3M Personal Safety Division

3M is a global science-based innovation company, developing products that improve people’s daily lives in a multitude of ways.

3M Science can be found in your home, in your office, at the hospital, at the dentist, in your phone, in your PC, in your car. You’ll find it on roads, trains and airplanes, and it’s helping to connect you with your energy and with the outside world. Improving your life in hundreds of ways every day.

We do this through a unique culture of innovation. One where people are given the freedom to create, the responsibility to deliver and the opportunity to connect ideas and technologies in unexpected ways. From concept to creation we manufacture our products to exacting quality standards, whilst working hard to look after our people, our communities and our planet.

Founded in 1902, we have a proud history as one of the world’s most innovative and ethical companies.

From the hidden science we all take for granted to the tangible products we use every day, 3M Science can be found in every corner of life.

That’s 3M Science. Applied to life™
Contents

About 3M
   A culture of innovation
   Giving back

3M Personal Safety Division
   Training and education
   Services
   Science of safety
   Productivity

Respiratory Protection
   Disposable Particulate Respirators
   Reusable Respirators
   Powered and Supplied Air Respirators

Hearing Solutions
   Detection Solutions
   Hearing Protection
   Validation Solutions
   Communication Solutions

Head, Eye and Face Protection
   Integrated Head and Face Protection
   Eyewear Solutions
   Welding Protection

Body Protection
   Protective Apparel
   3M™ Scotchlite™ Reflective Materials

Sorbents

Fall Protection

Floor Safety
A culture of innovation

We act differently because we embrace a culture that encourages us to think differently. It's what pushes us forward and ensures that we stay at the forefront of scientific technology.

Investing in innovation
As a world leading innovation company we are constantly looking for new ways to support our customers. Which is why over the past five years we have invested $8.5 billion (approximately six per cent of our global revenue) back into research and development. One third of our sales come from products that didn’t exist five years ago - testament to our focus on meeting our customers’ needs.

The McKnight Principles
William McKnight became president in 1929 and chairman of the board in 1949. The principles that he set out during his tenure remain the backbone of our culture today. Among them are the principles of initiative and autonomy captured in his words from 1948:

“As our business grows, it becomes increasingly necessary to delegate responsibility and to encourage men and women to exercise their initiative.”

“Mistakes will be made. But if a person is essentially right, the mistakes he or she makes are not as serious in the long run as the mistakes management will make if it undertakes to tell those in authority exactly how they must do their jobs.”

“Hire good people and leave them alone.”

Creative freedom
We understand that ideas need the freedom to grow, which is why we have a culture that works hard to cultivate great thinking. It is found in every corner of our business, from the permission to challenge to encouraging people to explore. Just one example of this is how our researchers and scientists have the opportunity to spend 15 per cent of their time on self initiated projects. This frees them up from their day-to-day work and maintains an enthusiasm to find new solutions to the challenges facing our customers. This culture is what lies behind thousands of products that 3M have introduced over the years.
46 technology platforms
Our 46 core technology platforms, ranging from adhesives and abrasives to sensors and electronics materials, drive innovation across our business. Individual business groups draw upon these core technologies to develop products for targeted markets.

Connected thinking
A spirit of collaboration underpins everything we do. As a community of innovators, we are constantly connecting people with knowledge and experience from different fields to answer our customers’ challenges. At the same time our 46 technology platforms allow us to apply science from one area to advance another. From unexpected market applications, to the limitless possibilities of merging different technologies.
“3M harnesses the power of science to make the world safer, more efficient and more prosperous. We use our science to solve challenges with our customers, and to stretch toward our vision of advancing every company, enhancing every home and improving every life.”

Inge G. Thulin Chairman of the Board, President and Chief Executive Officer
Giving back
When it comes to sustainability, we’d consider our society to be just as important as the environment. We have, over time, invested over $1.4 billion in creating sustainable communities. Under our 3M4Good scheme, our employees are entitled and encouraged to spend one day a year on volunteer work, some of our colleagues have gone out into communities to help with projects such as gardening and the construction of buildings, both in Europe and further afield. In addition to this our legal teams are recognised for their pro-bono work, with seniors, immigrants and children. This is in addition to our regular fundraising activities for local and larger charities, including a yearly 10km fun run by our UK Aycliffe lab.

Investing in young minds
Not only do we think that society is an important part of sustainability, but for continued development, we also believe in investing in the education of young people. This is why we have done a lot of work in STEM education, reinforcing the wonders of science with our visiting wizards who go into schools and perform experiments. We also have formed a partnership with Discovery Education in order to set up the Young Scientist Challenge.

World skills
3M are an official Global Industry Sponsor of World Skills. They provide training and work to increase skills amongst young people worldwide which will help them grow and in turn enable them to form a strong and skilled work force. This organisation is very important to us. Educating both young and old, teaching them new skills is and will continue to be an essential process. Because as the world we live in changes, we will have to change with it.
Training tailored to you
At 3M we believe that education is key to protection. It is essential that workers and safety managers understand the risks to their health in the workplace and know how to protect against these risks in the best way. In order for them to do this, we provide a vast array of training, suited to different businesses and individual needs.

On-site and on topic
We can provide on-site training, with a visit from our Safety Caravan, mobile across the EU or with the SafeTea Break concept recently introduced in the UK, which aims to give safety managers the chance to teach workers about health and safety issues and the importance of wearing PPE. We also provide extensive training to distributors, so that they can then advise and assist customers in selecting the correct protective equipment for their workplace. Of course our technical service teams are also on hand to present their expert knowledge of the Health and Safety Industry.

Accessible to all
We work hard to make sure that our training and tools are accessible to all, which is why we have developed an extensive eAcademy. We currently have modules spanning how the different parts of the body work, different hazards in the workplace, and how it is possible to protect against them. We are determined to increase the safety culture and having online training means we can reach more people. It is also flexible to the learning pace of the user, and very user friendly as well as being convenient and relevant to the needs of each individual.
3M offers you engaging interactive training on topics relevant to you

- Workplace hazards and health effects
- Industry standards and regulations
- The approach to protection
- 3M Personal Safety Solutions

Why e-learning?

Conventional training can often be difficult to manage. It can also be expensive, not simply in monetary terms, but in the time that people are kept away from their job. Time may be limited to cover content, whilst finding a convenient time for both trainer and staff may also be difficult.

- User-friendly site with online help
- Convenient – learn whenever and wherever you want
- Flexible – learn at a pace that’s comfortable
- Personalised completion certificates
- Structured curriculum deployed training
- Managers customised employee training reports
We believe that with a quality product, it is important that the customer also receives quality services. Not only do we provide different varieties of training and education, but we also have many other tools available to our customers.

**Fit testing is key**

In order to be fully protected, it is essential that PPE fits correctly. We provide fit testing for respirators (and fit testing guidelines online) as well as E-A-Rfit Validation testing for earplugs and earmuffs. We know that everyone is different and in order to get the best protection it is crucial that they know how to correctly fit and wear their personal protective equipment.

**3M™ Respiratory Fit Testing System**

3M Respiratory Protection offers a wide range of disposable and reusable respirators, as well as Powered and Supplied Air Respiratory Systems. However, even high quality products need a secure fit in order to protect the wearer. One model of respirator may not fit everyone. When choosing a respirator users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M. Even after a user has had a fit test, a fit check should be carried out before each use. A Respiratory Fit Check guide is available on page 23 of this catalogue.

**3M™ E-A-Rfit Dual-Ear Validation System**

As the leader in hearing protection, 3M offers a complete solution, with dual-ear and earmuff testing capabilities plus a user-friendly interface. The 3M™ E-A-Rfit Dual-Ear Validation System is the fast and easy way to find your employees’ PAR, because we know how important it is to make your hearing conservation program fit seamlessly into your operation.

Get results you can trust. The 3M™ E-A-Rfit Dual-Ear Validation System measure the effectiveness of the earplug or earmuff inside the employee’s ear providing accurate, quantitative results. Because you can simultaneously test both ears, you have more to focus on education including the importance of fit and protection.

**3M™ Eyewear Fit System**

When it comes to eyewear, a comfortable, well-fitted workforce is likely to be more effective. Current standards suggest careful consideration should be given to eyewear fit, however there is no specific guidance on how to evaluate eyewear fit on an individual. In view of this, 3M have developed the Eyewear Fit System, a simple 6 step method, designed to help select the best fitting eyewear for an individual.

Find out more by contacting your 3M Personal Safety Sales Representative.
3M Online
A selection of downloadable and printable documents are available online, such as selection tools, fit test guides, and guidance on the importance of protection. From our website you will be able to access product information, with market area specifications, to help select the right personal protective equipment for the right environment. You will also be able to discover webinars by experts concerning health and safety in the workplace as well as our own eAcademy.

Everything in one place, on your computer, laptop, tablet or mobile.

- Access our news, or eAcademy, find out where to buy or how to contact us
- Quick product search
- Narrow your selection
- Compare Products
- Our catalogue on your mobile
- Quick links to our Product Catalogue
- Tailored Solutions for your industry
- Subscribe to our newsletter
- Download product and technical documents

3M PPE Safety Solutions

Subscribe to our channel on YouTube to watch customer testimonials, technical support or product information videos.
Visit www.youtube.com/user/3MPPESafetySolutions

You can also:
Find us on Facebook or Follow us on Twitter

3M Personal Safety Division
3M Personal Safety Division

Science of Safety

3M’s new Science of Safety approach can support you with guidance on:

- Selection
- Training
- Fit validation

3M delivers consistent quality around the world helping you select the correct PPE for your workers, helping to ensure your workers are educated on the correct use of PPE and raising awareness of how important fit and comfort are to the health and wellbeing of your workforce.

For more information visit www.3M.eu/SoS

40% of employees incorrectly select or use PPE

Source: HSE Research Report RR720 ‘Real world use and performance of hearing protection’

H&S officials and employers have a duty to provide the correct safety equipment and training.

Maintaining consistency in this arena can prove difficult, hindering the health and safety process.

Many companies don’t have the ability to test whether PPE fits the employee properly.

Employees are at risk of damaging their health long term which may lead to an increase in liability for employers.
Why partner with 3M for your health and safety?

3M can deliver consistent quality around the world

Our industry-leading approach embraces best practice on a global level

Selection  Training  Fit validation

3M PPE equipment
industry leading breadth and depth, helping to optimise protection and fit.

3M can give local support and advice wherever you do business

www.3M.eu/SoS

#3MScienceOfSafety
Productivity

We don’t only aim to improve the safety of our customers, we also want to help them keep costs down. Our products are designed to last and to provide more efficient protection, but they can bring efficiencies in other ways.

Peltor™

As many supervisors know, efficient on-site communication can save a lot of time throughout the duration of a project. Recently, a study by Lund University Faculty of Engineering in Sweden showed that downtime and interruptions were reduced by 19% when two-way radio communication headsets were used. A single construction worker gained 380 minutes of productive time per week.

The study was conducted by Victoria Joang and Aidin Sakikovic, two researchers from Lund’s graduate program in civil engineering. They compared two work weeks on one of Skanska’s major water main projects in Sweden, analysing similar work activities during each week. In the first week, the workers did not use two-way radios. In the second week, they were equipped with 3M™ PELTOR™ WS™ LiteCom Headsets, which have a built-in two-way radio and a Bluetooth® wireless technology mobile phone connection.

Detailed follow-up interviews showed that the big advantage was being able to quickly relay and receive messages on the job, especially on large construction sites where eye contact is not possible. Improved team spirit was another reported benefit.

Speedglas™

Another example of efficiency can be seen in our Welding portfolio, where, by using a 3M™ Speedglas™ Welding Helmet with auto-darkening filters, companies can save up to 1€ per hour.

We have created a Return on Investment calculator for the welding portfolio, where you can input all your numbers to see how much your company would save by using these auto-darkening filters. From this we have calculated that a company with low salary costs who have previously not used an auto-darkening filter, would be able to save 75 euro cents per hour per worker by using almost any auto-darkening filter. So if they had 100 workers, all wearing an auto-darkening filter, 5 days a week, for 8 hours they would make a weekly company saving of 3000 euros.
Respiratory protection
Types of Protection Equipment from 3M

3M offers you a wide range of disposable, reusable, powered and supplied air respirators for protection against gases, vapours and particulates allowing you to choose the level and type of protection, comfort, style and maintenance requirements you need to work safely, comfortably and effectively.

There are three main types of RPE available from 3M:

**Disposable Respirators**
- Ideal for most industries and applications where wearers require particulate protection e.g. dusts and mists
- A choice of cup-shape or flat-fold, valved or unvalved and also the option to protect against ozone and nuisance levels of organic vapours and acid gases
- Available in two types to satisfy single shift use (NR) and reusable (R) requirements
- Lightweight and maintenance free
- Comfortable, convenient and easy to use

**Reusable Half and Full Face Respirators**
- Offer protection against particulates, gases and vapours and combinations of the two
- These respirators have integrated or replaceable filters and parts. They may be cleaned, stored and reused provided they are in good condition
- Full face respirators also offer integrated eye and face protection
- Many models are fully maintainable

**Powered Air & Supplied Air Systems**
- Offer protection against dusts, mists, fumes, gases, vapours and combination hazards e.g. paint spray
- Can offer integrated eye, face, head, neck and hearing protection in one system avoiding incompatibility issues between items of PPE
- Modular system allows you to mix and match parts as your environment or application changes giving you the ultimate in flexibility and ease of use
- No increase in breathing resistance means more comfortable and longer wear time
- Usable by a wide range of users regardless of facial characteristics; shape, size etc.
The 4-Step Method

Selecting and specifying the appropriate respiratory protective equipment may appear daunting with so many factors to consider and so many options to choose from. With our simple 4-step method it’s easy to choose the correct level of protection and comfort required to optimise respiratory protection:

1. Identify the hazards
   Respiratory: dust, metal fume, gas, vapour etc.
   Other neck-up: head, eye, face, hearing etc.

2. Assess the risk
   Assess the hazard levels against safety standards and consider other protection e.g. skin, eye, face, head and body

3. Select the right respirator
   Disposable, reusable, half mask, full face, powered air, supplied air and the right filter if appropriate

4. Train in fitting and use
   Make sure you know how to use and maintain your RPE to ensure effective respiratory protection. 3M sales and technical professionals can help you to define your training needs and can provide training and on-site consultations on all aspects of respiratory protection tailored to your individual needs. You’ll also find easy to use training on our website: www.3M.eu/PPESafety

3M™ Organic Vapour Monitor
Badges measure personal exposure to hazards

3M™ EVM Monitors measure hazards in real-time

3M™ Organic Vapour Monitor
Badges measure personal exposure to hazards

www.3M.eu/PPESafety
3M™ EVM Environmental Monitors

Simultaneous Particulate & Gas Concentration Measurement in Real-time

The 3M™ EVM Series monitors both particulates and air quality in one compact instrument. From healthcare and manufacturing to construction and military applications, the EVM Series provides a lower cost of ownership by combining three instruments into one. Its user-friendly interface, patented dial-in rotary impactor, and advanced reporting and analysis features make it a particulate and IAQ (Indoor Air Quality) area monitoring instrument of choice for industrial hygienists and safety professionals worldwide.

Simultaneous measurement
- Measures particulate mass concentrations (0.1-10 μm), select toxic gases, select volatile organic compounds*, carbon dioxide, relative humidity, temperature, air velocity (with purchase of optional accessory).
- Helps control equipment costs, by combining three instruments into one.

* Visit www.3M.eu/detection for details regarding volatile organic compounds and toxic gas sensor selection.

Choose the Model That Best Meets Your Needs

<table>
<thead>
<tr>
<th>Feature</th>
<th>EVM-7 Indoor Air Quality/Particulate Monitor</th>
<th>EVM-4 Indoor Air Quality Monitor</th>
<th>EVM-3 Particulate Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Air velocity (with purchase of optional accessory)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Particulates (mass concentration)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Toxic Gas (choose from nine sensors)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Select volatile organic compounds</td>
<td>●</td>
<td>●</td>
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</tr>
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</table>

The Economical, Accurate Way to Monitor Your Workplace

3M™ Air Monitors are simple and effective devices that collect certain airborne contaminants using the scientific principle of diffusion. They meet or exceed ±25% accuracy at a 95% confidence level for many workplace contaminants.

- Simple and convenient. There are no batteries, hoses, pumps, or equipment to calibrate.
- Easy to use. Just clip the monitor to shirt lapel, collar, or pocket.
- Versatile. 3M monitors can also be used for area monitoring, if sufficient air flow exists.
- Analysis options. 3M monitors can be analyzed in the lab of your choice or returned for analysis.
- Comfort. 3M monitors are small and lightweight and will not interfere with employee activities.
Disposable Particulate Respirators

Comfortably breathing clean, safe air is important for workers’ health and workplace morale. With this in mind we have designed a range of 3M™ Disposable Respirators using science to increase comfort, breathability and protection.

In combination with ergonomic design, a wide range of technologies including the new 3M™ Cool Flow™ Comfort Valve help to deliver comfortable protection with easier breathing and reduced heat build-up.
The 4-Step Method

1. Identify the Hazards

<table>
<thead>
<tr>
<th>Application*</th>
<th>Suggested Minimum Performance Level</th>
<th>Important Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rust, Metal Particles, Filler</td>
<td>FFP1</td>
<td></td>
</tr>
<tr>
<td>Sanding, Concrete, Stone</td>
<td>FFP1</td>
<td></td>
</tr>
<tr>
<td>Cutting, Cement, Wood, Steel</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Drilling Paints/Varnish/Anti-rust coating</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Steel, Stainless Steel</td>
<td>FFP3</td>
<td></td>
</tr>
<tr>
<td>Anti-Fouling Varnish</td>
<td>FFP3</td>
<td></td>
</tr>
<tr>
<td>Low temp. oil spray</td>
<td>FFP2</td>
<td>3M™ 9928 or 3M™ 9925 for Ozone protection - May be required in some countries - see national regulations</td>
</tr>
<tr>
<td>Mild Steel, Zinc (Autogen, MIG/MIK)</td>
<td>FFP2</td>
<td>3M™ 9928 or 3M™ 9925 for Ozone protection - May be required in some countries - see national regulations</td>
</tr>
<tr>
<td>Welding Stainless Steel (Electrodes)</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Soldering</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Work with Asbestos</td>
<td>FFP3</td>
<td></td>
</tr>
<tr>
<td>Work with Glass and Mineral fibres</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Waste Sorting</td>
<td>FFP2</td>
<td>Speciality Respirator may be preferred - May need gas and vapour respirator</td>
</tr>
<tr>
<td>Spraying Paint spray</td>
<td>FFP2</td>
<td>May need gas &amp; vapour respirator</td>
</tr>
<tr>
<td>Pesticides (water based)</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Utility maintenance (e.g. filter change)</td>
<td>FFP3</td>
<td></td>
</tr>
<tr>
<td>Allergies Pollen, Animal dander</td>
<td>FFP1</td>
<td></td>
</tr>
<tr>
<td>Grain dust</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Contact with: Mold/Fungus</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Bacteria/Virus</td>
<td>FFP2</td>
<td></td>
</tr>
<tr>
<td>Diesel exhaust/Smoke</td>
<td>FFP2</td>
<td></td>
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</tbody>
</table>

Warning: This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. Please note that the applications shown highlight some of the hazards which may be considered. Selection of the most appropriate respiratory protective equipment (RPE) will depend on the particular situation and should be made only by a competent person knowledgeable of the actual working conditions and the limitations of RPE.

2. Assess the Risk

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<thead>
<tr>
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<tbody>
<tr>
<td>Nominal Protection Factor (NPF)</td>
<td>Nominal Protection Factor (NPF)</td>
<td>Nominal Protection Factor (NPF)</td>
<td>Nominal Protection Factor (NPF)</td>
</tr>
<tr>
<td>NPF 4</td>
<td>NPF 12</td>
<td>NPF 50</td>
<td>NPF 10</td>
</tr>
<tr>
<td>Typical Applications</td>
<td>Typical Applications</td>
<td>Typical Applications</td>
<td>Typical Applications</td>
</tr>
<tr>
<td>Low levels of fine dust particles and oil or water based mist typically found during sanding, drilling and cutting</td>
<td>Moderate levels of fine dust particles and oil or water based mist typically found during plastering, cement, sanding and wood dust</td>
<td>Higher levels of fine dust particles and oil or water based mist typically found when handling hazardous powders found in the pharmaceutical industry or work with biological agents and fibres</td>
<td>Moderate levels of fine dust particles, oil and water based mist, metal fume and ozone and organic vapours below exposure limit typically found in welding and soldering</td>
</tr>
</tbody>
</table>

Nominal Protection Factor (NPF): The theoretical protection level of a respirator based on laboratory measured performance data.
3. Select the Right Respirator
Once you have selected the protection factor you require, you can then consider whether you need a cup-shaped respirator, or a foldable respirator, whether it has buckled straps and whether it is valved or not.

3M™ Cup-Shaped Respirators
- Convex shape, nose clip and twin strap design
- Easy to fit
- Durable, collapse resistant shell

3M™ Foldable Respirators
- Ultra soft, flexible and comfortable fit resulting from the multiple panel design
- Comfort Series - Flat Fold only: Individually packed, foldable design prevents contamination before use and allows easy storage

3M™ Buckle Strap Respirators
- Robust and durable design provides multishift capability and secure feel
- Adjustable braided headbands
- Soft inner face-seal improves comfort

3M™ Cool Flow™ Valve
- Effective removal of heat build-up provides a cooler and more comfortable wear
- Provides longer continuous wear time
- Reduces risk of fogging of spectacles and eyewear

4. Train in Fitting and Use
Training Offered by 3M
Correct use and appropriate maintenance of personal protective equipment (PPE) from 3M makes a major contribution towards ensuring that it provides effective protection. Our experienced sales and technical teams will help you make the most of your products. In compact training units, they will show you and your employees how to recognize potential hazards, suggest what measures to take and help explain how to choose the appropriate protective equipment for each particular situation.

3M™ Disposable Respirators meet the requirements of European Standard EN 149:2001 + A1:2009, filtering facepiece respirators for use against solid and non-volatile liquid particles only. Products are classified by filtering efficiency and maximum total inward leakage performance (FFP1, FFP2 and FFP3), also by usability and clogging resistance.

Performance tests in this standard include:
- filter penetration and extended exposure (loading) test - evaluates the filtration performance when new and over time
- breathing resistance - evaluates the ease of breathing (inhalaion and exhalation) through the respirator
- total inward leakage - evaluates the filter penetration, valve leakage (if fitted) and importantly the face seal leakage of the respirator when worn by a panel of different people whilst conducting simulated work exercises
- clogging resistance - evaluates the ability of the respirator to continue to function effectively and provide respiratory protection in very high dust environments

Reusable products are also subjected to a cleaning cycle (specified by the manufacturer) and 24 hour storage to confirm the product performance is not affected by re-use. Clogging resistance testing is a mandatory requirement for reusable products, but is optional for single shift use only (non reusable) products. A full copy of EN 149:2001+A1:2009 can be purchased from your national standards body.

Marking designations:
R = Reusable
NR = Non reusable (single shift use only)
D = Meets the clogging resistance requirements
The importance of comfort

To make sure that the respirator protects you, it must be worn during all periods of exposure. Make sure that you choose a respirator that you can wear comfortably for your entire shift.

**Face and head comfort**
The respirator’s edge should be flexible and the shape and size should cover the nose, mouth and chin without causing excessive pressure. A headband material which provides a good, even tension across the head can ensure a comfortable, secure fit for a range of head sizes.

**Coolness**
An efficient exhalation valve minimises heat build up, particularly in hot and humid work conditions.

**Breathing ease**
An efficient exhalation valve and high-efficiency, low breathing resistance filter material will help you to breathe comfortably.

**Skin comfort**
Skin comfort will be affected by the smoothness and softness of the inner material in contact with the skin - especially over a long period of time. A soft inner face seal and sweat absorbent nose foam will provide greater comfort. Rough or hard materials, coupled with a high temperature inside the respirator may be itchy and unpleasant.

**Lightweight**
Take advantage of technological innovation and choose a lightweight respirator for optimal comfort.

**Compatibility with other PPE**
Make sure that the respirator you select fits well with the other PPE required for your work such as eyewear and hearing protection to ensure maximum comfort.
3M™ Disposable Particulate Respirators

The importance of fit

Particulate respirators and reusable half face masks are most effective when there is a good seal between the edges of the respirator and your face. The instant this seal is broken, protection is compromised as contaminated air can leak in through any gaps.

Here’s what to look for:

- Upper strap should be positioned on the crown of the head. Strap should not be twisted
- Respirator should be correctly positioned on your face and head
- Lower strap should be positioned below the ears. Strap should not be twisted
- Care must always be taken to ensure other safety equipment is compatible with your respirator and does not interfere with its fit, for example, straps should always be fitted underneath safety eyewear and hoods

- Before fitting your respirator, make sure that your face is clean shaven. Respirators must not be worn with stubble, beards or other facial hair under the area of the face seal as these can prevent a good seal to the face

- For flat fold respirators make sure the panels are fully unfolded
- Noseclip should be moulded around nose and cheeks to give a good seal. Using both hands, mould noseclip to the shape of the lower part of the nose to ensure a close fit and good seal. Do not pinch the noseclip with only one hand as this may not give a good fit

Fit Check

- A pre-use fit check must be conducted every time you fit your respirator
- Cover the front of the respirator with both hands, being careful not to disturb the fit of the respirator
- Unvalved respirator – exhale sharply, Valved respirator – inhale sharply
  - If air leaks around the nose, re-adjust the noseclip to eliminate leakage
  - If air leaks at the respirator edges, work the straps back along the sides of the head or adjust the tension to eliminate leakage

Repeat the above fit check. If you cannot achieve a proper fit do not enter the hazardous area - see your supervisor.

One model of respirator may not fit everyone. Users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M.
The 3M™ Aura™ Disposable Respirators 9300+ are the result of 3M’s continuous drive to improve comfort. They are packed with ground-breaking ideas, technologies and materials and have also retained many of the features that helped make the original 9300 series hugely popular.

Features include low breathing resistance filter technology for easier breathing throughout your shift, an embossed top panel to reduce fogging of eyewear, a sculpted edge for improved compatibility with eyewear and a chin tab to improve ease of fitting.

**Features and Benefits:**

**Foldable – Proprietary 3-Panel Design**
- Ingenious 3-panel design fits a wide range of face shapes and sizes
- Accommodates your facial movements
- Collapse resistant: ideal for work in hot humid environments

**Sculpted Nose Panel**
- Curved, low profile design
- Conforms well to nose and eye contours
- Helps provide a good field of vision and improves compatibility with eyewear

**Low Breathing Resistance Filter Technology**
- Combines the benefits of 3M’s electret particulate filter material with advanced low breathing resistance filter technology
- Improved breathing ease and comfort

**Embossed Top Panel**
- Helps reduce fogging of eyewear

**3M™ Cool Flow™ Valve**
- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of fogging eyewear
- Shrouded valve to remove risk of cross contamination in clinical environments (1883+ only)

**Chin Tab**
- Improves ease of donning and adjustment to help achieve a comfortable fit

**Face and Head Comfort**
- Large soft nose foam material and smooth inner cover web both feel incredibly soft on the skin and help to create a comfortable environment for the face

**Compatible with**
- Eyewear from 3M
- Hearing Protection from 3M

**Typical Applications**
- Construction
- Metal working
- Agriculture
- General manufacturing
- Automotive
- Woodworking
- Maintenance
- Chemical/petrochemical
- Pharmaceuticals/laboratory

**3M™ Aura™ Particulate Respirator 9332+**
- FFP3 NR D
- Protection: Dust/Mist
- Nominal Protection Factor: 50

**3M™ Aura™ Particulate Respirators 9312+, 9320+, 9322+ and 9332+**
- also available in handy packs of 5

**Individual Packaging**
- Hygienic individual packaging helps protect the respirator from contamination before use
- Allows practical storage and dispensing in the workplace

**Comfort Series: 3M™ Aura™ Flat Fold 9300+ Series**
3M™ Disposable Particulate Respirators

3M™ Aura™ Particulate Respirator 9310+
FFP1 NR D
Protection: Dust/Mist
Nominal Protection Factor: 4

3M™ Aura™ Particulate Respirator 9312+
FFP1 NR D
Protection: Dust/Mist
Nominal Protection Factor: 4

3M™ Aura™ Particulate Respirator 9320+
FFP2 NR D
Protection: Dust/Mist
Nominal Protection Factor: 12

3M™ Aura™ Particulate Respirator 9322+
FFP2 NR D
Protection: Dust/Mist
Nominal Protection Factor: 12

3M™ Aura™ Particulate Respirator 9330+
FFP3 NR D
Protection: Dust/Mist
Nominal Protection Factor: 50

3M™ Aura™ Particulate Respirator 1883+ with Shrouded Valve
Classification: Meets the requirements of EN 149:2001+A1:2009 FFP3 NR D and EN14683:2005 Type IIR (Surgical Masks—Requirements and Test Methods)
Protection: Solid and Non-volatile Liquid Particles
Nominal Protection Factor: 50
The 3M™ Respirators 8300 Series enable you to enjoy a comfortable ‘cushion-fit’, facing hard work from a soft place.

The 8300 Series respirators have been designed with comfort in mind. The super-soft, cushioned lining provides instant yet lasting comfort; whilst the robust design makes the 8300 Series tough and durable – all this helps to increase user wearability. 3M offers a comprehensive range of respiratory protection – you can choose from different protection levels and styles that best suit your needs.

**Features and Benefits:**

**Braided Headbands**
- Materials have been selected for extra comfort and durability
- Colour-coded headbands offer easy protection level identification

**M-Noseclip**
- The noseclip is quick and easy for wearers to mould around the nose offering greater comfort

**Robust Outer Shell**
- The shell construction offers users added durability

**3M™ Cool Flow™ Valve**
- The Cool Flow valve reduces heat build-up to offer workers comfortable protection – even in hot humid conditions

**3M™ High Performance Filter Material**
- Effective filtration helps wearers to breathe easily through the respirator for more comfortable protection

**‘Cushion-Fit’ Lining**
- The super-soft, cushioned inner lining helps workers stay comfortable

**Soft Waffle Edge**
- The flexible, textured edge offers a comfortable and secure feel on the face

**Soft Inner Face Seal (8833 only)**
- Gives a secure, conforming fit for added comfort
- Can be cleaned for wearer hygiene if used for longer than one shift

**Typical Applications**
- Construction
- Quarrying
- Pottery/Ceramics
- Engineering
- Pharmaceuticals
- Sawmills
- Iron and steel foundries
- Shipbuilding
- Metalworking

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**3M™ Particulate Respirator 8833**
- Protection: Dust/Mist
- Nominal Protection Factor: 50
- FFP3

**3M™ Particulate Respirator 8310**
- Protection: Dust/Mist
- Nominal Protection Factor: 4
- FFP1

**3M™ Particulate Respirator 8320**
- Protection: Dust/Mist
- Nominal Protection Factor: 12
- FFP2

**3M™ Particulate Respirator 8312**
- Protection: Dust/Mist
- Nominal Protection Factor: 4
- FFP1

**3M™ Particulate Respirator 8322**
- Protection: Dust/Mist
- Nominal Protection Factor: 12
- FFP2

**3M™ Particulate Respirators 8833**
- are also available in handy packs of 5
The 3M™ Cup Shaped Respirators 8825+ and 8835+ have been engineered to help improve fit to wearer’s individual face shape and size.

With their robust shell and cup design, these respirators meet the particular requirements of the clogging test for FFP (filtering face piece) respirators and are EN 149 'R' rated which means that they may be used for more than one shift.

Features and benefits:

- **Proprietary soft inner face seal**
  - Flexible material helps form comfortably onto a wide range of face shapes and sizes
  - Innovative contoured design engineered to help provide a more secure seal around the nose
  - Comfortable feel on the skin
  - Easy to clean for wearer hygiene using the 3M™ Face Seal Cleaning Wipe 105 (as per EN 149+A1)
  - Designed to help reduce eyewear fogging

- **Innovative design**
  - Engineered to help improve fit to wearer’s individual face shape and size
  - EN 149 ‘R’ Rated. Reusable – this mask can be used for more than one shift
  - Collapse resistant: works well in hot humid environments
  - Modern and stylish
  - Easy to don and doff

- **3M™ Advanced Electret Filter Media (AEM)**
  - High performance filter material that’s easy to breathe through
  - Meets the clogging test requirements of EN 149:2001+A1:2009
  - Consistent high quality performance

- **3M™ Cool Flow™ Valve**
  - Effective exit of heat build up provides a cooler and more comfortable wear and helps to minimise the risk of fogging eyewear

- **Adjustable braided headbands**
  - 4-point adjustment helps to provide a more secure feel
  - Comfortable on the head and neck

- **Materials**
  - This product does not contain components made from:
    - natural rubber latex
    - metal
    - PVC

- **Designed to be compatible with:**
  - Safety eyewear from 3M
  - Hearing protection from 3M

Typical Applications

- Construction
- Ship building/repair
- Pharmaceuticals
- Welding and soldering
- Chemical processing
- Iron and steel foundries
- Battery manufacturing
3M™ Disposable Particulate Respirators

Classic Series: 3M™ Cup Shaped 8000 Series

The 3M™ Respirators 8000 Series provide lightweight, comfortable and effective respiratory protection against dust and mist. The convex shape, twin strap design, nose foam and nose clip ensure comfortable wear over a range of face sizes.

The collapse resistant shell and 3M™ Cool Flow™ Valve in the 8822 and 8812 respirators offer durable, comfortable protection particularly in hot and humid conditions.

Features and Benefits:

**Comfort**
- Traditional convex shape, with nose clip and twin strap design
- Comfortable, lightweight, off-the-face design

**Safety**
- Reliable, effective protection against fine particles
- Durable, collapse resistant inner shell

3M™ Cool Flow™ Valve
- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

**Compatible with**
- Eyewear from 3M
- Hearing Protection from 3M

Typical Applications
- Construction
- Ship building/repair
- Pharmaceuticals/laboratories
- Rubber/plastics
- Iron and steel foundries
- Agrochemicals
- Agriculture
- Base metal manufacture
- Powdered chemicals

3M™ Particulate Respirator 8822
Protection: Dust/Mist
Nominal Protection Factor: 12

Valved

3M™ Particulate Respirator 8812
Protection: Dust/Mist
Nominal Protection Factor: 4

3M™ Particulate Respirator 8832
Protection: Dust/Mist
Nominal Protection Factor: 50

Unvalved

3M™ Particulate Respirator 8710E
Protection: Dust/Mist
Nominal Protection Factor: 4

3M™ Particulate Respirator 8810
Protection: Dust/Mist
Nominal Protection Factor: 12

3M™ Particulate Respirators 8710E, 8810 and 8822, also available in handy packs of 5
3M™ Aura™ Respirators 9422+ and 9432+ provide reliable and comfortable protection from a range of airborne particulate hazards while minimizing contamination risks to food or pharmaceutical production processes. They are made without staples or small detachable parts and are metal and visually detectable. Built on the innovative 3M™ Aura™ platform, the disposable respirators 9422+ and 9432+ fit a wide range of face shapes and sizes. Comfortable to wear and easy to breathe through they are ideal for use in hot humid environments.

**Features and Benefits:**

- **Metal Detectable**
  - Embedded metal nose clip kept securely in place within the layers of the respirator to help ensure the safety of your production

- **Staple-free**
  - To help minimise contamination risks to your production

- **Sculpted Nose Panel**
  - Curved low profile design helps provide a good field of vision and improves compatibility with eyewear
  - Conforms well to nose and eye contours

- **Embossed Top Panel**
  - Helps reduce the fogging of eyewear

- **Foldable – Proprietary 3-Panel Design**
  - Ingenious 3-panel design fits a wide range of face shapes and sizes
  - Accommodates your facial movements
  - Collapse resistant: ideal for work in hot humid environments

- **3M™ Cool Flow™ Valve**
  - Effectively removes heat build up provides a cooler and more comfortable wear
  - Removes exhaled air and minimises the risk of fogging eyewear

- **Distinguishable Non-Food Colour**
  - Bright blue for quick search recognition

- **Low Breathing Resistance Filter Technology**
  - Combines the benefits of 3M’s electret particulate filter material with advanced low breathing resistance filter technology
  - Improved breathing ease and comfort

- **Chin Tab**
  - Improves ease of donning and adjustment, to help achieve a comfortable fit

**Typical Applications**

- Food and beverage
- Pharmaceuticals

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**3M™ Aura™ Particulate Respirator 9422+**

- Protection: Dust/Mist
- Nominal Protection Factor: 12

**3M™ Aura™ Particulate Respirator 9432+**

- Protection: Dust/Mist
- Nominal Protection Factor: 50

**Individual Packaging**

- Hygienic individual packaging helps protect the respirator from contamination before use
- Allows practical storage and dispensing in the workplace
The 3M™ Welding Fume Respirators 9925 and 9928 provide lightweight, effective, comfortable and hygienic respiratory protection against dust, mist and metal fumes and resist clogging for extended use against welding fume. The convex shape enhances wearer comfort; the 3M™ Cool Flow™ Exhalation Valve reduces heat build up, particularly in hot humid work conditions. The 4-point adjustable straps and adjustable nose clip help achieve a comfortable fit. The 3M respirators 9925 and 9928 have been designed specifically for welding applications to provide protection against ozone and welding fumes, plus relief from nuisance odours.

**Features and benefits:**

**Robust shell and cup design**
- Flame retardant outer surface minimises the effect of welding splatter
- Conforms well to most face shapes and sizes
- Collapse-resistant

**Soft inner face-seal (9928 only)**
- Provides secure feel
- Improves wearer comfort

**Can be hygienically cleaned if used for longer than one shift (3M™ Faceseal Cleaner 105)**

**3M™ Cool Flow™ valve**
- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

**Colour coded valve lettering**
- Easy to recognise protection level (FFP2) by colour coding

**Carbon layer**
- Provides protection against ozone gas and relief from nuisance level odours

**Adjustable braided headbands**
- Help provide comfort to face, head and neck

**Compatible with**
- Eyewear from 3M
- Hearing protection from 3M
- 3M™ Speedglas™ Welding Headtop
- Welding shields – low profile design for compatibility with welding shields

### 3M™ Welding Particulate Respirator 9928
**Classification:** EN 149:2001+A1:2009 FFP2 R D
**Protection:** Dust/Mist/Ozone/Nuisance level odours
**Nominal Protection Factor:** 10 for Ozone and Particulates

### 3M™ Welding Particulate Respirator 9925
**Classification:** EN 149:2001+A1:2009 FFP2 NR D
**Protection:** Dust/Mist/Ozone/Nuisance level odours
**Nominal Protection Factor:** 10 for Ozone and Particulates

**Typical applications**
- Refractory maintenance
- Melting and pouring
- Welding and cutting
- Hot surface treatment
3M™ Disposable Particulate Respirators

Speciality Series Respirators

The Speciality Series by 3M have been developed to provide lightweight, effective, comfortable and hygienic respiratory protection for particular working environments ranging from welding to waste sorting.

These speciality respirators which protect against dust and mist also feature an integrated activated carbon layer, offering relief from nuisance odours below nominal protection factor and, depending on the product type, from low levels of organic vapours or acid gases.

Features and Benefits:

- Robust Shell and Cup Design
  - Conforms well to most face shapes and sizes
  - Maintains its shape well during use
  - Collapse-resistant

- 3M™ High Performance Filter Material
  - Effective filtration with easy breathing
  - Consistent high quality performance

- 3M™ Cool Flow™ Valve
  - Effective removal of heat build up provides a cooler and more comfortable wear
  - Removes exhaled air and minimises the risk of misting eyewear

- Carbon Layer
  - Provides protection against nuisance level organic vapours below nominal protection factor

- Colour Coded Straps
  - Easy to recognise performance level by colour coded straps

- Compatible with
  - Eyewear from 3M
  - Hearing Protection from 3M

Typical Applications:

- Iron and steel foundries
- Powdered chemicals
- Ship building/repair
- Metal manufacture
- Battery manufacture
- Construction
- Welding
- Waste sorting

3M™ Speciality Particulate Respirator 9922
Protection: Dust/Mist/Nuisance Level Ozone
Nominal Protection Factor: 10 for Particulates and Ozone Below NPF for Organic Vapors
Also Available in handy packs of 5

3M™ Speciality Particulate Respirator 9906
Protection: Dust/Mist/Nuisance Level Hydrogen Fluoride
Nominal Protection Factor: 4 for Particulates Below NPF for Hydrogen Fluoride

3M™ Speciality Particulate Respirator 9913 and 9914
Protection: Dust/Mist/Nuisance Level Organic Vapour
Nominal Protection Factor: 4 for Particulates Below NPF for Organic Vapors

3M™ Speciality Particulate Respirator 9921 and 9926
Nominal Protection Factor: 12 for Particulates Below NPF for Acid Gasses

3M™ Speciality Particulate Respirator 9936

3M™ Speciality Particulate Respirator 9921 and 9926

3M™ Speciality Particulate Respirator 9915
Safety is priceless, but it doesn’t have to be expensive. The 3M™ Respirators K100 Series provide comfortable, solid and professional protection at an affordable price.

The K100 series also removes any doubt as to quality when it comes to choosing a value product: fully tested, certified and CE marked, all K100 products are also backed with the kind of responsive support, access to technical personnel, reliable advice as well as dependable quality and supply that only a brand like 3M can offer.

**Features and Benefits:**

- **Adjustable noseclip**
  - Easy to check that correct protection is being worn in the workplace
  - Yellow: FFP1, blue: FFP2, red: FFP3
  - Metal detectable

- **Synthetic headbands**
  - Do not contain components made from natural rubber latex
  - Reduces risk of allergic reaction

- **Single loop strap**
  - Allows easy adjustment for a comfortable fit
  - Staple-free

- **Flat-fold convenience**
  - Makes the respirator easy to store away when not in use

- **Classic Exhalation valve**
  - Reduces heat build up in hot or humid environments, or when work is hard and physical
  - Improves breathing comfort over long periods

- **Diamond-shaped front panel**
  - Allows the respirator to retain its shape, even in hot or humid environments

- **Compatible with**
  - Eyewear from 3M
  - Hearing Protection from 3M

**Typical Applications**

- Construction
- Mining
- Agriculture
- General manufacturing
- Woodworking
- Maintenance
- Machine building

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**3M™ Particulate Respirator K112**

- Protection: Dust/Mist
- Nominal Protection Factor: 12

**Unvalved**

**3M™ Particulate Respirator K101**

- Protection: Dust/Mist
- Nominal Protection Factor: 4

**3M™ Particulate Respirator K102**

- Protection: Dust/Mist
- Nominal Protection Factor: 12

**Valved**

**3M™ Particulate Respirator K111**

- Protection: Dust/Mist
- Nominal Protection Factor: 4

**3M™ Particulate Respirator K113**

- Protection: Dust/Mist
- Nominal Protection Factor: 50

**3M™ Particulate Respirators K100 Series also available individually wrapped in a handy dispenser box**
3M™ Disposable Particulate Respirators

Classic Series: 3M™ VFlex™ Flat Fold 9100 Series

3M™ VFlex™ respirators 9152 and 9152S offer effective protection at incredible value with no compromise on quality. The unique design unfolds into roomy, comfortable space. VFlex™ respirators expand and flex with your face as you breathe, work and talk.

Positioning tabs, adjustable nose clip and a choice of two different sizes help achieve a custom fit across a broad range of faces.

Features and Benefits:

Adjustable Noseclip
- Helps provide a custom fit and secure seal
- Imbedded, metal detectable

Tabs
- Designed for positioning the respirator on the face

Embossed Front Panel
- Helps the respirator retain its shape, away from your mouth
- Helps maintain spacious feel

V-Shaped Pleats
- Flex and expand with mouth movement for easier talking and breathing

Comfortable inner Layer

3M™ Proprietary Media
- 3M™ high performance filter material provides effective filtration combined with low breathing resistance

Flat-Fold Convenience
- Convenient storage prior to use

Additional Design Features
- Elastic headbands contain no natural rubber latex components
- Spacious feel inside, with minimal impact on field of vision
- Compatible with a variety of eyewear and hearing protection from 3M™
- Available in 2 sizes to fit a broad range of faces

Typical Applications
- Fibreglass manufacturing
- Pharmaceuticals/laboratory
- Maintenance
- Woodworking

3M™ VFlex™ Particulate Respirator 9152
(Standard size)
FFP2 NR D
Protection: Dust/Mist
Nominal Protection Factor: 12

3M™ VFlex™ Particulate Respirator 9152S
(Small size)
Protection: Dust/Mist
Nominal Protection Factor: 12
Reusable Respirators

For prolonged periods of use, Half and Full Face Masks by 3M offer exceptional value and quality, all combine comfort with ease of use. 3M™ Respirators have to pass strict quality control tests and provide a consistently high level of safety.

The choice of the right mask and filter type depends on your particular working environment and individual requirements. 3M can assist you to choose the protection that helps you achieve optimum results.
## The 4-Step Method

### 1. Identify the Hazards

<table>
<thead>
<tr>
<th>Application</th>
<th>Hazard</th>
<th>Typical Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Painting, Spraying, Varnishing, Coating</strong></td>
<td>Solvent-Based Paint**</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Anti-Fouling Paint Spraying / Grinding</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Water Soluble Paint</td>
<td>A1P2 R</td>
</tr>
<tr>
<td></td>
<td>Solvents, Resins, Synthetic Resins**</td>
<td>A2P3 R</td>
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<tr>
<td></td>
<td>Latex-Paint, Residual Solvents</td>
<td>A2P3 R</td>
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<tr>
<td></td>
<td>Wood Preservatives</td>
<td>A1P2 R</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td>Disinfection, Cleaning*</td>
<td>ABEK1P2 R</td>
</tr>
<tr>
<td><strong>Decoration</strong></td>
<td>Spray-On Glue, Foam, Varnish, Adhesive</td>
<td>A1P2 R</td>
</tr>
<tr>
<td><strong>Waste Removal</strong></td>
<td>Bacteria, Spores, Odours</td>
<td>A1P2 R</td>
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<tr>
<td><strong>Agriculture</strong></td>
<td>Pesticides, Insecticides</td>
<td>ABEK1P2 R</td>
</tr>
<tr>
<td><strong>Wood Treatment</strong></td>
<td>Bonding, Spray-On Glue</td>
<td>A2P3 R</td>
</tr>
<tr>
<td><strong>Construction, Grinding, Cutting, Drilling</strong></td>
<td>Tarring</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Sealing</td>
<td>A1P2 R</td>
</tr>
<tr>
<td></td>
<td>Spray Foam Insulation</td>
<td>A1P2 R</td>
</tr>
<tr>
<td><strong>Coating</strong></td>
<td>Organic Solvent/with boiling point less than 65 C</td>
<td>AXP3 R</td>
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<td></td>
<td>Ammonia Based Paint Remover</td>
<td>ABK</td>
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<tr>
<td></td>
<td>Polyurethane Coating**</td>
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<td></td>
<td>Solvent Based Varnish</td>
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<tr>
<td></td>
<td>Water Based Varnish</td>
<td>A1</td>
</tr>
<tr>
<td><strong>Bonding</strong></td>
<td>Solvent containing Adhesives</td>
<td>A1</td>
</tr>
<tr>
<td><strong>Handling</strong></td>
<td>Sulphur Dioxide</td>
<td>ABE</td>
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<td></td>
<td>Hydrochloric Acid</td>
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<td>Liquid Manure</td>
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<td></td>
<td>Ammonia</td>
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<td></td>
<td>Formaldehyde</td>
<td>A1 + Form</td>
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<tr>
<td></td>
<td>Hazardous goods storage/transport</td>
<td>ABEK1P3 R</td>
</tr>
</tbody>
</table>

**Warning:**

This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed.

* excluding Formaldehyde

** for occurrence of isocyanates, please contact the 3M Customer Helpline +44 (0) 870 60 800 60 or your local 3M office

![3M™ Reusable Respirators](image)
2. Assess the Risk

Nominal Protection Factors (NPF) for reusable half and full face masks*

<table>
<thead>
<tr>
<th>Filter Classification</th>
<th>NPF* with 3M Half Mask</th>
<th>NPF* with 3M Full Face Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>P2</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>P3</td>
<td>48</td>
<td>1000</td>
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<tr>
<td>Class 1 Gas and Vapour filters</td>
<td>50 or 1000ppm (whichever is lower)</td>
<td>2000 or 1000ppm (whichever is lower)</td>
</tr>
<tr>
<td>Class 2 Gas and Vapour filters</td>
<td>50 or 5000ppm (whichever is lower)</td>
<td>2000 or 5000ppm (whichever is lower)</td>
</tr>
</tbody>
</table>

AX-Filter for low boiling point (organic composition with a low boiling point under 65 °C). AX-Filter should only be fitted to 3M™ Full Face masks. AX filters may only be used for a single shift. A1 and A2 Filter for organic vapour with a boiling point above 65 °C.

* Country APF should be used where available.

Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

3.1 Select the Right

3M™ Reusable Respirator Series

<table>
<thead>
<tr>
<th>3M™ Reusable Respirator Series</th>
<th>4000</th>
<th>6000</th>
<th>6500</th>
<th>7500</th>
<th>6000</th>
<th>7907S</th>
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<tbody>
<tr>
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<td>Half Masks</td>
<td>Half Masks</td>
<td>Half Masks</td>
<td>Full Face Masks</td>
<td>Full Face Masks</td>
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<tr>
<td>Maintenance-free</td>
<td>●</td>
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<td></td>
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<tr>
<td>Ready to use</td>
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<td>●</td>
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<td>Comfortable</td>
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<td>Lightweight</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Easy to fit</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Adjustable head bands</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Drop Down feature</td>
<td>●</td>
<td>(QL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy-to-clean</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Quick de-assembly for maintenance</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>3M™ Cool Flow Valve</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Compatiblue with 3M Supplied Air System</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Modular replacement filter system</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Variety of filters</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Six-point head harness</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Speaking diaphragm</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Spare parts</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Accessories</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Multiple sizes available</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Colour coded sizes</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
3.2 Select the Right Filter

How do I select my filter?

- **Consider the hazard**
  Are they particles or particles, gases and vapours?

- **Contaminant**
  How much contaminant is in the air?

- **Comfort and Convenience**
  Filter protection level, weight, balance, field of view, compatibility with other equipment such as face shields.

- **Mask type**
  Is it a full face or half face mask?

- **Compatibility**
  What other Personal Protective Equipment is required e.g. welding shield?

- **Environment**
  Will the filter be caked in dust?

3M can help with free Select and Service Life Software.

3M™ Select and Service Life Software [www.3M.com/SLS](http://www.3M.com/SLS)

### 3M™ Reusable Respirators and Filters at a glance

- **Particulate protection only**
  - 7907S Full Face Mask
  - 6000 Full Face Mask
  - 7500 Half Face Mask
  - 6091 A1P3 R
  - 6092 A1B1E1K1P3 R + Formaldehyde
  - 6096 A1E1HgP3 R
  - 6098 AXF3 NR*
  - 6099 A2B2E2K2HgP3 R* + Formaldehyde

- **Gas and vapour protection only**
  - 6035 P3 R
  - 6036 P3 R

- **Particulate protection with relief from nuisance odours**
  - 6038 P3 R-HF
  - 6039 P3 R

- **Combined particulates + gas and vapour protection**
  - 6051 A1
  - 6051i A1
  - 6055 A2
  - 6057 ABEK1
  - 6059 ABEK1

* For use with full face masks only by 3M
4. Train in Fitting and Use

Make sure you know how to use and maintain your Respiratory Protective Equipment to ensure effective respiratory protection. 3M sales and technical professionals can help you to define your training needs and can provide training and on-site consultations on all aspects of respiratory protection tailored to your individual needs. You’ll also find easy to use training on our website: www.3M.eu/occsafety

Reusable Respirator Care & Maintenance

3M™ Reusable Respiratory Equipment requires regular checks and maintenance to ensure optimum performance and protection for the wearer. In addition to potentially reducing protection levels, poor maintenance can also reduce the effective lifetime of the equipment, resulting in the additional cost of replacement. Guidance on the appropriate checks is provided in the instruction booklets with each new item.

Example of a 3M™ Reusable Respirator Cleaning and Inspection Sheet
Respirator Select and Service Life Software

3M have designed state of the art software to help make the selection of 3M™ Respirators and filters easier. The user-friendly software also helps users estimate the service life of 3M™ Gas and Vapour Filters and helps determine how to use the NEW 3M™ 6051i and 6055i filters that feature the 3M™ End of Service Life Indicator (ESLI).

The 3M™ Select and Service Life Software simplifies and speeds up the selection of 3M™ Respirators through a user-friendly interface that allows the user to enter contaminants and their concentrations.

With the ability to analyse more than 700 different chemicals, and mixtures of chemicals, the software provides a series of prompts to the user to select an appropriate respirator. A record is also provided of the choices made by the user.

Respiratory filters have a limited service life, this is the estimated period of time before breakthrough of a chemical for a specific filter. Respiratory protection standards and/or good practice often require users of chemical filter respirators to implement a filter change schedule based on “objective information or data” to help prevent worker overexposure.

The 3M™ Select and Service Life Software offers the additional capability of estimating the frequency of replacement of 3M™ Gas and Vapour Filters. The software calculates service life based on workplace conditions such as contaminant concentration. This information can then be used to establish a filter change schedule.

To use the software simply visit: www.3M.eu/SLS
3M has over 30 years’ experience in respiratory protection, making us a brand you can trust. Our filters don’t just offer protection, our innovations over the years have focused on making your safety easier and more comfortable. Modern filter technology provides reduced breathing resistance whilst the dual cartridges and compact design offer better weight distribution and field of vision. With a simple twist and click 3M filters and facepieces featuring the 3M™ Bayonet Filter Attachment System can be connected in any combination (excluding the 6098 and 6099 combination filters, which need to be used with 3M full face respirators).

### 3M™ Combination Filters
Protect against both particles and gases. Different combinations of particulate and gas and vapour filters are used depending on the gases or vapours present in the air.

#### 3M™ Gas, Vapour and Particulate Filters 6000 Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6091</td>
<td>A1P3 R</td>
<td>Organic gases and vapours bp&gt;65°C and particulates</td>
</tr>
<tr>
<td>6092</td>
<td>A1B2E1K3P3 R +</td>
<td>Organic vapours bp&gt;65°C, inorganic vapours, acid gases, ammonia and its derivatives, formaldehyde up to 10ppm and particulates</td>
</tr>
<tr>
<td>6095</td>
<td>A2P3 R</td>
<td>Organic gases and vapours bp&gt;65°C and particulates</td>
</tr>
<tr>
<td>6096</td>
<td>A1E1HgP3 R</td>
<td>Organic vapours bp&gt;65°C, acid gases, mercury and particulates</td>
</tr>
<tr>
<td>6098*</td>
<td>AXP3 NR</td>
<td>Organic vapours bp&lt;65°C and particulates</td>
</tr>
<tr>
<td>6099*</td>
<td>A2B2E2K2HgP3 R +</td>
<td>Organic vapours bp&gt;65°C, inorganic vapours, acid gases, ammonia and its derivatives, mercury, formaldehyde up to 10ppm and particulates</td>
</tr>
</tbody>
</table>

* Only for full face masks.

### Convenience and flexibility
Three new combination filters accommodate an even greater variety of applications. Whilst the 6096 and 6099 classifications have been expanded to cover additional contaminants.
3M™ Gas and Vapour Filters
Gas and vapour filters protect only against gases and vapours. These can be combined with some particulate filters if needed.

3M™ Gas and Vapour Filters with 3M™ Service Life Indicator 6000i Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6051i</td>
<td>NEW A1</td>
<td>Organic gases and vapours bp&gt;65°C</td>
</tr>
<tr>
<td>6055i</td>
<td>NEW A2</td>
<td>Organic gases and vapours bp&gt;65°C</td>
</tr>
</tbody>
</table>

†† Please see the 6051i and 6055i User Instructions or the 3M™ Select and Service Life Software to determine if these filters are appropriate as a primary change out method for your work environment. It is important to change your gas and vapour filters at the right time; using the filter for longer can lead to break-through of hazard into the mask. Service life is the terms used to describe how long a set of filters can be used before they need to be changed. The ESLI is only appropriate as a primary change out method for certain organic vapours and exposure concentrations, must also be less than the workplace exposure limit (WEL).

Optimised filter use
Designed to indicate service life based on individual exposure and respiratory use patterns.

Confidence in protection
Indicator is a simple tool integrated into each individual 6000i Series filter for a quick visual check.

Ease of use
Can help users determine when to change their filters in appropriate environments†† or can be used to complement your current filter change schedule.

3M™ Gas and Vapour Filters 6000 Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6051</td>
<td>A1</td>
<td>Organic gases and vapours boiling point bp&gt;65°C</td>
</tr>
<tr>
<td>6054</td>
<td>K1</td>
<td>Ammonia and derivatives</td>
</tr>
<tr>
<td>6055</td>
<td>A2</td>
<td>Organic vapours bp&gt;65°C</td>
</tr>
<tr>
<td>6057</td>
<td>ABE1</td>
<td>Organic vapours bp&gt;65°C, inorganic vapours and acid gases</td>
</tr>
<tr>
<td>6059</td>
<td>ABEK1a</td>
<td>Organic vapours bp&gt;65°C, inorganic vapours, acid gases, ammonia and its derivatives</td>
</tr>
<tr>
<td>6075</td>
<td>A1+ formaldehyde</td>
<td>Organic vapours bp&gt;65°C and formaldehyde up to 10ppm</td>
</tr>
</tbody>
</table>

Comfort
Provides a good balance of weight on the face. Offers low breathing resistance. Trapezoidal shape helps to give excellent field of vision.

Compatibility
Can be used with all half face and full face combinations both with and without particulate filters.

3M™ Reusable Respirators

3M™ Gas and Vapour Cartridge 6057
3M™ Reusable Respirators

3M™ Particulate Filters
Particulate filters protect only against particles i.e. dust, mists, aerosols, smoke, mould, bacteria and so on. Some of our filters also provide relief from nuisance odours.

3M™ Particulate Filters 6035/6038 Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6035</td>
<td>P3 R</td>
<td>Solid and liquid particles – in solid plastic case for rough application</td>
</tr>
<tr>
<td>6038</td>
<td>P3 R</td>
<td>Solid and liquid particles, Hydrogen Fluoride gas up to 30ppm and relief from nuisance level organic vapours and acid gases below nominal protection factor in solid plastic case for tough applications</td>
</tr>
<tr>
<td>502**</td>
<td></td>
<td>Filter retainer</td>
</tr>
</tbody>
</table>

Service life
These filters have more surface area than many standard filters i.e. 1.8 times the surface area of a 2000 Series filter, which can potentially increase the service life in some applications.

Easy seal checking
Simply press on the filter’s hard case to use the 3M™ spring seal check feature.

Convenience
The hard case makes this filter ideal for harsh environments with the need for easy decontamination and protection. The 6038 hard case also protects against sparks and high heat.

3M™ Particulate Filters 5000 Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>5911†</td>
<td>P1 R</td>
<td>Solid and liquid particles</td>
</tr>
<tr>
<td>5925†</td>
<td>P2 R</td>
<td>Solid and liquid particles</td>
</tr>
<tr>
<td>5935†</td>
<td>P3 R</td>
<td>Solid and liquid particles</td>
</tr>
<tr>
<td>501</td>
<td></td>
<td>Filter retainer</td>
</tr>
<tr>
<td>603</td>
<td></td>
<td>Filter retainer</td>
</tr>
</tbody>
</table>

Combine
Can be combined with the 3M™ Gas and Vapour 6000 Series using the 501 retainer or used separately with the 603 and 501 filter retainer.

Comfort
Lightweight, low breathing resistance, excellent field of vision when fitted over the 6000 Series Gas and Vapour Filters.

3M™ Particulate Filters 2000 Series

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>2125</td>
<td>P2 R</td>
<td>Solid and liquid particles</td>
</tr>
<tr>
<td>2128</td>
<td>P2 R</td>
<td>Solid and liquid particles, ozone protection up to 10 x nominal protection factor, organic vapours/acid gas</td>
</tr>
<tr>
<td>2135</td>
<td>P3 R</td>
<td>Solid and liquid particles</td>
</tr>
<tr>
<td>2138</td>
<td>P3 R</td>
<td>Solid and liquid particles, ozone protection up to 10 x nominal protection factor, organic vapours/acid gas</td>
</tr>
<tr>
<td>502**</td>
<td></td>
<td>Filter retainer</td>
</tr>
</tbody>
</table>

Comfort
Both sides of the filter can be breathed through, increasing the surface area and reducing breathing resistance.

Compatibility
Can be used with half/full face masks and can even be used under welding shields.

Durability
These filters resist abrasion and wetting.

*502 filter retainer, allows 6000 series gas and vapour filters to be combined with 2000 series or 6000 series particulate filters.
† 5000 series filters can be used with 6000 series filters for combined gas and particulate protection in conjunction with a 501 filter retainer, and without the 6000 series filters in conjunction with a 603 filter platform and a 501 filter retainer.
Proudly introducing the 3M™ Organic Gas & Vapour Filters with 3M™ Service Life Indicator technology.

Unique to 3M, these innovative and easy-to-use filters have an end-of-service-life indicator (ESLI) to help users to determine when to change their filters in appropriate environments*

Compatible with any 3M Reusable mask, apart from the 4000 Series, the 6051i and 6055i filters can be used to complement or replace your current filter change schedule.

Who can benefit?
The 3M Service Life Indicator can be used to complement or replace your current filter change schedule. It is only recommended as a primary change method for certain organic vapours and exposure levels.

To determine if the ESLI may be used as the primary method for determining your filter schedule:

1. Perform exposure monitoring to quantify the organic vapour exposure levels in your workplace (See www.3M.co.uk/exposuredetection for guidance).

2. Enter the monitoring results in the 3M™ Select and Service Life Software (www.3M.co.uk/filterservicelife). If the ESLI is not applicable as a primary method, it may still be used to complement your current filter change schedule.

*Please see the 6051i and 6055i User Instructions or the 3M™ Select and Service Life Software to determine if these filters are appropriate as a primary change out method for your work environment.

Features and Benefits:

- Designed to indicate service life based on individual exposure and respiratory use patterns
- An efficient and effective visual tool to help determine when to change filters
- Helps provide added peace of mind, and can help increase compliance with your company’s respirator policy and industry regulatory requirements
- CE approved as A1 (6051i) and A2 (6055i) organic vapour filters against certain organic gases and vapours PLUS all of the features you would find in standard 3M Gas & Vapour Filters

Simple indicator bar

Helps users determine when to change filters.

Removable label

Helps protect Indicator from overspray and debris.

It is important to change your gas and vapour filters at the right time; using the filter for longer can lead to breakthrough of hazard into the mask. Service Life is the term used to describe how long a set of filters can be used before they need to be changed.

The ESLI is only appropriate as a primary change out method for certain organic vapours and exposure concentrations must also be less than the workplace exposure limit (WEL).
Since its introduction, the 3M 4000 Series has been the first choice 3M Reusable Respirator by health and safety managers across Europe*. With no parts assembly or maintenance required this simple, lightweight, well balanced respirator offers reliable respiratory protection against a range of gases, vapours and particulates typically found in a variety of industries. A unique bonded carbon technology allows the respirator to sit close to the face and fit well under many other types of protective equipment, providing an undisturbed field of vision and a more comfortable worklife.

**Features and Benefits:**

**Comfortable, Effective Protection**
- Low profile design for better peripheral vision
- Lightweight, well balanced design
- Soft, non-allergenic material with textured face seal
- Proven to consistently exceed EU standard requirements for breathing ease

**Convenience**
- One piece, maintenance-free construction
- Four versions available, each offering protection against differing hazards throughout industry
- Re-sealable bag provides convenient and clean storage between uses

**Cooler Wear**
- Central position of the exhalation valve for effective removal of heat and moisture build up within face piece

**Adjustability**
- Helps to achieve a stable secure fit
- Easy to fasten neck strap

**Cost Effective**
- Use until damaged, particulate filters clog or gas filters become saturated
- Proven to consistently exceed minimum standards for filter service life which can help postpone the need for respirator replacement and, overtime, represent a budget gain

**Accessories**
- 3M™ Overspray Guard 400 is available to help prolong the life of the main particulate filters

*Based on sales of 3M reusable respirators in Europe Middle East and Africa between 2010 and 2013.
1 INSPEC INTERNATIONAL Test Report 110.06.20 and ongoing quality release data
2 Tested by 3M, ongoing quality release data. For example in 2012: 1000 products tested, all samples exceeded EN 405 minimum level gas and vapour filter capacity.
The 7500 Series Respirators by 3M have set a new standard in comfort. This facepiece was designed with the wearer in mind. Its soft sealing surface, along with the unique 3M™ Cool Flow™ Valve, enhances wearer comfort and face fit. Reduced breathing resistance helps to minimise heat build-up in the mask and increases your comfort.

Available in three sizes, all masks have the 3M™ Bayonet Attachment System offering a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs and can also be used with 3M™ Supplied-Air Systems.

### Features and Benefits:

#### Head Harness
- Balanced, secure fit
- Reduced pressure and tension points

#### Facepiece
- DropDown feature for added convenience during breaks
- Designed for compatibility with 3M Head and Eye protection
- Soft silicone face piece material for comfort and durability
- Thin nose bridge area for more comfort
- Fully maintainable
- Low weight of 136 gr.

#### 3M™ Cool Flow™ Exhalation Valve
- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Stays clean

#### Low-Profile Design
- Minimises interference with field of view
- Minimised dirt-traps
- Reduced fogging with eye protection
- Sleek look and feel

#### Filter Connection
- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

### Plus
- Full range of spares available
- Available in three sizes distinguished by different colours

### 3M™ Half Mask 7503 (Large)
**Classification:** EN140:1998
- 3M™ Half Mask 7501 – small (grey blue)
- 3M™ Half Mask 7502 – medium (light blue)
- 3M™ Half Mask 7503 – large (dark blue)

### Compatible with:
- 3M™ S-200+ Supplied Air System
- 3M Protective Eyewear
- 3M Hearing Protection

### Ready-to-Use Respirator Packs
- 3M™ Reusable Half Masks 7500 Series

See page 51 for 3M™ Half Mask Accessories
The 3M™ Reusable Half Masks 6500 Series have been designed with tough and dirty work environments in mind. Stay productive and protected – the 6500 Series delivers durability and stability with a firm, lightly textured silicone faceseal and strong body construction. There are two versions of the 6500 Series available - the 6500QL Series featuring the Quick Latch Drop Down mechanism and the 6500 Series (Standard). Both versions are available in three sizes.

**Features and Benefits:**

- **Overmoulded, Low-Profile Design**
  - Simplified cleaning and maintenance with minimal parts and crevices
  - Advanced half mask design for a wide field of view
  - Compatibility with 3M™ welding/grinding shields

- **Adjustable Head Harness Assembly**
  - Optimum fit and comfort with three-size adjustable head cradle
  - Durable harness straps

- **Silicone Faceseal**
  - Provides comfort and stability with a soft but firm faceseal
  - Extended product life due to resilient silicone material
  - Lightweight
  - Keeps its shape in high-heat environments
  - Available in three sizes (S, M and L)

- **3M™ Bayonet Connection**
  - Flexible bayonet system for connection to a wide range of 3M™ gas, vapour and particulate filters

- **Valve Cover Design**
  - Directs exhaled breath and moisture downward
  - Easy positive pressure seal check

- **3M™ Cool Flow™ Exhalation Valve**
  - Enhanced comfort by reducing heat and moisture
  - Less exhalation resistance makes breathing easier

- **Quick Latch (QL) - Drop Down Mechanism**
  - Easy on and off as you move in and out of contaminated areas
  - No need to remove your safety helmet or face shield when lowering or raising your respirator

*QL version only

**3M™ Reusable Half Mask 6500 Series**

- **3M™ Reusable Half Mask 6501QL - small with Quick Latch**
  - 3M™ Half Mask 6501QL - small
  - 3M™ Half Mask 6502QL - medium
  - 3M™ Half Mask 6503QL - large

- **Standard**
  - 3M™ Half Mask 6501 - small
  - 3M™ Half Mask 6502 - medium
  - 3M™ Half Mask 6503 - large

**Compatible with:**

- 3M™ S-200+ Supplied Air System
- 3M Protective Eyewear
- 3M Hearing Protection

See page 51 for 3M™ Half Mask Accessories
The 3M™ Reusable Half Masks 6000 Series are economical, low-maintenance, simple to handle and lightweight. Available in three sizes, all masks have the 3M™ Bayonet Connection System allowing connection to a broad range of twin filters to protect against gases, vapours and particulates depending on your individual needs. 6000 series half masks by 3M can also be used with 3M™ Supplied Air Systems for your increased convenience and flexibility.

### Features and Benefits:

**Head Harness**
- Designed for compatibility with other 3M Head and Eye protection
- Cradle suspension for comfortable fit
- Easy to fasten neck strap

**Facepiece**
- Three colour coded sizes for easier identification
- Lightweight elastomeric material for comfort during long periods of work
- Ultra-low weight of 82g
- Reducing maintenance costs to minimum

**Low-Profile Design**
- Minimises interference with field of view
- More simplicity for easy handling

**Filter Connection**
- Twin filter design provides lower breathing resistance
- Better weight distribution and a more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

**Plus**
- Spare parts available
- Available in three sizes distinguished by different colours

### 3M™ Half Mask 6200 (Medium)
Classification: EN140:1998

3M™ Half Mask 6100 – small (light grey)
3M™ Half Mask 6200 – medium (grey)
3M™ Half Mask 6300 – large (dark grey)

**Compatible with:**
- Eyewear from 3M
- Hearing Protection from 3M

### Accessories for 3M Half Masks
- 3M™ Face Seal Wipe 105
- 3M™ Half Mask Carry Bag 106

### Ready-to-Use Respirator Packs
3M™ Reusable Half Masks 6000 Series
The 3M™ Full Face Mask 7907S offers durability and safety for demanding tasks that require face and respiratory protection. The 3M™ Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

The 7907S full face mask by 3M can also be used with Supplied Air Systems by 3M for your increased convenience and flexibility.

**Features and Benefits:**

- **Six Strap Head Harness**
  - Easy and secure fit for maximum safety
  - Provides greater stability
  - Easy release buckles

- **Full Face Lens**
  - Large polycarbonate lens with wide field of view
  - Spectacle kit and lens covers available

- **Facepiece**
  - Double face sealing for safe, secure fit to most face sizes
  - 6 Strap suspension
  - Silicone rubber one-size-fits-all
  - Highly durable
  - Range of consumables available
  - Speech Diaphragm for improved communication

- **Filter Connection**
  - Twin filter design provides lower breathing resistance
  - Better weight distribution and more balanced fit
  - Improved peripheral vision
  - Safe and secure fit
  - Flexible System for gas, vapour, particulate filters
  - Optional supplied-air connection

**3M™ Full Face Mask 7907S (Silicone)**

*Classification: EN136 (Class 2)*

**Compatible with:**
- Hearing Protection from 3M

**Accessories for 3M™ Full Face Masks**

- 3M™ Face Seal Wipe 105
- 3M™ Full Face Carry/Storage Bag 107
3M™ Reusable Respirators

3M™ Reusable Full Face Masks 6000 Series

The 3M™ Full Face Masks 6000 Series are simple to handle and comfortable to wear. The exhalation port provides increased durability and is easy to keep clean. Available in three sizes, all masks have the 3M™ Bayonet Connection System enabling connection to a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

Features and Benefits:

Full Face Piece
- Soft, non-allergenic elastomeric face piece
- Extremely lightweight (400 grams) for high comfort

Full Face Lens
- Broad field of vision
- Polycarbonate lens, scratch and impact resistant to EN166:2001 B

4 Strap Head Suspension
- Easy to put on and take off
- Well balanced

3M™ Cool Flow™ Exhalation Valve
- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Minimised dirt-traps to stay clean
- Sleek look and feel

Filter Connection
- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

Compatible with:
- Hearing Protection from 3M

Accessories for 3M™ Full Face Masks

- 3M™ Face Seal Wipe 105
- 3M™ Full Face Carry/Storage Bag 107
# 3M™ Reusable Respirators

## Reusable Respirator Spares and Accessories

### Half Masks

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head Harness</td>
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<tr>
<td>2</td>
<td>Inhalation Valve</td>
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<td>3</td>
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<td>7583</td>
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### 3M™ 7500 Series Half Mask

### 3M™ 6500 and 6500QL Series Half Masks

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<th>#</th>
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<th>6500 Part Number</th>
<th>6500QL Part Number</th>
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<tr>
<td>1</td>
<td>Head Harness Assembly/Quick Latch Head Harness Assembly</td>
<td>6581</td>
<td>6582</td>
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<td>Exhalation Valve</td>
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### 3M™ 6000 Series Half Mask

<table>
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<tr>
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<tr>
<td>Inhalation Valve Gasket</td>
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3M™ Reusable Respirators

Reusable Respirator Spares and Accessories

Full Masks

3M™ 7907S Series Full Face Mask

<table>
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<tr>
<td>1</td>
<td>Speaking Diaphragm Kit</td>
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<td>2</td>
<td>Breathing Room Assembly</td>
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<td>3</td>
<td>Nose Cup Assembly</td>
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<td>4</td>
<td>Exhalation Valve Cover</td>
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<tr>
<td>5</td>
<td>Nose Cup Valve Assembly</td>
<td>7882</td>
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<td>6</td>
<td>Lens Covers</td>
<td>7992</td>
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<tr>
<td>7</td>
<td>Lens Frame Kit</td>
<td>7928</td>
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<td>8</td>
<td>Large Respirator Rubber</td>
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3M™ 6000 Series Full Face Mask

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<tr>
<th>#</th>
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<tr>
<td>1</td>
<td>Spectacle Kit</td>
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<td>Lens Cover Peek Off</td>
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<td>Exhalation Valve</td>
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<td>Inhalation Valve</td>
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<td>5</td>
<td>Inhalation Gasket</td>
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<td>6</td>
<td>Head Harness Assembly (including head harness and buckles)</td>
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<tr>
<td>7</td>
<td>Lens Assembly (including lens, bayonet part fittings, inhalation valves and</td>
<td>6898</td>
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<td></td>
<td>inhalation port gaskets)</td>
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<td>8</td>
<td>Neckstrap Assembly</td>
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<td>9</td>
<td>Centre Adapter Assembly</td>
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Powered & Supplied Air Respirators

Providing clean breathing air is essential when working in areas where hazardous contaminants are present. 3M offers an extensive and flexible range of industrial powered and supplied air respirators, developed especially for the toughest environments.

These respiratory protective systems offer comfortable protection against multiple hazards and their ease-of-use enables improved productivity in the workplace. 3M is available to support the user in the correct selection, training and proper use of these products.
3M™ Powered & Supplied Air Respirators

Should I choose:

A powered air system?
- Incorporates a battery powered motorised fan to draw air through a filter
- Cannot be used to protect against substances with poor warning properties (taste/smell)
- Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- Suitable for use over long shifts - reduced breathing resistance
- Can offer integrated head, eye and face protection

A supplied air system?
- Air is supplied from a compressor (compressed air must be of breathable quality)
- Can be used to protect against substances with poor warning properties (taste/smell)
- Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- Suitable for use over long shifts - reduced breathing resistance
- Can offer integrated head, eye and face protection

Powered air respirators

- 3M™ Versaflo™ Powered Air Turbo TR-300+
- 3M™ Versaflo™ Powered Air Turbo TR-600
- 3M™ Jupiter™ Powered Air Turbo

Supplied air respirators

- 3M™ Versaflo™ Regulators V-Series
- 3M™ S-200+ Supplied Air System
- 3M™ Aircare™ Filtration Units
3M™ Powered & Supplied Air Respirators

Modular Systems

The modular respirator system is a comprehensive approach to worker protection systems based on comfortable-to-wear modules. All modular headtops, air delivery units and breathing tubes are compatible with one another. Users can mix and match parts as they move from one environment to another, or from one application to the next. It is the ultimate in flexibility for handling changing user environments.

Individual Systems

The individual respirator systems can be used in a variety of workplace applications. They include powered air respirators with integrated head, eye, face and respiratory protection and supplied air regulators with half and full face masks.

Selection Process for Modular Systems

**Powered Air Systems**

- **Stage 1A**
  Select Powered Air Turbo*

- **Stage 1B**
  Select Filters, Battery and Belt

- **Stage 2**
  Select your Headtop

- **Stage 3**
  Select your Breathing Tube

- **Stage 4**
  Choose Accessories

* Want an even easier way to select a system? Choose 3M’s powered air starter kits, which include everything apart from the headtop.

**Supplied Air Systems**

- **Stage 1**
  Select your Regulator

- **Stage 2**
  Select your Headtop

- **Stage 3**
  Select your Breathing Tube

- **Stage 4**
  Select your Compressed Air Supply Tube

- **Stage 5**
  Select Couplings

- **Stage 6**
  Choose Accessories

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3M™ Powered & Supplied Air Respirators

Modular Respirator Systems

### 3M™ Versaflo™ Headcovers and Hoods S-Series
- Integrated Suspension
- Reusable Suspension
- S-133 S/L
- S-333 S/L
- S-433 S/L
- S-533 S/L
- S-655
- S-657
- S-757
- S-855E

### 3M™ Versaflo™ Headtops M-Series
- Faceshields
- Helmets
- Helmets with Shrouds
- M-206
- M-207
- M-306
- M-307
- M-406
- M-407

### Breathing Tubes
- BT-20 S/L: Lightweight (in two lengths)
- BT-30: Self-adjusting
- BT-40: Heavy-duty rubber

* BT-30 not approved for use with M-400 Headtop/TR-600 Powered Air Turbo combinations. BT-20S/L or BT-40 Breathing Tube should be used.

### Powered Air Turbos
- Particulate only (nuisance level organic vapour and acid gas options available)
- Particulate + Gas & Vapour
- Particulate + Gas & Vapour
- Intrinsically Safe Particulate + Gas & Vapour
- 3M™ Jupiter™ Powered Air Turbo with IS Kit

### Filter
- Spark Arrestor
- Prefilter
- P Filter
- P/Nuisance Level Organic Filter
- P/Nuisance Level Acid Gas (HF up to 10 x Threshold Limit Value)

### Battery
- Standard battery
- High capacity battery

### Charger
- Single Station Battery Charger
- 4-Station Battery Charger Kit

### Filter
- Spark Arrestor
- Prefilter
- P Filter
- P/Nuisance Level Organic Vapour/Acid Gas
- A1P Filter
- A2P Filter
- ABE1P Filter
- ABE2K1HgP Filter

### Battery
- Standard Battery
- High Capacity Battery

### Charger
- Single Station Bat. Charger
- 4-Station Bat. Charger Kit

### Filter
- Prefilter Pads
- Particulate P Filters
- A2P Filters
- A2BEK1P Filters
- ABE1P Filters

### Battery
- 4 hour Battery
- 8 hour Battery
- 4 hour IS Battery

### Charger
- Single Station Battery Charger
- 10-station Multi Battery Charger
3M™ Powered & Supplied Air Respirators

Welding Shields, High Temperature Helmet and Welding Helmets

- Welding Shields
  - HT-622
  - HT-629
  - HT-639

Breathing Tube Accessories

- BT-922: Disposable Cover
- BT-926: Flame-resistant Cover
- BT-927: Radiant Heat Cover

Supplied Air Regulators

- Air Cooling
- 3M™ Versaflo™ Supplied Air Unit V-100E
- 3M™ Versaflo™ Supplied Air Unit V-200E
- 3M™ Versaflo™ Supplied Air Regulator V-500E
- Air Heating
- Flow Controlled

Belt unit coupling

- Air Supply Tube
- Air supply tube coupling set
- 3M™ Aircare™ Filtration Units (Wall Mounted or Freestanding)

Individual Respirator Systems

Belt-Mounted Powered Air Respirator System for Asbestos Environments

- 3M™ Versaflo™ Powered Air System TR-603E-ASB with 7900PF Full Face Mask and BT-50 Breathing Tube
- Face-Mounted Powered Air Respirator

- 3M™ Powerflow™ Powered Air System 7900PF

Supplied Air Respirator

- 3M™ S-200+ Supplied Air System

Helmet-Mounted Powered Air Respirator

- 3M™ Airstream™ Helmet AS-300

Welding Headtops

- * For welding applications please refer to the Speedglas pages of this catalogue pages 147-160.
The new 3M Versaflo Powered Air Respirator System TR-600 provides protection against particles, gases or vapours, or against a combination of these depending on the type of filter used.

The turbo has selectable multiple airflows through a simple, intuitive, easy to use two-button operation and the particulate filter and battery status indicators provide constant updates during use. The modern, low profile design keeps weight close to the back resulting in greater comfort.

Features and Benefits:

Comfortable Airflow
- Three user selectable flow rates to maximise comfort
- Controlled airflow delivers steady flow as battery discharges or filter loads with particulates

Ease of Use
- TR-600 display shows battery charge status and particulate filter loading status during use
- Charge status is also indicated by a useful LED display on the battery
- No user calibration of turbo required
- Electronic audible, visual and vibratory alarm in case of low battery and/or low air flow

Multiple Applications
- Easy clean belt – submersible belt with smooth surfaces allows easy, thorough cleaning
- High durability belt option for hot work or rugged environments provides greater durability and spark/flame resistance
- Suitable for shower decontamination and temporary submersion to aid cleaning
- For asbestos specific version, please see Individual Respirator Systems - TR-603E-ASS (page 74)

Safety
- Approved to EN 12941 Class TH2 or TH3 dependent on headtop

<table>
<thead>
<tr>
<th>Filter</th>
<th>Filter Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-6700E P</td>
<td>TR-6700FC</td>
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<tr>
<td>TR-6820E P</td>
<td>TR-6800FC</td>
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<td>Organic Vapour Filter and Acid Gas (Hydrogen Fluoride up to 10 x Threshold Limit Value)</td>
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<tr>
<td>TR-6910E A1P</td>
<td>TR-6100FC</td>
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<td>TR-6130E ABE1P</td>
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<tr>
<td>TR-6580E ABE2K1HgP</td>
<td>TR-6500FC</td>
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</table>

Typical Applications
- Pharmaceutical manufacturing
- Painting
- Chemical processing
- Agriculture
- Demolition
- Pulp and paper processing
- Medical & healthcare
- Foundries

Batteries
- TR-630 Standard Battery
- TR-632 High Capacity Battery

Belts
- TR-626 High Durability Belt
- TR-627 Easy Clean Belt

Spares & Accessories
- TR-6600 Pre-filter
- TR-971 Air Flow Indicator
- TR-652 Spark Arrestor
- BPK-01 Backpack
- TR-653 Cleaning & Storage Kit
- TR-655 Backpack Adapter
- TR-651 Filter Latch Assembly
- TR-329 Braces
- TR-627X Easy Clean Belt Extender

Chargers
- TR-641E Single Station Battery Charger Kit
- TR-644E 4-Station Battery Charger Kit

3M™ Versaflo™ Powered Air Turbo TR-602E
This turbo can be easily adapted to your type of environment - see options below. (Includes Air Flow Indicator TR-971 and Spark Arrestor TR-662 x2).

3M™ Versaflo™ Powered Air Turbo Starter Kit TR-619E
This Versaflo™ Starter Kit includes the TR-602E Turbo, A2P filter, filter cover, prefilters (x10), spark arrestors (x2), easy clean belt, high capacity battery, single station battery charger kit, BT-30 length adjusting breathing tube and airflow indicator.
3M™ Modular Respirator Systems

3M™ Versaflo™ Powered Air Turbo TR-300+

The 3M™ Versaflo™ Powered Respirator System TR-300+ combines performance, protection and functionality with modern, stylish design and comfort. It is the key to easy-to-use, versatile, respiratory protection systems for particulate environments.

**Features and Benefits:**

**Ease of use**
- Battery charge status, selected airflow and particulate filter loading status indicators
- Electronic audible and visual alarm in case of low battery and/or low air flow
- Charge status is indicated by a useful LED display

**Comfort**
- 185 l/min and 205 l/min airflow rate options for user comfort
- Light and small - slim, lightweight, balanced design for comfort

**Multiple applications**
- High efficiency filter captures hazardous dust, mist and fume plus options for nuisance level gases and vapours
- IP53 rating. Suitable for use in decontamination shower
- Leather belt
- Spark arrestor

**Safety**
- Approved to EN 12941, TH2 or TH3 depending on headtop

**Typical Applications**
- Pharmaceutical manufacturing
- Woodworking
- Surface preparation
- Food & beverage
- Metal working
- Smelting

3M™ Versaflo™ Powered Air Turbo TR-302E+
This unit comes with an airflow indicator only. To adapt to your type of environment see options below.

3M™ Versaflo™ Starter Kit TR-315E+
This Versaflo Starter Kit includes the TR-302E+ Turbo, particulate filter, pre-filter, spark arrestor, standard belt, high capacity battery pack, battery charger kit, self-adjusting breathing tube and airflow indicator.

**Filter**
- TR-372PE
- TR-393E P + Nuisance Level* Organic Vapour
- TR-392E P + Nuisance Level* Acid Gas Filter (Hydrogen Fluoride up to 10 x Threshold Limit Value)

* Nuisance level refers to concentrations below the occupational exposure limit (OEL)

**Batteries**
- TR-330 Standard Battery
- TR-332 High Capacity Battery

**Belts**
- TR-325 Standard Belt
- TR-327 Easy-Clean Belt
- TR-328 Leather Belt

**Spares & Accessories**
- TR-3600 Pre-filter
- TR-970 Air Flow Indicator
- BPK-01 Backpack
- TR-362 Spark Arrestor
- TR-329 Braces
- TR-380 Filter Surround Gasket

**Chargers**
- TR-341E Single Station Battery Charger Kit
- TR-344E 4-Station Battery Charger Kit

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3M™ Jupiter™ Powered Air Turbo

Fully compatible with all 3M™ Versaflo™ Headtops and Breathing Tubes, the 3M Jupiter Respirator provides respiratory protection against particulate and gaseous contaminants (particulate only and combined particulate/gas and vapour filters are available). It can also be used in potentially explosive atmospheres when fitted with the intrinsically safe pouch and battery (available as the Intrinsically Safe Kit).

Ergonomically designed to sit at the base of the user’s back, the units low weight is carried mostly on the user’s hips via the padded comfort belt. As a result, the 3M Jupiter Respirator is comfortable enough to wear for entire work shifts.

**Features and Benefits:**

**Ease of Use**
- Electronic audible and visual alarm in case of low battery and/or low air flow

**Comfort**
- Modern, ergonomic design
- High comfort decontamination belt

**Multiple Applications**
- IP53 rating. Suitable for shower decontamination
- "Intrinsically Safe" (IS) Kit is available for use in potentially explosive atmospheres. Kit includes pouch and Intrinsically Safe battery

**Safety**
- Approved to EN 12941 class TH2 or TH3 depending on headtop

**Typical Applications**
- Pharmaceutical manufacturing
- Painting
- Chemical processing
- Agriculture
- Demolition
- Pulp and paper processing
- Medical & healthcare
- Foundries

**3M™ Jupiter™ Turbo (085-00-10P)**
Includes decontamination belt, air flow indicator and calibration tube.

To adapt to your type of environment see options below.

**3M™ Jupiter™ Powered Air Starter Kit**
This Starter Kit includes a standard Jupiter Turbo with decontamination belt and clip, air flow indicator and calibration tube as well as a pair of organic vapour and particulate (A2P) filters, pre-filters, self-adjusting breathing tube, 8 hour rechargeable battery (NiMH) and battery charger.

Now choose your headtop from pages 62-69.

**Filter**
- Pre-filter Pack: 461-00-02P24X5
- P Filter: 450-00-25P2X12
- A2P Filter: 453-00-25P2X06
- ABE1P Filter: 456-18-25P2X06
- A2BEK1P Filter: 453-09-25P2X06

**Batteries**
- Battery Pack - 8 hour: 007-00-64P
- Battery Pack - 4 hour: 007-00-63P
- Battery Pack - 4 hour IS battery (provided as part of IS Kit with pouch): 085-12-00P

**Chargers**
- Intelligent Charger: CHG-02EU
- 10 Station Intelligent Charger: CHG-04
3M™ Versaflo™ Supplied Air System V-Series

The modular range of supplied air respirators lets you choose how you want your system built, with the flexibility to change it in the future. The 3M™ Versaflo™ Supplied Air Regulators offer protection against dust, mist, fumes, gases or vapours and combination hazards e.g. paint spray. Supplied Air Regulators do not offer protection in confined spaces, oxygen deficient atmospheres or for asbestos stripping.

Features and Benefits:

Comfort
- Individually adjustable, consistently controlled airflow
- Air flow 170-305 l/min
- Removable, integrated activated charcoal filter
- Integrated silencer
- Belt swivel mechanism

Multiple Applications
- Spray gun or compressed air-tool port

Safety
- Low-pressure warning whistle
- Double action supplied air connection
- Approved to EN 14594 Class 2A/3A or 2B/3B dependent on headtop

Typical Applications
- Surface preparation, painting and coating
- Agriculture
- Woodworking

3M™ Versaflo™ Supplied Air Regulator V-500E
Balanced regulator specifically designed for respirator use, the Versaflo V-500E Regulator ensures smooth airflow, safety and comfort.

3M™ Versaflo™ Cooling Regulator V-100E and 3M™ Versaflo™ Heating Regulator V-200E
3M™ Versaflo™ Regulators V-100E and V-200E allow users to either cool (V-100E) or heat (V-200E) the air by as much as 28°C, making them a good choice for workers exposed to uncomfortably hot or cold temperatures.

Now choose your headtop from pages 62-69.

Filtration Units and Couplings
The 3M™ Aircare™ Filtration Unit can be connected inline to clean the compressed air before it is fed to the regulator.

The various components of the Versaflo V-Series Regulators are connected using plug and socket hose couplings (Rectus 25 or Rectus 95 connectors available).

Further details on page 71-72.
Based on a computer modeling of a worldwide sampling of head sizes, the 3M™ Versaflo™ Headcovers and Hoods S-Series, through their sizing and adjustment options, will comfortably fit many users. The integrated suspension headcovers and hoods can be suitable for applications that require frequent replacement of the entire headtop assembly, such as pharmaceutical manufacturing, or in situations where there is less soiling of the outer fabric. For disposal, the suspension assembly and air inlet components can be quickly removed and separated for segregated waste streams, where facilities are available.

**Features and Benefits:**

**All-Day Comfort**
- Slim design, that closely profiles the user's head for improved appearance
- Lightweight and loose-fitting
- Excellent airflow distribution for improved comfort, lower noise and reduced fogging

**Integrated Suspension**
- Ready to use straight out of the box
- Available in two adjustable sizes: S/M (50-58 cm) and M/L (54-64 cm)

**Improved Visibility**
- Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

**Added Protection**
- Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- Meets the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Unit
- Eye and face protection to EN166 – liquid splash and low energy impact
- Coverage of head, hair, neck and shoulders

![Image of 3M™ Versaflo™ Integrated Suspension Headcovers & Hoods S-Series](image)

**Typical Applications**
- Surface preparation, painting and coating
- Pharmaceutical manufacturing
- Chemical industry
- Medical and healthcare
- Food and beverage
- Agriculture
- Woodworking
- Pulp and paper processing

**3M™ Versaflo™ Hood S-533**
- Neck and shoulder coverage with soft, low-linting fabric that more readily drapes over user.
- **Fabric material:** Polyurethane coated knitted polyamide.
- **Visor material:** Coated polycarbonate for increased chemical and scratch resistance.

**Additional Protection**

<table>
<thead>
<tr>
<th>3M Air Delivery Unit</th>
<th>S-Series Headcovers and Hoods Classification</th>
<th>NPF¹</th>
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</thead>
<tbody>
<tr>
<td>3M™ Versaflo™ TR-300+</td>
<td>EN12941 TH3</td>
<td>500</td>
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<tr>
<td>3M™ Versaflo™ TR-600</td>
<td>EN12941 TH3</td>
<td>500</td>
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<tr>
<td>3M™ Jupiter™</td>
<td>EN12941 TH3</td>
<td>500</td>
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<tr>
<td>3M™ Versaflo™ V-100E/V-200E/V-900E</td>
<td>EN14594 3A²</td>
<td>200</td>
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</tbody>
</table>

1 Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
2 S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.
3M™ Versaflo™ Premium Hoods with Reusable Suspensions S-Series

Premium reusable suspension hoods can be a highly cost-effective choice for some high disposal rate environments; just the soiled hood fabric is replaced, while the suspension and air ducting can be reused. It also has an externally-adjustable airflow control that allows wearers to modify the airflow distribution to suit personal comfort needs. With a simple turn of the external controller, wearers can shift the location of air flowing over the back of their head to over their temples, face and visor.

Features and Benefits:

Comfort
- Slim design, that closely profiles the user’s head for improved appearance
- Lightweight and loose-fitting
- Excellent airflow distribution for improved comfort, lower noise and reduced fogging

Reusable Suspension
- Cost effective choice for some high disposal rate environments
- User control of airflow location and suspension adjustments for best comfort and custom fit
- One Size: 50-64 cm

Improved Visibility
- Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

Added Protection
- Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- Meets the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Units
- Eye and face protection EN166 – liquid splash and low energy impact

Typical Applications
- Surface preparation, painting and coating
- Pharmaceutical manufacturing
- Chemical industry
- Medical and healthcare
- Food and beverage
- Agriculture
- Woodworking
- Pulp and paper processing

3M™ Versaflo™ Hood S-655
General purpose, with knitted inner collar that is shorter and thinner than previous models.

Fabric material: 2-layer polypropylene spunbond/laminated film.
Visor material: PETG.

3M™ Versaflo™ Hood S-657
Features a double-shroud design for its respiratory seal. The inner shroud can be tucked into a shirt or protective coverall, which allows excess air to be channeled over the body, providing additional comfort.

Fabric material: 2-layer polypropylene spunbond/laminated film.
Visor material: PETG.

3M™ Versaflo™ Painters Hood S-757
Fabric specifically intended to help capture paint overspray. Double shroud design.

Fabric material: 3-layer polypropylene spunbond/laminated film/spunbond.
Visor material: Coated polycarbonate.

3M™ Versaflo™ Hood S-855E
Sealed seam hood for liquid chemical splash environments. Knitted inner collar design.

Fabric material: Spunbond polypropylene with multilayer barrier film.
Visor material: Coated polycarbonate.

3M Air Delivery Unit S-Series Headcovers and Hoods

<table>
<thead>
<tr>
<th>Classification</th>
<th>NPF¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M™ Versaflo™ TR-300+</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Versaflo™ TR-600</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Jupiter™</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Versaflo™ V-100E/V-200E/V-500E</td>
<td>EN14594 3A²</td>
</tr>
</tbody>
</table>

¹ Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
² S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

www.3M.eu/PPESafety
The 3M™ Versaflo™ Headtops M-200 Series feature lightweight, compact and well-balanced faceshields that can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards.

**Features and Benefits:**

**Highly Versatile Rigid Headtops**
- Provides protection from specific respiratory, head and eye hazards
- Bump cap protection approved according to EN812

**Modern, Well Balanced Design**
- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

**Visor Design**
- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

**Easy To Maintain**
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace

**3M™ Versaflo™ Faceshield M-206**
Features a general purpose face seal for dusts, spraying and chemical processing.
Fabric material: Polyurethane coated polyamide.

**3M™ Versaflo™ Faceshield M-207**
Features a flame resistant face seal for applications with hot particles.
Fabric material: Flame resistant polyester.

**Accessories**
- M-925 Uncoated Visor - providing additional molten metal splash protection
- M-927 Coated Visor - providing chemical and scratch resistance
- M-928 Peel-Off Visor Covers (pack of 10)
- M-935 Standard face seal (white) (pack of 5)
- M-936 Comfort face seal (pack of 5)
- M-937 Flame resistant face seal (pack of 5)
- M-958 Chin-strap
- M-972 Flame Resistant Headtop Cover
- M-976 Head, Neck and Shoulder Cover

**3M Air Delivery Unit**

<table>
<thead>
<tr>
<th>3M Air Delivery Unit</th>
<th>Versaflo™ M-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>NPF1</td>
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<tr>
<td>3M™ Versaflo™ TR-300+</td>
<td>EN12941 TH3 500</td>
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<tr>
<td>3M™ Versaflo™ TR-600</td>
<td>EN12941 TH3 500</td>
</tr>
<tr>
<td>3M™ Jupiter™</td>
<td>EN12941 TH2 50</td>
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<tr>
<td>3M™ Versaflo™ V-100E/V-200E/V-500E</td>
<td>EN14594 3B 200</td>
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</tbody>
</table>

1 Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
2 The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14384. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.
3M™ Modular Respirator Systems

3M™ Versaflo™ Helmets M-300 Series

The 3M™ Versaflo™ Helmets M-300 Series feature lightweight, compact and well-balanced helmets that can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards. M-300 Series helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units.

Features and Benefits:

**Highly Versatile Rigid Headtops**
- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

**Modern, Well Balanced Design**
- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

**Visor Design**
- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

**Easy To Maintain**
- Optional hearing protection
- 3M™ PELTOR™ Helmet-Mounted Earmuff Assembly
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace

**Typical Applications**
- Smelting and foundry applications
- Grinding
- Chemical processing and plant maintenance
- Agricultural applications
- Construction and renovation
- Demolition

3M™ Versaflo™ Helmet M-306
Features a general purpose faceseal for construction, chemical applications and heavy industry.

**Fabric material:** Polyurethane coated polyamide.

3M™ Versaflo™ Helmet M-307
Features a flame resistant faceseal for applications with hot particles.

**Fabric material:** Flame resistant polyester.

**Accessories**
- M-925 Visor - providing additional molten metal splash protection
- M-927 Coated Visor - providing chemical and scratch resistance
- M-928 Peel-Off Visor Covers (pack of 10)
- M-935 Standard faceseal (white) (pack of 5)
- M-936 Comfort faceseal (pack of 5)
- M-937 Flame resistant faceseal (pack of 5)
- M-958 Chin-strap

H3P3AF 300, HS10P3AF-405-GJ (Optime I), HS20P3AF-410-GQ (Optime II), HS40P3AF-413-SV (Optime III),
The following may also be used in combination with the Z3AF/2 adaptor:
X1P5/X1P5-OR, X2P5, X3P5, X4P5/X4P5-OR, X5P5

**3M™ Versaflo™ Helmet M-301**

**Features**
- General purpose faceseal for construction, chemical applications and heavy industry.
- Fabric material:
  - Polyurethane coated polyamide.

**3M™ Versaflo™ Helmet M-302**

**Features**
- Flame resistant faceseal for applications with hot particles.
- Fabric material:
  - Flame resistant polyester.

**Accessories**
- M-972 Flame Resistant Headtop Cover
- M-976 Head, Neck and Shoulder Cover

**Nominal Protection Factor** – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
1. The M-Series Face Shields and Helmets meet the higher strength (B) requirements of EN4594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

**3M Air Delivery Unit / Versaflo™ M-300**

<table>
<thead>
<tr>
<th>Classification</th>
<th>NPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M™ Versaflo™ TR-300+</td>
<td>EN12941 TH3</td>
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<tr>
<td>3M™ Versaflo™ TR-600</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Jupiter™</td>
<td>EN12941 TH2</td>
</tr>
<tr>
<td>3M™ Versaflo™ V-100E/V-200E/V-500E</td>
<td>EN4594 3B*</td>
</tr>
</tbody>
</table>

**Eye Protection**
- EN166 1BT:3*
- EN166 1BT:3.9**

**Hearing Protection**
- EN352-2***
- EN352-3***

**Head Protection**
- EN397 LD 440V a.c.

* With M-927 Coated Visor
** With M-925 Uncoated Visor
*** With M-922 Peltor H3P3AF 300 SNR = 28 Size designation M/L, Optime I SNR = 26 Size designation M/L, Optime II SNR = 30 Size designation M/L, Optime III SNR = 34 Size designation M/L, XPS/XPS-CR SNR = 25dB Size designation M/L, XPS SNR = 30 Size designation M/L, XPS SNR = 32 Size designation M/L, XPS-CR SNR = 32 Size designation M/L, XPS-SML or XPS SNR = 36 Size designation L.

Contact 3M for full attenuation data including octave band and H, M and L values.

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65
3M™ Versaflo™ Helmet M-300 with integrated communications and hearing protection

M-300 Series Helmets meet the highest powered respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units. Now approved to be used with 3M™ Peltor™ LiteCom headsets, M-300 Helmets offer you the possibility to communicate effectively whilst protecting your hearing in noisy environments.

Features and Benefits:

- Highly versatile rigid headtops
  - Head protection approved according to EN397
  - Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

- Modern, well balanced design
  - Lightweight with excellent balance
  - Fully-adjustable head suspension
  - A deflector allows users to direct the airflow inside the headtop for increased control and comfort

- Visor design
  - Visor design combines excellent peripheral and downward vision with good optical clarity
  - Lenses provide chemical and scratch resistance

Typical Applications

- Smelting and foundry applications
- Grinding
- Chemical processing and plant maintenance
- Agricultural applications
- Construction and renovation
- Demolition

3 options of LiteCom headsets

- 3M™ PELTOR™ LiteCom
  - Two way radio

- 3M™ PELTOR™ LiteCom Plus
  - Two way radio
  - External audio input
  - Level dependent function for ambient listening

- 3M™ PELTOR™ WS™ LiteCom
  - Two way radio
  - External audio input
  - Level dependent function for ambient listening
  - Bluetooth® connectivity

Product references

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>M-307</td>
<td>3M™ Versaflo™ Helmet M-307 with flame resistant faceplate</td>
</tr>
<tr>
<td>MT7V1</td>
<td>Dynamic Microphone (including helmet attachment)</td>
</tr>
<tr>
<td>MT53V1</td>
<td>Electret Microphone (including helmet attachment)</td>
</tr>
<tr>
<td>MT7H7P3E4410-EU</td>
<td>3M™ PELTOR™ LiteCom Plus, PMR 446, helmet attachment, dynamic mic</td>
</tr>
<tr>
<td>MT7H7P3E4310-EU</td>
<td>3M™ PELTOR™ LiteCom Plus, LPD 433, helmet attachment, dynamic mic</td>
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<tr>
<td>MT53H7P3E4410WSS</td>
<td>3M™ PELTOR™ WS™ LiteCom, PMR 446, helmet attachment, electret mic</td>
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<tr>
<td>MT53H7P3E4400-EU</td>
<td>3M™ PELTOR™ LiteCom, PMR 446, helmet attachment, electret mic</td>
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Approvals

- Respiratory protection
  - EN12941 TH2/TH3
  - EN14594 3B*

- Hearing protection
  - PPE Directive (89/686/EEC)
  - RED Directive (2014/33/EU)
  - EMC Directive (2014/30/EU)
  - LVD Directive (2014/35/EU)
  - ROHS Directive (2011/65/EU)

- Head protection
  - EN397 LD 440V a.c.

- Eye protection
  - EN166 1BT:3:1**
  - EN166 1BT:3:9***

* The M-Series Helmets meet the higher strength (B) requirements of EN14984. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.
The 3M™ Versaflo™ M-Series Helmets can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards with additional neck and shoulder coverage. M-400 Series helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units.

Features and Benefits:

Highly Versatile Rigid Headtops
- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, Well Balanced Design
- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor Design
- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Easy To Maintain
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace

Typical Applications
- Smelting & foundry applications
- Construction & renovation
- Grinding
- Demolition

3M™ Versaflo™ Helmet M-406
Features a highly durable shroud for construction applications and heavy industry.
Fabric material: Nylon.

3M™ Versaflo™ Helmet M-407
Features a flame resistant shroud for applications with hot particles.
Fabric material: Polyaramid.

3M Air Delivery Unit

<table>
<thead>
<tr>
<th>3M Air Delivery Unit</th>
<th>Versaflo™ M-400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>NPF</td>
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<td>3M™ Versaflo™ TR-300+</td>
<td>EN12941 TH3</td>
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<tr>
<td>3M™ Versaflo™ TR-600</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Jupiter**</td>
<td>EN12941 TH3</td>
</tr>
<tr>
<td>3M™ Versaflo™ V-500E/V-200E/V-500E</td>
<td>EN14594 3B</td>
</tr>
</tbody>
</table>

Additional Protection
- Eye Protection EN166 1BT
  EN166 1BT:3
- Hearing Protection N/A
- Head Protection EN397 LD 440V a.c.
  * With M-927 Coated Visor
  ** With M-925 Uncoated Visor

Eye Protection EN166 1BT
- EN166 1BT:3
- EN166 1BT:3:9

Accessories
- M-925 Visor - providing additional molten metal splash protection
- M-927 Coated Visor - providing chemical and scratch resistance
- M-928 Peel-Off Visor Covers (pack of 10)
- M-958 Chin-strap
- M-447 Flame resistant shroud
- M-448 High durability shroud
- M-972 Flame resistant headtop cover

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3M™ Radiant Heat Cover M-973/M-975 and Over-Visor M-967


Features and benefits:

- Designed to be robust and durable to withstand some of the harsh environments experienced in the metal production industry
- Adaptable - the radiant heat cover and over-visor comprises modular components allowing the user to select the components required to adapt to their needs
- Low profile, designed specifically for 3M™ M-307/M-407 Respirator Helmet
- The over-visors are designed to be flip-up, allowing the user the flexibility to have shaded IR/UV protection when needed but have the peace of mind of clear vision when not required
- Utilises the 3M™ Visor Carrier M-961 to fit to the 3M™ M-307/M-407 Respirator helmet
- Additional option: 3M™ Radiant Heat Breathing Tube Cover BT-927

### Radiant heat cover performance

<table>
<thead>
<tr>
<th>EN ISO 11612 Code letter and classification</th>
<th>Heat transmission performance requirement</th>
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<tbody>
<tr>
<td>A1</td>
<td>Limited flame spread</td>
</tr>
<tr>
<td>B1</td>
<td>Convective heat</td>
</tr>
<tr>
<td>C4</td>
<td>Radiant heat</td>
</tr>
<tr>
<td>D3</td>
<td>Molten aluminium splash</td>
</tr>
<tr>
<td>E3</td>
<td>Molten iron splash</td>
</tr>
</tbody>
</table>

### Over-visor and visor carrier performance

<table>
<thead>
<tr>
<th>Model</th>
<th>European standard</th>
<th>Scale number</th>
<th>Optical class</th>
<th>Symbol</th>
<th>Field of use</th>
<th>Mechanical strength</th>
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<tbody>
<tr>
<td>M-967 Over-visor</td>
<td>EN 166:2001</td>
<td>1</td>
<td>8T</td>
<td>High speed particles</td>
<td>Medium energy impact at extremes of temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td>Molten metal splash</td>
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<tr>
<td></td>
<td>EN 170:2002</td>
<td>2–5 (Ultraviolet)</td>
<td></td>
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<td></td>
<td>EN 171:2002</td>
<td>4–5 (Infrared)</td>
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<tr>
<td>M-961 Visor Carrier</td>
<td>EN 166:2001</td>
<td>BT</td>
<td>High speed particles</td>
<td>Medium energy impact at extremes of temperature</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Typical Applications

- Furnaces and smelting
- Foundry casting

**Radiant heat covers**

- 3M™ Radiant Heat Cover M-973 for 3M™ M-307 Helmet
- 3M™ Radiant Heat Cover M-975 for 3M™ M-407 Helmet

**Visors**

- 3M™ Over-Visor M-961
- 3M™ Over-Visor M-967

**Other accessories**

- 3M™ Breathing Tube Cover BT-927
The HT-600 Series Welding Shields not only offer respiratory protection but also face, eye and impact protection in metal working and fabrication environments. The various flip-up shield and filter mechanisms allow you to inspect your work whilst the large coverage area gives protection from radiation and sparks. The range also offers a choice of filter shades including auto-darkening and fixed shades. Thanks to the comfortable head harness and knitted face seal, the welder can wear the welding shield for long periods of time. The airflow through the visor ensures reduced sweat build up and can make the welder more comfortable and efficient.

### Features and Benefits:
- Superb coverage
- Respiratory, eye, face and impact protection
- Liftable welding lenses to allow clear view, while retaining respiratory protection
- New airduct system giving improved airflow to the face area
- New comfortable easy adjust harness with double comfort band
- Harness/airduct in one robust assembly
- Easy-to-fit comfortable, elasticated, knitted face seal

### Typical Applications
- Metal working

For a more comprehensive guide to welding protection, please refer to the welding section 138-150.

### 3M™ Welding Shield HT-639
A well balanced shield for welders.
**Headtop weight:** 696g.
- Supplied with a 90×110mm filter holder
- Conventional or auto-darkening filters can be fitted

### 3M™ Welding Shield HT-622
A super-light shield for welders. Wide range of filter shade combinations available.
**Headtop weight:** 595g.
- Supplied with shade 1.7 UV filter, also available in shades 3 & 5
- Supplied with shade 8 welding filter, also available in shades 5 & 10
- Total shade range available from 6.7 to 15

### 3M™ Welding Visor HT-629
The solution for those welders needing a welding shield with a clear, wide view visor beneath. The 90 × 110mm filter holder hinges down for easy access.
**Headtop weight:** 794g
- Supplied without a welding filter, but with cover lenses
- Conventional or auto-darkening filters can be fitted

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**3M Air Delivery Unit Classification**
- **NPF1**

3M™ Versaflo™ TR-300+ EN12941 TH2 50
3M™ Versaflo™ TR-600 EN12941 TH2 50
3M™ Jupiter™ EN12941 TH2 50
3M™ Versaflo™ V-100E/V-200E/V-500E EN14594 2A 2 50

1 Nominal Protection Factor - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
2 The HT-600 Series Welding Shields meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.
3M™ Versaflo™ Breathing Tubes BT-Series

A breathing tube connecting the air source with the headtop is required to ensure that clean air reaches the headtop reliably and with unrestricted airflow. The breathing tubes offered are compatible with all 3M™ Versaflo™ Headtops and Air Delivery Units*.

Features and Benefits:

- QRS (Quick Release Swivel) breathing tubes allow fast and easy connection
- All BT-Series Breathing Tubes meet the higher respiratory performance requirements with 3M™ headtops
- A special flame-resistant sleeve lengthens the life of the breathing tube and protects it from flying sparks
- A disposable breathing tube cover is available to help aid, cleaning and decontamination

Accessories

- BT-922: Disposable breathing tube cover
- BT-926: Flame resistant breathing tube cover
- BT-927: Radiant Heat Cover

3M™ Versaflo™ Breathing Tube BT-20 S/L
Lightweight breathing tube that comes in two lengths and is easy to wipe down.
Material: Polyurethane.
Length: 735mm (S), 965mm (L).

3M™ Versaflo™ Breathing Tube BT-30
Self-adjusting length for improved fit for many wearers and reduce risk of catching and snagging.
Material: Polyurethane.
Length: 525 - 850mm.

3M™ Versaflo™ Breathing Tube BT-40
High durability breathing tube.
Material: Chloroprene.
Length: 840mm.

3M™ Modular Respirator Systems

* BT-30 not approved for use with M-400 Headtop/TR-600 Powered Air Turbo combinations. BT-20S/L or BT-40 Breathing Tube should be used.
Various compressed air supply tubes are available to connect the 3M™ Air Regulator to the facility’s compressed air system to meet different requirements.

The tubes are available in different lengths and they guarantee high quality connections to all components. The tubes have a 3/8” male pipe thread BSP at each end to allow flexibility in the choice of coupling systems.

**Features and Benefits:**

- 3/8” BSP connection
- Flexibility of the hose
The 3M™ Aircare™ Filtration Units can be combined with all 3M™ Supplied Air Respirator Systems. The three-stage filtration system supplies highest quality air to the Supplied Air Respirator System and compressed air tools by removing water and oil aerosols, particles and odours from the facility-supplied compressed air.

The Filtration Unit is available as either a portable freestanding unit or wall-mounted unit.

Features and Benefits:

- Can be used for up to three users (or two users plus air tool)
- Differential Pressure Indicator
- Pressure regulator (lockable)
- Pressure gauge
- Pre-filter
- Semi Auto Drains (Stage 1, 2) and Manual Drain (Stage 3)
- Coalescing filter
- Adsorber filter with activated charcoal

Adapters and connectors

- Input: 1/2” or 3/8” female pipe thread BSP
- Includes 3/8” to 1/2” BSP adapter
- Includes 2 adapters, 3/8” BSP to 3/8” male pipe thread BSP
- Output: 3/8” BSP
- Output pressure can be adjusted with the integrated pressure regulator. The Aircare™ Filtration Units can be used with input pressures up to 10 bar

3M™ Aircare™ Filtration Unit, Freestanding
ACU-04
Input: 1/2” or 3/8” female pipe thread BSP.
Output: 3/8” BSP.

Wall-mounted option:
3M™ Aircare™ Filtration Unit, Wall Mounted
ACU-03
Input: 1/2” or 3/8” female pipe thread BSP.
Output: 3/8” BSP.
3M™ S-200+ Supplied Air System

The 3M™ Supplied Air Respirator System S-200+ is a comfortable and versatile supplied air respirator system for use with the 3M™ 6000 and 3M™ 7000 Series Half and Full Face Masks. The S-200+ System by 3M can be used as a standard airline respirator system or in dual-mode with filter back-up when air supply is disconnected.

Engineered to deliver additional comfort and security, the S-200+ features double-action safety couplings to help minimise the risk of accidental disconnection during use and an adjustable airflow feature so you can control the air across your face for maximum comfort.

Features and Benefits:

Cool and Comfortable
- Lightweight and balanced system with a constant flow of air across the face for a cooler and more comfortable wear

Adjustable Airflow
- Lockable airflow adjustment knob giving you full control of a range of input pressure

Double Action Couplings
- Help to minimise the risk of accidental disconnection during use giving you enhanced confidence in protection
- Stainless Steel CAST Connection, offering improved corrosion resistance in tough conditions

ATEX Tested
- Assessed in accordance with the requirements of the ATEX directive and in accordance with EN13463-1 for non-electrical equipment
- Suitable for use in IIB 2GD environments under certain conditions. Please see all relevant user information for further details

Top Performance
- Tested and approved to EN14594:2005
- Meets the highest level of protection, Class 4B for continuous flow supplied air respirators when fitted to a full face mask

Quick and Easy Maintenance
- Easy to maintain, spare parts are quick, easy and intuitive to replace

Typical Applications

- Spray Painting
- Glass Fibre Fabrication
- Powder Coating
- Material Handling
- General Transport
- Boat building
- Metal Fabrication
- Pharmaceutical
- Oil and Gas
- Automotive & Aerospace

3M™ S-200+ Supplied Air System
Approvals: EN14594
NPF*: 3M Half Face Masks (Class 3A/B**) = 200
3M Full Face Masks (Class 4A/B**) = 2000
Pressure range: 3.0 – 7.0 Bar
Pressure range (with Auxiliary air tool connected): 4.5-7.0 Bar
Maximum Pressure: 10 Bar

Select Your Individual Respirator System:
1. Choose the S-200+ Air Delivery Unit
2. Choose your half face or full face mask
3. Choose your filters (for use in dual-mode)
4. Choose the appropriate air supply tube
5. Choose your accessories and air tools (optional)

Flow Check Bag FCB-01
The S-200+ includes a Flow Check Bag allowing you to conduct a simple pre-use check to ensure that the correct amount of air is being delivered - giving you peace of mind

* Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

**When used with a 3M™ recommended Full Face mask the product meets the requirements for a class 4A/B device. When used with a 3M™ recommended Half Face mask the product meets the requirements for a class 3A/B device.
NEW 3M™ Versaflo™ Powered Air Turbo TR-603E-ASB for Asbestos Environments

The 3M™ Versaflo™ Powered Air Respirator System TR-603E-ASB is a belt-mounted air purifying device specifically designed for use in the asbestos/abatement environment.

When combined with 3M 7900PF Full Face Mask and BT-50 Breathing Tube, it forms a power-assisted system for respiratory protection against particles, organic gases and vapours with a minimum flow rate of 180 lpm.

Features and Benefits:

Comfortable Airflow
- Comfortable constant flow 180 lpm - when combined with BT-50 Breathing Tube and 7900PF Full Face Mask
- Controlled airflow delivers steady flow as battery discharges or filter loads with particulates

Ease of Use
- TR-603E-ASB display shows battery charge status and particulate filter loading status during use
- Charge status is also indicated by a useful LED display on the battery
- No user calibration of turbo required
- Electronic audible, visual and vibratory alarm in case of low battery and/or low air flow

Multiple Applications
- Available with Particulate and Organic Gas and Vapour/Particulate options
- Easy clean belt – submersible belt with smooth surfaces allows easy, thorough cleaning
- Suitable for shower decontamination and temporary submersion to aid cleaning

Safety
- Approved to EN12942 Class TM3

Typical Applications
- Asbestos stripping
- Abatement
- Demolition
- Construction
- Maintenance activities
- Transportation

Filter Covers
TR-6700E P
TR-6700PFC
TR-6700E A/P
TR-6100FC

Batteries
TR-632 High Capacity Battery

Belts
TR-627 Easy Clean Belt

Chargers
TR-641E Single Station Battery Charger Kit
TR-644E 4-Station Battery Charger Kit

Mask
7900PF Full Face Mask

Spares & Accessories
TR-653 Cleaning & Storage Kit
TR-651 Filter Latch Assembly
TR-662 Spark Arrestor
BT-922 Disposable Breathing Tube Cover
RTN-01 Retainer

Material:
EPDM rubber
The 3M™ Powerflow™ Face-mounted Powered Air Respirator System 7900PF is a single, optimised personal system combining effective, robust and reliable protection against respiratory, face and eye hazards present in the stripping and abatement of asbestos.

The system combines a comfortable elastomeric full-face mask with an industry proven powered air turbo and particulate filter combination in an easy to use and easy to decontaminate total system solution.

Features and Benefits:

- Six strap harness
- Quick release buckles
- Soft and pliable silicone
- Lightweight battery and full facepiece
- Large Polycarbonate lens with wide field of view
- Equipped with one side-mounted P3 filter for use against solid and liquid aerosols
- Compact face-mounted turbo unit with DIN knuckle threads
- Belt-mounted 5 hour Lithium ion system battery - Ingress Protection IP54 rated
- Intelligent fast charging battery charger
- Smooth shape allows easy decontamination
- Speech diaphragm to improve communication
- Compatible with head protection
- Delivered with a professional carry case

3M™ Powerflow™ 7900PF

<table>
<thead>
<tr>
<th>Filters</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefilter</td>
<td>461-00-02P24X5</td>
</tr>
<tr>
<td>Prefilter with holder</td>
<td>461-00-20P10X5</td>
</tr>
<tr>
<td>P3 Filter (pack of 3)</td>
<td>450-00-02P3X12</td>
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</tbody>
</table>

3M™ Full Face Mask

<table>
<thead>
<tr>
<th>Consumables</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Face Mask</td>
<td>7900PF</td>
</tr>
<tr>
<td>Six-Strap Harness</td>
<td>7983</td>
</tr>
<tr>
<td>Lens</td>
<td>7927</td>
</tr>
<tr>
<td>Lens Covers</td>
<td>7992</td>
</tr>
<tr>
<td>Nose Cup Assembly</td>
<td>7991</td>
</tr>
</tbody>
</table>

3M™ Powerflow™ Face-mounted Powered Air Respirator System 7900PF

Approvals
Visor: EN166 (limited testing) Optical class 2, Medium energy impact.
NPF *: 2000 (Turbo unit ON)
1000 (Turbo unit OFF)

3M™ Powerflow™ 7900PF

<table>
<thead>
<tr>
<th>Consumables</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerflow Turbo Unit</td>
<td>PFT-01</td>
</tr>
<tr>
<td>Battery</td>
<td>BAT-25</td>
</tr>
<tr>
<td>Individual charger</td>
<td>CHG-03</td>
</tr>
<tr>
<td>Decontamination kit and canister cover</td>
<td>024-04-02P</td>
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<tr>
<td>Easy-clean belt</td>
<td>031-35-00P4</td>
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<tr>
<td>Airflow Indicator Tube</td>
<td>031-34-02P</td>
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</table>

<table>
<thead>
<tr>
<th>Consumables</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spares and Accessories</td>
<td>Part No</td>
</tr>
<tr>
<td>Spectacle Kit</td>
<td>7925</td>
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<tr>
<td>Exhalation Valve</td>
<td>7283</td>
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<tr>
<td>Speaking Diaphragm Kit</td>
<td>7895</td>
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<tr>
<td>Neck Strap Assembly</td>
<td>7883</td>
</tr>
<tr>
<td>Green Head Harness Buttons</td>
<td>7989</td>
</tr>
</tbody>
</table>

* Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
3M™ Individual Respirator Systems

3M™ Airstream™ Respirator AS-300

The 3M™ Airstream™ system AS-300 is a helmet-mounted powered air respirator where the motor, fan and filter components are integrated into the helmet. The helmet is powered by a lightweight battery that can be fitted on the waist or in a pocket to improve the comfort and mobility of the user. The Airstream Powered Air Respirator has been very popular in industry for many years. They offer protection class TH1P R S against EN12941:1998+A2:2008 and an NPF* of 10 x exposure limit particulates only.

Features and Benefits:

- New visor design with larger viewing area provides eye and face protection to EN166:2001
- Robust and proven helmet design with optimised weight and balance provides head protection to EN397:2012
- Integrated turbo motor including filter cartridge and prefilter
- Head and face seals
- Lightweight belt-mounted 5 or 8-hour NiCd battery
- Electronic battery charger
- Combines respiratory, head, eye and face protection; hearing protection optional
- Easy to maintain, spare parts are quick, easy and intuitive to replace
- Easy to use filter system offers Particulate or Particulate and nuisance organic vapour protection

Typical Applications

- Metal Fabrication
- Quarries & Mining
- Smelting Foundries
- Battery, Lead recycling
- Woodworking
- Demolition
- Concrete/Cement

3M™ Airstream™ Ready-to-use Kit AS-300 Protection against solid particles

This 3M™ Airstream™ AS-300-1 Starter kit includes a motor and fan mounted inside the new helmet, a combined head and faceseal, one particulate filter and one super battery.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-filter (pack of 10)</td>
<td>060-22-00-P10</td>
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<tr>
<td>High efficiency main filter (pack of 10)</td>
<td>060-23-04P10X4</td>
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<tr>
<td>Main filter</td>
<td>060-23-06P10X4</td>
</tr>
<tr>
<td>Main filter with Charcoal</td>
<td>060-23-1P15X4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Batteries</th>
<th>Part No</th>
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<tbody>
<tr>
<td>Standard Battery Pack</td>
<td>007-00-01P</td>
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<tr>
<td>Super Battery Pack</td>
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<table>
<thead>
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<th>Charger</th>
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<tbody>
<tr>
<td>Intelligent Charger</td>
<td>CHG-02EU</td>
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<tr>
<td>AS/PP Charger Adaptor</td>
<td>ADP-01</td>
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</table>

<table>
<thead>
<tr>
<th>Consumables</th>
<th>Part No</th>
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<tbody>
<tr>
<td>Molten metal visor (pack of 20)</td>
<td>AS-361</td>
</tr>
<tr>
<td>Visor scratch resistant (pack of 20)</td>
<td>AS-362</td>
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<tr>
<td>Head and Faceseal</td>
<td>FSL-24</td>
</tr>
<tr>
<td>Visor surround assembly</td>
<td>AS-321</td>
</tr>
</tbody>
</table>

* Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
Hearing solutions
The Challenge of Hearing Protection

40 million workers are exposed to loud noise and 13 million suffer from hearing disorders despite industry regulations.

You can advance your hearing conservation programme with a customised and comprehensive approach to the hearing protection challenge. Implementing a solution that really makes a difference begins with understanding the hazards, the regulation and the factors that impact protection.

The Facts

The #1 Reported Occupational Health Issue: data from the European Agency for Safety and Health at Work shows that noise induced hearing loss is the most commonly reported occupational medical condition in the EU.

One Third of European Employees Potentially at Risk: according to the EU OSHA one third of workers in Europe are exposed to potentially dangerous levels of noise.

The Hazards

At home and work, it’s important to understand which sounds may cause hearing loss and require hearing protection.

The Regulations

At the Lower Exposure Action Value, suitable hearing protectors must be made available on request. At the Upper Exposure Action Value, hearing protectors must be worn and information provided to workers on risks, control measures, hearing protectors and safe working practices. An effective hearing conservation programme should also be instigated.

The Limit Value is an absolute value which must not be exceeded under any circumstances and can be achieved by using hearing protectors.

The Real World Hearing Concerns of Hearing Protection

Variable Noise Levels: Every environment is different and workers can face a wide range of sound levels throughout the day and in different areas at the same facility.

The Human Factor: Each person has a different shape, size and anatomy of the ear canal, so there is no one-size fits all hearing protection solution. The key to achieving optimal protection is having the best fit possible.

Employee Communication: Where there is an essential need for workers to communicate or hear warning sounds it is vital that their hearing is protected from hazardous noise levels.
The Solution, 3M Detection, Protection and Validation

As a global leader in sound and noise detection, hearing protection and fit test validation, 3M delivers easy and comprehensive solutions to complex hearing protection challenges.

Accurate Noise Detection. The first step in solving the challenge is to measure the noise levels facing your workers. 3M Detection Solutions make it easy to measure noise hazards, so you can select the appropriate protection for the job. Our detection instruments deliver accurate and reliable measurements and detection management software makes it easy to report and share data.

Adaptable Hearing Protection. 3M delivers a wide range of innovative hearing protectors, making it easy to select the right solution for the job. A variety of types and sizes of earplugs and earmuffs are available helping your team determine the right fit for each person and the right protection for the application. Our innovative products are designed for comfortable, extended wear, and they can help your team comply with your safety program.

Fit Test Validation. Integrating hearing protector fit testing into your hearing conservation program benefits everyone from new hires to high-risk workers. The 3M™ E-A-Rfit™ Validation System makes it easier to fit, train and motivate workers and to assess and manage the long-term performance of your hearing conservation program.

3M’s broad range of hearing protection devices in a variety of types and styles helps you solve many of the challenges facing workers in various environments.
Detection is the first step in identifying where hearing protection may be needed. 3M delivers intuitive solutions for effective noise monitoring programs. Durable, accurate, and easy-to-use instrumentation makes it simple to report and share noise exposure data. 3M Detection products deliver innovatively simple solutions to complex monitoring challenges.
Noise Indicator™ NI-100

The 3M™ Noise Indicator NI-100 alerts users to potentially dangerous noise levels, helping to identify areas where hearing protection may be required. Users simply clip the Noise indicator to a shirt or jacket; its LED light provides a clear visual indication when noise levels exceed a potentially hazardous threshold.

The NI-100’s small size and lightweight design make it ideal for workers in a variety of industries. In a variable noise environment the “Go/No Go” simplicity of the 3M™ Noise Indicator™ offers an indispensable tool for training and promoting voluntary hearing protection compliance in all areas of the work place.

Visual “Go/No Go”
- Green LED ("Go") flashes when noise level is below 85dB(A)
- Red LED ("No Go") flashes when noise level exceeds 85dB(A)
- Easy-to-understand visual indication when hearing protection may/may not be needed

One-button operation
- Simply clip to shirt and power-on
- Easy for workers to use and understand

Easily attached
- Clips to a wearer’s shirt or can be worn as a lanyard

3M™ Sound Detector SD-200 with Optime™ Alert System Linkage

The 3M™ Sound Detector SD-200 is a compact, lightweight sound level meter, designed to accurately measure workplace noise levels. Green, yellow and red LEDs flash the colour that corresponds to the 3M™ Optime™ Alert System, making it easy to select the appropriate level of hearing protection.

Industry compliant
- Meets applicable European ANSI and IEC Class 2 standards
- Consistent performance with accurate, actionable readings

Average sound pressure level (LEQ/LAVG)
- Integrating feature computes the average sound pressure level
- Provides stable readings where noise levels typically vary, for easier interpretation

User-friendly
- Simple four-button navigation to perform all functions
- Comes ready to take measurements; no configuration necessary

LED alerts match Optime™ Alert System
- Tri color LED’s flash brightly when preset noise levels are reached
- Helps user understand where hearing protection may need to be worn

Green LED flashes when noise measurements are between 80 and 85dB

Yellow LED flashes when noise measurements are between 85 and 105dB

Red LED flashes when noise measurements are above 105dB

Rechargeable battery
- Provides up to 200 hours of use between charges
- 10-hour auto-power off helps prolong battery life for extra cost savings

Small size
- Compact, lightweight design for increased hearing protection compliance

- Lithium polymer battery provides up to 50 hours of use between charges
- Reduces the cost and hassle of replaceable batteries
The Sound Examiner SE-400 series of sound meters are engineered to accurately measure noise levels in highly variable environments. The intuitive interface of this user-friendly sound level meter allows for out-of-box use with little to no training.

Features and Benefits:

Removable preamp
- Preamp can be easily removed to enable interference-free low-level monitoring, especially for remote use

Aerodynamic shape
- Minimizes disturbance to sound fields being measured, assuring accurate readings

Onboard Data Logging
- Allows user to capture maximum, minimum and peak values analysis.
- Can be used with 3M™ Detection Management Software DMS to manage compliance with hearing conservation programs

Display
- Display Languages: English, Spanish, German, French, Italian or Portuguese
- Display SPL, LMAX, LMIN, Peak, Lavg/Leq, Elapsed Time

Conformance to standards
- Meets IEC 61672-1 (2002) and ANSI S1.43-1997 (R2007) standards and is CE certified

Choice of microphones
- User can specify microphone type (Class/Type I or Class/Type II) based on application.
- Select Type II for general duty; Type I accuracy for legal metrology

SoundPatrol portable digital printing (optional)
- Enables hard-copy documentation of measurement results in the field
- Facilitates noise ordinance enforcement and on-the-spot citation issuance

<table>
<thead>
<tr>
<th>Product No.</th>
<th>SE-401</th>
<th>SE-402</th>
<th>SE-402-R</th>
<th>SE-401-IS</th>
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<tr>
<td>Data Logging</td>
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<tr>
<td>DMS Compatible</td>
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<tr>
<td>Class/Type 2 Accuracy</td>
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<tr>
<td>Class/Type 1 Accuracy</td>
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<tr>
<td>External AC/DC Output</td>
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<td></td>
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<tr>
<td>Portable Printing Option</td>
<td>•</td>
<td></td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removable Preamp</td>
<td>•</td>
<td></td>
<td></td>
<td></td>
<td>•</td>
</tr>
</tbody>
</table>
3M™ The Edge Personal Noise Dosimeter

The Edge family of personal noise dosimeters offer a cable-free, compact monitoring solution that mounts comfortably to the shoulder. Its large display with easy to use interface provides crucial information at a glance and its data logging capability allows for advanced reporting and analysis.

Features and Benefits:

**LED dose indicator**
- LED indicator can be programmed to flash when dose level has been exceeded
- Helps safety manager and employees easily identify who has reached their daily maximum noise dose exposure

**Three independent dosimeters**
- Edge eg5 enables simultaneous measurement against as many as three industry standards (e.g. EU, OSHA PEL, OSHA HC, ACGIH)
- Saves time and cost by reducing the need for multiple sampling surveys

**Display with lockout ability**
- Easy-to-read design enables workers to monitor their own noise exposure. If desired, unit can be set to inhibit display, for easier testing and verification
- Provides safety professionals the options needed to achieve compliance with hearing protection standards

3.5" long x 2.1" wide x .75" thick (88mm x 53mm x 19mm)

### Efficient Setup
- Infrared communication port to EdgeDock provides quick USB connection to 3M™ Detection Management Software
- Helps safety professional easily setup one or more Edge dosimeters

### Contoured shoulder mount
- Ergonomically designed and comfortable; weighs just 85g
- Lightweight and unobtrusive design assures comfort

### Intrinsic safety approvals
- The Edge eg5 carries Intrinsic Safety Approvals from MSHA, SIRA (ATEX), CSA (US and Canada) and Simtars (IECEx)
- Monitoring can be safely performed in potentially hazardous environments where devices must be certified

### Data Logging

<table>
<thead>
<tr>
<th></th>
<th><strong>Edge 4 Noise Dosimeter</strong></th>
<th><strong>Edge 5 Noise Dosimeter</strong></th>
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<tr>
<td>Product No.</td>
<td>eg4-D</td>
<td>eg5-D</td>
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<td>70071579307</td>
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<td>Data Logging</td>
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<td>•</td>
</tr>
<tr>
<td>Battery Life</td>
<td>60+ hours</td>
<td>40 hours</td>
</tr>
</tbody>
</table>
3M™ Detection Management Software DMS

Designed for dosimetry, sound level measurements, heat stress assessments and environmental monitoring, this advanced software helps safety and occupational professionals.

Configure instrumentation and save pre-configured setups Analyse, retrieve, download, share and save instrument data. Create charts, tables and panels to intuitively interpret your measurements. Perform advanced calculations. Report, generate insightful charts and reports, export and share the recorded results.

The software integrates with 3M™ Detection Solutions data logging instruments and will help you improve both operating efficiency and reporting in acoustics, heat stress, and environmental monitoring.

Features and Benefits:

Global platform
- Languages supported: Chinese, Czech, English, French, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, and Turkish
- Single software package enables companies with multiple locations to easily align programs and share data across regions and divisions

Wide-range application support
- Noise dosimetry
- Octave band sound analysis/survey
- Thermal comfort monitoring
- Integrating sound level meter
- Industrial and community sound surveys
- Indoor air quality (IAQ) assessment
- Area and personal heat stress monitoring

User-friendly interface
- Intuitive operation, helpful icons and simple graphing tools enable efficient usage
- “Click, Drag and Drop” report-building
- Data Finder provides quick access to stored information
- Easy to learn and use without the need for extensive training

All-in-one software solution
- Integrates with currently manufactured models of 3M Detection data logging instruments
- Centrally organize and access exposure data across acoustics, heat stress and environmental monitoring categories
- Generate powerful charts and reports including logged data, statistics, exceedance, and filter summary
- Saves time spent switching between software applications

Powerful tool for analysis
- Quickly create insightful charts including logged data, exceedance, filter summary and more
- Ready-to-use chart templates help generate impactful reports to support safety program compliance efforts

System Requirements

Pentium 4, 3GHz or later

2GB RAM

Windows XP, SP2 or later, Windows 7, 8, both 32 and 64 bit systems

1280 x 1024 pixels x 32-bit color display

70 -135 MB of disk space, depending on previously installed components

Keyboard

Mouse or pointing device

Product No. Description 3M ID
DMS Detection Management Software 70-0716-0821-3
Hearing Protection

Hearing protection must be right for you and your situation. For safety, productivity and comfort, it must reduce noise by the right amount, not too little and not too much. 3M can provide solutions for different individuals and applications with a wide range of earmuffs and earplugs.

3M Optime™ Alert System

Our system uses a simple, logically coloured classification to make the selection process easy. Firstly find out what your noise level is, then look at the icons below and establish which noise band (RNR) your noise level falls into. Take note of the icon and choose from the wide range of products featuring the correct icon (see summary table on next page). The 3M Optime™ Alert system has been incorporated into the 3M SD-200 sound detector that highlights the appropriate 3M hearing protection required.

*RNR = Recommended Noise Rating
3M™ Hearing Protection

3M™ Optime™ Alert System by Product

**GREEN OPTIME™ ALERT SYSTEM**
- **RNR* < 85dB(A)**
  - Hearing protection is not compulsory but is made available to workers for their comfort and protection.

**YELLOW OPTIME™ ALERT SYSTEM**
- **83dB(A) - 93dB(A)**
  - You must assume you are above the permitted exposure level, hearing protection is compulsory.

**RED 1 OPTIME™ ALERT SYSTEM**
- **87dB(A) - 98dB(A)**
  - You are above the permitted exposure level, hearing protection is compulsory. Ideal for high frequency noise.

**RED 2 OPTIME™ ALERT SYSTEM**
- **94dB(A) - 105dB(A)**
  - You are above the permitted exposure level, hearing protection is compulsory. Ideal for high and medium frequency noise.

**RED 3 OPTIME™ ALERT SYSTEM**
- **95dB(A) - 110dB(A)**
  - You are above the permitted exposure level, hearing protection is compulsory. Ideal for all frequencies.

**PLEASE NOTE:**
- At levels above 95dB(A) you will need an accurate noise assessment to correctly select the product. Green and Yellow marked products are not suitable for use in low frequency noise.
3M™ Disposable Earplugs

Our 3M™ Disposable Earplugs are made from expandable Polyurethane (PU) foam, which provides great comfort and good protection. The one size fits most ear canals. Once inserted in the ear, the foam plugs expand to provide a snug and secure custom fit. 3M provides a wide range of disposable roll down PU foam earplugs to choose from and to find the best solution for your individual needs.

Features and Benefits:

Comfortable
- Soft hypoallergenic foam material for lower pressure inside the ear
- Smooth, dirt resistant surface for better hygiene, durability and comfort

Convenient
- Tapered design fits most ear canals making the plugs easier to use
- One size only
- Dispenser available (1100)
- Polyester cord (1110) helps prevent loss of earplugs

Effective
- High SNR of 37dB

Compatible with
- Designed to be compatible with other PPE

Attenuation*

<table>
<thead>
<tr>
<th>3M™ Earplugs 1100/1110</th>
<th>Frequency (Hz)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
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</thead>
<tbody>
<tr>
<td>Mean Attenuation (dB)</td>
<td></td>
<td>30.0</td>
<td>33.1</td>
<td>36.3</td>
<td>38.4</td>
<td>38.7</td>
<td>39.7</td>
<td>48.3</td>
<td>44.4</td>
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<tr>
<td>Standard Deviation (dB)</td>
<td></td>
<td>3.9</td>
<td>5.0</td>
<td>7.4</td>
<td>6.2</td>
<td>5.6</td>
<td>4.3</td>
<td>4.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Assumed Protection (dB)</td>
<td></td>
<td>26.1</td>
<td>28.1</td>
<td>28.9</td>
<td>32.2</td>
<td>33.1</td>
<td>35.4</td>
<td>43.8</td>
<td>40.0</td>
</tr>
</tbody>
</table>

*SNR=37dB H=37dB, M=34dB, L=31dB

* For further attenuation information please visit www.3M.eu/PPEsafety

www.3M.eu/PPEsafety
40 years ago this simple hearing protector, the world’s first foam earplug, revolutionised hearing protection in the workplace and has remained to this day one of the most widely used earplugs in the world. Since its introduction to the market no other earplug has been studied and assessed in the field more comprehensively than the E-A-R Classic. Discover for yourself what makes the E-A-R Classic earplug so different and why it remains one of the most popular choices of earplug in the world today for attenuation, comfort and ease-of-fit.

Features and Benefits:

**Attenuation**
- Features a proprietary slow recovery vinyl foam, engineered to protect against noise and vibration
- Expands to the shape of the wearer’s ear canal, thereby providing an effective acoustic seal
- Fully tested and CE approved against EN352-2:1993
- The unique 3M™ E-A-RFit™ Validation System allows users to obtain their own personal attenuation rating to help ensure best fit and protection

**Comfort**
- Cylindrical shape: Flat and cylindrical to provide an effective seal even with jaw movement
- Sweat and humidity resistant, enables easier fitting and helps prevent moisture build up in the ear canal
- Textured surface, provides greater friction to prevent slippage and maintain an effective seal over a prolonged wear time
- Soft energy absorbing foam offers a low equilibrium pressure

**Ease-of-Fit**
- Firm foam properties prevent the earplug from folding or collapsing when inserted into the ear canal
- Quick and easy to roll down with slow recovery foam for a good custom fit

**Attenuation**

<table>
<thead>
<tr>
<th>3M™ E-A-R™ Classic™ Earplugs (Uncorded version)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
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</table>

SNR=28dB H=30dB M=24dB L=22dB

* For further attenuation information please visit [www.3M.eu/PPEsafety](http://www.3M.eu/PPEsafety)
3M™ Push-to-Fit

3M™ Push-to-Fit earplugs are very easy to insert since there is no roll down needed: just use the soft flexible grip to push the earplug into position and achieve excellent protection. Because you do not have to touch the foam during fitting it is one of the most hygienic types of earplug available.

Features and Benefits:

Comfortable
- Unique pod design allowing the foam to compress easily
- The plug slides gently into the ear and expands slowly
- Patented E-A-Rform foam tip shaped and sized to mold comfortably fitting virtually every size ear canal

Convenient
- Available corded or uncorded
- No roll down required
- Washable and reusable
- The insertion stem eliminates the need to touch the tip: no need to clean your hands

Compatible with
- Designed to be compatible with other PPE

Other Pod Earplugs

3M™ Torque™ Earplugs
The tough pod plugs
Available corded
SNR: 32dB

3M™ No-Touch™ Earplugs
The colourful pod earplugs
Available corded
SNR: 35dB

3M™ E-A-R™ Push-Ins™ Earplugs
The disposable pod earplugs with high attenuation Available corded and uncorded.
Compatible with E-A-Rfit™ validation system
SNR: 38dB

3M™ E-A-R™ Express™ Earplugs
Available corded, uncorded
SNR: 28dB

Attenuation*

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<tr>
<th>3M™ E-A-R™ Express Earplugs</th>
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<td>30.8</td>
<td>31.8</td>
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</table>

SNR=28dB H=30dB, M=24dB, L=22dB

* For further attenuation information please visit www.3M.eu/PPEsafety
3M™ Reusable Earplugs

3M™ Reusable Earplugs are made from flexible materials that are preformed to fit the ear. They are generally available with a joining cord to prevent loss. These reusable earplugs are comfortable, hygienic and economical. No sizing is required for these patented, pre-moulded, triple flanged earplugs. Available in a variety of styles and protection levels.

**Features and Benefits:**

**Comfortable**
- Unique and patented tri-flange design for a perfect fit and comfort
- Easy to fit in the ear for a continuous and comfortable protection

**Effective**
- High attenuation (SNR: 32dB)

**Convenient**
- Available with a cord to prevent loss
- Washable and reusable
- Compatible with E-A-Rfit™ validation system to check Personal Attenuation Ratings

**Versatile**
- Different versions to various use: traceable, high and low attenuation versions

**Compatible with**
- Designed to be compatible with all types of PPE

**Attenuation**

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<th>3M™ E-A-R™ Ultrafit™ Earplugs</th>
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<td>27.3</td>
<td>32.8</td>
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<td>38.4</td>
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</tbody>
</table>

**3M™ E-A-R™ Ultrafit™ 14 and Ultrafit™ 20 Earplugs**
SNR: 32dB

**Other pre-moulded earplugs**

- **3M™ E-A-R™ Ultrafit™ 14 and Ultrafit™ 20 Earplugs**
  - The low attenuation E-A-R™ Ultrafit™ versions
  - SNR: 14dB
  - SNR: 20dB

- **3M™ E-A-R™ ClearEAR™ 20 Earplugs**
  - The “nearly” invisible earplugs
  - SNR: 20dB

- **3M™ E-A-R™ Switch Protection Earplugs**
  - Special acoustic filter that lets lower level of sound through with little noise reduction for greater situational awareness
  - SNR: 15 dB (open mode)
  - SNR: 28 dB (closed mode)

- **3M™ Earplugs 1261/1271**
  - The pre-moulded earplug with convenient storage case
  - Available corded and uncorded
  - SNR: 25dB

- **3M™ E-A-R™ Tracers™ and Tracers™ 20 Earplugs**
  - Metal detectable version
  - SNR: 32dB
  - SNR: 20dB

*For further attenuation information please visit [www.3M.eu/PPEsafety](http://www.3M.eu/PPEsafety)*
3M™ Banded Earplugs

3M™ Banded Earplugs are easy to use, convenient and extremely comfortable. They are quick to insert and remove and can be stored around the neck when not required, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help improve the choice of hearing protection products that best suits the work place environment. Most models are available with replacement pods making them a more cost-effective option.

Features and Benefits:

Comfortable
- Extremely light
- Very low pressure into the ear
- Pod plugs seal the entrance part of the ear canal with no deep insertion

Convenient
- Wear in Under-the-Chin (U-T-C) mode
- Easy to use
- Ideal for people moving in and out
- Replacement pods available

Compatible with
- Designed to be compatible with other PPE

Attenuation*

3M™ E-A-R™ EARcaps™ Earplugs (In U-T-C mode)

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<th>1000</th>
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</table>

SNR=23dB H=27dB, M=19dB, L=17dB

3M™ Banded Earplugs can be worn in a variety of modes:
- Behind-the-Head (B-T-H)
- Under-the-Chin (U-T-C)
- and/or Over-the-Head (O-T-H)

Other banded earplugs

- 3M™ E-A-R™ EARband Earplugs
  The ergonomic banded earplugs Replacement pods available
  SNR: 21dB (B-T-H)

- 3M™ E-A-R™ Caboflex™ Earplugs
  The banded earplugs with durable conical shaped insert Replacement pods available.
  Wear Behind-the-Head or Under-the-Chin
  SNR: 21dB (U-T-C)

- 3M™ E-A-R™ Flexicap Earplugs
  The multi-position banded earplugs Replacement pods available.
  Wear Behind-the-Head, Under-the-Chin or Over-the-Head
  SNR: 23dB (U-T-C)

* For further attenuation information please visit www.3M.eu/PPEsafety
The 3M™ PELTOR™ Optime™ Earmuffs have been developed for demanding noisy environments and are effective in reducing even extremely low frequency sound. The sealing rings are filled with a unique combination of liquid and foam. The result is an optimum seal with low contact pressure, which provides agreeable comfort even during long periods of use. The sealing rings have ventilation channels and are covered with soft, patterned, hygienic foil. The product is also available in an electrically insulated (dielectric) version without visible metal parts.

Features and Benefits:

Comfortable
- Generous space inside the cup to help the ears breathe thus improving comfort
- Soft and wide sealing rings filled with a unique combination of foam and liquid to offer optimum sealing and low pressure
- Sealing rings with ventilation channels and covered with soft, patterned hygienic foil

Effective
- High attenuation despite lightness and low profile design: 31dB SNR
- Unique band design, stainless steel wire for constant pressure over long periods of use

Versatile
- Available in several versions including: Headband, foldable, neckband and helmet mounted versions. All versions are available in high visibility colours

3M™ PELTOR™ Optime™ II Earmuffs
Headband
SNR: 31dB

Accessories
Hygiene kits are available for each earmuff version

Other PELTOR™ Optime™ Earmuff options:

3M™ PELTOR™ Optime™ Neckband
Offers excellent compatibility with other PPE
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB
Optime™ III SNR: 35dB

3M™ PELTOR™ Optime™ Foldable Headband
Easy-to-store solution
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB

3M™ PELTOR™ Optime™ Helmet attachment
Can be worn with a wide range of safety helmets
Optime™ I SNR: 26dB
Optime™ II SNR: 30dB
Optime™ III SNR: 34dB

3M™ PELTOR™ Optime™ Hi-Viz Headband
For workers in need of extra visibility
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB
Optime™ III SNR: 35dB

3M™ PELTOR™ Welding Earmuff
Designed for welders
Fits into welding helmets
Optime™ I SNR: 24dB

* For further attenuation information please visit www.3M.eu/PPEsafety
The 3M™ PELTOR™ Earmuffs X Series have been developed on the basis of design, comfort and attenuation techniques. This new range sets a new standard for over-the-ear protection. The 3M™ PELTOR™ X3 earmuffs are the first of our new range of products to utilise a newly designed spacer to help improve attenuation without the need for double cup design, thus increasing the space inside the cup for greater comfort and wearability.

**Features and Benefits:**

**Comfort**
- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Earcups tilt for optimum comfort and efficiency

**Protection**
- New ear cushion foam technology for an effective acoustic seal and reliable protection
- New smart sealing ring
- Streamlined cups without compromising attenuation
- Compatible with a range of 3M eyewear and respirators (validated by internal testing)
- Also available as a helmet mounted version

**Design**
- Lightweight dual mould cups with maximum space inside to help minimise heat and moisture build up
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean

*For further attenuation information please visit www.3M.eu/PPEsafety*
Historically higher attenuating earmuffs meant larger and bulky cups, but no longer. The 3M™ PELTOR™ Earmuffs X4 can attenuate by as much as 33dB whilst maintaining a sleek, low profile aesthetically pleasing design. Using the same innovative technology the 3M™ PELTOR™ X5 remains relatively lightweight with excellent balance and wearer comfort despite the larger cups, providing a SNR of 37dB.

Features and Benefits:

Comfort
- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Ear cups tilt for optimum comfort and efficiency

Protection
- Unique attenuation as a result of optimum combination of specially-formulated foam featured in the ear cups, cushions and the innovative spacer and cup design
- Newly designed spacer improves attenuation without excess bulk or weight
- Also available as a helmet mounted version

Design
- Extremely lightweight (234g)
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean
- Extremely slim design providing excellent compatibility with other 3M personal protection products

For further attenuation information please visit www.3M.eu/PPEsafety
Validation Solutions

Fit Testing Made Easy
To make sure they are getting the protection they need, you need to know the Personal Attenuation Rating (PAR) of every employee.

The highest-SNR earplug or earmuff won’t provide the expected protection if it doesn’t fit right or isn’t used correctly at all times. Fit validation is a powerful training and motivational tool that can help the worker select the right hearing protector to achieve appropriate protection.
Validation

1. Fit
   Have the employee insert their hearing protection.

2. Test
   Connect to microphones and begin speaker test sound.

3. Assess
   Use PAR to customise hearing protector selection.

Fail
A ‘fail’ result means the hearing protection is either not inserted properly or is the wrong type or size for the worker’s ear canal.

NOTE:
Finding out each employee’s PAR is the first step to a successful conservation program. Once a worker’s PAR is measured, you can determine if they’re using the right hearing protection and ensure they’re trained on using it properly.

Pass
A ‘pass’ result means the hearing protection is inserted properly and provides sufficient protection for the worker’s specific job.
Fit testing is key, so make sure you get results you can trust. The 3M™ E-A-Rfit™ Dual-Ear Validation System measures the effectiveness of the earplug from inside the ear, providing accurate quantitative results. And because you can simultaneously test both ears, you’ll have more time to educate employees on the importance of fit and compliance.

Features:
- Dual-ear testing
- Fast, clear accurate results
- Earmuff testing capability
- Tests all 7 frequencies
- Seamless software integration
- Science-based, quantitative testing
- Compact design
Get results you can trust. The E-A-Rfit Dual-Ear Validation System measures the effectiveness of the hearing protection from inside the employee's ear, providing accurate, quantitative results. And because you can simultaneously test both ears, you'll have more time to educate employees on the importance of fit and compliance.

These earplug styles cover fit validation testing for more than 80 different 3M hearing protectors including earmuffs.

<table>
<thead>
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<th>Product #</th>
<th>Abbreviated Description</th>
<th>Case qty</th>
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<td>1 KIT</td>
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<td>393-2000-50</td>
<td>E-A-Rsoft Yellow Neons Probed Test Plugs</td>
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<td>393-2001-50</td>
<td>UltraFit Probed Test Plugs</td>
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<td>Push-Ins Probed Test Plugs</td>
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<td>Classic Probed Test Plugs</td>
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<td>E-A-Rsoft FX Probed Test Plugs</td>
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<td>393-3005-2</td>
<td>X4/X5 Probed Test Ear Muff Cushion</td>
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<td>Express Probed Test Plugs</td>
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<td>393-3003-2</td>
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Communications Solutions

Close up or far away the 3M™ PELTOR™ Communication Solutions for noisy environments make it possible for users of hearing protectors to communicate very effectively – with their immediate environment and with people further away.
The Sound Solution

First-class communication and hearing protection! There was a time when wearing hearing protectors meant being isolated and out of contact. Those days are over. Today, 3M™ PELTOR™ offers first-class communication solutions that not only make your working day safer and more efficient, but also much nicer!

3M™ PELTOR™ products are developed for all environments where high safety must be combined with communication. Shop and industrial environments, construction sites, agriculture and forestry are a few examples.

We have developed several models to ensure there’s a PELTOR Headset for every situation. Headband models for all-round use, and models with helmet attachments for people who wear safety helmets at work.

To ensure easy use of our products and good functions for all environments we use advance technology such as Bluetooth®.
The importance of wearing hearing protection 100% of time exposed

100% usage
Gives the expected protection.

99% usage
Just five minutes of carelessness per day significantly reduces the effect of the hearing protector.

90% usage
Virtually no protection.

Safety
To be effective, a hearing protector should be used 100% of the time in noisy environments. Even taking it off for a short time dramatically reduces its effectiveness and greatly increases the risk of hearing damage. The 3M™ PELTOR™ Communication Solutions encourage longer use because the wearer feels less isolated and can communicate with others more easily.

Function symbols
To help you to understand the functionality of the products you will find below symbols on each product page.

Key Function

<table>
<thead>
<tr>
<th>LEP-100 EU</th>
<th>Pro-Tac III</th>
<th>WS™ Headset XP</th>
<th>WS™ Pro-Tac XP</th>
<th>WorkTunes™ Pro</th>
<th>WS™ Alert™ XP</th>
<th>LiteCom</th>
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<th>WS™ LiteCom</th>
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</table>
3M™ PELTOR™ Communication Solutions

3M™ Versaflo™ Helmets M-300 Series with 3M™ PELTOR™ LiteCom solutions

M-300 Series Helmets meet the highest powered respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units. Now approved to be used with 3M™ PELTOR™ LiteCom headsets, M-300 Helmets offer you the possibility to communicate effectively whilst protecting your hearing in noisy environments.

Features and Benefits:

Highly versatile rigid headtops
- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, well balanced design
- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor design
- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Typical applications:
- Smelting & foundry applications
- Grinding
- Chemical processing & plant maintenance
- Agricultural applications
- Construction & renovation
- Demolition

Electronic Protectors
Size Ranges: S = Small, M = Medium, L = Large

<table>
<thead>
<tr>
<th>Helmet Model</th>
<th>Wedge</th>
<th>Product Number</th>
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<td>Z3AF</td>
<td>MT**H79P3*</td>
<td>3M™ PELTOR™ Helmet Att. Headsets, Product numbers beginning with MT7H or MT53H except model number ending in -77</td>
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<td>Helmet attached WS™ ProTac XP, WS™ Headset XP, Tactical XP, LiteCom, WS™ LiteCom, LiteCom PRO II, LiteCom Plus product numbers beginning with MT7H or MT53H</td>
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Note: 3M does not accept responsibility or liability, direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M’s liability for death or personal injury arising from its negligence or fraudulent misrepresentation.
The 3M™ PELTOR™ Level Dependent Ear Plug helps protect your hearing, and can help improve situational awareness and communications in challenging environments. Integrated with state-of-the-art level-dependent technology, the LEP-100 helps provide hearing protection in noise and situational awareness in quiet environments.

Features and Benefits:
- Protects your hearing (SNR 32dB/38dB) depending on the ear tip used
- Level dependent technology for situational awareness
- Intuitive one-button operation
- Recharge on the go
- LED charging status

3M™ PELTOR™  Level Dependent Ear Plug LEP-100 EU

Features and Benefits:

- Protects your hearing (SNR 32dB/38dB) depending on the ear tip used
- Level dependent technology for situational awareness
- Intuitive one-button operation
- Recharge on the go
- LED charging status

3M™ PELTOR™  Level Dependent Ear Plug LEP-100 EU

SNR: 32dB / 38 dB

Earpiece Power
- Battery Type: Lithium Ion
- Battery Life: Up to 16 hours
- Battery Charge Time: Approximately 90 minutes
- Volume Steps: 3 steps, Low, Medium, High
- Case Battery Type: 3 AA Alkaline Batteries
- Case Battery Life: Up to 16 recharging cycles
- Case USB Type: Micro B

Standards
- Waterproof Rating: Complies with IP54 with cover and USB ports closed.
- SNR: PPE directive 89/686/EEC

Physical Characteristics
- Weight: Box containing charger, 2 earpieces, 4 pair communications eartips, cord, 3 AA batteries - 272g
- Weight: 1 earpiece - 4g

3M™ PELTOR™ Accessories
- 370-TEPL-25 Communication Tips
- 370-TEPM-25 Replacement, Large
- 370-TEPS-25 Replacement, Medium
- PELTIPS-01 Torque™ Ear Tips, 50pr

* For further attenuation information please visit www.3M.eu/PPEsafety

www.3M.eu/PPEsafety
The 3M™ PELTOR™ ProTac™ III hearing protector helps protect against harmful noise, whilst allowing ambient sounds to be heard at a level below 82dB. It increases your ability to communicate with nearby colleagues, as well as hearing warning signals, approaching vehicles, or sounds in machines and processes.

### Features and Benefits:
- Attenuating hearing protector
- Level-dependent function for ambient listening
- 3.5 mm listen only stereo input (limited to 92 dB) for connection to external devices (e.g. cell phone, two-way radio, iPod)
- Voice guided menu system
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery
- Low-battery warning at low battery level
- To reduce the corrosion caused by sweat the electronics are located in the outer part of the cup
- Available in both headband and helmet attached versions (black)
- Available in two different cup sizes: one with higher attenuation and one slim version with lower attenuation

### Attenuation*

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<th>Frequency (Hz)</th>
<th>125</th>
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<td>36.1</td>
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</tbody>
</table>

* For further attenuation information please visit www.3M.eu/PPEsafety

### Additional Information
- **Battery Type:** 2x AA (Alkaline)
- **Operating time:** Approximately 100 hours of battery lifetime
- **Net Weight (incl. Batteries):**
  - ProTac™ III Slim MT13H220A (headband) = 303g
  - ProTac™ III MT13H221A (headband) = 355g
  - ProTac™ III Slim MT13H221P3E (helmet attachment) = 322g
  - ProTac™ III MT13H221P3E (helmet attachment) = 374g
- **Operating temperature:** -20°C to +55°C (battery dependent)
- **Wired Connectivity:** 3.5mm listen-only stereo input jack (limited to 82 dB)

### 3M™ PELTOR™ Accessories
- HY220: Hygiene kit
- FL6C/1: 3M™ PELTOR™ FL6C/1 3.5 mm Cable
- HY100A: 3M™ PELTOR™ HY100A CLEAN HYGIENE PAD
In environments with potentially hazardous levels of noise, protecting your hearing is essential. But so is communicating with your team.

With built in Bluetooth® Wireless Technology the 3M™ WS™ Headset XP enables communication and the streaming of high quality stereo sound. So you can safely hear and communicate even in loud environments.

### Features and Benefits:
- CE-marked Hearing Protection
- Noise Cancelling Speech Microphone
- Bluetooth® Wireless Technology HS/HF and A2DP profile for communication and streaming high quality stereo sound
- Advanced Voice Operated Transmission (VOX) technology for hands-free communication in high noise environments
- Stainless Steel Wire Headband: Wire headband offers comfortable pressure during prolonged usage.
- Protects your hearing (SNR: 31dB)

#### Push-to-Talk (PTT)
- Ergonomically placed PTT-button on cup for easy operation

#### Hearing Protection
- Noise attenuating headset help provide hearing protection in environments with potentially hazardous noise

---

### Technical Data Specifications

**3M™ PELTOR™ WS™ Headset XP**

**MT53H7AWS5**

Technical data specifications Bluetooth® Wireless Technology Version: 2.1+EDR

- **Frequency:** 2400-2483.5 MHz
- **Supported profiles:** HF/HS version 1.5, A2DP version 1.2
- **Output power:** 2.5 mW

**Other functions**

- **Battery Type:** 2xAA NiMH or alkaline batteries, 1.2-1.5 V
- **Battery life time:** Operating time: 24 h, standby time: 150 h Low battery level is indicated by a voice message: “low battery”,
- **Settings:** The last settings are stored when the headset is switched off
- **Mode:** Stereo
- **Auto power off:** 2 hours from last activation
- **Menu voice guide language:** English

**Storage**

Recommended storage conditions: -20° C - +55° C, <90% humidity Recommended max. shelf life: 5 years except the batteries, <1 year

Use limitation: Never modify or alter this product

### Accessories

**3M™ PELTOR™ Accessories**

- **ACK053** Rechargeable battery
- **FR08** Power supply
- **FR09** Battery charger
- **HY79** Hygiene Kit
- **M995/2** Microphone Wind Protector
- **HYM1000** Microphone Protector

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### Attenuation*

**MT53H7AWS5 Headband**

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SNR – H=32dB, L=22dB

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*For further attenuation information please visit www.3M.eu/PPEsafety*
The 3M™ PELTOR™ WS™ ProTac XP Headset is equipped with a level-dependent function for situational awareness and communication. The headset features Bluetooth wireless technology and can also be connected via a jack to provide high quality communication and streaming.

The level-dependent function helps you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication in quiet environments. Robust design, clear controls and an intuitive menu system.

This is a headset you will never want to take off.

Features and Benefits:

- Protects your hearing (SNR: 31dB)
- Noise cancelling speech microphone for clear communication in noisy environments using digital noise reduction
- Stainless steel wire headband for comfortable and consistent pressure
- Bluetooth® wireless technology for communication and streaming high quality stereo sound
- Advanced voice operated transmission (VOX) technology for hands-free communication in high noise environments
- Level-dependent function for situational awareness and communication
- External radio connection jack (only available in FLEX Connector version)
- Easy to use with four button operation
- Ghost voice guided menu system
- Auto power off in 2 hours from last activation
- Also available as neckband or helmet attachment

Connects with

- Bluetooth compatible devices
- Two-way radio (Flex)

Attenuation*

MT15H7AWS5 Headband

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</table>

SNR=31dB H=32dB, M=25dB, L=22dB

* For further attenuation information please visit www.3M.eu/PPEsafety

Other 3M™ PELTOR™ WS™ ProTac XP options

3M™ PELTOR™ WS™ ProTac XP
MT15H7P3ESW5 Helmet attachment
SNR: 31dB

3M™ PELTOR™ WS™ ProTac XP
MT15H7BWS5 Neckband
SNR: 30dB

Frequency Range: 2400-2483.5 MHz

Bluetooth® Version: 2.1+EDR

Battery Type: 2xAA NiMH or alkaline batteries, 1.2-1.5 V

Operating Time: Level Dependent + Bluetooth active: app 24h

Net Weight, (incl. batteries):
Headband: 396g
Helmet Attachment: 421g
Neckband: 386g

Operating Temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: Available with flex input jack

3M™ PELTOR™ Accessories
ACK053 Rechargeable battery
FR08 Power supply with USB connector
FR09 Battery charger with USB connector
M60/2 Wind shield for attenuation mic
HYM1000 Hygiene tape for boom mic
HY79 Hygiene kit
The 3M™ PELTOR™ WorkTunes™ Pro Headset helps protect you from potentially harmful workplace noise while at the same time enjoy listening to the built-in FM or AM/FM radio. The built-in antenna, fast digital tuning and ability to store stations makes the hearing protector flexible and easy to work with.

Features and Benefits:

- High attenuating hearing protector
- FM or AM/FM radio headset with built-in antenna
- Digital station search
- Voice guided menu system with announced frequencies
- Store up to 5 stations
- 3.5mm listen only stereo input (limited to 82dB) for connection to external devices (e.g., cell phone, two-way radio, iPod)
- Auto power off, the headset will turn off after 4hrs of non-use to save battery
- Low-battery warning at low battery level
- To reduce the corrosion caused by sweat the electronics are located in the outer part of the cup
- Available in both in headband and helmet attached versions (black)

3M™ PELTOR™ WorkTunes™ Pro Headset

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>125</th>
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SNR=32 dB H=34 dB M=29 dB L=22 dB

* For further attenuation information please visit www.3M.eu/PPEsafety
3M™ PELTOR™ WS™ Alert™ XP

With the 3M™ PELTOR™ WS™ Alert™ XP Level Dependent FM-Radio Bluetooth® Headset, we introduce a new era in the world of hearing protection. With a built-in FM-radio receiver, Bluetooth® and a level dependent technology for situational awareness, 3M PELTOR WS Alert XP enables users to have wireless telephone conversations or listen to their favorite music even in noisy environments.

**Features and Benefits:**

- Protects your hearing (SNR: 29dB)
- Built in FM-radio receiver
- Wireless calls and music via Bluetooth®
- Patented speaker system for full-bodied dynamic sound
- Level dependent technology for situational awareness enables you to communicate with your colleagues while maintaining your ability to hear and react on e.g. warnings signals
- External jack (3,5 mm) enables you to connect to external devices via cable
- Fast tuning
- Memory/preset function
- Voice guided menu system
- Also available as helmet attachment
- Possibility to use rechargeable batteries and charge them direct in the headset.

Connects with

- Bluetooth compatible devices
- Two-way radio (Flex)

**3M™ PELTOR™ WS™ Alert™ XP MRX21AWS5 Headband**

SNR: 29dB

**Other 3M™ PELTOR™ WS™ Alert™ XP options**

- **3M™ PELTOR™ WS™ Alert™ XP MRX21P3EWS5 Helmet attachment**
  - SNR: 31dB

**Battery Type:** 2X AA 1.2–1.5 V

**Operating time:** Approximately 23 hours of battery lifetime with included alkaline batteries (all functions active)

**Net Weight (incl. batteries):**
- 430 g (headband)
- 455 g (helmet att.)

**Operating temperature:** -20°C to +55°C (battery dependent)

**Wired Connectivity:** 3,5 mm AUX input jack (limited to 82dB(A))

**3M™ PELTOR™ Accessories**

- HY81 Hygiene kit
- FL8CE/1 Connection cables for external audio input
- LR6NM Rechargeable AA batteries
- FR08 Power supply
- FR09 Battery charger

**Attenuation**

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SNR=29dB H=33dB M=26dB L=20dB

*For further attenuation information please visit www.3M.eu/PPEsafety
The 3M™ PELTOR™ WS™ ALERT™ XPI Headset is the next generation protective communication solution. With Bluetooth® wireless communication, noise-cancelling boom microphone, integrated FM Radio and level-dependent function for ambient listening, the WS™ ALERT™ XPI Headset not only helps protect you against hazardous noise, but also makes it easy to make phone calls with both hands free in noisy environments.

Features and Benefits:

- High attenuating hearing protector in two models: stand-alone headband or safety helmet attachment (SNR 30 dB)
- Bluetooth® MultiPoint Technology for connection to one or two external devices for hands-free talk and streaming
- Noise cancelling boom microphone for clear speech transmission in noisy environments
- Level-dependent function for ambient listening to help improve your situational awareness (limited to 82 dB)
- Push-to-Listen feature to easily and instantaneously listen to your surroundings
- Built-in FM-Radio with radio volume limited to 82 dB
- Voice guided menu system with announced FM-Radio frequencies
- Digital station search
- Ability to store up to 4 favourite stations
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery

### Attenuation* MRX21AWS6*

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SNR=30dB. H=35dB. M=27dB. L=18dB

### 3M™ PELTOR™ accessories:

- HY82 Hygiene kit
- FR08 3 Power supply with USB connector
- FR09 Battery charger with USB connector
- LR6NM Rechargeable AA batteries

* For further attenuation information please visit www.3M.eu/PPEsafety

**3M™ PELTOR™ WS™ ALERT™ XPI**

- MRX21AWS6 headband
  - SNR: 30 dB

**Other 3M™ PELTOR™ WS™ ALERT™ XPI**

- MRX21AWS6-ACK, incl. ACK (FR09, FR08, LR6NM), headband
  - SNR: 30 dB

- MRX21P3EWS6-ACK, incl. ACK (FR09, FR08, LR6NM), helmet attachment
  - SNR: 30 dB

**Battery Type:** 2x AA (Alkaline)

**Operating time:**
- Approximately 58 hours (FM radio and level-dependent)
- Approximately 78 hours (Bluetooth® streaming and level-dependent)

**Net Weight**
- (incl. batteries): MRX21AWS6 (headband): 411 g
- MRX21P3EWS6 (helmet attachment): 431 g

**Bluetooth® Technology:**
- Bluetooth version: 4.2

**Bluetooth® Range:** Up to 10m (class 2)

**Speakers:** 27 mm diameter, 100 Ohm

**Boom microphone type:** Noise cancelling electret microphone

**Operating temperature:** -20°C (~4°F) to +55°C (131°F)

**Storage temperature:** -20°C (~4°F) to +55°C (131°F)

**Shelf life:** 5 years excl. batteries

www.3M.eu/PPEsafety
With 3M™ PELTOR™ LiteCom communicating in noisy environments has been made easy – and safe. LiteCom is a tough and rugged headset designed to cope with demanding use in many different working environments. The built-in two-way radio has got 8 channels with 38 subchannels, and has a range of up to 3 km. It lets you talk hands-free and work safely regardless of harmful noise levels.

Features and Benefits:
- Protects your hearing (SNR: 32dB)
- Built in two-way radio
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3 km depending on conditions
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment

3M™ PELTOR™ LiteCom
MT53H7A4400-EU Headband
SNR: 32dB

Other 3M™ PELTOR™ LiteCom options

<table>
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<th>Model</th>
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<th>Battery Type</th>
<th>Operating time</th>
<th>Net Weight (incl. batteries)</th>
<th>Operating temperature</th>
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<tr>
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<td>2X AA 1.2–1.5 V batteries or NiMH (2.4 V)</td>
<td>Approximately 20 hours of battery lifetime with included alkaline batteries</td>
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3M™ PELTOR™ Accessories
- HY79 Hygiene kit
- ACK053 Rechargeable battery
- FR08 Power supply
- FR09 Battery charger
- MT53N-12 Electret microphone

Attenuation*
MT53H7A4400-EU Headband

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SNR=32dB H=33dB M=30dB L=23dB

For further attenuation information please visit www.3M.eu/PPEsafety
3M™ PELTOR™ LiteCom Plus

3M™ PELTOR™ LiteCom Plus Electronic Level Dependent Headset with Built-in Two-way Communication Radio and External Audio Input is based on a robust basic design with a number of added features. This is a headset that is designed for demanding use on a daily basis. The built-in two-way radio has 8 or 69 channels with 121 subchannels, and has a range of up to 3 km. It lets you talk hands-free and work safely regardless of harmful noise levels. The level dependent function for ambient listening ensures you are not isolated from your immediate surroundings, but can still hear alarms, unexpected sounds and calls for help.

Features and Benefits:
- Protects your hearing (SNR: 34dB)
- Built in two-way radio communication
- 8 channels in the PMR 446 MHz band or 69 channels in the LPD 433 MHz band
- 121 subchannels
- Range of up to 3 km depending on conditions
- Level dependent function for ambient listening
- Rechargeable lithium-ion battery with 20 hours operating time
- A separate audio input enables connection to external equipment such as mobile phone, two-way radio.
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment

Connects with
- Two-way radio (Flex)

Attenuation*
<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
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</thead>
<tbody>
<tr>
<td>Mean Attenuation (dB)</td>
<td>20.2</td>
<td>26.7</td>
<td>35.0</td>
<td>37.4</td>
<td>35.7</td>
<td>40.4</td>
<td>38.9</td>
</tr>
<tr>
<td>Standard Deviation (dB)</td>
<td>3.1</td>
<td>3.1</td>
<td>2.6</td>
<td>2.1</td>
<td>3.0</td>
<td>2.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Assumed Protection (dB)</td>
<td>17.1</td>
<td>23.6</td>
<td>32.4</td>
<td>35.3</td>
<td>32.7</td>
<td>37.5</td>
<td>36.8</td>
</tr>
</tbody>
</table>

* For further attenuation information please visit www.3M.eu/PPEsafety

Other 3M™ PELTOR™ LiteCom Plus options (in blue):
- 3M™ PELTOR™ LiteCom Plus MT7H7A4410-EU Headband SNR: 34dB
- 3M™ PELTOR™ LiteCom Plus MT7H7F3E4410-EU Helmet attachment SNR: 33dB

3M™ PELTOR™ Accessories
- HY79 Hygiene kit
- MT7N-02 Dynamic microphone (standard)
- ACK081 Battery
- AL2A1 Charging cable
- FR08 Power supply
- FL5602 External PTT

www.3M.eu/PPEsafety
3M™ PELTOR™ WS™ LiteCom

3M™ PELTOR™ WS™ LiteCom with Bluetooth® opens up a world of communication with your built-in two-way radio headset at the hub. You become a mobile, hands-free communication center, the built-in two-way radio and wireless connections to your computer and cell phone. You can take your calls, or stream music thanks to electronics that let you switch easily between functions. The level-dependent technology lets you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication at close distance. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.

**Features and Benefits:**

- Protects your hearing (SNR: 30dB)
- Built in two-way radio communication
- Bluetooth® communication link enables talking wireless in the mobile phone or streaming music
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3 km depending on conditions
- Level dependent technology for situational awareness
- A separate audio input enables connecting equipment such as mobile phones or external two-way radios.
- Works with rechargeable batterypack or 2x standard AA batteries
- Voice operated transmission (VOX)
- Auto power off function
- Voice guided menu system
- Also available as neckband or helmet attachment

**Connects with**

- Bluetooth compatible devices
- Two-way radio (Flex)

**Attenuation**

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
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<tr>
<td>Mean Attenuation (dB)</td>
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<td>23.4</td>
<td>30.7</td>
<td>34.6</td>
<td>34.5</td>
<td>36.9</td>
<td>37.3</td>
</tr>
<tr>
<td>Standard Deviation (dB)</td>
<td>3.9</td>
<td>4.6</td>
<td>3.2</td>
<td>3.4</td>
<td>3.1</td>
<td>2.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Assumed Protection (dB)</td>
<td>10.8</td>
<td>18.8</td>
<td>27.4</td>
<td>31.2</td>
<td>31.4</td>
<td>34.2</td>
<td>33.1</td>
</tr>
</tbody>
</table>

SNR=30dB H=33dB, M=27dB, L=19dB

* For further attenuation information please visit www.3M.eu/PPEsafety

**Other 3M™ PELTOR™ WS™ LiteCom options**

- 3M™ PELTOR™ WS™ LiteCom
  - MT53H7A4410WS5 Headband
  - SNR: 30dB

- 3M™ PELTOR™ WS™ LiteCom
  - MT53H7P3E4410WS5 Helmet attachment
  - SNR: 31dB

**3M™ PELTOR™ Accessories**

- HY79  Hygiene kit
- ACK053  Rechargeable battery
- FR08  Power supply
- FR09  Battery charger
- MT53N-12  Electret microphone

**Specifications**

- **Frequency range:** 446 MHz (PMR)
- **Bluetooth® Version:** 2.1+EDR
- **Battery Type:** Rechargeable batterypack or 2x standard AA batteries
- **Operating time:** Approximately 13 hours
- **Net Weight (incl. batteries):**
  - Headband: 462g
  - Neckband: 448g
  - Helmet attachment: 490g
- **Operating temperature:** -20°C to +55°C (battery dependent)
Head, Eye & Face Protection
Integrated Head & Face Solutions

3M™ Head and Face Solutions
The 3M brand offers a complete line of safety helmets, face shields, combinations and accessories for anyone exposed to hazardous environments. Our goal is continuous improvement of our products to provide the optimal balance of comfort and safety.
3M™ Head & Face Protection

3M™ Uvicator™ Technology for safer working conditions

When a safety helmet is exposed to sunlight the stability of the plastic shell may be adversely affected due to interaction between UV-radiation and the plastic material which may weaken the helmet and compromise safety of the wearer. The adverse effect is dependent not only on the nature of the plastic material but also the intensity of the UV-radiation. All too often damage to the helmet shell may not be visible to the naked eye.

Red, the new sign of safety

The patented Uvicator technology is intended to easily and clearly help show the user when his/her helmet has been over-exposed to UV-radiation and thus when to replace it. This technology is the result of many years of full scale and artificial ageing testing of different material combinations under various sunlight exposure conditions.

As the helmet is exposed to sunlight, the Uvicator indicator is calibrated to detect the amount of UV radiation received and gradually changes colour over time, clockwise, from red to white. When the Uvicator indicator turns completely white, it means that the helmet has received maximum tolerable radiation and therefore needs to be replaced.
Attractive design and excellent protection! That’s the easiest way to summarise the G2000 helmet. The helmet fulfils the requirements for formal testing and is comfortable with its low back and relatively low profile.

It was designed to accommodate additional accessories, such as integrated eyewear, visor and hearing protection.

**3M™ Safety Helmet G2000 Series**

Features and Benefits:

- **Ventilation**
  - For comfort, good ventilation is a must, particularly in warm environments. The G2000 Helmet allows free airflow between the helmet and its harness. Combined with ventilation inlet in the top of the helmet, this helps to increase wearers acceptance.

- **3M™ Uvicator™ Technology**
  - The disc tells you when it’s time to replace your helmet.

- **Optional space for customised print**
  - A flat surface for printing a logotype, brand name, etc.

- **Neck protection**
  - Extended edge on the back of the helmet provides extra coverage for the sensitive neck area.

- **Ratchet headband**
  - For easier and quicker adjustment.

- **Optimal profile for ear muffs**
  - The G2000 helmet features a special profile design to enable helmet mounted ear muffs to achieve optimal fit and maximum adjustability for individual needs.

- **Attachment point for accessories**
  - An adjustable snap attachment in the balance point of the helmet to allow simple attachment of accessories, such as muffs, headsets and visors.

- **Sweatband**
  - Easy to replace for increased comfort and hygiene. Also available in soft leather.

**3M™ G2000 Series Helmets**

- Available in 7 colours, with ratchet or pin-lock suspension.
- Material: UV-Stabilised ABS
- Colours: yellow, white, orange, red, blue, green and Hi-Viz
- Weight: 354g (pin-lock), 376g (ratchet)
- Size: 54-62cm for pin-lock version, 53-62cm for ratchet version

**Other 3M™ Head Protection Products**

- **3M™ Industrial Helmet Combination**
  - Di-electric combination specially designed for work in electrical environments.
  - Includes: G2001 helmet, H31P3K-01 ear muffs, V4H clear visor.

- **3M™ Integrated Eyewear**
  - Designed to be used with 3M™ Helmets.
  - The design allows the glasses to slide easily between the helmet shell and lining. Available in clear, yellow, grey.

- **3M™ Helmet Accessories**
  - A wide range of accessories are available, including sweatbands, chin straps, rain protection, etc…
3M™ Safety Helmet G3000 Series

The G3000 helmet has been developed and designed in close collaboration with industrial and forestry workers. It is intended for use in harsh environments with tough demands for effective protection. The G3000 has excellent ventilation, good field of vision and is one of few lightweight helmets available on the market today.

Features and Benefits:

- **3M™ Uvicator™ Sensor**
  - The disc tells you when it's time to replace your helmet

- **Ventilation**
  - Optimised ventilation with lots of ventilation holes

- **Slim design**
  - Softly rounded design, which helps to avoid helmet parts snagging on branches etc.

- **Reversible lining**
  - Lining that can be rotated 180° allows the helmet to be worn back-to-front which is ideal, for example, when working in tight spaces or climbing

- **Ratchet headband**
  - For easier and quicker adjustment

- **Accessories**
  - Attachment point for accessories

- **Sweatband**
  - Easy to replace for increased comfort
  - Available in plastic or leather

- **Space for company name**
  - Surface for printing a logo, brand name, etc.

- **Short brim**
  - Short brim giving a broader field of view

The characteristics of the G3000 helmet are:

- **G3000**
  - low temperature, –30°C, and molten metal, MM
- **G3001**
  - (unventilated): low temperature, –30°C, molten metal, MM, and electrical insulation 440Vac,
- **G3000-10**
  - (with lamp and cord holder) low temperature, –30°C and molten metal, MM

Now available with Scotchlite™ reflective material. Adding Scotchlite™ reflective material can help provide additional high visibility performance in low light to help workers be seen so they can function at their best.

Industrial Safety helmet G3000 is now available with reflective materials in a range of colours to suit your head protection needs.

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<table>
<thead>
<tr>
<th>3M™ G3000 Series Helmets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available in 8 colours with ratchet or pin-lock suspension</td>
</tr>
<tr>
<td><strong>Material:</strong> UV-stabilised ABS</td>
</tr>
<tr>
<td><strong>Colours:</strong> yellow, white, orange, red, blue, green, Hi-Viz and black</td>
</tr>
<tr>
<td><strong>Weight:</strong> 310g (pin-lock) 334g (ratchet)</td>
</tr>
<tr>
<td><strong>Size:</strong> 54-62cm for pin-lock version 53-62cm for ratchet version</td>
</tr>
</tbody>
</table>

3M™ Forestry Helmet Combination

Ready-to-use combination for forestry workers

Includes: G3000 helmet, V4CK mesh visor, H31P3E ear muffs, GR3C rain protection

Now available with reflective strips. For features and benefits on the reflective strips please refer to page 118.

3M™ Head & Face Protection

Now available with reflective strips. For features and benefits on the reflective strips please refer to page 118.

For features and benefits on the reflective strips please refer to page 118.
The 3M™ Safety Helmet H-700 is comfortable but tough. Designed with a low profile for improved stability and performance, the H-700 Series is engineered to provide ultimate full-shift comfort without compromising the protection against small objects striking the top of the hard hat.

Now available with Scotchlite™ reflective material. Adding Scotchlite™ reflective material can help provide additional high visibility performance in low light to help workers be seen so they can function at their best.

Industrial Safety helmet H-700 is now available with reflective materials in a range of colours to suit your head protection needs.

3M™ Safety Helmet H-700 Series

Features and Benefits:

Cool wear
- Ventilated headband
- Optional ventilated shell

Ease of Use
- Short brim for better upward visibility and user mobility
- Replaceable sweatband

Internal Accessory slots for:
- 3M™ Helmet Mounted Earmuffs
- 3M™ Helmet Mounted Communication Solutions
- Integrated Eyewear
- Face Shields
- Welding helmets

Suspension
- Comfortable 4 point pin-lock or ratchet suspension with height adjustment or an optional 6 point strap

3M™ Industrial Safety Helmets with Reflectives

Safety
- Carefully selected 3M adhesive technology to ensure the performance of the helmet is maintained with the addition of reflective properties.

Precision
- Factory applied for accurate positioning to ensure the best visibility for the kit.

Visibility
- Designed to improve visibility and safety of the worker in low light conditions.

Recognition
- Designed to provide visibility of the reflective when viewed from all lateral directions and from above.

3M™ Helmet H-700 Vented option
- Available in 6 colours with ratchet or pin-lock suspension
- Very low temperature (-30°C)

3M™ Helmet H-701 Non-vented option
- Available in 6 colours with ratchet or pin-lock suspension
- Very low temperature (-30°C)
- Molten metal splash (MM)
- Electrical insulation (440 Vac)

Also meet the requirements for low temperature (-50°C) according to OCT P EH 397/A1-2010

Material: high density polyethylene
Colours: yellow, white, orange, red, blue and green
Weight: 356g (pin-lock)
378g (ratchet)
Size: 54-62cm for pin-lock version
53-62cm for ratchet version

Now available with reflective strips.
Temperature extremes, metal sparks and splashes – that's the job. And it's a tough environment to work in. You just can't afford to compromise the safety and comfort of your workforce.

At 3M we recognise the demanding nature of the work you and your team undertake every day. That's why we've developed a range of completely compatible personal protective equipment (PPE) that can help provide the necessary safety, comfort and compliance in the work environment.

**3M™ Safety Helmet G3501 Series**

Features and Benefits:

- Lightweight and durable helmet meeting a wide range of standard performance requirements
- Electrically insulating in accordance with EN50365 for live-working in low voltage environments
- Approved for use at temperatures ranging from -30°C to +150°C

**3M™ Safety Helmet G3501**

Available in 6 colours with ratchet or pin-lock suspension

Material: glass fibre reinforced nylon

Colours: yellow, white, orange, red, blue and green

Weight: 369g (pinlock) 392g (ratchet)

Size: 54-62cm for pin-lock version 53-62cm for ratchet version

**Select a combination for a complete solution:**

**3M™ Face Shields**

- 5XG-IR5 Gold/Green visor shade 4-5, medium energy impact (B), Molten Metal Splash (9)
- 5F-11 Clear visor shade 2C-1.2, medium energy impact (B), liquid splash (3), electric arc (B)
- 5E-11 Green Image Shade 5, medium energy impact (B), liquid splash (3)

**Additional heat protection**

- NC1-GR Cotton/Para-aramid neck cover for flame resistance and metal splash resistance
- FC1-GR Cotton/Para-aramid front cover to protect the helmet from flames and metal splash
- NC1-AL Aluminized fabric neck cover offering flame, splash and IR resistance to the wearer’s neck
- FC1-AL Aluminized fabric front cover offering flame, splash and IR resistance to the helmet and wearer

**3M™ V6 Integrated Eyewear**

The design allows the glasses to slide easily between the head cradle and carrier. Available in clear, yellow and grey

**Hearing Protection and Communication Headsets**

3M PELTOR X Series Ear muff X4P3E

Compatible with a wide range of Earmuffs including the 3M™ PELTOR™ X Series and 3M™ Optime™ Series. A wide range of Communication headsets including 3M™ PELTOR™ LiteCom
The 3M™ Headgear G500 is a versatile and comfortable solution for use as a standalone face protection system or for combined face and hearing protection. Special design features make it easy to combine the G500 with other 3M™ Safety Products such as face shields, passive earmuffs or communication headsets and integrated eyewear. This high quality product provides protection against impacts from the front and side, while special attention at the design stage has ensured maximum visibility and wearer comfort.

### Features and Benefits:

**Front cover**
- Ventilation for increased comfort
- Design incorporates a cable holder for Peltor Communication products

**Face Shield**
- A wide range of visors and face shields available for many industrial applications
- Offers a wide field of view

**Integrated eyewear**
- To increase eye protection
- G500 headgear can incorporate integrated eyewear
- Available in clear, grey and yellow

**Ratchet Harness**
- Ergonomically designed neck support gives maximum comfort for long periods of time
- 3 height adjustment positions
- 8 head size adjustments

**Robustness**
- Firm and sturdy for improved product life
- Reduction of flexible materials minimises stress and deformation caused by rough handling
- Ensures consistent attenuation when combined with hearing protection or communication headsets

**Hearing Protection**
- G500 can be used with or without earmuffs
- 30mm slot fits the Peltor P3E-earmuff attachment

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**3M™ Industrial Combination G500**
- 3M™ Headgear G500
- Clear PC Face Shield 5F-1
- 3M™ Peltor™ Optime™ I Earmuffs

**3M™ Forestry Combination G500**
- 3M™ Headgear G500
- Stainless Steel Mesh Face Shield 5C-1
- 3M™ Peltor™ Optime™ I Earmuffs

**3M™ Integrated Eyewear**
- Designed to be used with 3M™ Headgear G500. The design allows the glasses to slide easily between the head cradle and carrier. Available in clear, yellow and grey

**3M™ Face Shields**
- The wide range of visors allows for many industrial combinations
- **Mesh Face Shield**
  - 5B/5C-1/5J-1
  - Available in Polyamide, Stainless steel and Etched metal mesh.
  - EN1731:2006 Approved
- **Polycarbonate Face Shield**
  - 5F-1/5E-1
  - Available in clear and Shade 5
  - EN166:2001 Approved
  - 5F-1: 2C-12 3M 1:A(BT):3:8:9:K:N
  - 5E-1: 5 3M 1:BT:3:9:K:N

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**3M™ Head & Face Protection**
The 3M™ Linkage System V5 can be mounted onto the 3M™ Industrial Safety Helmet G22 or G3000 to allow attachment of a range of faceshields. This high quality product provides protection against impacts from the front and side.

### Features and Benefits:

**Face Shield**
- A wide range of visors and faceshields available for many forestry and industrial applications
- Offers a wide field of view
- Designed to attach to helmet via a wide range of 3M™ Peltor™ Earmuffs with helmet adapter
- New ‘Snap-in’ feature makes it easy to combine the faceshield to the linkage system

**Integrated Eyewear**
- To increase eye protection the V5 can incorporate integrated eyewear
- Available in clear, grey and yellow

**Robustness**
- Firm and sturdy for improved product life
- Reduction of flexible materials minimises stress and deformation caused by rough handling
- Ensures consistent attenuation when combined with hearing protection or communication headsets
3M™ Helmet Integrated Safety Glasses V9 Series

The 3M™ Helmet Integrated Safety Glasses V9 Series is a range of integrated safety eyewear designed to attach to the headband of 3M™ Helmet or Headgear products.

Features and Benefits:

The 3M™ Helmet Integrated Safety Glasses V9 Series are designed to be fitted to the following 3M™ products:

- 3M™ G500 Headgear
- 3M™ G22 Industrial Safety Helmet
- 3M™ G2000 Industrial Safety Helmets
- 3M™ G3000 Industrial Safety Helmets
- 3M™ G3501 Industrial Safety Helmets
- 3M™ H700 Industrial Safety Helmets

Comfort

- Features an easy to use clip-on attachment to connect to the headband of the helmet or headgear
- Features 3 pivoting adjustment points allowing for easy positioning to a range of face shapes and sizes. In order to assess the fit of safety eyewear we recommend the 3M™ eyewear fit system

Possible adjustments include:

- Up and down
- Forwards and backwards
- Angle up and down

- The adjustment mechanism also allows the safety glasses to be stored inside the helmet to protect it from damage during storage or when eye protection is not required
- The safety glasses can be used at the same time as faceshields when continuous eye protection is required but faceshields are not in constant use
- Designed without temple arms the helmet integrated safety glasses will not interfere with the acoustic seal of helmet mounted Ear Muffs

V9C: Helmet integrated safety glasses
Lens Colour: Clear
Lens: Polycarbonate
Spectacle arms: Polyamide
Nosepad: Thermoplastic rubber

V9A: Helmet integrated safety glasses
Lens Colour: Amber
Lens: Polycarbonate
Spectacle arms: Polyamide
Nosepad: Thermoplastic rubber

V9B: Helmet integrated safety glasses
Lens Colour: Grey
Lens: Polycarbonate
Spectacle arms: Polyamide
Nosepad: Thermoplastic rubber
V9A: Helmet integrated safety glasses

- Lens Colour: Amber
- Lens: Polycarbonate
- Spectacle arms: Polyamide
- Nosepad: Thermoplastic rubber

V9B: Helmet integrated safety glasses

- Lens Colour: Grey
- Lens: Polycarbonate
- Spectacle arms: Polyamide
- Nosepad: Thermoplastic rubber
Protective Eyewear Solutions

The portfolio of 3M™ Eye Protection products promises quality eyewear that provides an optimal balance of comfort, protection and design.

3M’s Engineers have worked hard to ensure that the level of comfort and style matches the standard of protection offered. The 3M portfolio offers the highest level of optical class. A broad range of eyewear products include durable anti-scratch and convenient anti-fog coatings. All products are approved to EN166 and are CE marked.
As with all personal protective equipment, comfort is very closely linked with compliance and improperly fitted eyewear may not be enough to prevent eye injuries, so the quality and security of fit is extremely important. Unlike respiratory protection where face fit testing is mandatory, there are no regulatory requirements regarding fitting of eyewear. While current standards suggest careful consideration should be given to eyewear fit, e.g. BS 7029:1999, there is no specific guidance on how to evaluate an individual’s fit. Making an assessment based on size and adjustable features is not always adequate to determine best fit and security of eyewear. The innovative 3M™ Eyewear Fit System, is a simple 6 step method* and enables a measured evaluation of fit. This method, utilising the Coverage and Gap gauge tools will help assess 4 elements of protective eyewear fit:

**View**
Assessment to ensure the wearer can see in all directions of eye rotation without major obstruction to the field of view that would interfere with visibility to perform work tasks.

**Coverage**
The Coverage gauge assesses how well the safety eyewear covers the soft tissue area around the eyes.

**Security**
Assessment to ensure the eyewear stays in place on the wearer’s head and does not fall off with head movement.

**Gaps**
The Gap gauges help to identify excessive gaps between the eyewear and the face. Large gaps can provide a clear path for flying debris.

* The full 6 step method is unique to 3M and is available free of charge (Subject to terms and conditions, see website for details). Find out more by contacting your 3M Personal Safety Sales Representative or visit www.3M.eu/eyewear
The 3M™ 2800 Over Safety Glasses are designed to fit over most users’ prescription eyewear with minimal interference. They offer an excellent coverage and field of vision, combined with a high level of protection against impacts.

**Features and Benefits:**

**Style**
- Versatile design allows use with wide variety of prescription eyewear

**Premium Protection**
- Optical Class 1 for high optical clarity to allow prolonged, comfortable wear
- Polycarbonate lens offers good impact resistance with Anti-Scratch coating for improved durability

**Comfort**
- Adjustable length temples (4 positions) for optimal comfort and fit
- Inclinable lens for easy adjustment and maximum comfort
- Soft low profile temples for comfort and minimum interaction with prescription eyewear

3M™ Over Safety Glasses 2800
- Lens colour: clear
- Lens material: polycarbonate

3M™ Over Safety Glasses 2801
- Lens colour: grey
- Lens material: polycarbonate

3M™ Over Safety Glasses 2802
- Lens colour: amber
- Lens material: polycarbonate

3M™ Over Safety Glasses 2805
- Lens colour: IR Shade 5
- Lens material: polycarbonate
Recognising that lack of comfort and fit are the biggest barriers to protective eyewear use, 3M has introduced a revolutionary range of safety eyewear which self-adjusts to individual head sizes, delivering noticeably higher levels of personal comfort and security of fit. Weighing just 18g, the lightweight eyewear has no moving parts. It simply adjusts to fit a wide array of head sizes, reducing the need to stock multiple frame sizes. The new 3M™ SecureFit™ Protective Eyewear features patented 3M™ Pressure Diffusion Temple Technology which draws on years of scientific anthropometric research by 3M. This game-changing technology allows the frames to naturally adjust to the wearer’s profile, providing a snug, stylish and secure fit across a diverse workforce, without compromising safety.

3M™ SecureFit™ Classic Line Safety Glasses 200 Series

Features and Benefits:

Style
- Sleek, streamline design
- The robust temple design gives great performance and make adjustable features redundant

Premium Protection
- Provides complete impact protection for the orbital region of the eye
- Exceeds the requirements of EN166 clause 7.2.8 Lateral Protection
- Integrated side-shield provides additional protection for surrounding tissues

Comfort
- Features 3M™ Pressure Diffusion Temple Technology
- Constant temple force even with different head sizes
- Reduced frame slippage during workplace head movements
- Self adjusting temples for a secure fit
- Weighs only 18g

3M™ SecureFit™ Classic Line Safety Glasses SF201AF-EU
Lens colour: grey
Lens material: polycarbonate
Optical Class 1
2C-1.2 lens provides UV protection and good colour recognition

3M™ SecureFit™ Classic Line Safety Glasses SF202AF-EU
Lens colour: amber
Lens material: polycarbonate
Optical Class 1
2C-1.2 lens provides UV protection and good colour recognition

3M™ SecureFit™ Classic Line Safety Glasses SF203AF-EU
Lens colour: clear
Lens material: polycarbonate, Anti-Scratch
Optical Class 1 2C-12 lens provides UV protection and good colour recognition

www.3M.eu/PPESafety
3M™ SecureFit™ Comfort Line Safety Glasses 400 Series

Sourcing eyewear to securely fit a diverse workforce can be a challenge. 3M Pressure Diffusion Temple Technology enhances fit as temples naturally adjust to individual head sizes. This can result in enhanced comfort due to less pressure over the ears without compromising security of fit. This lightweight eyewear weighs just 19g and offers improved features for comfort and style, combatting two of the largest barriers to compliance.

Features and Benefits:

Style
- Sleek, streamline design
- The robust temple design gives great performance and make adjustable features redundant
- Motion inspired, contoured piping in a bold, modern colour palette for an added infusion of style

Premium Protection
- Provides complete impact protection for the orbital region of the eye
- Exceeds the requirements of EN166 clause 7.2.8 Lateral Protection
- Integrated side-shield provides additional protection for surrounding tissues
- Polycarbonate lenses absorb 99.9% of UVA and UVB and meet the requirements of EN166:2001

Comfort
- Features 3M™ Pressure Diffusion Temple Technology
- Constant temple force even with different head sizes
- Reduced frame slippage during workplace head movements
- Self adjusting temples for a secure fit
- Weighs only 19g
- Dual-injected padded temple touchpoints for added comfort over the ears
- Soft, adjustable nosepads for even greater personalisation of fit

Coming Soon
New SF400 models with Scotchgard Anti-Fog coating!
The 3M™ SecureFit™ 400 Series safety glasses now feature a choice of reading dioptres (+1.5, +2.0 and +2.5) to help workers who have difficulty reading small print or who are engaged in small detail work.

Features and Benefits:

Style
- Sleek, streamline design
- The robust temple design gives great performance and make adjustable features redundant
- Motion inspired, contoured piping in bold, modern colour palette for an added infusion of style

Premium Protection
- Polycarbonate lenses absorb 99.9% of UVA & UVB. Meets the requirements of EN166:2001

Comfort
- Dual-injected, padded temple touchpoints for added comfort over the ears
- Motion-inspired, contoured piping
- Self-adjusting 3M™ Pressure Diffusion Temple Technology ensures a comfortable and a secure fit and prevents slippage
- Soft, adjustable, one-piece nose bridge for an individual comfortable fit
- Removable foam insert helps keep debris out of your eyes while providing comfort and cushioning
- 3 focal strength available +1.5, +2.0 and +2.5
3M™ SecureFit™ 600 Series Safety Glasses

3M™ SecureFit™ 600 Series Protective Eyewear combine the best features of existing models, and add more. They are designed for maximum comfort, fit and clarity, so they stay on and wearers stay protected. A host of options means that there is the right version for any situation – lens colour choices, anti-scratch or 3M™ Scotchgard™ Anti-Fog coating, Pressure Diffusion Temple (PDT) technology for security and comfort, foam gasket, and more.

Features and Benefits:

**Style**
- Semi-rimless frame with two separate lenses
- Premium style and optimal optical performance
- Multiple lens colour options including polarised lenses

**Premium Protection**
- Durable polycarbonate lenses absorb 99.9% of UVA and UVB rays and meet the requirements of EN 166:2001
- Optical Class 1

**Available with two coating options**
- 3M™ Scotchgard™ Anti-Fog coating resists fogging longer than traditional coatings, even after multiple lens washes
- SF601SGAF-EU (with and without Foam Insert)
  - Lens Material: Polycarbonate
- SF601RAS-EU
  - Lens Material: Polycarbonate

**Comfort**
- Secure, comfortable fit with 3M™ Pressure Diffusion Temple (PDT) technology

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3M™ SecureFit™ 600 Series
SF601SGAF-EU
Lens Colour: Clear
Lens Material: Polycarbonate

3M™ SecureFit™ 600 Series
SF602SGAF
Lens Colour: Grey
Lens Material: Polycarbonate

3M™ SecureFit™ 600 Series
SF603SGAF
Lens Colour: Amber
Lens Material: Polycarbonate

3M™ SecureFit™ 600 Series
SF617AS-EU
Lens Colour: IR
Shade: 1.7, anti-scratch
Lens Material: Polycarbonate

3M™ SecureFit™ 600 Series
SF630AS-EU
Lens Colour: IR
Shade: 3.0, anti-scratch
Lens Material: Polycarbonate

3M™ SecureFit™ 600 Series
SF650AS-EU
Lens Colour: IR
Shade: 5.0, anti-scratch
Lens Material: Polycarbonate
**3M™ Classic Line Safety Glasses 2820 Series**

Very lightweight, the 3M 2820 Safety Glasses are a sleek, modern design offering excellent coverage and field of vision.

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**Features and Benefits:**

**Style**
- Stylish and modern design, eye protection is more likely to be worn if it looks good

**Premium Protection**
- Optical Class 1 for high optical clarity and extended wear time
- Polycarbonate lens offers good impact resistance
- Wrap-around design for increased lateral protection

**Comfort**
- Very lightweight 21g
- Incliable lens for easy adjustment and maximum comfort
- Soft, flexible temples for improved comfort

**Compatible with**
- Fits well with 3M™ Respirators 9300 Series for the majority of users

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**3M™ Classic Line Safety Glasses 2820**
- Colour: clear
- Lens material: polycarbonate

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**3M™ Classic Line Safety Glasses 2821**
- Lens colour: grey
- Lens material: polycarbonate

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**3M™ Classic Line Safety Glasses 2822**
- Lens colour: amber
- Lens material: polycarbonate
3M™ Virtua™ AP Classic Line Safety Glasses

The 3M™ Virtua™ AP features a graceful, unisex styling and lightweight comfort to help promote compliance.

Features and Benefits:

Style
- Unisex styling

Premium Protection
- Clear and grey anti-scratch lenses
- Integral side-shields and brow guard
- Polycarbonate lens absorbs 99.9% UV

Comfort
- Comfortable, impact-resistant, lightweight frame - weighs less than 26g

3M™ Virtua™ AP Classic Line Safety Glasses
Lens colour: clear
Lens material: polycarbonate

3M™ Virtua™ AP Classic Line Safety Glasses
Lens colour: grey
Lens material: polycarbonate
3M™ Tora™ Classic Line Safety Glasses

The 3M™ Tora™ Classic Line Safety Glasses’ cool image makes this line of protective eyewear very popular amongst younger members of staff. The 3M Tora™ CCS has a built-in temple groove feature that allows the wearer to attach a corded earplug, keeping both PPE products together.

The optional foam insert features a comfy seal that helps limit eye exposure to nuisance dust. The insert can be easily removed for cleaning or alternate wearing configurations.

Features and Benefits:

Style
- Stylish and modern design, eye protection is more likely to be worn if it looks good
- The 3M™ Tora™ CCS Safety Glasses feature blue temples to intensify the contemporary smart look

Premium Protection
- Excellent peripheral vision and lateral side protection
- Good impact resistance with Anti-Scratch coating for improved durability
- Anti-Fog coating which reduces fogging and ensures clearer vision
- Designed to keep eyewear and earplugs attached, untangled and ready to use
- Can help reduce the expense of replacing lost earplugs and eyewear

Comfort
- Lightweight and comfortable

Compatible with
- Slim nose bridge and flat temples for improved compatibility with other PPE
- Compatible with a variety of 3M™ E-A-R™ corded earplugs
- Earplug cord can be worn around the neck to carry eyewear when neither product is in use

3M™ Eye Protection

3M™ Tora™ CCS Classic Line Safety Glasses
Lens colour: clear
Lens material: polycarbonate

3M™ Tora™ CCS Classic Line Safety Glasses with foam insert

3M™ Tora™ Classic Line Safety Glasses
Lens colour: amber
Lens material: polycarbonate

3M™ Tora™ Classic Line Safety Glasses
Lens colour: bronze
Lens material: polycarbonate
Protection, comfort and adjustability. With a unique style, the 2840 Safety Glasses have been designed with user comfort and convenience in mind. The temples are fully inclinable and adjustable in length for optimal fit. The soft inner padding offers increased comfort.

The 3M™ Safety Glasses 2840 also feature an integrated browguard for increased protection incorporating a strong polycarbonate lens with anti-scratch and anti-fog coating (except 3M™ Safety Glasses 2844), they are available in 6 lens options.

### Features and Benefits:

**Style**
- Stylish and modern design, eye protection is more likely to be worn if it looks good

**Premium Protection**
- Optical Class 1 to allow prolonged, comfortable wear
- Integrated browguard for increased protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Polycarbonate lens for good impact protection

**Comfort**
- Adjustable temple length (3 positions) for comfort and optimal fit
- Soft inner padding on temple for increased comfort and stability when worn
- Inclinable lens enabling individual adjustment and optimal personal fit
- Lightweight (26g)

**Compatible with**
- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series
3M™ Eye Protection

3M™ Solus™ Comfort Line Safety Glasses

Solus Comfort Line Safety Glasses combine a modern design and an optimal dual technology, with the soft inner padding of the temple, leading to increased comfort and protection, without optical distortion.

Features and Benefits:

Style
• Stylish and modern design, eye protection is more likely to be worn if it looks good
• With colour accented soft temple components, Solus brings sophistication and comfort to safety eyewear

Premium Protection
• Strong PC lenses with anti-scratch and anti-fog coating
• Wrap-around lens provides excellent lateral protection

Comfort
• Lightweight (23g)
• Soft inner padding on temple for increased comfort and stability when worn

Compatible with
• Specially designed for improved compatibility with other PPE

3M™ Solus™ Comfort Line Safety Glasses
Colour: amber
Lens material: polycarbonate

3M™ Solus™ Comfort Line Safety Glasses
Lens colour: red mirror
Lens material: polycarbonate

3M™ Solus™ Comfort Line Safety Glasses
Lens colour: bronze
Lens material: polycarbonate

3M™ Solus™ Comfort Line Safety Glasses
Lens colour: I/O (indoor/outdoor)
Lens material: polycarbonate

3M™ Solus™ Comfort Line Safety Glasses
Lens colour: Clear
Lens material: polycarbonate
1364

**3M™ Maxim™ Comfort Line Safety Glasses**

Protection, comfort, and adjustability, Maxim comfort line Safety Glasses, all have a unique patented aspherical lens which provides excellent coverage and a wide angle of vision. The temples are fully inclinable and adjustable in length for optimal fit. They are available in more than 15 different lens and frame options.

The unique minimizer option for welding assistance protects against Infra-red without blocking visible light.

### Features and Benefits:

**Style**
- Stylish and modern design

**Premium Protection**
- Patented aspherical lens for excellent coverage and field of view
- Ventilation channel across the lens to minimise misting

**Comfort**
- Soft, adjustable nosebridge
- Dual-injected cushion browguard for extra comfort and shock absorption
- Adjustable length temples with pantoscopic system

**Compatible with**
- Ballistic version is specially designed for improved compatibility with other PPE e.g. with 3M™ Peltor™ Earmuffs X Series

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**3M™ Maxim™ Welding Premium Line Safety Glasses**
- Lens colour: shade 5.0
- Lens material: polycarbonate

**3M™ Maxim™ Utility Pack**
- Lens colour: clear, bronze and amber
- Lens material: polycarbonate

**3M™ Maxim™ Premium Line Safety Glasses**
- Lens colour: clear
- Lens material: polycarbonate

**3M™ Maxim™ Ballistic Premium Line Safety Glasses**
- Lens colour: bronze
- Lens material: polycarbonate

**3M™ Maxim™ Ballistic Premium Line Safety Glasses**
- Lens colour: amber
- Lens material: polycarbonate

**3M™ Maxim™ Ballistic Premium Line Safety Glasses**
- Lens colour: clear
- Lens material: polycarbonate
3M™ Marcus Grönholm Premium Line Safety Glasses

Protection, comfort, and stylish design. Marcus Grönholm premium line Safety Glasses combine attractive and modern styling with wrap around design. The strong metal frame provides a comfortable fit.

Features and Benefits:

Style
- Stylish and modern design, eye protection is more likely to be worn if it looks good
- Wrap-around design
- Bronze and blue mirror lenses are available

Premium Protection
- High curve lenses provide optimal field of view
- Excellent UV protection, ideal for sunny environments
- Strong polycarbonate lens with anti-scratch and anti-fog coating

Comfort
- Spring hinges for robustness and soft temple tips for extra comfort
- Adjustable nose grips provide a comfortable fit

Compatible with
- Slim nose bridge and flat temples for improved compatibility with other PPE
- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series

3M™ Marcus Grönholm Premium Line Safety Glasses
- Colour: blue Mirror
- Lens material: polycarbonate

3M™ Marcus Grönholm Premium Line Safety Glasses
- Colour: bronze
- Lens material: polycarbonate

3M™ Marcus Grönholm Premium Line Safety Glasses
- Colour: clear
- Lens material: polycarbonate
3M™ Refine 300 Premium Line Safety Glasses

Better Style means better compliance
Women don’t have to settle for bulky, oversized eyewear anymore. The 3M™ Refine 300 Safety Eyewear is specially sized for smaller heads and profiles.

The result is excellent coverage with fewer gaps where dangerous particulates or flying debris can damage the eyes. Appealing, well-fitting design will lead to increased wearer acceptance.

Features and Benefits:

**Style**
- Slim frame design
- Clear and bronze anti-fog and anti-scratch lenses

**Premium Protection**
- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Integrated side protection
- Meets the low energy impact requirements of EN 166

**Comfort**
- Specific slim design that fits smaller faces
- Adjustable soft nose pads to improve comfort

**Compatible with**
- Compatible with 3M’s respiratory protection range

3M™ Refine 300 Premium Line Safety Glasses
Lens colour: mocha
Lens material: polycarbonate

3M™ Refine 300 Premium Line Safety Glasses
Lens colour: clear
Lens material: polycarbonate
Introducing safety eyewear that combines the edgy styling and solid performance that workers crave. Upgrade your safety compliance with the 1100E and 1200E Series.

3M™ Premium Line Safety Glasses 1100E / 1200E Series

With inspired designs and a solid frame construction, the new 1100E and 1200E styles deliver the looks, attitude and brand that workers want to wear.

Features and Benefits:

Style
- Stylish and modern design, delivers the looks attitude and brand that workers want to wear
- Available with clear or grey lens

Premium Protection
- Polycarbonate lenses absorb 99.9% UV radiation
- Frame made from a high density nylon material for robust protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Each pair comes with a micro-fibre pouch

Comfort
- Lightweight half frame assures a comfortable fit
- Soft adjustable nosepiece

Compatible with
- Low profile nose-bridge provides increased compatibility with 3M respirators

3M™ Premium Line Safety Glasses 1200E
Colour: grey or clear
Lens material: polycarbonate

3M™ Premium Line Safety Glasses 1100E
Lens colour: clear
Lens material: polycarbonate
Features wrap around frame and wide temples with integrated side protection.

3M™ Premium Line Safety Glasses 1100E
Lens colour: grey
Lens material: polycarbonate
Features wrap around frame and wide temples with integrated side protection.
3M™ Fuel™ X2 Premium Line Safety Glasses

Pump up your safety compliance levels with some of the best looking protective eyewear on the market. The Fuel X2 Series – where compliance meets style.

An ultra efficient blend of comfort and style, Fuel X2 offers a refined look and superb features. The revolutionary frame design features bold new grooved styling, rubber over-moulded adjustable temples and a fully adjustable nose-bridge. The sleek frame profile and rimless lower lenses help ensure that protection and performance remain uncompromised.

Features and Benefits:

Style
- Rubber over-moulded adjustable temples
- Half frame design
- Each pair comes with a microfibre pouch

Premium Protection
- Polycarbonate lenses absorb 99.9% UV radiation
- Meets the low energy impact requirements of EN166
- Frame made from a high density nylon material for impact, torsion and heat resistance
- Special mirror coating provides glare reduction and UV protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating

Comfort
- Adjustable temple arms
- Soft adjustable nose bridge

Compatible with
- Compatible with other 3M PPE products

3M™ Fuel™ X2 Premium Line Safety Glasses
Lens colour: red mirror
Lens material: polycarbonate

3M™ Fuel™ X2 Premium Line Safety Glasses
Lens colour: bronze
Lens material: polycarbonate

3M™ Fuel™ X2 Premium Line Safety Glasses
Lens colour: clear
Lens material: polycarbonate
3M™ Eye Protection

3M™ Solus™ 1000 Series with 3M™ Scotchgard™ Anti-Fog Coating

A fogged lens can be frustrating and dangerous. Removing eyewear to wipe away fog can expose eyes to potentially dangerous workplace impact hazards and debris. The Scotchgard™ Anti-Fog Coating resists fogging longer than traditional anti-fog coatings, even after washing multiple times. Try the Solus™ 1000 Series with Scotchgard™ Anti-Fog Coating and see clearly, longer.

Features and Benefits:

Style
- Slim frame
- Colour accented soft temple components for a stylish and modern look

Premium Protection
- Strong PC lenses

3M™ Scotchgard™ Anti-Fog Coating
- Provides scratch resistance and durability
- Provides superior anti-fog and anti-scratch properties, complying with K & N marking requirements of EN166
- Can be disinfected with diluted bleach soaking or alcohol wipes without losing its anti-fog performance

Comfort
- Lightweight
- Soft cushioning on nose bridge
- Inner padding on temples for increased comfort and stability when worn

3M™ Solus™ 1201
- Lens colour: clear
- Also available in: 3M™ Solus™ 1202 grey, 3M™ Solus™ 1203 amber
- Lens material: polycarbonate
- Frame colour: green/black

3M™ Solus™ 1101
- Lens colour: clear
- Also available in: 3M™ Solus™ 1102 grey, 3M™ Solus™ 1103 amber
- Lens material: polycarbonate
- Frame Colour: blue/black

Kits available with clear lens in each frame type. These include a headband and foam insert.
3M™ Goggle Gear 500 Series with 3M™ Scotchgard™ Anti-Fog Coating

3M™ Goggle Gear 501 has a low profile design, an adjustable headband and optional prescription insert. The goggle is available with a Scotchgard™ Anti-Fog coating which resists fogging longer than traditional anti-fog coatings.

Features and Benefits:

Style
- Modern, slim-line and lightweight design for an excellent fit

Premium Protection
- Optical class 1 lens suitable for prolonged use
- Coating retains its effectiveness even after multiple washings
- Offers excellent protection against UV radiation
- Separate prescription lens can be fitted into the Goggle Gear 500

3M™ Scotchgard™ Anti-Fog Coating
- Provides scratch resistance and durability
- Provides superior anti-fog and anti-scratch properties, complying with K & N marking requirements of EN166
- Can be disinfected with diluted bleach soaking or alcohol wipes without losing its anti-fog performance

Comfort
- Easy-to-adjust elastic Nylon headband for stable and comfortable wear
- Pivoting ratchet for convenient personal adjustment

3M™ Goggle Gear Protective Eyewear 500
- Lens colour: clear
- Lens material: polycarbonate

Prescription insert
- Lens colour: clear
- Lens material: polycarbonate
The 3M™ Maxim™ Hybrid goggle is a very lightweight, low profile form of eyewear protection that provides the same protection as traditionally styled goggles. It provides high comfort and unsurpassed protection against liquid droplets and mechanical hazards. The slim design offers improved comfort and wearer acceptance.

### Features and Benefits:

**Style**
- Modern and slim design

**Premium Protection**
- Patented aspherical lens for excellent field of view and superior eye coverage
- High performance ventilation system

**Compatible with**
- Special design for improved compatibility with other PPE

3M™ Maxim™ Hybrid Goggles

- **Colour:** clear
- **Lens material:** polycarbonate
The 3M™ Comfort Line Safety Goggles 2890 Series feature a modern, slim design and are available with four different options using either an acetate or polycarbonate lens with either sealed or indirect ventilation. They are suitable for a number of different applications where a versatile, comfortable goggle is required.

**Features and Benefits:**

**Style**
- Modern, slim-line and lightweight design for an excellent fit

**Premium Protection**
- Sealed design (3M™ 2890S & 3M™ 2890SA) helps provide protection against liquids, dust, gases and vapours
- Indirect ventilation design (3M™2890 & 3M™ 2890A) for improved air circulation, comfort and reduced fogging in hot/humid conditions
- Acetate lens option (2890A & 2890SA) for excellent chemical resistance and protection against high speed particles at low energy EN166 1 FT
- Polycarbonate lens option (2890 & 2890S) protects against high speed particles at medium energy EN166 1 BT and molten metal
- Anti-Scratch features an extremely scratch resistant coating ensuring improved durability (2890 & 2890S only)
- Anti-Fog coating reduces fogging and ensures clearer vision
- UV Protection gives reliable protection against specified levels of hazardous UV radiation
- The 2895S lenses are assessed against EN169:2002 for transmittance requirement for welding filters. This product protects against high speed impact at medium energy at room temperature only

**Comfort**
- Easy-to-adjust strap for stable and comfortable wear
- Pivoting ratchet for convenient personal adjustment
- Replacement lens options for 2890/2890S 2890A/2890SA

**Compatible with**
- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series

**3M™ Goggles 2890**
- Lens colour: clear
- Lens material: polycarbonate

**New 2890 models with Scotchgard Anti-Fog coating**
The Fahrenheit comfort goggle features a modern, slim design and is available with an acetate or polycarbonate lens with either sealed or indirect ventilation. It is suitable for a number of different applications where a versatile, comfortable goggles is required.

**3M™ Fahrenheit™ Comfort Goggles**

**Features and Benefits:**

**Style**
- Modern, slim-line and lightweight design for an excellent fit

**Premium Protection**
- Aerodynamic shape with cylindrical lens for excellent field of vision
- Indirect ventilation system to prevent fog, liquids and dust (on selected models)

**Comfort**
- Wide nylon elastic strap (25mm) which is easily adjustable thanks to a buckle system and to a pivoting strap attachment mechanism
- A Neoprene headband, easy to clean, specially for the food industry (on selected models)
- T-N-Wear Solution – available with an additional polyester film that can be easily removed and replaced

**Compatible with**
- Special helmet version is compatible with Peltor™ Helmet G3000

**Specifications:**

- **3M™ Fahrenheit™ Comfort Goggle**
  - Colour: clear
  - Lens material: polycarbonate

- **3M™ Fahrenheit™ for Peltor™ Helmet**
  - Lens colour: clear
  - Lens material: acetate

- **3M™ Fahrenheit™ T-N-Wear**
  - Lens colour: clear
  - Lens material: acetate
### Safety Glasses

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<tr>
<th>3M™ Eyewear</th>
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<th>Coating</th>
<th>Lens Filter and Shading</th>
<th>Visual Light Lens Transmittance (approx.)</th>
<th>EN166 Lens Marking</th>
<th>Mechanical Work</th>
<th>Outside Work</th>
<th>Driver</th>
<th>Metallurgy</th>
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### RISKS

- **Impact, dust**

## Over Safety Glasses

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<td>FT</td>
<td>AS</td>
<td>2C-1-2</td>
<td>89%</td>
<td>2C-1-2 3M FT</td>
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<tr>
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<td>14%</td>
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<td>3M™ Marcus Grönhoff (Clear)</td>
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<td>89%</td>
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<tr>
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<td>14%</td>
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<tr>
<td>3M™ Solus 100 (Clear)</td>
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<td>14%</td>
<td>5-31 3M FT KN</td>
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<td>2C-1-2 3M FT KN</td>
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<tr>
<td>3M™ Fuel™ X2 (Clear)</td>
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<td>AS</td>
<td>2C-1-2</td>
<td>90%</td>
<td>2C-1-2 3M FT</td>
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<tr>
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<td>AS</td>
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<td>9%</td>
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</tr>
<tr>
<td>3M™ Fuel™ X2 (Red Mirror)</td>
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<td>Mirror</td>
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<td>9%</td>
<td>5-31 3M FT</td>
<td>y</td>
<td>y</td>
<td>y</td>
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</tr>
</tbody>
</table>

### 2 - OUTSIDE WORK

- Gardening, road works, building site work, shooting RISKS: Impact, dust, glare, UV

### 3 - DRIVER

- Fork lift truck, heavy plant, PPE, RISKS: Impact, dust, infrared, metal, metal objects (only goggles)

### 4 - CHEMICAL APPLICATION

- Laboratory, painting, general surgery RISKS: Liquid splash, acid, alkalies, infected blood

### 5 - METALLURGY

- Furnace works, casting control, mold maintenance RISKS: Impact, dust, infrared, metal, metal objects (only goggles)

### 6 - SURFACE INSPECTION

- Quality control, Wood lamp, curing RISKS: Ultraviolet, Blue light

### 7 - WELDING

- Welders assistant, brazeing, gas welding, oxy-cutting RISKS: Ultraviolet, glare, infrared, sparks

*Visual Lens Light Transmittance percentages quoted are typical values as results may vary.*
Guided by welders, trusted by welders,

The 3M™ Speedglas™ brand is the world’s leading product line of welding safety and is a vital part of 3M’s diverse range of personal protective equipment. More than 35 years ago, we went to the shipyards of Sweden to observe welders. They blindly struck arcs as they continually nodded their helmets down. They got accidently flashed by other welders - or even themselves. We asked, “What if... welders could always see, even with their helmets down?” Since then, we’ve been systematically addressing every welding ergonomic challenge you face.

Subscribe to www.youtube.com/3MSpeedglas
Join the welding community on www.facebook.com/3M Speedglas
Tag us on Instagram @3MSpeedglas
## Choose your 3M™ Speedglas™ Welding Helmet

<table>
<thead>
<tr>
<th>Welding helmet features</th>
<th>9100</th>
<th>9100-Air</th>
<th>9100-QR</th>
<th>9100 FX</th>
<th>9100 FX-Air</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye and Face Protection</strong></td>
<td>EN 175:B, EN 379, EN 166:BT</td>
<td>EN 175:B, EN 379, EN 166:BT</td>
<td>EN 175:B, EN 379, EN 166:BT</td>
<td>EN 175:B, EN 379, EN 166:BT</td>
<td>EN 175:B, EN 379, EN 166:BT</td>
</tr>
<tr>
<td><strong>Head protection</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>EN 397*</td>
<td>EN 397**</td>
<td>N/A</td>
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<tr>
<td><strong>Respiratory protection</strong></td>
<td>Disposable or reusable respirator</td>
<td>Powered or supplied air</td>
<td>Disposable or reusable respirator</td>
<td>Disposable or reusable respirator</td>
<td>Powered or supplied air</td>
</tr>
<tr>
<td><strong>Hearing protection options</strong></td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td><strong>Exhaust vents</strong></td>
<td>YES</td>
<td>N/A</td>
<td>YES</td>
<td>YES</td>
<td>N/A</td>
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<tr>
<td><strong>Side windows</strong></td>
<td>Optional</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>High-comfort headband</strong></td>
<td>YES</td>
<td>YES</td>
<td>N/A</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Flip-up with clear visor</strong></td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
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</tbody>
</table>

---

### Part No additional coverage:

| Flame-retardant head cover | #169005 | #169005 | NO | NO | #169007 |
| Flame-retardant neck protection | NO | NO | #169010 | #169010 | #169010 |
| Flame-retardant hood | #169100 | #169100 | #169100 | #169100 | #169100 |
| Ear and neck cover in leather | #164005 | #164005 | #164005 | #164005 | #164005 |

### Welding filter options

|---|---|---|---|---|

---

* with 3M™ Safety Helmet H-701.
** with 3M™ Safety Helmet G-3001 (adapter #197136 is needed).

**Exhaust vents** – exhaled air is channeled out via side exhaust vents.

**Side windows** – shade 5 filters that widen your field of vision.

**Adjustable high-comfort headband.**

**Big, curved 17 × 10 cm clear protective visor, increasing your peripheral vision.**
<table>
<thead>
<tr>
<th>9100 MP</th>
<th>9100 MP-Lite</th>
<th>9002NC</th>
<th>SL</th>
<th>100</th>
<th>100-QR</th>
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<tr>
<td>EN 175:B,</td>
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<td>EN 175:F</td>
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<td>EN 166:8T</td>
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<td>EN 166:8T</td>
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<td>EN 397</td>
<td>EN B12</td>
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</table>

* with 3M™ Safety Helmet H-701.
** with 3M™ Safety Helmet G-3001 (adapter #197136 is needed).
Still seeing green?

Imagine what more realistic-looking colours and details could do for you:

- Provide better control of your weld puddle – with a view that appears lighter, brighter, and more realistic.
- Help you focus on your welding setup, welding technique, and inspection of just-completed welds.
- Give you a clearer view of coloured welding machine controls – even with your helmet in the safe, down position.

See the difference!

“The view seems lighter and less green – I can see colours far better! Even in the dark state, I see contours better.”

Veteran welder
## Select 3M™ Speedglas™ Welding Filter

Before you select welding filter, ask yourself:
- How will I use my welding filter?
- Do I occasionally change welding process/shade no.?

There are a few parameters that affects the performance of an auto-darkening filter like type of welding machine, working environments etc. The table below is a general guide to all our various models due to detector function and based solely on welding applications.

### Specification

<table>
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<tr>
<th>Specification</th>
<th>9100XXi</th>
<th>9100XX</th>
<th>9100X</th>
<th>9100V</th>
<th>SL</th>
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<td>Shade 12 (permanent)</td>
<td>Shade 13 (permanent)</td>
<td>Shade 12 (permanent)</td>
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<td>0,1 ms (+23°C)</td>
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</tr>
<tr>
<td>Memory mode</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
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<td>Delay switching time, dark-light</td>
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<td>40–1 300 ms</td>
<td>60–250 ms</td>
<td>40–250 ms</td>
<td>60–400 ms</td>
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<td>Number of sensors (arc detection)</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Approval (welding filter)</td>
<td>EN 379</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3M™ Speedglas™ Natural Colour Technology</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* The ratings (good - better - best) above refer to the products listed in this chart and should be seen as general recommendations based on differences in product comfort features and configuration options when using these selected Speedglas welding helmet series.
At a mere 370 grams — including its auto-darkening filter — the 3M™ Speedglas™ Welding Helmet SL is 25% lighter than any other Speedglas model. Using specialised manufacturing techniques, we greatly reduced the weight of the auto-darkening filter. And unlike other lightweight helmets that can absorb moisture and become heavy, the Speedglas helmet SL is made from a strong, non-absorbent material.

Designed specifically for quick welding tasks, a motion sensor automatically turns ON the welding filter when you pick up the helmet.

**Features and Benefits:**

- Light in weight, strong in performance
- Five adjustable dark shades 8–12 and a light shade of 3
- Four sensitivity settings
- Appropriate for most arc welding processes – such as MMA, MIG/MAG, TIG and plasma welding
- A motion sensor automatically turns ON the welding filter when you pick up the helmet
- Compatible with most 3M™ Disposable Particulate Respirators
- Easy tightening: The head suspension features a smooth ratchet for easy tightening – even while wearing gloves!

3M™ Speedglas™ Welding Helmet SL with welding filter.

Part Number 70 11 20

When your #1 priority is super light technical specifications on page 148-149.
The easy-to-use 3M™ Speedglas™ Welding Helmet Series 100 allows you to take advantage of excellent optical quality and reliable light-to-dark switching at a highly affordable price.

In addition to the black model, you can choose from several highly expressive graphic helmet designs.

Features and Benefits:
- 3M™ Speedglas™ Welding filter 100V: five adjustable dark shades 8-12 and a light shade of 3
- Three sensitivity settings
- Speedglas Welding filters 100S-10 and 100S-11 have single dark shades of 10 and 11 respectively, and a light shade of 3
- For grinding, lock-in shade 3 light state. Only applicable for the welding filter 100V
- High impact rating according to the requirements of the European Standard EN 175:B
- Appropriate for most arc welding processes, including MMA and MIG/MAG. The welding filter 100V is also appropriate for high amp TIG welding
- Compatible with most 3M™ Disposable Particulate Respirators

Make a visual impact
3M™ Speedglas™ Auto-Darkening Filter 9100XXi

Introducing a new solution in our range of top-of-the-line auto-darkening filters: The 3M™ Speedglas™ Auto-Darkening Filter 9100XXi offers the same large viewing area as our 9100XX welding filter.

See the difference: improved optics in the new 9100XXi filter provide more contrast and natural-looking colours, as shown by these two photos. The photo below is shot through the 9100XXi welding filter.

Features and Benefits:

- Fast Switching Between Welding and Grinding
- Seven dark shades, including 9-13 (variable), 5 for gas welding/cutting, and 8 for micro-plasma or low-amp TIG (even on settings as low as 1 amp)
- Auto ON/OFF - A new motion-sensor instantly turns ON the welding filter when you pick up the helmet
- Large viewing area 73x107 mm

More natural colours
The difference is easy to see. Yes, the light state is still shade 3! In fact, the improved welding filter optics can make your entire viewing experience feel more natural.

External controls and memory function
With a push of an external button, switch between grinding mode or your two memory settings for welding. You do not even have to take off a glove!

3M™ Speedglas™ Auto-Darkening Filter 9100XXi
Seeing is believing

Technical specifications on page 148-149.

Easy Upgrade
The 9100XXi ADF is compatible with all welding helmets in the 3M™ Speedglas™ Welding Helmet Series 9100. However, to access the grinding and memory modes, the silver front panel included in the 3M™ Speedglas™ Auto-Darkening Filter Kit 9100XXi is required. This panel will only operate on Speedglas Welding Helmets 9100, 9100-Air and 9100-QR.

Watch the videos at www.youtube.com/3MSpeedglas
Protecting your eyes and face from radiation, heat and sparks - while providing a precise view of your work - makes your 3M™ Speedglas™ Welding Helmet 9100 one of your most important welding tools.

All of these benefits can be used with powered or supplied air respiratory protection in combination with the Speedglas welding helmet 9100-Air. If your work situation requires head protection, test out our Speedglas welding helmet 9100-QR. It quickly attaches to many of the industry’s most popular safety helmets, including the 3M™ Safety Helmet H-701.

**Features and Benefits:**

- **Simplified workflow:** The 9100XXi kit (special front and welding filter) houses external controls – enabling convenient, “gloves-on” memory mode switching – to help you weld, grind and see your finish.
- **High-comfort 3M™ Speedglas™ Headband**
- **Large coverage for ear and side of head**
- **Side Windows:** Shade 5 filters that widen your field of vision
- **Meets the requirements of mechanical resistance to high speed particles according to EN 175 class B**
- **100% compatible with our top-of-the-line series of 3M™ Speedglas™ Welding Filter Series 9100**
- **Exhaust vents readily direct exhaled air out of the helmet, reducing likelihood of a foggy welding filter (9100 and 9100-QR)**

Tailor to fit your personal preferences

With the 9100 headband, we’ve carefully avoided sensitive areas of the head while designing self-adjusting twin pads for the forehead band. By better contouring it around your head, our headband doesn’t need to be overly tight to be comfortably secure, your head.

---

3M™ Speedglas™ Welding Helmet 9100 with Side Windows and welding filter 9100XXi

Part Number: 50 18 26
3M™ Speedglas™ Natural Colour Technology.

For other welding filter options and technical specifications please check page 148-149.

3M™ Speedglas™ Welding Helmet 9100-QR with welding filter 9100XXi

Part Number: 58 36 26
3M™ Speedglas™ Quick Release (QR) Rail. 3M™ Speedglas™ Natural Colour Technology.

For other welding filter options and technical specifications please check page 148-149.

3M™ Speedglas™ Welding Helmet 9100-Air with welding filter 9100XXi and 3M™ Adflo™ Powered Air Respirator.

Part Number: 56 7726
3M™ Speedglas™ Natural Colour Technology. Also available with supplied air regulator.

For other welding filter options and technical specifications please check page 148-149.
3M™ Speedglas™ Welding Helmet 9100 FX with welding filter 9100XXi

3M™ Speedglas™ Welding Helmet 9100 FX, a flip up combination of an auto-darkening welding helmet and a protective visor.

A quick lift of the front and you get a big, 17 × 10 cm clear view – perfect for precision grinding in low-light conditions. And if you use the 9100 FX-Air model, the clear view from the curved visor lets you keep your respiratory protection in place at all times.

Features and Benefits:

- Side windows: Shade 5 filters that widen your field of vision
- The big, 17×10 cm clear protective visor is curved, increasing your peripheral vision
- High-comfort 3M™ Speedglas™ Headband 9100
- Exhaled air is channelled out via side exhaust vents
- Meets the requirements of mechanical resistance to high speed particles according to EN 175:B and EN 166:B
- 100% compatible with our top-of-the-line series of 3M™ Speedglas™ Welding Filter Series 9100

Safety Helmet Adapter

Using the safety helmet adapter, you can easily fit many of the industry’s safety helmets with the Speedglas welding helmet 9100 FX. Part number: 19 71 36

3M also offers this complete welding helmet system including the 3M™ Safety Helmet G-3001.
You asked and we listened. Many welders consider our classic Speedglas 9000 model an excellent balance of helmet shape, size, and weight for their application. So we’ve brought it back. The exact same shell profile many welders love. But we added new, high performing optics – and a headband made for increased comfort.

Introducing the 3M™ Speedglas™ Welding Helmet & Auto-Darkening Filter 9002NC.

Features and Benefits:

- **Better control**
  An improved optical experience, with a view that appears lighter, brighter, and more realistic. Viewing your weld puddle with the new 3M™ Speedglas™ Natural Colour Technology can help give you better control over your welds.

- **Exhale**
  Thanks to the exhaust vents built into the helmet, the build-up of carbon dioxide is reduced compared to traditional helmet designs.

- **Freedom of movement**
  The slim helmet’s design increase freedom of movement. Plus, the exhaust vents allow for a close-to-the-face fit.

- **Affordable price**
  Puts 3M™ Speedglas™ Technology and state-of-the-art auto-darkening optics within reach of every welder, from apprentices to seasoned veterans.

Improved comfort
Adjust to the right headband setting, so your helmet stays where you want it.
3M™ Speedglas™ Welding Helmet 9100 MP with welding filter 9100XXi and 3M™ Adflo™ Powered Air Respirator

We've seamlessly integrated five levels of welder protection: head, eye, face, respiratory and hearing into one extraordinarily comfortable and easy-to-use system. The 3M™ Speedglas™ Welding Helmet 9100MP (Multi Protection): uncompromising, all-in-one, welding protection for highly demanding environments.

Features and benefits:

- A big (17x10cm) curved protective visor with excellent views up, down and peripherally
- Meets EN 166:BT for high speed particle protection*
- Respiratory protection - TH3**
- The top shell is made from heat resistant polycarbonate and meets the standard EN397 for industrial safety helmets
- An optional high visibility, aluminium fabric reflects hot sunlight and welding heat
- Two shade 5 passive side windows add peripheral welding vision
- Designed from inception to accept 3M™ Peltor™ Earmuffs
- It readily connects to both 3M™ Adflo™ Powered Air Respirator and 3M™ Versaflo™ Supplied Air Regulator V-500E

* European Standards classify this visor as “B,” with resistance to high speed particles at medium energy impact (120 m/s).
** When used with 3M™ Adflo™ Powered Air Respirator

For other welding filter options and technical specifications please check page 148-149.
3M™ Adflo™ Powered Air Respirator

Since its launch, 3M™ Adflo™ Powered Air Respirator has become one of the most popular powered air respirators in the world.

The Adflo powered air respirator is specifically designed to meet your welding needs. Its continuous airflow provides filtered air that takes much of the heat and sweat out of welding. By using the Adflo respirator, you get both increased protection and comfort all day long.

Features and benefits:

- The slim profile and ergonomic design make it easier to go into tight welding spaces and offers the quality and functions you should expect from a robust and easy-to-use respiratory system.
- With the right type of filter, the Adflo respirator effectively protects against both particles and gases - all in one system.
- Selectively replace either the particle or the gas filter as needed: you don’t need to change both filters at the same time.
- The new Li-ion batteries makes the turbo more lightweight and balanced for even greater comfort during the full shift.
- The airflow is always a constant nominal rate of 170 litres per minute, regardless of the battery’s charge or the particle loading of the filter.
- For hot, humid jobs, you can increase the airflow to 200 litres per minute by simply pushing the ON button a second time.

3M™ Adflo™ High Altitude Powered Air Respirator
An adaptable system that saves money
If you are using an older Adflo respirator, you can easily upgrade to a new level of performance incorporating Li-ion battery, making the turbo almost 20% lighter.

Go higher
At higher altitudes, air is less dense. To compensate, we offer the 3M™ Adflo™ High Altitude Powered Air Respirator. Suitable for 0 to 3000 meters above sea level, or 0 to 1500 meters with gas filters.
Body Protection
Protective Apparel

Differential Permeation. Applied to returning you home safely.

At 3M we have a select and high quality range of CE Certified products from CE simple coveralls to PPE Directive Category III Coveralls, which provide protection against many hazards.

The range of 3M™ Protective Apparel offers a variety of features, from the use of fabrics with specialist treatments for enhanced wear and added protection, to breathable back panels for increased comfort. Our experts can work closely with you, to help you identify hazards and best protect your workers against them.
3M™ Protective Apparel

Standards

There are many tests and standards that apply to protective coveralls and selection can be a daunting task. The following section outlines the different options available to help you select the right product for your employees. For more information on how the tests are done, and what they mean practically to you, review the technical bulletins and guides within our 3M protective apparel literature.

Protection Types

Depending on the materials and construction protective coveralls can be designed for either hazardous applications (certified to CE Category III) or non-hazardous applications (approved as CE Simple Category I). Products for hazardous applications can be tested and certified to any of six different “Type” standards providing guidance on suitability of use:

<table>
<thead>
<tr>
<th>Category</th>
<th>Symbol</th>
<th>Protection Type</th>
<th>Standard</th>
<th>3M Products</th>
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<tr>
<td>CE Category III</td>
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<td>1 – Gas Tight</td>
<td>EN 943-1</td>
<td>N/A</td>
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<tr>
<td></td>
<td></td>
<td>2 – Non-gas tight</td>
<td>EN 943-1</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – Liquid Jet Protection</td>
<td>EN 14605 + A1</td>
<td>4570</td>
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<td></td>
<td>4 – Liquid Spray Protection</td>
<td>EN 14605 + A1</td>
<td>4570, 4565</td>
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<td>5 – Hazardous Particulate Protection</td>
<td>EN ISO 13982</td>
<td>4570, 4565, 4540+, 4535, 4532+, 4530, 4520, 4515, 4510</td>
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<td></td>
<td></td>
<td>6 – Liquid Splash Protection</td>
<td>EN 13034 + A1</td>
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<td>CE Category I</td>
<td></td>
<td>CE Simple</td>
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<td>4500</td>
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</table>

Additional Standards

Some 3M™ Protective Coveralls and their materials are approved to additional standards for specialist applications.

<table>
<thead>
<tr>
<th>Symbol/Standard</th>
<th>Protection Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio</td>
<td>Protection against micro-organisms or infective agents (EN 14126:2003)</td>
</tr>
<tr>
<td>Radioactive</td>
<td>Protection against nuclear particles (EN 1073-2:2002)</td>
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<tr>
<td>L</td>
<td>Anti-static (EN 1149-5:2008)</td>
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<tr>
<td>ISO 15025 / ISO 14116</td>
<td>Limited Flame Spread Resistance</td>
</tr>
<tr>
<td>!</td>
<td>Where added to the above symbols please refer to the appropriate user instructions for further information on the compliance of this product</td>
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</table>
3M™ Protective Apparel

Materials

The following is a guide that offers a brief description and comparison of the materials used in 3M’s protective coverall range. Base materials can be treated, for instance, with an anti-static treatment, to enhance the total protection offered.

Non-woven Polypropylene
Offers comfortable light-duty protection against nonhazardous liquids and dust.

Spunbond-Meltblown Polypropylene (SMS)
‘SMS’ can be layered differently to adjust the protective and physical properties of the material. Standard SMS-material is very breathable and offers a good barrier against dusts and limited liquid splashes. If treated materials can achieve an enhanced level of splash protection, such as the 3M™ Protective Coverall 4532+.

Microporous Laminates
‘Microporous laminates’ offer a higher level of liquid splash protection, while the micropores allow for some breathability.

Non-microporous Laminates
‘Non-microporous laminates’ can offer an even higher level of liquid protection. Adding multiple layers of the laminate can also increase robustness and chemical holdout.

Design Features
3M™ Protective Coveralls can offer a variety of features depending on your needs. The illustration below highlights some of the features available:

- Contains no components made from natural rubber latex
- Two-way zipper for on/off convenience
- Anatomical design and fit for optimal wear, coverage and comfort
- Elasticized waist and ankles and knit or elastic cuffs on all models for increased comfort and mobility
- Three panel hood design on most models for compatibility with complementary PPE
- Seamless shoulder and sleeve tops for fewer entry points for contaminants and increased comfort
- Storm flap on all coveralls to help provide additional protection
- Available in a variety of sizes (S-4XL).
- Backed by 3M global technical capabilities and support
- Opportunities for customisation
- 2015 3M protective apparel sizing enhancement implemented globally
3M™ Coverall 4500

The 3M™ Coverall 4500 is a CE Simple suit designed and suitable for non-hazardous applications.

Whether it is for domestic DIY use, light duty industrial cleaning and maintenance applications or environments where hygiene and cleanliness are important, the 3M coverall 4500 is an excellent economic solution to help keep wearers clean and protected from light non hazardous splashes.

Features and Benefits:

- Breathable and light duty protection
- Strong, durable 45gsm polypropylene fabric
- Storm flap over zip
- Elasticated hood, cuffs, ankles and waist
- Available in blue and white
- Serged seams

Typical Applications

Popular Choice
- Light duty cleaning
- Warehousing
- Janitorial
- Domestic DIY

3M™ Coverall 4500
Colour: White and blue
CE Category I
Sizes: S-4XL

Fabric material
The material used in the 3M coverall 4500 is a soft breathable polypropylene, which aids air flow helping reduce heat stress and improve comfort. The comfortable coverall for non-hazardous protection.

Seam Technology
Seams are serged for Type 5/6 protection.
The 3M™ Protective Coverall 4510 is an economic solution which offers quality and protection from limited chemical splashes such as those from paint spraying and is certified to the PPE Directive Category III, Type 5/6 protection standard. The material is microporous, allowing air and moisture to escape from within the suit, while helping to protect from the hazard on the outside.

**Features and Benefits:**

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Laminated microporous material
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Elastic cuffs, waist and ankles for a better fit and freedom of movement
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Biological protection tested to EN 14126

**Typical Applications**

**Popular Choice**
- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Coating & resin applications
- Crime scene investigation

**Suitable for Consideration**
- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing & handling toxic powders
- Cleanrooms

**3M™ Protective Coverall 4510 Type 5/6**

- Colour: White
- CE Category III
- Sizes: S-4XL

**Fabric material**

The anti-static treated 3M protective coverall 4510 material is made using a layer of soft, spunbond polypropylene and a layer of light, but high quality polyethylene laminate film giving good levels of barrier efficiency and protection.

**Seam Technology**

Seams are serged for Type 5/6 and certain seams bound for extra protection.
Low cost hazardous dust protection
The 3M™ Protective Coverall 4515 is an economic solution to protect from hazardous dusts such as asbestos fibres exposed to during site inspection. While protecting on the outside, the breathable material allows air to escape from the inside to reduce heat build-up and discomfort. Available in white, blue and orange, the range is certified to PPE Directive Category III, Type 5/6 protection for both hazardous dusts and liquid splashes.

Features and Benefits:
- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Robust, highly breathable 50gsm SMS material
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Elastic cuffs, waist and ankles for a better fit and freedom of movement
- Low-linting
- Available in white, blue and orange

Typical Applications
Popular Choice
- Asbestos inspection
- Site preparation, insulation
- Construction

Suitable for Consideration
- Cement manufacturing
- Grinding & polishing
- Light industrial cleaning
- Machine maintenance

Fabric material
The material used in the 3M protective coverall 4515 sandwiches a single thick filtering layer of melt-blown polypropylene between two thinner layers of softer spun bond polypropylene delivering a finished durable, breathable 50gsm protective material that aides air flow to reduce heat stress and improve comfort.

Seam Technology
Seams are serged for Type 5/6 protection.
Made using the latest lightweight, breathable material technology, 3M presents the 3M™ Protective Coverall 4520, a PPE Directive Category III, Type 5/6 protective garment.

**3M™ Protective Coverall 4520**

**Features and Benefits:**
- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- SMMMS material technology for reduced heat stress and breathable comfort all day
- Low-linting
- Extremely lightweight and comfortable compared to many certified coveralls available in the marketplace
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- 2 way zipper with stormflap for added convenience and extra protection
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Model with elasticated cuffs and thumbloop also available

**Typical Applications**
- **Popular Choice**
  - Asbestos inspection
  - Site preparation, insulation
  - Pharmaceutical processing and handling toxic powders
- **Suitable for Consideration**
  - Asbestos removal
  - Cement manufacturing
  - Grinding & polishing
  - Light industrial cleaning
  - Machine maintenance
  - Construction work
  - Light paint spraying/powder coating

**3M™ Protective Coverall 4520 Type 5/6**
- **Colour:** White with green back panel
- **CE Category III**
- **Sizes:** S-4XL

**Latest Material Technology**
With 3 layers of melt-blown polypropylene in-between 2 layers of spunbound polypropylene, the 3M protective coverall 4520 fabric has been specifically designed to improve air flow and breathability, thereby reducing heat stress and enhancing comfort levels. The middle 3 layers act as a filter to effectively protect against hazardous dust and splash and the outer 2 layers offer strength and durability whilst maintaining a soft, comfortable feel.

**Seam Technology**
Seams are serged for Type 5/6 protection.
**3M™ Protective Coverall 4520CS**

Made using the latest lightweight, breathable material technology, 3M presents the 3M™ Protective Coverall 4520CS, a PPE Directive Category III, Type 5/6 protective garment.

With the same premium comfort and protection as the standard 3M protective coverall 4520, but with a standard collar for greater compatibility with Powered and Supplied Air Respirators.

### Features and Benefits:

- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- SMMMS material technology for reduced heat stress and breathable comfort all day
- Extremely lightweight and comfortable compared to many certified coveralls available in the marketplace
- Low-linting
- Collar standard neck finish for when a hood is not required or interferes with alternative head, face or respiratory protection
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- 2-way zipper with stormflap for added convenience and extra protection
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles

### Typical Applications

**Popular Choice**
- Asbestos inspection
- Site preparation, insulation
- Pharmaceutical processing and handling toxic powders

**Suitable for Consideration**
- Asbestos removal
- Cement manufacturing
- Grinding & polishing
- Light industrial cleaning
- Machine maintenance
- Construction work
- Light paint spraying/powder coating

### Latest Material Technology

With 3 layers of melt-blown polypropylene in between 2 layers of spunbound polypropylene, the 3M protective coverall 4520 fabric has been specifically designed to improve air flow and breathability, thereby reducing heat stress and enhancing comfort levels. The middle 3 layers act as a filter to effectively protect against hazardous dust and splash and the outer 2 layers offer strength and durability whilst maintaining a soft, comfortable feel.

### Seam Technology

Seams are serged for Type 5/6 protection.
The 3M™ Protective Coverall 4530 is a PPE Directive, CE Category III, Type 5/6 protective garment, made from a breathable SMMS material technology and includes a host of comfort features. The material also has a flame resistance treatment, which allows the fabric to perform to ISO 14116 Index 1*.

**Features and Benefits:**
- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Limited flame spread resistance to ISO 14116 Index 1/0 (material only)
- Highly breathable robust 54gsm SMMS material
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- 2-way zipper with sealable storm flap for added on-off convenience and extra protection
- Knitted cuffs and elastic waist and ankles for a better fit and freedom of movement
- Enhanced triangular gusset panel
- Low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Available in blue (with white triangle) and white

**Typical Applications**

**Popular Choice**
- Metal grinding and polishing
- Oil & Gas industry
- Cement manufacturing
- Welding

**Suitable for Consideration**
- Asbestos inspection and removal
- Site preparation and insulation
- Light industrial cleaning
- Machine maintenance
- Pharmaceutical processing
- Handling toxic powders
- Painting and coating

**Fabric Material**

With layers of Meltblown polypropylene in between 2 layers of spun bond polypropylene the 3M protective coverall 4530 fabric allows airflow, increasing breathability, reducing heat stress and improving comfort. The melt blown layers are inserted with hot air and act as a barrier while the two outer spun bond layers make the coverall soft and breathable.

* The additional flame spread resistance treatment enables the material to give limited flame spread protection (ISO 14116) when worn over an Index 2 or 3 garment. This may extend the life of the more expensive thermal protective garments.

**Seam Technology**

Seams are serged for Type 5/6 protection.
The 3M™ Protective Coverall 4532+ range is made from a highly breathable and lightweight 5 layered SSMMS material, providing the wearer with CE Category III, Type 5/6 protection with specialist treatments providing anti-static protection and an enhanced liquid repellency.

**Features and Benefits:**

- Specialist coatings enable this product to be used in many applications not usually suitable for SMS Based coveralls
- SSMMS material, see Fabric Material
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles
- 2-way zipper for added convenience and a storm flap with full sealable tape for extra protection
- Enhanced and reinforced triangular gusset panel to increase product durability
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Low linting
- Available in blue (with a light blue triangle back panel) and Cool white

**Typical Applications**

- **Popular Choice**
  - Metal grinding and polishing
  - Oil/greasy environments
  - Painting and coating
  - Cement manufacturing

- **Suitable for Consideration**
  - Light industrial cleaning
  - Machine maintenance
  - Pharmaceutical processing
  - Handling toxic powders
  - Resin applications

**Fabric Material**

The 3M protective coverall 4532+ is made using a 52gsm SSMMS, which consists of two outer layers of spunbond polypropylene (SS) encasing two layers of melt-blown polypropylene (MM) and a third layer of spunbond (S) on the underside. The fabric has been specifically designed to be durable whilst enabling air flow thereby reducing heat stress and enhancing wearer comfort. The middle 2 layers act as a filter to effectively protect against noxious dust and splash whilst the outer layers offer strength and increased liquid hold out from the alcohol and oil repellence treatment.

**Seam Technology**

Seams are serged for Type 5/6 and certain seams bound for extra protection.
3M™ Protective Apparel

3M™ Protective Coverall 4535

If you’re looking for a balance of protection, durability and additional comfort, look no further than the 3M™ Protective Coverall 4535. Certified to PPE Directive Category III, Type 5/6 protection, it utilises a dual material design with added comfort features and enhanced breathability to optimise wearer acceptance.

Features and Benefits:
- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Robust, super low-linting laminated microporous material
- Extra large breathable back panel for improved air circulation and reduced heat stress
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement
- Low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles

Typical Applications

Popular Choice
- Coating & resin applications
- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Forensics

Suitable for Consideration
- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders

3M™ Protective Coverall 4535 Type 5/6
Colour: White with blue back panel
CE Category III
Sizes: S-3XL

Fabric Material
The front of the 3M protective coverall 4535 combines a high quality polyethylene laminate providing an excellent barrier, on top of a layer of soft, spunbond polypropylene fibres creating a robust, yet comfortable 55gsm protective fabric. The large blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.

SMMMS back-panel.

Microporous laminate fabric.

Seam Technology
Seams are serged for Type 5/6 and certain seams bound for extra protection.
With premium dual material technology and offering CE Category III, Type 5/6 protection, the 3M™ Protective Coverall 4540+ is ideal for applications where both high levels of protective performance and comfort are desired.

**Features and Benefits:**
- Excellent barrier against dry particles and certain liquid chemical splash (CE Type 5/6)
- Soft and light, super low-linting laminated microporous material that drapes and hangs well over the body facilitating ease of movement
- Back panel made of breathable SMMMS material for improved air circulation and reduced heat stress
- 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- Enhanced and reinforced triangular gusset panel to increase product durability
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN1073-2 for protection against nuclear particles
- Low linting

**Typical Applications**
- Popular Choice
  - Paint spraying & powder coating
  - Coating & resin applications
  - Light industrial cleaning
  - Machine maintenance

**Suitable for Consideration**
- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders

**3M™ Protective Coverall 4540+ Type 5/6**
- Colour: White with blue back panel
- CE Category III
- Sizes: S-4XL

**Fabric Material**
The 3M protective coverall 4540+ material is made using a composite layer of soft, spunbond fibres and a layer of light, but high quality polyethylene laminate film giving excellent levels of barrier efficiency and protection. Compared with many other laminates it has a particularly soft feel and drapes well over the body. The blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.

**Seam Technology**
Seams are serged for Type 5/6 and certain seams bound for extra protection.
The 3M™ Protective Coverall 4545 is designed to be comfortable, but highly protective certified to PPE Directive Category III, Type 5/6.

Designed like the 3M™ Protective Coverall 4540+ and using the same material as a single laminate suit, it is certified to protect against biological agents, radioactive particulates and is super low-linting, making it suitable for a wide range of applications including many cleanrooms.

**Features and Benefits:**

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Biological protection tested to EN 14126
- Soft, well-draping, laminated microporous material
- 3-panel hood design for enhanced compatibility with complimentary PPE
- 2-way zipper with sealable storm flap for added on-off convenience and extra protection
- Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement
- Enhanced and reinforced triangular gusset panel to increase product durability
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Supplied in space saving vacuum packaging

**Typical Applications**

**Popular Choice**
- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Coating & resin applications
- Cleanrooms
- Forensics

**Suitable for Consideration**
- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders
- Metallurgy

**Fabric Material**

The 3M protective coverall 4545 material is up to 20% lighter than previous 3M polyethylene laminate materials and made using an anti-static composite layer of soft, spunbond fibres and a layer of light, but high quality polyethylene laminate film, giving excellent levels of barrier efficiency and liquid protection.

**Seam Technology**

Seams are serged for Type 5/6 and certain seams bound for extra protection.
Offering CE Category III, Type 4/5/6 protection, the 3M™ Protective Coverall 4565 has an impressive level of liquid barrier protection whilst maintaining its unique soft feel and well-fitting drape. With tape applied over the seams a greater level of total protection and seam durability is offered versus Type 5/6 products.

**Features and Benefits:**
- Excellent barrier against dry particles, liquid certain chemical splash and spray (CE Type 4/5/6)
- Taped seams across the suit for better protection and increased durability
- Soft, well-draping laminated material
- Biological protection tested to EN 14126
- 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- Anti-static treatment to EN 1149 to reduce charge build up
- Super low-linting
- Supplied in space saving vacuum packaging
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles

**CE Type 4:**
Testing to Type 4 standards requires the coverall material to be put through additional testing. A whole body suit test is conducted with a higher volume of liquid than the equivalent Type 6 test. More importantly, the material and the seams have permeation tests conducted with a minimum of one chemical to assess whether the chemical/s can get through the material at a molecular level. The construction of the laminate used in the 3M protective coverall 4565 offers a superior performance in this area compared to many other Type 4 products.

**Typical Applications**
- Popular Choice
  - Asbestos removal
  - Pharmaceutical processing
  - Handling toxic powders
  - Cleanrooms
  - Pesticide Spraying

**Suitable for Consideration**
- Asbestos inspection
- Site preparation, insulation
- Cement manufacturing
- Grinding & polishing
- Industrial cleaning and maintenance
- Painting & coating, resins

**Fabric Material**
20% lighter than previous 3M polyethylene laminate materials, the 3M protective coverall 4565 combines a composite base of nonwoven fibres and a polyethylene film giving good barrier efficiency against many hazardous liquids. The laminate is also ultra-low linting and anti-static treated making it suitable for a wide variety of potentially hazardous applications.

**Seam Technology**
Seams are stitched and overtaped with a red protective tape to offer increased seam strength and an effective barrier to liquids and particulates.
The 3M™ Protective Coverall 4570 is a high performance chemical protective suit, certified to PPE Directive Category III, Type 3/4/5/6 levels of protection, making it suitable to protect against a range of chemical jets and sprays. With additional design features including an enlarged zip and finger loops, a double-closing storm flap system and chin flap, convenience of use can be offered without compromising the high level of protection given.

**Features and Benefits:**

- Excellent barrier for jet spray and liquid tight chemical protection (CE Type 3/4)
- Biological / infective agent protection (EN 14126) to the maximum class
- Seams are taped with a multi layer coextruded clear tape, giving a discreet finish and a consistent seal and barrier
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Two stormflaps combined with double colour coded zips to create a double seal for added convenience and extra protection
- Larger easy grab ring pulls for ease of use
- Elasticated cuffs with thumb loops for secure fit during overhead work
- Elasticated waist and ankles for increased comfort and freedom of movement
- Glued in waist elastic and seam free shoulders to minimise entry points for confidence of wearer
- Adhesive chin flap
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles

**Typical Applications**

**Popular Choice**
- Chemical mixing and handling
- Chemical/oil spills and clean up
- Metal Refining
- Metal Etching
- Hazardous waste remediation
- Decontamination/Site Decommissioning
- Tank cleaning
- Infective agents/Biological Hazards
- Handling Toxic Powders

**Suitable for Consideration**
- Light industrial cleaning
- Machine maintenance
- Pharmaceutical processing
- Handling toxic powders
- Resin applications

**Fabric Material**

The 3M protective coverall 4570 uses a heavy-duty material blending a soft inner layer of spun bond fibres with layers of a high performance anti-static treated polyethylene laminate, to offer a high level of liquid protection.

**Seam Technology**

Seams are stitched and overtaped with a clear heat applied multi-layer chemically protective tape to offer increased strength and an effective barrier to liquids and particulates.
Accessories

From head to toe, we've got you covered with a full range of add-on options to give your workers the body protection they need.

**Coats**

**3M™ Lab Coat 4440**
- Made of the same laminated material as the Type 5/6 3M Protective Coverall 4535
- Anti-static treated
- Knitted cuffs
- Zip fastener
- Available in white

**3M™ Visitor Coat 4400**
- Made of the same material as the 3M Coverall 4500
- 100% soft, breathable and lightweight polypropylene
- Zip fastener
- Internal pocket
- Available in white

**Overboots**

**3M™ Overboot 450**
- Elastic at the calf
- 3M Overboot 440 16inch length with ties for good fit
- 3M Overboot is available in standard 16inch or 11.5inch length, both models with ties
- Made of the same laminated material as the Type 5/6 3M™ Protective Coverall 4535
- 3M Overboot 450 has a PVC sole to help reduce the risk of slipping
- Laminated material ties to minimise particle shed and contamination in particle restricted environments such as cleanrooms

**3M™ Overboot 440**
- Standard Sole
- Made of the same laminated material as the Type 5/6 3M Protective Coverall 4535

**Overshoes**

**3M™ Overshoe 442**
- Made of the same laminated material used in the Type 5/6 3M™ Protective Coverall 4535
- Elastic at ankle
- Anti-static treated

**3M™ Overshoe 402**
- General non-hazardous substance protection
- Sole has printed pattern to help reduce the risk of slipping
- Elastic at ankle

**Oversleeves**

**3M™ Oversleeve 444**
- Made of the same laminated material as the Type 5/6 3M Protective Coverall 4510
- 16 inch length covering wrist to top of arm
- Elastic finish on top end for secure fit
- Anti-static treated

**Head Wear**

**3M™ Overhood 446**
- Made of the same microporous laminated material as the Type 5/6 3M™ Protective Coverall 4510
- Anti-static treated
- Drapes over the shoulders offering excellent coverage
Product selector diagram*

*Warning: This product selector is intended to provide guidance on key features of the 3M product range. The products shown highlight some of the products which may be considered but product suitability will depend on the particular situation and product selection should always be made after a risk assessment by a competent person knowledgeable of the actual working conditions and limitations of the PPE.

**Not suitable for flame protection, to be used in conjunction with an Index 2/3 garment only

*** For more information on the breathability of the 3M protective coveralls line, see the technical bulletin on breathability and our coveralls RET performance

3M™ Protective Coveralls Protection Types

This guide is only an outline. It should not be used as the only means for selecting protective clothing. Always read and follow all user instructions supplied with your 3M™ Protective Coveralls in order to ensure correct operation. Final determination as to the suitability of these products for a particular situation is the employer’s responsibility. If in doubt contact a safety professional. For further information in the performance data of these garments or for any other questions contact your local 3M representative.

LIMITATION OF LIABILITY:
Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential arising out of the sale, use or misuse of 3M PSD products, or the user’s inability to use such products.
## Product selector table*

Visit 3M Chemical Test library at [http://go.3M.com/CHTL](http://go.3M.com/CHTL) to review the chemical protective properties of the fabrics used in our range and see which 3M™ Protective Apparel solution could best meet your needs.

<table>
<thead>
<tr>
<th>3M</th>
<th>4500</th>
<th>4510</th>
<th>4515</th>
<th>4520</th>
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<td>Colours</td>
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</tbody>
</table>

- **Light-duty cleaning, warehousing, janitorial**
- **Asbestos Inspection, site preparation, insulation**
- **Asbestos removal**
- **Cement manufacturing, metal grinding & polishing**
- **Light industrial cleaning, machine maintenance**
- **Pharmaceutical processing, handling toxic powders**
- **Painting & coating, resins**
- **Cleanrooms**
- **Pesticide spraying**
- **Chemical mixing and handling**
- **Chemical spills, emergency response, decontamination, tank cleaning**

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**Popular choice ● Suitable for consideration**

* In all cases, product selection should be based on a full risk assessment. Always read product user information. Use limitations and performance data should be considered to ascertain the protection required. If in doubt, contact a safety professional. This guide is only an outline. It should not be used as the only means for selecting protective clothing. Details regarding performance and limitations are set out on the packaging and user instructions. Before using any protective clothing, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional or 3M – www.3M.eu/safety. Always check the compatibility of the suit material before selection. Please note that the personal protective equipment (PPE) shown highlight some of the products which may be considered. Sections of the most appropriate PPE will depend on the particular situation and should be made only by a competent person knowledgeable of the actual working conditions and the limitations of PPE.

** See user instructions or technical datasheets for full details.

*** Material meets standard requirements.
3M™ Scotchlite™ Reflective Materials

3M™ Scotchlite™ Reflective Material has proven to be an excellent choice when it comes to incorporating retroreflective materials into occupational and protective garments.

We have been enhancing the visibility of road workers and making them safer in all types of traffic situations for almost 80 years.

Do not compromise. Trust the original.
How retroreflection works

3M™ Scotchlite™ Reflective Material technology has never been more state of the art than it is now.

Thousands of small glass beads reflect incidental light, tightly bundled, back to the original light source. The glass beads provide 100% surface reflection, making it the most efficient way of reflecting light.

3M™ Scotchlite™ Reflective Material Series 9925+
Especially developed for industrial washing

Features and Benefits:
- Highest quality and durability
- Certified to 75 industrial wash cycles per ISO 15797-8
- Certified to 50 cycles of industrial disinfected wash per ISO 15797-2
- Certified to 100 home wash cycles at 60 °C per ISO 633-6N
- Suitable for tumbler and tunnel finisher drying
- OEKO-TEX certified

3M™ Scotchlite™ Reflective Material Series 5696/5697
Ideal for use in firefighting apparel and flame-resistant workwear

Features and Benefits:
- Combines daytime and nighttime visibility in one product
- Especially flexible and lightweight
- Segmented to make it easier for moisture to escape

www.3M.eu/PPESafety
High-visibility protection

Wearers of high-visibility garments are usually found in critical traffic situations where it is important to be seen early by other road users. High-visibility clothing signals that there are people in a dangerous area. A high degree of day and night conspicuity is therefore required. Fluorescent colors and 3M™ Scotchlite™ Reflective Material on clothing ensure that no one is overlooked in such critical situations.

High-visibility clothing needs to be robust and durable, and, of course, suitable for industrial washing, depending on the specific application. 3M™ Scotchlite™ Reflective Material provides long lasting functionality even under harsh conditions. 3M™ Scotchlite™ Reflective Material has been the first choice for high-visibility clothing for many years.

Industry

Different markets have completely different requirement profiles. That’s why each industrial target group requires a bespoke solution. But one thing is clear: anyone working in production or warehouse facilities should be sufficiently visible.

Your individual requirement profile will determine which properties of 3M™ Scotchlite™ Reflective Material you want to use for your industrial clothing. In addition to its well-known products, 3M also produces a range of flame-resistant reflective materials.

Firefighting

When it comes to firefighting garments, only flame-resistant products with high durability can be used.

The yellow/silver/yellow triple trim developed by 3M is synonymous with the firefighting industry. Only the original – 3M™ Scotchlite™ Reflective Material 9687 – stands for the highest quality and best properties. It has been specially designed for use in fire protective clothing and flame-resistant workwear. It is especially robust and durable, guaranteeing maximum visibility, day or night.

Rescue Services

People working in rescue services frequently encounter confusing situations. It is therefore all the more important for these “rescuers” to be seen early, especially during twilight and at night. Retroreflective materials on their uniforms are standard; this is where high quality and durability count.

The new 3M™ Scotchlite™ Reflective Material 9925 has been developed especially for the use on rescue service apparel. It offers excellent washing performance, even after 50 cycles of disinfected wash.
Body Language

Making people immediately visible has been shown to increase a vehicle driver’s attention significantly. To achieve this, the reflective stripes on a garment are arranged in such a way that the silhouette of the human body is recreated by reflected light. 3M’s Body Language concept is the basis for many different applications of retroreflective materials.

360 Degrees

The interplay of design, high functionality and good visibility of the wearer are crucial for selecting Corporate Identity workwear. We would be happy to help you to implement and perfectly integrate higher visibility into your design. And that’s not all – we go one step further and evaluate your range from all angles. All measurements are documented and displayed graphically in a spider diagram. This allows the “dark” spots in your clothing to be perfectly analyzed and avoided.
# 3M™ Scotchlite™ Reflective Materials

## Product Overview

<table>
<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Product Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fabrics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2910</td>
<td>Silver</td>
<td>100% polyester backing, for limited-wash vest applications (is not branded Scotchlite™)</td>
</tr>
<tr>
<td>2925</td>
<td>Silver</td>
<td>100% polyester backing, vest applications, soft hand, discrete 3M logo on reflective face (is not branded Scotchlite™)</td>
</tr>
<tr>
<td>8906</td>
<td>Silver</td>
<td>Fabric backing: 70% PES, 30% cotton, excellent drapability and smooth hand</td>
</tr>
<tr>
<td>8912</td>
<td>Silver</td>
<td>Fabric backing: 65% PES, 35% cotton, excellent drapability, discrete 3M logo on reflective face</td>
</tr>
<tr>
<td>8925</td>
<td>Silver</td>
<td>Fabric backing: 65% PES, 35% cotton, improved resistance against abrasion and chemicals, wash durability</td>
</tr>
<tr>
<td>8965</td>
<td>White</td>
<td>Fabric backing: 65% PES, 35% cotton, sublimation printability</td>
</tr>
<tr>
<td>C925</td>
<td>Silver</td>
<td>Fabric backing: cotton/polyester blend, intended for diverse applications on leisure, fashion and sports wear</td>
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<tr>
<td><strong>Industrial Wash Fabrics and Transfer Films</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9910</td>
<td>Silver</td>
<td>Fabric backing: 100% PES, industrial wash, tumble drying, enhanced resistance against abrasion and chemicals</td>
</tr>
<tr>
<td>9920</td>
<td>Silver</td>
<td>Fabric backing: 100% PES, industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals</td>
</tr>
<tr>
<td>9720</td>
<td>Silver</td>
<td>Transfer films: industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals</td>
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<tr>
<td><strong>Flame Resistant Fabrics and Transfer Films</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5535</td>
<td>Silver</td>
<td>Segmented flame resistant trim for workwear with improved moisture vapour transmission and comfort</td>
</tr>
<tr>
<td>8735</td>
<td>Silver</td>
<td>Flame resistant transfer film, enhanced resistance against abrasion and chemicals</td>
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<tr>
<td>8935</td>
<td>Silver</td>
<td>Fabric backing: 100% cotton, flame resistant, enhanced resistance against abrasion and chemicals</td>
</tr>
<tr>
<td>8940</td>
<td>Silver</td>
<td>Aramid backing, industrial wash, flame resistant, enhanced resistance against abrasion and chemicals</td>
</tr>
<tr>
<td>8986</td>
<td>Red-orange</td>
<td>Fabric backing: 100% cotton, flame resistant, fluorescent and reflective</td>
</tr>
<tr>
<td>8987</td>
<td>Lime-yellow</td>
<td>Fabric backing: 100% cotton, flame resistant, fluorescent and reflective</td>
</tr>
<tr>
<td><strong>Fire Coat Trims</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9686</td>
<td>Silver-red-orange</td>
<td>Aramid fabric, flame resistant, fluorescent red-orange, silver reflective centred stripe with discrete 3M logo</td>
</tr>
<tr>
<td>9687</td>
<td>Silver-lime-yellow</td>
<td>Aramid fabric, flame resistant, fluorescent lime-yellow, silver reflective centred stripe with discrete 3M logo</td>
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## Transfer Films

<table>
<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Product Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>5510</td>
<td>Silver</td>
<td>Segmented trim for occupational garments, improved moisture vapour transmission, comfort and wash performance</td>
</tr>
<tr>
<td>5807</td>
<td>Silver</td>
<td>Custom-cuttable for reflective graphics and logos, heat-activated transfer film</td>
</tr>
<tr>
<td>8711</td>
<td>Silver</td>
<td>Heat activated adhesive, elastic, can be printed directly</td>
</tr>
<tr>
<td>8712</td>
<td>Silver</td>
<td>Heat activated adhesive, improved aesthetics after wash, with discrete 3M logo on reflective face</td>
</tr>
<tr>
<td>8725</td>
<td>Silver</td>
<td>Heat activated adhesive, improved resistance to abrasion and chemicals, improved aesthetics after wash, with discrete 3M logo on reflective face</td>
</tr>
<tr>
<td>8725LL</td>
<td>Silver</td>
<td>Heat activated adhesive, improved resistance to abrasion and chemicals, improved aesthetics after wash, with discrete 3M logo on reflective face, without paper liner</td>
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<td>8726</td>
<td>Silver</td>
<td>Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability</td>
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<tr>
<td>8726LL</td>
<td>Silver</td>
<td>Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability, without paper liner</td>
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<tr>
<td>8787</td>
<td>Lime-yellow</td>
<td>Heat activated adhesive, fluorescent lime-yellow combined performance material</td>
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## Marking Films

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<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Product Features</th>
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</thead>
<tbody>
<tr>
<td>8850</td>
<td>Silver</td>
<td>Pressure sensitive adhesive (PSA), non-washable</td>
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## High Gloss Trims

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<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Product Features</th>
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<tbody>
<tr>
<td>7160</td>
<td>White</td>
<td>Ready to be sewn on, can be printed</td>
</tr>
<tr>
<td>7180</td>
<td>Silver-grey</td>
<td>Ready to be sewn on, can be printed</td>
</tr>
<tr>
<td>7187</td>
<td>Lime-yellow</td>
<td>Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective</td>
</tr>
<tr>
<td>7196</td>
<td>Red-orange</td>
<td>Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective</td>
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## High Gloss Films

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<td>6260 / 6260R</td>
<td>White</td>
<td>Sewing, welding, cutting, can be printed</td>
</tr>
<tr>
<td>6287 / 6287R</td>
<td>Lime-yellow</td>
<td>Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective</td>
</tr>
<tr>
<td>6296</td>
<td>Red-orange</td>
<td>Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective</td>
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</table>

## High Gloss Sparkle Films

<table>
<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Product Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>6560</td>
<td>White</td>
<td>Sewing, welding, cutting, can be printed, sparkling appearance</td>
</tr>
</tbody>
</table>
From simple maintenance tasks, to cleaning up dangerous spills, sorbents help to make sure that your workplace is kept clean and safe and they help reduce damage to the environment. Split into three key categories, maintenance, oil and chemical, 3M™ Sorbents are available in a variety of formats so you can choose the best option for your needs.
3M™ Sorbents

Different Types of Sorbents

3M™ Maintenance Sorbents – ideal for absorbing oil and other industrial fluids cleanly, safely and efficiently.

3M™ Oil Sorbents – for absorbing oil not water. Being hydrophobic (water repellent) they are ideal for absorbing oil from areas where water may also be present.

3M™ Chemical Sorbents – an ideal solution for hazardous spill control. They provide very high absorption capacities and are suitable for absorbing a very wide range of liquids – even aggressive acids and alkalis.

Different Formats of Sorbents

Sorbents by 3M are available in a variety of formats, so you can choose the format that meets your needs.

Rugs
Ideal for use in walkways near leaky machines. The rugs are highly durable and tear resistant, withstanding heavy foot-traffic and soaking up liquids without breaking up.

Minibooms – Pillows
Ideal for placing around the base of leaking machinery/equipment to contain and absorb oils and cutting fluids.

Multi-Format
All your sorbent needs from one box. This versatile product is four formats rolled into one.

Pads and Rolls
Designed to be used in and around the work area to catch leaks and drips, pads are highly absorbent and simple to use.

Hazardous Spill Response Kits
3M™ Chemical Spill Kits each contain a carefully selected variety of chemical sorbents. These convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

Tanker Spill Response Kits
The modern and effective way to control and clean up spills resulting from liquid fuel deliveries.

Symbol Key
Throughout this section of the brochure you’ll notice the symbols shown below. These symbols indicate which sorbents can and cannot be used with different fluids.

For use with oil-based products

For use with water-based products

For use with chemical-based products

Not for use with
3M™ Sorbents

3M™ Maintenance Sorbents

For leaks and drips of non-aggressive fluids. 3M Maintenance Sorbents are ideal for absorbing oil and other industrial fluids cleanly and efficiently. They are lightweight and very quick to deploy. They are long lasting and highly absorbent (up to 25 x their own weight) absorbing most fluids very quickly. 3M maintenance sorbents are not suitable for absorbing aggressive liquids.

Maintenance sorbents by 3M are made from inert, synthetic fibres principally of polypropylene and polyester. They are available in a large range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal.

Features and Benefits:

**Ventilation**
- Promotes a cleaner, safer working environment
- Very easy to use and to retrieve
- Reduces the risk of contamination of finished products
- Reduces the risk of damage to valuable machinery
- Significantly less waste to dispose of

**Applications:**
- Industrial machinery leaks, drips, spills and splashes of non-aggressive maintenance fluids
- Wiping down oily tools and equipment
- Tabletops and under work surfaces
- Indoor vehicle/equipment parking areas – fork trucks, compressors, and lift equipment
- Areas where an oily mist is problematic
- Under oily machined metal parts while they drip off prior to packing and shipping

**Product overview**

<table>
<thead>
<tr>
<th>Product</th>
<th>Number</th>
<th>Size (CM)</th>
<th>No./case</th>
<th>Case sorbency (litres)</th>
<th>Case weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiformat</td>
<td>M-F2001</td>
<td>12 x 1520</td>
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<tr>
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<td>M-M1002</td>
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<tr>
<td></td>
<td>M-M1003</td>
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<td>Rug (coated)</td>
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<td>40</td>
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3M™ Oil Sorbents

3M Oil Sorbents are an innovative range of highly absorbent products. Being hydrophobic or water repellent they are ideal for absorbing oil from places where water may also be present.

As with 3M™ Maintenance Sorbents, Oil Sorbents are available in a wide range of convenient formats – each designed to enhance spill management and maximise pollution control. Oil Sorbents are made from inert, synthetic fibres, principally polypropylene for ‘T’ oil sorbents and polypropylene and polyester for ‘HP’. They are available in a wide range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal.

Features and Benefits:

- Hydrophobic
- Cost-effective as oil, not water, is recovered
- Can be used outside as well as in-plant
- Handy dispenser box for easy on-site use

Applications
- Controlling, cleaning up and recovering oil and petroleum based liquids from effluent discharge, streams, ponds, lakes, rivers, and other bodies of water
- In-plant spills under leaking equipment and machinery in place of clay granules
- In drains and sumps to collect petroleum products from runoff

Product overview

<table>
<thead>
<tr>
<th>Product</th>
<th>Number</th>
<th>Size (CM)</th>
<th>No./ case</th>
<th>Case sorbency (litres)</th>
<th>Case weight (kg)</th>
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<tbody>
<tr>
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<td>150</td>
<td>8.5</td>
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<tr>
<td></td>
<td>T156</td>
<td>53 x 39</td>
<td>100</td>
<td>135</td>
<td>7.5</td>
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<tr>
<td></td>
<td>HP156</td>
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<td>100</td>
<td>142</td>
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<tr>
<td></td>
<td>HP-255</td>
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<td>50</td>
<td>124</td>
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<td>276</td>
<td>15.0</td>
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<td>1</td>
<td>138</td>
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<td>T240</td>
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<td>100</td>
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<tr>
<td>Booms</td>
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<td>152</td>
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<td></td>
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<td>220</td>
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<td>T8</td>
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<td>T12</td>
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<td>12 x 1520</td>
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<td>119</td>
<td>8.2</td>
</tr>
</tbody>
</table>
The modern and effective way to control and clean up spills, particularly those resulting from liquid fuel deliveries. Best practice recommends that during the delivery and unloading of petrol, a suitable quantity of absorbent material must be available as a contingency against spills. Tanker Kits by 3M can satisfy this by ensuring a rapid and effective solution to spills of this nature.

### Features and Benefits:
- Easily stowed in confined areas, e.g. behind the drivers seat
- Immediately deployable
- Two convenient sizes (3M™ TSK15, absorbency 15 litres and 3M™ TSK30, absorbency 30 litres)
- Mini-booms for containment
- Easy to dispose of – disposal bags and ties included
- Absorbs solvents, oils and hydrocarbons

### Product Overview

<table>
<thead>
<tr>
<th>3M™ TSK 30 Kit Contains:</th>
<th>3M™ TSK 15 Kit Contains:</th>
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</thead>
<tbody>
<tr>
<td>50 Sheets – 48 cm x 43 cm</td>
<td>25 Sheets – 48 cm x 43 cm</td>
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<tr>
<td>2 Minibooms – 7.5 cm x 1.2 cm</td>
<td>2 Pillows – 18 cm x 38 cm</td>
</tr>
<tr>
<td>1 Disposal bag and tie</td>
<td>1 Disposal bag and tie</td>
</tr>
<tr>
<td>1 Disposal guide and label</td>
<td>1 Disposal guide and label</td>
</tr>
<tr>
<td>Absorbency per kit: 30 litres</td>
<td>Absorbency per kit: 15 litres</td>
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<tr>
<td><strong>Particulate</strong></td>
<td><strong>T210</strong></td>
</tr>
<tr>
<td><strong>Multiformat</strong></td>
<td><strong>T-F2001</strong></td>
</tr>
</tbody>
</table>

### Application and Directions for Use

- Small spills can be covered with the oil sorbent sheets.
- For larger spills, contain the spill by surrounding the liquid with oil sorbent minibooms. To prevent seepage ensure they are overlapped.
- Add sheets to absorb the contained liquid pool.
- Oil Sorbent Minibooms can also be used to prevent flow of spills into drains.
- Also use sheets to wipe off any contaminated surfaces.
- Used sorbents should be placed in the temporary disposal bags provided and sealed with plastic tie.
3M Chemical Sorbents are the ideal solution for hazardous spill control. Available in a wide range of formats – including our spill kits – they provide very high absorption capacities and are suitable for absorbing a very wide range of liquids – even aggressive acids and alkalis. 3M™ chemical sorbents are convenient and rapid to deploy, major considerations in an emergency.

**Features and Benefits:**
- Promotes safety on the site
- Immediate response to chemical spillages
- Fast and effective containment and clean-up
- Suitable for use with most chemicals
- Easy to dispose of
- Available in several formats including mini-booms, pillows, sheets and rolls
- Products have a high capacity
- Can be used with many aggressive chemicals

**Product overview**

<table>
<thead>
<tr>
<th>Product</th>
<th>Number</th>
<th>Size (CM)</th>
<th>No./case</th>
<th>Case sorbency (litres)</th>
<th>Case weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets</td>
<td>P110</td>
<td>28 x 33</td>
<td>200</td>
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<td>Rolls</td>
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<td>33 x 3000</td>
<td>2</td>
<td>50</td>
<td>6.0</td>
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<td>P190</td>
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<td>48 x 3000</td>
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<td>Pillows</td>
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<td>Minibooms</td>
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<td>7.5 ø x 120</td>
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<td>5.5</td>
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<td>Particulate</td>
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<td>3</td>
<td>119</td>
<td>8.2</td>
</tr>
</tbody>
</table>

3M™ P110 Chemical Sorbent Sheet

Other 3M™ Chemical Sorbents

- 3M™ P-F2001 Multi-Format Chemical Sorbent
- 3M™ P130 Chemical Sorbent Roll
- 3M™ P190 Chemical Sorbent Roll
- 3M™ P200 Chemical Sorbent Mini-Boom
- 3M™ P300 Chemical Sorbent Pillow
3M™ Hazardous Spill Response Kits

3M Hazardous Spill Response Kits each contain a carefully selected variety of 3M™ Chemical Sorbents. Available in five configurations, these convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

3M™ SK75
Chemical Spill Kit

3M™ SK 5
Chemical Spill Kit

3M™ SK 26
Chemical Spill Kit

3M™ DRSK-DP Disposable Spill Kit
An innovative way of dealing with everyday spills quickly and easily. Everything you need in one kit!

• Unique design allows safer clean up – less risk of injury
• Specially designed brush means no need to handle glass and the dustpan kit seals reducing exposure to broken glass
• Absorbs up to 1.5 Litres

Product overview

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<th></th>
<th>SK360</th>
<th>SK210</th>
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<td>P110 Sheets</td>
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<td>10</td>
</tr>
<tr>
<td>P300 Pillows</td>
<td>24</td>
<td>12</td>
<td>12</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>P200 Mini-Booms</td>
<td>24</td>
<td>12</td>
<td>8</td>
<td>5</td>
<td>–</td>
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<td>P190 Roll</td>
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<td>PF-2001 Multi-Format</td>
<td>3</td>
<td>2</td>
<td>–</td>
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</tr>
<tr>
<td>Disposal bag and ties</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>2</td>
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<tr>
<td>Warning Sign</td>
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<tr>
<td>Warning Tape</td>
<td>1</td>
<td>1</td>
<td>–</td>
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</tbody>
</table>

www.3M.eu/PPESafety
3M™ Fall Protection

3M Fall Protection, part of the 3M Personal Safety Division offers first-to-market innovations and high-performance solutions that have earned us a reputation as experts in fall protection and rescue.

We’re better equipped than ever to continue investing in technology and products that enhance worker safety, productivity and comfort through our DBI-SALA® and Protecta® brands.

We’re elevating safety and comfort to new heights.
Harness icons

- Chest
- Leg
- Shoulders
- Waist
- 180° Positioning Belt

- Adjustable Chest
- Adjustable Leg
- Adjustable Shoulder
- Adjustable Waist
- Adjustable Waist with Back Pad

- Dorsal D-Ring
- Sternum D-Ring
- Work Positioning

- Pectoral D-Ring
- Rescue Attachment Point
- Suspension Attachment Point
- Fall Indicator
- Carrying Pocket

- Rigid Hip Padding Loops
- Rigid Shoulder Caps
- Front Loops

- 3M™ DBI-SALA® Duo-Lok™ Quick Connect Buckle
- Pass Through Buckle
- Quick Connect Buckle
- 3M™ DBI-SALA® Tri-Lock Quick-Connect Buckles
- Tongue & Grommet Buckle

- 3M™ DBI-SALA® Tri-Lock Revolver™ Connectors
- Comfort Padding
- 3M™ DBI-SALA® TechLite™
3M™ Fall Protection

3M™ Protecta® Pro™ Harnesses

For many years the Pro Harness Range has brought workers home safely, whatever their job. The new improved Pro harness design offers the same stringent safety standards but with improved comfort, adjustability, webbing management and functionality. The extensive model range remains as one of the widest in the industry. Whatever your job demands, there is a new Pro harness for you.

Features and Benefits:

Buckle Options
- Pass Through for simple, safe connection.
- Quick Connect for fast and easily adjustable connection.

Chest Strap
- Optimum position for connection to lanyards and systems.
- Keeps connectors out of the users face.

Spring Loaded Torso Adjusters
- Spring loaded grip bar ensures no webbing slippage.
- Easier to adjust with pull down adjustment.

Webbing Management
- Spare torso webbing stored through hip strap.
- All stitch blocks are away from the body for greater comfort.

Contrasting Leg & Chest Strap
- Reduces donning time.

Sub Pelvic Strap

Large Rear D-ring
- Easier to connect, increased safety.
- Can be used for rescue.

Fall Indicators

Protected Labels
- Protective Velcro® sealed pouch.
- Ensures easy identification and inspection.

Weight Capacity
- 140 kg.
## 3M™ Fall Protection

### 3M™ Protecta® Pro™ Harness

<table>
<thead>
<tr>
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<th>Size</th>
<th>Weight (kg)</th>
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<tr>
<td>AB10214NG</td>
<td>XL</td>
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### 3M™ Protecta® Pro™ Harness with Belt

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### 3M™ Protecta® Pro™ Harness with Belt & Quick Connect Buckles

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</thead>
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<tr>
<td>AB260136NG</td>
<td>M/L</td>
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<tr>
<td>AB260146NG</td>
<td>XL</td>
<td>2.70</td>
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</tbody>
</table>
3M™ DBI-SALA® Delta™ Harness

Features and Benefits:

**3M™ DBI-SALA® Delta™ Repel™ Technology Webbing**
- Water repellent to reduce attraction of mould and dirt - also has up to 5 times more abrasion resistance.

**Lanyard Keepers**
- Avoids carrying lanyard by hand when no longer in use.

**Revolver™ Vertical Torso Adjusters**
- Simple and fast adjustments that eliminate loose ends and lock into place, preventing slippage.

**Covered Labels**
- A Velcro® cover protects harness labels.

**Built-in Impact Indicators**
- Rip-stitch indicators allow you to inspect the harness at a glance, for prior damaging impact loads.

**Stand Up Dorsal D-ring**
- Patented spring-loaded design automatically stands-up, ensuring fast, easy and safe connections to your fall arrest system.

**3M™ DBI-SALA® No-Tangle™ Design**
- Defining the Delta name, the patented triangular design creates a frame that allows the harness to fall into place when donned.

**3M™ DBI-SALA® Surefit™ No-Tangle Design**
- Ensures correct fitting of the harness in the event of a fall while still providing additional comfort for everyday use.

**Weight Capacity**
- 140 kg.

Applications

Innovative body support for more than two decades. Toughness. Versatility. These are qualities expected of you, so you should expect nothing less from your safety harness. Delta harnesses combine a number of innovations with popular features that have made an industry workhorse that’s as tough as those who wear them. Delta harnesses have a shape of their own, so you can down them quickly and easily.
## 3M™ Fall Protection

### 3M™ DBI-SALA® Delta™ Harness

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<td>U</td>
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<td>XL</td>
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### 3M™ DBI-SALA® Delta™ Harness with Quick Connect Buckles

<table>
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<tr>
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### 3M™ DBI-SALA® Delta™ Harness with Belt & Quick Connect Buckles

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### 3M™ DBI-SALA® Delta™ Harness

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The newest Delta Comfort full-body harness offers innovative features such as an improved ergonomic fit and feel, lighter-weight buckles and high-strength webbing. Employing a patented No-Tangle triangle pattern creates a frame that allows the harness to easily fall into place when donned. The new Delta Comfort harness features liquid-resistant 3M™ DBI-SALA® Delta™ Repel™ Technology Webbing and 3M™ DBI-SALA® Revolver™ Torso Adjusters, which allow for quick adjustment and eradicates loose strap ends.

**Features and Benefits:**

- **3M™ DBI-SALA® Repel™ Technology Webbing**
  - Water repellent to reduce attraction of mould and dirt - also has up to 5 times more resistance to abrasion.

- **Gear Loops and Connectors**
  - Range of connection and storage points for tools and pouches.

- **Comfort Padding**
  - To the underside of the shoulder straps, hips and legs.

- **3M™ DBI-SALA® Revolver™ Torso Adjusters**
  - These innovative adjusters have patent pending. Simple and fast adjustment that eliminates loose ends and locks into place preventing slippage.

- **3M™ DBI-SALA® Tech-Lite™ Quick Connect Buckles**
  - Lightweight aluminium alloy buckles for fast and easy connections. Other connections available (Pass Through models also available).

- **Stand Up Dorsal D-ring**
  - Stands-up dorsal D-ring, ensures fast, easy and safe connections to your fall arrest system.

- **Rigid Belt**
  - Allows for 27 kg of tools without collapsing.

- **Protected Labels**
  - A Velcro® cover protects harness labels.

- **Weight Capacity**
  - 140 kg.

**Applications**

- Building & Construction
- Agriculture
- Electrical Industries
- Marine
- Storage & Staging
- Roofing
3M™ Fall Protection

3M™ DBI-SALA® Delta™ Comfort Harness with Belt

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3M™ DBI-SALA® Delta™ Comfort Harness with Quick Connect Buckles

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3M™ DBI-SALA® Delta™ Comfort Harness with Belt & Quick Connect Buckles

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<th>Code</th>
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3M™ DBI-SALA® Delta™ Comfort Harness

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</table>
3M™ DBI-SALA® ExoFit NEX™ Harnesses

The ExoFit NEX harness gives workers the freedom and confidence to function to their maximum. Innovative safety devices and design features allow workers to work smart, fast and safe increasing productivity. Designed using soft yet extremely durable anti-absorbent, abrasion resistant webbing of lasting strength, harnesses can withstand the most severe demands, day in, day out. They are built to perform to the highest standards in the harshest environments. 140 kg capacity.

Applications

Features and Benefits:

- **Moulded Lanyard Keepers**
  - Easy holstered snap hooks breakaway to avoid trip hazard.

- **Covered Labels**
  - A Velcro® cover protects harness labels.

- **3M™ DBI-SALA® Duo-Lok™ Quick Connect Buckles**
  - Lightweight one-handed use with memory-fit web-lock ensures fast, non-slipping connections.

- **Vertical Torso Adjusters**
  - Simple and fast adjustments that eliminate loose ends and lock into place, preventing slippage.

- **3M™ DBI-SALA® Repel™ Technology Webbing**
  - Water repellent to reduce attraction of mould and dirt - also has up to 5 times more abrasion resistance.

- **Integrated Suspension Relief Straps**
  - Provide an adjustable, continuous loop for post fall, offering suspension relief.

- **Stand Up Dorsal D-ring**
  - Patented spring-loaded design automatically stands-up, ensuring fast, easy and safe connections to your fall arrest system.

- **Built-in Impact Indicators**
  - Rip-stitch indicators allow you to inspect the harness at a glance, for prior damaging impact loads.

- **Weight Capacity**
  - 140 kg.
3M™ Fall Protection

3M™ DBI-SALA® ExoFit NEX™ Harness

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3M™ DBI-SALA® ExoFit NEX™ Harness with Belt

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Best Seller 1113902

3M™ Harnesses Accessories

3M™ DBI-SALA® Suspension Trauma Safety Straps
Suspension relief safety straps for full body harness.

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3M™ Protecta® Nylon Transport Bag
Nylon transport bag.

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<tr>
<td>AK043</td>
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3M™ Protecta® Back Pack
Red and grey back pack.

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<tr>
<td>AK053</td>
<td>15 x 30 x 50 cm</td>
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</table>

3M™ Protecta® Pro Harness Back D-ring Extension Strap
Back D-ring extension strap 45 mm webbing. Screw gate triangle to attach to harness.

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<th>Price</th>
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</thead>
<tbody>
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<td>40 cm</td>
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www.3M.eu/PPESafety
3M™ Lanyards

Lanyard icons

General:
- Dimension 💼
- Kilogrammes 🍱
- Certification 🌐

Type:
- Material Type 🃏
- Material: Aluminium 🍎
- Material: Steel 🍍

Lanyards:
- Lanyard 🧵
- Twin Leg 🧵
- Tie-Back 🧵
- Loops with Thimbles 🧵
- Carabiner 🧵
- Screw Carabiner 🧵
- Gate Strength (Value) 🧵
- Size of gate opening 🧵

Twist Lock 🧵
- Connector: Lanyard End 🧵
- Connector: User End 🧵

Rope Type 🧵
- 3M™ Dbi-Sala® EZ-Stop™ 🧵
- WrapBax™ Hook 🧵

Material:
- Steel 🍍
- Aluminium 🍎
- Certification 🌐

Material Type 🃏

Certification 🌐

For more information or to order, contact customer services on 00 800 999 55500
3M™ Protecta® Rope Restraint Lanyard
Protecta rope connecting lanyards are an ideal solution for the connecting element in a restraint system. Made from polyamide braided rope with safety stitching. Rope diameter 10.50 mm.

<table>
<thead>
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<th>Length (m)</th>
<th>Qty</th>
<th>Trgld. Width (mm)</th>
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3M™ Protecta® Rope Work Positioning Lanyard
Braided rope work positioning lanyards available in a variety of diameters and connector combinations.

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<th>Qty</th>
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3M™ Protecta® Work Positioning Lanyard - Trigger
The adjustment system allows the length of the lanyard to be easily adjusted during use.

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<th>Model</th>
<th>Length (m)</th>
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3M™ Protecta® Sanchoe™ Kernmantle Rope Lanyard
- 10.50 mm diameter kernmantle rope leg material
- Rope terminations sewn with high strength polyester thread
- Identification labels protected within transparent shock pack cover
- Wide range of designs and connector options available

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (m)</th>
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</table>
3M™ Fall Protection

3M™ Lanyards

3M™ DBI-SALA® Restraint Lanyard
Constructed from 3 strand twisted 12 mm polyamide rope.

3M™ DBI-SALA® Work Positioning Rope Trigger Lanyard
The adjustment system allows the length of the lanyard to be easily adjusted during use. Protective cover on the rope.

<table>
<thead>
<tr>
<th>Model</th>
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<th>Break</th>
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</table>

3M™ DBI-SALA® Work Positioning Spreader Bar Lanyard
Confined space lanyard for use with rescue harness incorporating shoulder D-rings. Use for vertical lifts in confined space or rescue situations. Built in spreader bar keeps shoulder straps from being pulled in during use.

3M™ DBI-SALA® EZ-Stop™ Expander Lanyard
- Elasticated webbing reduces length by up to 50 cm when not under tension.
- Reduced trip or snarling hazard.
- Leg material - 35 mm polyester webbing.

<table>
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<tr>
<th>Model</th>
<th>Length</th>
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<th>Break</th>
<th>CE Mark</th>
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<td>2 m</td>
<td>60 mm</td>
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<td>🟠</td>
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3M™ DBI-SALA® EZ-Stop™ Edge Tested Lanyard

Daily, thousands of people working at height are exposed to falls over or around edges. Those working on electrical pylons, steel fabrications, scaffolding, flat roof structures or telecoms towers today may be using shock absorbing lanyards that are not durable enough to withstand a fall across such a structure. DBI-SALA®’s answer to this is our new range of lanyards, designed to offer greater security to users exposed to falls over or around edges and tested rigorously over a 0.5mm radius edge. All edge tested products in the DBI-SALA range are differentiated from DBI-SALA standard shock absorbing lanyards and bear the Edge tested logo.

- The fall arrest solution for all users working at height exposed to falls around or over edges.
- 12 mm diameter rope offers extreme durability whilst maintaining flexible handling for ease of use. Orange accenting indicates suitability for edge applications.

### Leg material
12 mm diameter kernmantle rope

### Body Connector
AJ512/0, Aluminium Triple Lock, 22 mm opening size, 25 kN breaking strength or AJ567/0, Aluminium, 21 mm opening size, 22 kN breaking strength

### Anchor Connectors
AJ527/0, Aluminium, 60 mm opening, 22 kN breaking strength or AJ512/0, Aluminium Triple Lock, 22 mm opening size, 25 kN breaking strength

### Maximum User Weight
100 kg

3M™ DBI-SALA® EZ-Stop™ Webbing Lanyard

- General purpose fall arrest lanyards with polyester webbing leg material.
- Fixed lengths of 1.25 m & 2 m are available along with an adjustable model for applications where other lengths are required.

### Leg Material
Web

### Body Connector
Aluminium Twist Lock, 20 mm opening, 28 kN breaking strength

### Anchor Connectors
AJ527/0, Aluminium, 60 mm opening, 22 kN breaking strength or Aluminium Twist Lock, 20 mm opening, 28 kN breaking strength

<table>
<thead>
<tr>
<th>Leg Material</th>
<th>Web</th>
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</thead>
<tbody>
<tr>
<td>Body Connector</td>
<td>Aluminium Twist Lock, 20 mm opening, 28 kN breaking strength</td>
</tr>
<tr>
<td>Anchor Connectors</td>
<td></td>
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</tbody>
</table>
AJ527/0, Aluminium, 60 mm opening, 22 kN breaking strength or Aluminium Twist Lock, 20 mm opening, 28 kN breaking strength |
3M™ Fall Protection

3M™ Rope Grabs

3M™ Protecta® Viper™ Vertical Lifeline Rope Grab

- The Viper 2 rope grab is available in 2 variants, AC401 has the addition of a 28 cm extension strap with a self locking carabiner (9509437).
- It’s extremely simple opening system means that the Viper 2 can be attached to the rope or removed from it at any location.
- As soon as the connecting carabiner is put back into place the Viper 2 is locked to ensure safe use.

The Viper 2 is supplied with a kernmantle rope and is available with rope options from 5 to 99 m lengths in increments of 5 m.

<table>
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<td>AC401</td>
<td>15 m</td>
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</table>

3M™ Protecta® Viper™ Vertical Lifeline Rope

Nylon static rope, ø 10.50 mm, with yellow and red wear indicator. Rope end: sewn loop underneath protective sleeve Connector: AJ501, 17 mm opening System breaking strength > 22 kN.

3M™ Protecta® Viper™ LT Rope Grab with Extension

Vertical fall arrest 100 kg user. Roof top work restraint use. A 175 mm extension strap with self-locking double action snap hook to aid ease of use when rope grab is attached to the harness.

<table>
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<td>AC420</td>
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<tr>
<td>AC430</td>
<td>30 m</td>
<td>2.26</td>
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</table>

AC4001 | 0.56
3M™ Protecta® Rebel™ Self-Retracting Lifeline

Total compliance, absolute confidence. Rebel SRLs are available with a heavy duty aluminium or a durable lightweight thermoplastic housing, providing an economical fall protection solution without compromising on performance or safety. Integrated ergonomic carrying handle and top swivel connector ensure easy transport and installation. Built-in fall indicator hook allows visual yearly inspection. Rebel Cable blocks meets the latest CE sharp edge certification when used with an extension sling.

Features and Benefits:

Anchor Swivel
• Allows the block to align with lifeline and avoid any torsion of the cable when the user is working.

Choice of Housing (Thermoplastic or Aluminium)
• Durable thermoplastic for lightweight or aluminium for ultimate ruggedized housing allows for job site flexibility.

Galvanized or Stainless Steel 5 mm Cable
• Larger cable diameter for added strength and safety.

Side Cable Exit
• Allows best alignment of the cable and minimises cable guide wear.

Ergonomic Cable Bumper
• Allows the block to align with lifeline and avoid any torsion of the cable when the user is working.

Ergonomic Carrying Handle
• Allows easier transportation of the block.

140 kg Weight Capacity
• High capacity allows for use by most users and tools ensuring the highest level of safety.
### 3M™ Protecta® Rebel™ Cable Self-Retracting Lifelines - 6-30m

<table>
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<td>3590542</td>
<td>6</td>
<td>5.6 mm</td>
<td>5.60</td>
</tr>
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<td>3590545</td>
<td>12</td>
<td>5.6 mm</td>
<td>8.50</td>
</tr>
<tr>
<td>3590698</td>
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<td>5 mm</td>
<td>11.90</td>
</tr>
<tr>
<td>3590699</td>
<td>15</td>
<td>5 mm</td>
<td>11.90</td>
</tr>
</tbody>
</table>

### 3M™ Protecta® Rebel™ Cable Leading Edge Self-Retracting Lifelines

The only SRL that complies to extreme sharp edge (VG11.054, type B, 0 mm radius). Users are now able to tie-off at foot level with the 6 m Leading Edge Rebel without requiring to connect the sharp edge extension sling. This built-in sharp edge product was put through extensive sharp edge testing to ensure absolute protection against sharp, abrasive and leading edges found at construction sites.

### 3M™ Protecta® Rebel™ Cable Retrieval Self-Retracting Lifelines

These new Retrieval models incorporate fall arrest and a built-in emergency retrieval winch for rescue, making them a versatile solution for many job sites.

- 15 m SRL with rescue winch
- Brackets available for easy tripod integration
- Designed for confined space applications

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (m)</th>
<th>Diameter (mm)</th>
<th>Price (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3590498</td>
<td>15</td>
<td>5 mm</td>
<td>11.90</td>
</tr>
<tr>
<td>3590499</td>
<td>15</td>
<td>5 mm</td>
<td>11.90</td>
</tr>
</tbody>
</table>
3M™ Protecta® Rebel™ Self-Retracting Lifeline

3M™ Protecta® Rebel™ Web Self-Retracting Lifelines

3M™ Protecta® Aluminium Tripod
For tasks in a confined space, a reliable anchorage point must be used to allow work to be carried out effectively and in complete safety. This aluminium mobile tripod can be easily transported and deployed. Four independent anchorage points mean that a rig for suspended work can be used in combination with a self-retracting fall arrest device that incorporates a retrieval system, fall arrest and rescue equipment. 8 adjustable positions. Usage height 1.35 m to 2.35 m. Base dia. 1.50 m to 2.56 m.

3M™ Protecta® Steel Guide Pulley
Complete pulley with AJ501 Carabiner.
3M™ Fall Protection

3M™ DBI-SALA® Nano-Lok™ Web Self-Retracting Lifelines

Maintain safe fall distances for improved worker safety

Compact
Nano-Lok is ergonomically designed for ease-of-use and is ideal for direct connection to most harnesses. And at only 725 g, it’s virtually unnoticeable on your back, stays out of the way and can be easily used as a lanyard replacement.

Versatile
Whether your application requires single or twin leg configurations, mounting to an overhead anchor or for connection directly to a harness, there are more than 10 models to choose from to suit almost any application.

Safe
Nano-Lok locks quickly - stopping a fall within inches - providing more protection at low heights. In addition, tension is always kept on the lifeline, which reduces dragging, snagging and trip falls. Both features are key safety improvements.

Features and Benefits:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Leg Anchorage Connector</td>
<td>• Attaches directly to back of most harnesses - no separate carabiner required.</td>
</tr>
<tr>
<td></td>
<td>• Installs to web, leaving dorsal D-ring open for other equipment or rescue.</td>
</tr>
<tr>
<td></td>
<td>• Design provides snug fit to worker’s back eliminates nuisance “flopping”.</td>
</tr>
<tr>
<td>Swivelling Anchorage Loop</td>
<td>• Limits lifeline twisting for smoother operation.</td>
</tr>
<tr>
<td>Impact-Resistant Housing</td>
<td>• High-strength housing provides maximum durability.</td>
</tr>
<tr>
<td>Automatic Quick-Activating Arrestor</td>
<td>• Stops falling worker within inches - reduces fall distances and average arresting forces to 6 kN or less.</td>
</tr>
<tr>
<td></td>
<td>• Advanced webbing (thickness 1.5 mm, width 20 mm).</td>
</tr>
<tr>
<td>Impact Indicator</td>
<td>• Integrated shock absorber provides visual indication of a fall.</td>
</tr>
<tr>
<td></td>
<td>• Very short shock absorber deployment length: 50 cm requires small clearance.</td>
</tr>
<tr>
<td>Retractable Lifeline</td>
<td>• Stays locked on rigid and non-rigid (horizontal lifeline) anchors.</td>
</tr>
<tr>
<td>1630 kg Gate</td>
<td>• Reduces chances of accidental disengagement (roll-out) for added safety.</td>
</tr>
<tr>
<td>Extremely Compact and Lightweight</td>
<td>• At just 725 g this SRL is extremely lightweight and along with its compact size, it is virtually un-noticeable on your back.</td>
</tr>
<tr>
<td>141 kg Weight Capacity</td>
<td>• Higher capacity for operator &amp; tools.</td>
</tr>
<tr>
<td>Wide Variety of Configurations</td>
<td>• Provides complete jobsite versatility and flexibility.</td>
</tr>
</tbody>
</table>

Applications

Twin Leg Connector

Single Leg Connector

Meets or Exceeds Industry Standards EN360 : 2002.
3M™ Fall Protection

3M™ DBI-SALA® Nano-Lok™ Web Self-Retracting Lifeline

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Diameter</th>
<th>Braking Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>3101207</td>
<td>1.95 m</td>
<td>57 mm</td>
<td>1.28</td>
</tr>
<tr>
<td>3101265</td>
<td>1.95 m</td>
<td>19 mm</td>
<td>1.13</td>
</tr>
<tr>
<td>3101208</td>
<td>2 m</td>
<td>57 mm</td>
<td>1.15</td>
</tr>
</tbody>
</table>

3M™ DBI-SALA® Nano-Lok™ Web Self-Retracting Lifeline

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Diameter</th>
<th>Braking Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>3101298</td>
<td>1.95 m</td>
<td>57 mm</td>
<td>2.46</td>
</tr>
</tbody>
</table>
3M™ Nano-Lok™ Edge Cable Self-Retracting Lifeline

Nano-Lok Edge is specifically designed for foot level tie-off and sharp edge applications often found in construction. It is ergonomically designed for ease-of-use and is ideal for direct connection to most harnesses. The extremely compact and lightweight design is virtually unnoticeable on your back, staying out of the worker’s way and making it ideal as a lanyard replacement. Whether your application requires single or twin leg configurations, mounting to an overhead anchor or for connection directly to harness, there are numerous models to choose from to suit almost any application. Nano-Lok locks quickly - stopping a fall within inches - providing more protection at low heights. In addition, tension is always kept on the lifeline, which reduces dragging, snapping and trip falls. Both features are key safety improvements.

Features and Benefits:

Dedicated Foot Level Tie-Off
• Dedicated design minimises fall forces, auto retraction of unused lifeline minimises trip hazards.

Easy-Fit Connector
• 360° rotation, full integration with energy absorber, frees D-Ring for other equipment.

Impact-Resistant Housing
• Lightweight but extremely durable.

Galvanised Steel 5 mm Lifeline
• Extreme sharp edge protection.

Designed to Meet Sharp Edge Standards
• Cable - Galvanised steel 5 mm lifeline - Extreme sharp edge protection - Meets CE EN:2002 & standard requirements of VH11.60 rev 7.
• Web - High-resistance web 20 mm Dyneema® web makes lightweight and extreme resistance performance possible.

Multiple Hook Options
• Configure to your unique requirements.

Integrated Back-Pack Style Energy Absorber
• Works with connector to limit fall forces, for extreme sharp edge performance. Back pack design stays tight, evenly disperses weight.

141 kg Weight Capacity
• Ultimate job site flexibility to accommodate users who carry more equipment.

Applications

3M™ Fall Protection
3M™ Fall Protection

3M™ DBI-SALA® Nano-Lok™ Edge Tested Cable SRL

<table>
<thead>
<tr>
<th>Style Number</th>
<th>Length</th>
<th>Diameter</th>
<th>Force (kgf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500244</td>
<td>2.4 m</td>
<td>57 mm</td>
<td>1.46</td>
</tr>
<tr>
<td>3500241</td>
<td>2.4 m</td>
<td>57 mm</td>
<td>2.49</td>
</tr>
<tr>
<td>3500240</td>
<td>2.4 m</td>
<td>63.5 mm</td>
<td>2.81</td>
</tr>
</tbody>
</table>
3M™ Fall Protection

3M™ DBI-SALA® Sealed-Blok™ Self-Retracting Lifelines

3M™ DBI-SALA® continues to set the standard for quality in fall protection. The Sealed-Blok SRL family has a fully comprehensive line of sealed SRLs and decades of proven field service.

Features and Benefits:

New Sealed Design (Patent Pending)
- Ensures efficient, safe operation under all working conditions - the only SRL to meet IP69K sealed rating.

141 kg Weight Capacity
- Higher capacity for operator and tools.

Carrying Handle
- Built-in design for easy transport with improved ergonomics.

Secondary Anchorage Point
- Certified for “dropped objects” Protection Rated for fall arrest if primary anchor fails.

Retrieval Winch

3M™ DBI-SALA® Sealed-Blok™ Self Retracting Lifeline - RSQ™
- Dual Mode Design
  - Allows user to select between fall arrest mode and descent mode.
- 5 mm Diameter Wire Rope
  - Stainless steel for corrosion resistance.

Self-Locking Swivel Hook
- Limits lifeline twisting.

Anti-Ratcheting Design
- Stays locked on rigid and non-rigid (horizontal lifeline) anchors.

Pivoting Anchorage Loop
- Centres the load.

Aluminium Housing
- Provides exceptional strength, durability and corrosion resistance.

Stainless Steel End-Plate
- Durable construction for harsh environments.

Tripod/Davit Arm Bracket
- No tools required for install.

Ergonomic Cable Handle
- Provides added comfort and ease-of-use when making connections.

Galvanised and Stainless Steel Cable
- Abrasion resistant and corrosion resistant lifeline options.

3M™ DBI-SALA® FAST-Line™
- Provides the user with ability to replace the lifeline in the field. Eliminates the need to service / reset the brake after a fall arrest.

Impact Indicator
- Provides visual indication of Fall Arrest.

1630 kg (3600 lb) Gate
- Reduces chances of accidental disengagement (“roll-out”).

Applications

3M™ DBI-SALA® continues to set the standard for quality in fall protection. The Sealed-Blok SRL family has a fully comprehensive line of sealed SRLs and decades of proven field service.
3M™ Fall Protection

3M™ DBI-SALA® Sealed-Blok™
Cable Self-Retracting Lifeline - 4.5 m - 9 m

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
<th>Model</th>
<th>Unit Price</th>
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<tbody>
<tr>
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<tr>
<td>3400856</td>
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<td>S</td>
<td>12.00</td>
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</table>

3M™ DBI-SALA® Sealed-Blok™
Cable Self-Retracting Lifeline - 15 m

<table>
<thead>
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<th>Code</th>
<th>Length</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
<th>Model</th>
<th>Unit Price</th>
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</thead>
<tbody>
<tr>
<td>3400951</td>
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<td>S</td>
<td>13.00</td>
</tr>
<tr>
<td>3400961</td>
<td>15 m</td>
<td>S</td>
<td>13.00</td>
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<td>3400956</td>
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<td>S</td>
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<tr>
<td>3400944</td>
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<td>S</td>
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</table>

3M™ DBI-SALA® Sealed-Blok Cable SRL - 25 m

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>3400867</td>
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</table>

3M™ DBI-SALA® Sealed-Blok Cable SRL - 40 m

<table>
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<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>3400986</td>
<td>40 m</td>
<td>S</td>
<td>30.00</td>
</tr>
</tbody>
</table>
Ultra-Lok web and cable SRLs are rugged, highly engineered devices that can be counted on for user safety, efficiency and reliability. Available with synthetic rope, stainless steel or galvanised steel cable and aluminium or thermoplastic housing. The Ultra-Lok RSQ™ model is an innovative dual-mode SRL for fall arrest and integrated rescue.

**Features and Benefits:**

- **Anchor Swivel**
  - Allows the block to align with lifeline and avoid any torsion of the cable when the user is working.

- **Lightweight and Durable Thermoplastic Housing**
  - Provides exceptional durability and is lightweight for easy handling.

- **Stainless Steel Components**
  - Stainless steel internal parts ensure increased corrosion resistance and operational longevity.

- **Semi-sealed Design**
  - Gasket between the housings makes the block semi-sealed which increases protection against the intrusion of dust and water thereby offering additional protection against corrosion.

- **Constant Moving Pawls, Anti-ratchet System**
  - Anti-ratchet system means the pawls do not easily disengage after a fall. This innovative feature ensures that the pawls will remain engaged even it the anchorage structure is flexible and likely to induce rebounds.

- **Reserve Lifeline**
  - Allows the brake to perform even if a fall occurs when the cable is fully extended.

- **Impact Indicating Hook**
  - Allows easy visual inspection to determine if the unit has experienced a fall by a user.

- **141 kg Weight Capacity**
  - Higher capacity for operator and tools.

**Applications**

- Fall Arrest - Assisted Rescue by Hand
- Fall Arrest - Assisted Rescue by Pole
- Automatic Descent Mode
## 3M™ Fall Protection

### 3M™ DBI-SALA® Ultra-Lok™ Cable SRL - 6 m

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
<th>Hook Type</th>
<th>Diameter</th>
<th>Load Capacity</th>
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</thead>
<tbody>
<tr>
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<td>6 m</td>
<td>G</td>
<td>18 mm</td>
<td>4.50</td>
</tr>
<tr>
<td>3504429</td>
<td>6 m</td>
<td>G,S</td>
<td>18 mm</td>
<td>4.50</td>
</tr>
</tbody>
</table>

### 3M™ DBI-SALA® Ultra-Lok™ Cable SRL - 9 m

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hook Type</th>
<th>Diameter</th>
<th>Load Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3504424</td>
<td>9 m</td>
<td>G</td>
<td>18 mm</td>
<td>5.40</td>
</tr>
<tr>
<td>3504426</td>
<td>9 m</td>
<td>G,S</td>
<td>18 mm</td>
<td>5.40</td>
</tr>
</tbody>
</table>

### 3M™ DBI-SALA® Ultra-Lok™ Cable RSQ™ SRL - 15 m

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
<th>Hook Type</th>
<th>Diameter</th>
<th>Load Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3504553</td>
<td>15 m</td>
<td>G</td>
<td>18 mm</td>
<td>8.50</td>
</tr>
<tr>
<td>3504554</td>
<td>15 m</td>
<td>G,S</td>
<td>18 mm</td>
<td>8.50</td>
</tr>
<tr>
<td>3504555</td>
<td>15 m</td>
<td>G,S</td>
<td>18 mm</td>
<td>8.50</td>
</tr>
</tbody>
</table>
Confined Space Solutions

3M™ DBI-SALA® Portable Fall Arrest Post

The Portable Fall Arrest Post is specifically designed for use on top of transformers or other types of vertical platforms with potential fall hazards. It’s compact and lightweight design of only 17.20 kg (38 lbs) makes the post very easy to transport and put in place. The system features 3 independent swivel anchor points. They can rotate 360 degrees, offering freedom of mobility for up to 3 workers with self-retracting lifelines or fixed length lanyards. Weight capacity 205kg.

Telescopic design; 83.2 cm to 116.8 cm to 145.40 cm. Lightweight and durable aluminium construction. Levelling screws plumb system on inclines up to 150. Built-in anchor ring for horizontal lifeline attachment. Portable and fixed bases provide complete jobsite versatility.

3M™ DBI-SALA® Adjustable Offset Upper Masts
Masts come standard with one set of winch mount brackets to accommodate a DBI-SALA® winch or SRL. Additional brackets are available.

3M™ DBI-SALA®5 Piece Davit Hoist System*Short
Includes short offset adjustable offset upper mast (8568001), 83.8 cm lightweight lower mast (8568002) and 3-piece lightweight base (8568005). Includes winch mounting bracket. Order winch and SRL separately.

5-Piece Davit Hoist System *Long
Includes long offset adjustable upper mast (8568006), 33” (838 mm) lightweight lower mast (8568002), and 3-piece lightweight base (8568008). Includes winch mount brackets. Order winch and SRL separately.
Hooks and Carabiners

Twist Lock Self-Locking Carabiner
The automatic gate closing and locking makes it an ideal choice when the user will open and close the connector many times during the work period. Quick and easy to open with one hand.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (mm)</th>
<th>Force (kN)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ514</td>
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<td>25</td>
<td>0.18</td>
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<tr>
<td>KJ5024</td>
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<td>0.48</td>
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<tr>
<td>KJ5106</td>
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<td>0.55</td>
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<td>AJ593</td>
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<tr>
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</tr>
<tr>
<td>2000127</td>
<td>18</td>
<td>22</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Screw Gate Carabiners
The screw gate is ideal in working situations where opening is occasional during the working day, as the gate can be opened by the action of pushing it onto the anchorage point. The gate can then be manually locked once the carabiner holds the weight of the device.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (mm)</th>
<th>Force (kN)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>AJ501</td>
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<tr>
<td>KJ5107</td>
<td>25</td>
<td>50</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Triple Twist Lock Self-Locking Carabiner
Triple lock provides the user with confidence that the gate will not accidentally unlock.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (mm)</th>
<th>Force (kN)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL216SS</td>
<td>21</td>
<td>30</td>
<td>0.22</td>
</tr>
<tr>
<td>AJ572</td>
<td>24</td>
<td>22</td>
<td>0.11</td>
</tr>
</tbody>
</table>

3M™ Protecta® Manucroche Anchor Clamp
An anchor clamp in stainless steel wire, the Manucroche is the ideal connector for anchoring a fall arrest system to a steel structure. The double locking automatic closure system guarantees a connection that will withstand any challenge.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (mm)</th>
<th>Force (kN)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL216SS</td>
<td>21</td>
<td>30</td>
<td>0.22</td>
</tr>
<tr>
<td>AJ572</td>
<td>24</td>
<td>22</td>
<td>0.11</td>
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<td>AJ302</td>
<td>110</td>
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<td>0.35</td>
</tr>
<tr>
<td>KJ5108</td>
<td>50</td>
<td>30</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Scaffold and Snap Hooks
This detachable scaffold hook can be attached to spliced or webbing lanyards, and other PPE products. Detachable with internal gate means it can be added to a range of products and stays there until it is decided to be removed.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (mm)</th>
<th>Force (kN)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL216SS</td>
<td>21</td>
<td>30</td>
<td>0.22</td>
</tr>
<tr>
<td>AJ572</td>
<td>24</td>
<td>22</td>
<td>0.11</td>
</tr>
</tbody>
</table>
Fall Protection for Tools

Protecting workers takes more than just keeping them from falling. Their equipment also needs to be kept safe at height. That's why for over 10 years, we've been pioneering an innovative line of products and solutions to prevent dropped tools and equipment. From construction sites to oil rigs, we help make work environments safer and more productive by protecting workers from hazards that can result in personal injury, equipment damage and tool loss. Tested and adapted for all applications. Our onsite ISO 17025 accredited lab allows us to simulate heat, cold, moisture, corrosion and abrasion—the challenges you face every day. We conduct dynamic and static strength tests, both in the field and in our ISO 90001 certified manufacturing facilities, ensuring you get the highest quality, most reliable fall protection for tools.
# 3M™ Fall Protection

## 3M™ DBI-SALA® Adjustable Radio Holster
- Holster adjusts to fit virtually any hand-held radio, mobile phone, and many other devices.
- Can be worn from belt or harness.
- A Micro D-ring can be placed on the back of a device, and can then be tethered to a D-ring on the front of the Adjustable Radio Holster using a 1500066 Clip2Loop Coil Tether.

![Adjustable Radio Holster](image)

Can be worn from a belt or harness.

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1500089</td>
<td>Adjustable Radio Holster, Clip2Loop Coil Tether and Micro D-ring</td>
</tr>
</tbody>
</table>

## 3M™ DBI-SALA® Hook2Hook Coil Tether

<table>
<thead>
<tr>
<th>Description</th>
<th>(relaxed)</th>
<th>(stretched)</th>
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</thead>
<tbody>
<tr>
<td>1500049</td>
<td>10</td>
<td>12.7 cm (5&quot;)</td>
</tr>
<tr>
<td>1500064</td>
<td>10</td>
<td>10.2 cm (4&quot;)</td>
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</table>

## 3M™ DBI-SALA® Hard Hat Tether

- Simply slides onto the handle of a tool in seconds.
- Swivel spin top makes them tangle resistant.
- Reusable and suitable for non-conductive use.

<table>
<thead>
<tr>
<th>Description</th>
<th>(relaxed)</th>
<th>(stretched)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500061</td>
<td>10</td>
<td>10.2 cm (4&quot;)</td>
</tr>
<tr>
<td>1500049 Medium-Duty Hook2Loop Bungee Tether</td>
<td>10</td>
<td>132.1 cm (52&quot;)</td>
</tr>
<tr>
<td>1500048 Hook2Loop Bungee Tether</td>
<td>10</td>
<td>119.4 cm (47&quot;)</td>
</tr>
</tbody>
</table>

## 3M™ DBI-SALA® Hook2Loop Bungee Tether

<table>
<thead>
<tr>
<th>Description</th>
<th>(relaxed)</th>
<th>(stretched)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500049 Hook2Loop Bungee Tether</td>
<td>10</td>
<td>12.7 cm (5&quot;)</td>
</tr>
<tr>
<td>1500048 Hook2Loop Bungee Tether</td>
<td>10</td>
<td>10.2 cm (4&quot;)</td>
</tr>
<tr>
<td>1500049 Medium-Duty Hook2Loop Bungee Tether</td>
<td>10</td>
<td>132.1 cm (52&quot;)</td>
</tr>
</tbody>
</table>

www.3M.eu/PPESafety
3M™ DBI-SALA® Quick-Wrap Tape
- Heavy duty 2.54 cm (1") wide tape conforms to the shape of whatever it is applied to.
- Used with our D-rings and Tool Cinch Attachments to create instant tethering points on virtually any tool.
- Made from a self-fusing silicone rubber that leaves no adhesive or residue behind.
- Inner fiberglass webbing increases the strength of the tape and makes the tape resistant to sharp objects.

<table>
<thead>
<tr>
<th>Description</th>
<th>Closure system</th>
<th>Height/diameter</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500045 Quick-Wrap, yellow</td>
<td>10 Hook and loop</td>
<td>274 cm (108&quot;)</td>
<td>30 L</td>
</tr>
<tr>
<td>1500036 Quick-Wrap, blue</td>
<td>10 Hook and loop</td>
<td>274 cm (108&quot;)</td>
<td>30 L</td>
</tr>
</tbody>
</table>

3M™ DBI-SALA® Safe Buckets
With an integrated closure system that helps prevent dropped objects, our Safe Buckets are designed to be the ideal companion for workers at height carrying heavy loads.

3M™ DBI-SALA® Adjustable Wristbands
Our adjustable wristband uses a hook and loop system to adjust to any wrist size. An elastic band helps ensure a comfortable fit.

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500083 Adjustable Wristband</td>
</tr>
</tbody>
</table>

3M™ DBI-SALA® Single and Dual Tool Holsters
- Single and Dual Tool Holsters are equipped with D-rings that are load rated for 2.3 kg (5 lbs).
- Several variants of these holsters come with Retractors (indicated below). Retractors are load rated for 0.7 kg (1.5 lbs).
- Single and dual tool holsters feature Beacon High-Visibility Reflectors and the Quick-Mag Magnetic Tool Staging System.
- A bottom drain vent allows the holster to perform even in wet conditions.

<table>
<thead>
<tr>
<th>Description</th>
<th>Retractors included</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500107 Dual Tool Holster with Retractors</td>
<td>2x</td>
<td>Belt</td>
</tr>
</tbody>
</table>

Anchorages

3M™ Protecta® Fixed Anchorage Plate
12 mm fixing, 3 mm thick.

3M™ Protecta® Fixed D-ring Anchorage
12 mm fixing. Can be used in 3 load directions.

3M™ Protecta® Nylon Webbing Sling
Four safety seams.

3M™ Protecta® Galvanised Steel Sling
Thimble ends and PVC protective sleeve.

<table>
<thead>
<tr>
<th>AM210</th>
<th>0.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM211</td>
<td>0.13</td>
</tr>
</tbody>
</table>

| AM450/80 | 25 mm x 80 cm | 0.07 |
| AM450/150 | 25 mm x 150 cm | 0.25 |

| AM401G | 1 m | 6 mm | 0.29 |
| AM402G | 2 m | 6 mm | 0.47 |
Anchorages

**3M™ DBI-SALA® Fixed Beam Anchor**
Installs in seconds to the beam structure in any orientation, with final tightening using a built-in adjustment handle.

**3M™ DBI-SALA® Freestanding Rooftop Counterweight Anchor**
The rooftop freestanding counterweight anchor does not require attachment to a working surface and provides a safe and versatile fall arrest rated tie-off point.

<table>
<thead>
<tr>
<th>Anchor beam dimensions chart</th>
<th>Description</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>2108412</td>
<td>3.81 cm</td>
</tr>
<tr>
<td>B</td>
<td>C</td>
<td>2108413</td>
<td>3.81 cm</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>2108414</td>
<td>3.81 cm</td>
</tr>
</tbody>
</table>

**3M™ DBI-SALA® Glyder™ 2 Sliding Beam Anchor**
Provides complete horizontal mobility on i-Beams, attach overhead or at your feet (use with 3M™ DBI-SALA® Force2™ Shock Absorbing Lanyard when used at your feet). ‘Wear pads’ eliminate metal-to-metal contact, for smooth operation. Integrated ratcheting adjustment system for easy installation. Dual beam grip adjustment prevents twisting and turning. User capacity: 141 kg.

**3M™ DBI-SALA® Saflok™ Concrete Wedge Anchor**
Quick-release button for fast removal with a pivoting easy-grip handle. Innovative forged connection ring provides a compatible tie-off point. Shielded load cable and chock release cables.

**3M™ DBI-SALA® Concrete D-ring Anchor**
Reusable D-Ring assembly. Rugged design for harsh environments. Safe ‘hook-up’ indicator notifies user of proper installation. Install into 18 mm or 19 mm holes - only standard drill bits needed.

<table>
<thead>
<tr>
<th>Description</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2104700</td>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>2100100</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>2104565</td>
<td>1</td>
<td>0.50</td>
</tr>
</tbody>
</table>
**3M™ DBI-SALA® Polyester Webbing Sling**
Sling Polyester Webbing and stainless steel links. Choke back facility on KM419 & KM421.

<table>
<thead>
<tr>
<th></th>
<th>W (mm)</th>
<th>H (cm)</th>
<th>Tension (kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM419</td>
<td>45</td>
<td>90</td>
<td>0.47</td>
</tr>
<tr>
<td>KM421</td>
<td>45</td>
<td>200</td>
<td>0.86</td>
</tr>
</tbody>
</table>

**3M™ DBI-SALA® I-Beam Trolley Anchor - Adjustable**
The trolley is for use with self retracting lifelines on horizontal beams and has been engineered for ease-of-use and superior performance. Glides effortlessly along the beam and provides horizontal mobility. Attachable anywhere along beam, including midpoint. Non-corrosive double-shielded wheel bearings are maintenance free. Trolley Guards protect the wheels from damage and keep beam clear of debris.

**Applications**

**3M™ DBI-SALA® EZ-Line™ Temporary Horizontal Lifeline**
EZ-Line is a temporary horizontal lifeline system that is user friendly and extremely fast to install. The innovative retractable design of EZ-Line eliminates large and bulky coils of cable that are difficult to set-up, relocate and store. Built-in winch for fast and easy set-up, use and dismantling. Customise length in any increment up to 18.25 m. Built-in pre-tension and impact indicators for easy set-up and inspection. Extremely lightweight, 33% lighter than conventional systems.

**Applications**

Note: SRL not included
3M™ DBI-SALA® Rollgliss™ Rescue Systems

When the clock starts ticking, you need a rescue plan you can count on to rescue you quickly and efficiently. The type of job site, anchor location, working load and limit, and ease of use are some important considerations when choosing the appropriate rescue and descent system. A single rescue system cannot efficiently handle every scenario, performing well for one application but not another. Some rescue systems are easy to use for one application, while others require more skill but can be adapted for use in multiple situations.

Applications

Emergency Escape
Use the Rollgliss 550 as an escape device when it is imperative to get to the ground as quickly as possible.

Assisted Rescue
Attach the Rollgliss 550 to the top of the wind turbine and lower the hook end to the victim and lower them to the ground.

Assisted Rescue Pick-Off
Use the Rollgliss 550 for an assisted pick-off rescue when a victim is unable to get to safety alone. Lower to the victim and hook up to them and use the device to descend to safety.

Custom Rescue
The Rollgliss 550 can be used in many custom rescue situations. Use the system to repel down the structure to safety.

Features and Benefits:

Optional Rescue Hub
• Allows to perform not only evacuation but also rescue.

Bi-Directional Hub
• Rope descends from either side which brings one hook up as the other goes down, allowing for immediate use after each descent.

Optional Bracket
• Allows quick and easy connection to the ladder rung in order to optimise effectiveness of the rescue.

Durable Rope
• 9.5mm (3/8”) static kernmantle rope rated for durability.

Multiple Length Options
• Lengths from 10 to 200 m for 2 persons and from 10 to 500 m for 1 person.

Weight Capacity
• 282 kg.

3M™ DBI-SALA® Rollgliss R550 Rescue System with rescue hub

<table>
<thead>
<tr>
<th>Length</th>
<th>Weight Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 m</td>
<td>282 kg</td>
<td>4.59</td>
</tr>
<tr>
<td>50 m</td>
<td>282 kg</td>
<td>5.73</td>
</tr>
</tbody>
</table>

Other lengths or longer lengths up to 500 m contact us.
The Rollgliss R350 system provides efficient hauling, but more importantly, very controlled lowering (a finger and thumb are all that is required to hold a load). This system also allows you to change the hauling ratios on the fly with quick release pulleys, allowing custom rigging for different applications and jobsites.

- Interchangeable pulley system with a 3:1 ratio standard
- Includes everything you’ll need for efficient rescue
- Rope retention bar does not allow rope to twist or overlap
- Visual and audible function controls
- Static kernmantle rope for optimum performance
- Quick connect system allows fast insertion of various pulleys
- Weight capacity 150 kg

### 3M™ DBI-SALA® Rollgliss™ R350 Rescue System

<table>
<thead>
<tr>
<th>Ratio</th>
<th>AG6350ST31/30</th>
<th>AG6350ST31/60</th>
<th>AG6350ST51/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:1</td>
<td>7.5 m</td>
<td>15 m</td>
<td>10 m</td>
</tr>
<tr>
<td>5:1</td>
<td>10 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3M™ DBI-SALA® Rollgliss™ R250 Rescue Kit

Kit includes: R250 automatic blocking descender and belay device, rope (10 m, 20 m, or 30 m travelling lengths), 5 m telescopic rod, rigging system, ascent handle, anchorage ring and carrying bag. Weight capacity 150 kg.

<table>
<thead>
<tr>
<th>Ratio</th>
<th>AG62501010</th>
<th>AG62501020</th>
<th>AG62501030</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 m</td>
<td>6.10</td>
<td>6.60</td>
<td>7.10</td>
</tr>
<tr>
<td>20 m</td>
<td>6.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 m</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3M™ Protecta® Cabloc™ Vertical Lifeline System

3M™ Protecta® Cabloc™ Vertical Lifeline System consists of an 8 mm cable which is terminated at the top by a cable ferrule and cable clamps at the bottom.

The cable is supported at 10 m intervals with intermediate cable guides. Quick and easy to install, you can configure to an existing ladder and/or pylon pole. The Cabloc traveller is lightweight and sits in the palm of your hand. If using a Stainless Steel 8 mm cable (7 x 19) a version incorporating a shock absorber can be used which removes the need for an inline shock absorber. The Cabloc system is easy and quick to install and is available in kit form with all the components required.

For more information or to order, contact customer services on 00 800 999 55500 or visit www.3M.com/fallprotection
3M™ DBI-SALA® Lad-Saf™
Vertical Lifeline System

Working Safely at Height
Every day, workers around the world climb ladders to great heights to get their job done. Working at heights creates danger, and a need for maximum security. A fall can happen at any time and on any structure, during the climb to the top or on the way down.

The Solution
The Lad-Saf permanently installed vertical safety system that offers complete fall protection for the worker. It is designed to work with many different styles and lengths of ladders on structures like wind turbines, communication towers, buildings, water towers and more.

The Lad-Saf flexible cable system consists of a top and bottom bracket that act as anchors for a steel cable that runs the length of the climbing area. The Lad-Saf X2 & X3 traveller connects the worker to the system, automatically follows the user during the climb and locks onto the cable in the event of a fall, allowing the user to regain their footing.

Features
- Lad-Saf X2 & X3 Traveller automatically follows user for hands-free climbing and fall protection
- Accommodates up to 4 workers at one time*
- Customisable to suit almost any application
- Extremely rugged and corrosion resistant steel construction, Galvanised or Stainless Steel options available
- Built-in energy absorber protects user and structure
- Built-in tension indicator assures proper installation
*Depending on configuration of the system.

Applications
Every year, thousands of people are injured by slips and trips in the workplace, at great cost to their personal health and to their employer's reputation and bottom line.

Many of these risks are entirely preventable with 3M™ Safety-Walk™ Anti-Slip Tape – a high performance anti-slip flooring tape that is designed to keep your workers safe and productive, whilst lowering your compensation and insurance costs.
Are your floors up to Standard?

Stairways, ladders, ramps, walkways, machinery, kitchens, showers and changing rooms are all potential areas of risk. In particular, slippery surfaces caused by wet, greasy or oily floors are a major contributor to accident statistics.

Compliance with EC Directive 89/654 on floor safety helps you to minimise risk, limit costly down-time, and reduce your financial liability. It can also save lives.

3M™ Safety-Walk™ General Purpose – 600 Series

For light to heavy shoe-traffic areas

Safety-Walk General Purpose is a mineral-coated, abrasive material adhered by a durable resin to a pressure-sensitive adhesive backed plastic film. It provides an effective slip-resistant surface in most shoe traffic applications.

Features and Benefits:

Application
- It is used for all slippery surfaces with intensive pedestrian and light vehicle traffic; for example, stairways, production and storage rooms, ramps, ladders and machine footplates

Surfaces
- It is particularly effective on concrete (painted or primed), resilient tile, metal and porous surfaces if primed

General Purpose 600 Series at a glance
- Mineral-coated, high friction slip-resistant surface
- High performance press-sensitive adhesive for easy application
- For light to heavy shoe-traffic areas
- Low-profile design helps reduce trip hazard
- Highly durable surface which withstands the rigours of equipment traffic

Colours
- Black (610)
- Green (640)
- Clear (620)
- Brown (660)
- Yellow (630)
- Black/Yellow (613)
- Photo-Luminescent (690)

Product construction
Mineral Particles for permanent slip resistance in all applications

3M™ Floor Safety
In extreme conditions
Safety-Walk Coarse contains extra large mineral particles bonded by a tough durable polymer to a dimensionally stable plastic film. This durable construction provides additional slip resistance in extreme conditions and its open abrasive pattern resists clogging when oil and mud are present.

**Features and Benefits:**

**Application**
- It is used on agricultural and forestry equipment, ship and plane decks, trains, oily wet areas, machine shops, construction vehicles, platforms and ramps

**Surfaces**
- It is particularly effective on concrete (painted or primed), resilient tile, metal and porous surfaces if primed

---

On irregular or contoured surfaces
Safety-Walk Conformable is a high-friction, slip-resistant material that has a special pressure-sensitive adhesive backed aluminium film that conforms and adheres to irregular surfaces.

**Features and Benefits:**

**Application**
- It is especially suited to uneven and contoured surfaces (e.g. diamond plate). It is used on steps and stairwells, ladder rungs and fire escapes

**Surfaces**
- It is specially designed for textured surfaces and textured porous surfaces (if primed)
3M™ Safety-Walk™ Medium Resilient – 300 Series

In barefoot or light shoe traffic areas
Safety-Walk Medium Resilient is a soft textured, non-mineral, medium resilient surface bonded to a pressure-sensitive adhesive backed plastic film. It provides a comfortable, hygienic, slip-resistant covering.

Features and Benefits:

Application
- It is ideal for barefoot or light shoe traffic areas and wet areas such as boats and watersports equipment, locker rooms, around tubs and pools

Surfaces
- It is particularly effective on concrete (painted or primed), resilient tile, smooth metal, fibreglass and porous surfaces if primed

Medium Resilient 300 Series at a glance:
- Non-mineral, medium textured, slip-resistant vinyl surface
- Textured resilient high friction surface and durable adhesive provide long-lasting performance
- For barefoot or shoe-traffic areas

Colours
- Black (310)
- Grey (370)

Product construction
- Resin Surface
- Plastic Film
- Special Adhesive

3M™ Safety-Walk™ Fine Resilient – 200 Series

In wet, barefoot-traffic areas
A fine textured, slip-resistant vinyl surface with a pressure-sensitive adhesive backing. It provides enhanced safety and comfort in light and barefoot traffic areas.

Features and Benefits:

Application
- It is ideal for barefoot and wet areas, shower rooms, baths, changing rooms and around saunas

Surfaces
- It is particularly effective on concrete or other porous surfaces (if primed, painted or sealed), ceramic tile, fibreglass and smooth metal

Fine Resilient 200 Series at a glance:
- Non-mineral, fine textured, slip-resistant vinyl surface
- Its high performance, water resistant, acrylate adhesive is ideal for wet conditions
- For wet, barefoot traffic areas

Colours
- White (280)
- Clear (220)

Product construction
- Finely textured surface for barefoot movement
- Special acrylic adhesive for wet areas
3M™ Safety Matting

3M also has a range of mats that have been specifically created to overcome a number of specialist issues, such as wet areas, anti-fatigue for production sites and anti-contamination mats for clean working areas.

3M™ Nomad™ Terra Primary Matting (Outdoor)
Made from durable material, 3M™ Nomad™ Terra entrance matting is available in a variety of styles to handle different traffic levels
• Open web construction
• Flexible coils to brush shoe soles
• Place them inside, outside or in recessed wells
• Attractive matt finish in a range of colours
• Available without backing to aid drainage in outdoor areas or with vinyl backing to protect floors indoors
• High-tech product coating adds durability
• Highly crush resistant vinyl

3M™ Contamination Control Mat
A disposable, dust collecting floor mat designed to help protect areas where cleanliness and hygiene are critical factors
• High tack surface removes dust and small particles from shoe soles and trolley wheels
• Peel off one layer to expose the next
• Lay onto any clean surface with no edging or frame
• 40 sheets coated with a pressure-sensitive adhesive

3M™ Safety-Walk Wet Area Matting 1500
An unbacked, unwoven open matting made from continuous vinyl filaments
• Use as a comfort cushion in wet area applications
• Suitable for barefoot or shoe traffic
• Overall thickness 9.0mm

3M™ Safety-Walk Wet Area Matting 3200
Flexible open mesh structure allows water to run through so the surface stays drier than the surrounding area
• Comfortable for bare feet
• Formulated for resistance to chlorinated water, body oils, fungus, mildew and UV radiation
• Overall thickness 6.0mm

3M™ Safety-Walk Cushion Matting
Reduces leg and back fatigue by distributing cushioned support across the bottom of the shoe
• Flat topped vinyl anti-fatigue matting
• Textured top helps improve traction and clean up of debris and liquid
• 5270E Available with edging to allow wheeled traffic. Oil and grease resistant; suitable for heavy duty foot traffic environments
• 3270E Oil and moderate chemical resistance; suitable for heavy duty foot traffic environments
Notes