

 **Speedglas™**



Experience
the
difference



Designed & developed with passion by us.



Did you know

3M™ Speedglas™ Auto-Darkening Filters provide permanent protection from UV and IR light – regardless of whether your ADF is on or off.



Back in the seventies, we visited a number of Swedish shipyards to study welders at work.

We discovered skilled craftsmen blindly striking arcs as they continually nodded their shields down.

Ever since we have been committed to developing tools that would change – for ever – the welder's working world.

From the first groundbreaking auto-darkening welding helmet in 1981 to our current line up of state-of-the-art welding safety equipment, we are continuing to revolutionise welding safety and productivity.

Can you really have a passion for welding?

Well, we certainly have! Over the years we have learnt everything there is to know about the challenges that face welding professionals – and occasional hobbyists – on a daily basis, no matter how simple or complex your welding requirements might be.

Your thoughts, your opinions

Your experience forms the foundation of our continuing search for innovative, workable, solutions. Inspired by you, we shape the future of welding so you can get on with the job of shaping ours.



Inspired by welders like you.

Did you know

All 3M™ Speedglas™ 9100 Series and 100 Series Welding Helmets are approved to EN 175 class B. This means that they can be safely used for grinding.

If you grind often, why not try the 3M Speedglas 9100FX for a superior view?

We asked “What’s important to you?” You said...

- **Coverage is key:** We made our latest helmets deeper and wider, providing greater coverage of ears, neck and sides of the head.
- **The helmet must be comfortable to wear:** Our 3M™ Speedglas™ 9100 Series Welding Helmets have totally changed the interface between the welder’s head and the helmet’s suspension system, eliminating pressure points, optimising its centre of gravity, and adding multiple adjustment options.
- **The welding helmet must be reliable:** The 3M™ Speedglas™ Auto-Darkening Filters (ADFs) featured in our helmets are borne out of over 30 years of development expertise, resulting in extraordinarily reliable and durable equipment for professional welders.

Thank you, welders.

We couldn’t have done it **without you.**



From full-time professional to the

For high-level protection, comfort and versatility 3M™ Speedglas™ 9100 Series Welding Helmets are the professional's No.1 choice.

But why shouldn't there be something more affordable, yet superbly designed for the occasional welder?

Enter the 3M™ Speedglas™ 100 'Graphic' Series Welding Helmet – available in a range of eye-catching designs to reflect your personality.

9100 Series



occasional hobby welder, we can offer the perfect fit.

3M™ Speedglas™ 9100 Series The professional's choice

- + Excellent optics – bigger views
- + 7 user selectable dark shades*
- + 3 auto-darkening filters: regular, large and extra-large viewing areas
- + Delay function for selectable dark-to-light switching times
- + Adjustable arc detection sensitivity for unsurpassed switching reliability
- + Personalisation – wide selection of accessories available for matching specific user requirements

*Including 9-13 variable, 5 for welding/cutting, 8 for micro-plasma or low amp TIG.

3M™ Speedglas™ 100 'Graphic' Series Designed for the occasional welder

- + Robust industrial design
- + 5 adjustable dark shades (8-12) for most types of arc welding
- + 2 sensitivity settings
- + Suitable for grinding – class B (EN175)
- + 13 eye-catching designs – distinctive graphics, all with a specific identity
- + Size adjustable headband with ratchet design (to fit head sizes 52-63)
- + Lightweight - only 370 grams including auto-darkening welding filter

100 Series



Did you know

Auto-Darkening Filters work by using liquid crystal technology. Liquid crystals can twist polarised light by varying degrees and react to a change in voltage in less than 0.1ms!

Did you know

A welder working every day can breathe in 9.2g of welding fume a year, leading to health problems such as asthma, pneumonia and metal fume fever.

Make sure you stay protected by wearing a suitable respirator.

3M™ Speedglas™ 9100

Welding Helmet
For ultimate performance



Did you know

If you need to wear respiratory protection continuously for more than one hour a day the HSE suggest that you use a powered air respirator.



3M™ Adflo™ Powered Air Respirator for high level respiratory protection

Call 3M today to find out more and apply for a **FREE TRIAL**



reddot design award
best of the best 2009



product
design
award

2009



Key features

- + **Ergonomically designed, unique Speedglas Headband**
Avoids pressure points for increased comfort and productivity.
- + **Shade 5 side-windows**
Enables user to see out the side of the helmet for improved peripheral vision.
- + **Choice of 3 auto-darkening filters:**
V (45 x 93mm) / X (54 x 107mm) / XX (73 x 107mm)
with seven variable dark shades (5,8, 9-13) and adjustable sensitivity
Excellent visual clarity and adjustability. Precise, tailored view of your work.
Less bad welds – increased productivity.

Ordering

With Auto-Darkening Filter	With Side Windows	Without Side Windows
9100V	501805	501105
9100X	501815	501115
9100XX	501825	501125

**DUAL
PURPOSE**
Weld+Grind



Did you know

The human head is lined with nerves, arteries and pressure points – applying pressure to these points can make a person feel fatigued.

Our sophisticated head suspension system allows you to work comfortably and safely over long periods of time.



reddot design award
winner 2012



3M™ Speedglas™ 9100QR:
Compatible with a wide range
of safety helmets

Call 3M today to find out more

3M™ Speedglas™ 9100 FX

Welding Helmet with Grinding Protection

Wider field of view with flip up front



Key features

- + **Ergonomically designed, unique Speedglas Headband**
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V (45 x 93mm) / X (54 x 107mm) / XX (73 x 107mm)
with seven variable dark shades (5,8, 9-13) and adjustable sensitivity
Excellent visual clarity and adjustability. Precise, tailored view of your work.
Less bad welds – increased productivity.
- + **Large 17x10 cm curved clear protective visor, approved to EN 166 BT**
Large viewing area and increased peripheral vision. Perfect for grinding
and walking around the workshop.

Ordering

With Auto-Darkening Filter	With Side Windows	Without Side Windows
9100V	541805	■
9100X	541815	■
9100XX	541825	■

3M™ Speedglas™ 100 Series

Graphic Welding Helmets
Superior quality, affordable helmets
for the occasional welder



Did you know

We launched the first ever commercially viable auto-darkening filter in 1981

Featured model Razor Dragon



Key features

- + Ratchet Headband**
Size-adjustable for a superb, comfortable fit.
- + 100V ADF with 5 adjustable dark shades (8-12), lockable light state & delay function**
Easy to use, flexible ADF with a variety of standard functions for welding and grinding.
- + High quality, durable design that's easy on the pocket**
Ideal for hobbyists and occasional welders.
- + Wide range of eye-catching graphics**
Stay safe welding and express yourself at the same time!

Ordering

Design	Part Number
Blaze	751220
Razor Dragon	752420
Raging Skull	752620
Future Combat	752720
Ice Hot	752520
Xterminator	752220
Trojan Warrior	751620

Design	Part Number
Aces High	751720
Steel Rose	751820
Skull Jewels	751920
Wild 'n' Pink	752020
Steel Eyes	752120
Black	751120
Speedglas 100QR	782500*

*ADF (750020) and hard hat (G3001NUV-VI) available separately.



Blaze



Aces High



Raging Skull



Steel Rose



Future Combat



Skull Jewels



Ice Hot



Wild 'n' Pink



Xterminator



Steel Eyes



Trojan Warrior



Black



3M™ Speedglas™ 100QR:
Same great value and looks but with hard hat compatibility designed in!

Our innovation: your competitive edge

3M™ Speedglas™ ingenuity

Auto-Darkening Filters (ADFs): How they work

Adjustable Headband System: How one size fits all

No ordinary protection...

3M™ Speedglas™ Auto-Darkening Welding Filters

Eye protection that increases your performance

The key to remember with 3M Speedglas Auto-Darkening Welding Filters is consistency. They enable constant, comfortable vision. They provide constant protection from ultraviolet and infrared (UV/IR) radiation. And they consistently auto-switch from light to dark – and back again – in just the way you want them to.

Accuracy and Precision

Our ADFs eliminate the neck-strain of ‘helmet flipping’, while greatly increasing the the accuracy of electrode placement. This, in turn, reduces the need for grinding and rework. And what’s more, our filters’ constant clear views make even the most awkward welds a whole lot easier.

How our ADFs work

9100 Series Welding Helmets are available fitted with a choice of three ADF sizes:

V (45x93mm) **X** (54x107mm) **XX** (73x107mm)

100 Series ADF size: 45x93mm

Before the weld

With the helmet in the ‘safe down’ position you have a **clear view**. Both of your hands are free, so the electrode can be precisely positioned.



During the weld

Within just 0.1 milliseconds – yes, 0.1 – of the arc strike, the filter has auto-switched to **Dark state**.



After the weld

The filter automatically lightens allowing you to immediately and safely inspect the weld pool. Now you’re ready for the next weld.



Not just a headband!



When we set out to design and develop our multiple adjustment, ergonomic, fully suspended headband no expense was spared.

But the investment was worth it – it’s what makes a 3M™ Speedglas™ 9100 Welding Helmet so great to wear. With a 9100 helmet you feel more comfortable, so you become less fatigued.

And that just leads to one thing: better, more consistent welding from start to end of shift.



Key consumables		
Item	Part Number	Suggested Replacement Schedule
Outer Protection Plates		
9100 Standard	526000	Weekly Or when deeply pitted or scratched.
9100 Scratch-Resistant	527000	
9100 Heat-Resistant	527070	
100 Standard	776000	
Inner Protection Plates*		
To fit 9100V	528005	Monthly Or when deeply pitted or scratched.
To fit 9100X	528015	
To fit 9100XX	528025	
To fit 100V	428000	
Grinding Visor (9100FX Only)		
Standard	523000	Twice per month Or when visibility is reduced.
Anti-fog	523001	
Sweatbands		
To fit 9100 Series	168015	Monthly
To fit 100 Series	167520	

*Magnifying Inner Protection Plates are also available

Why choose 3M as your welding partner?

World class innovation: Innovation is at the core of everything we do. 3M™ Speedglas™ Auto-Darkening Welding Technology is a perfect example of the way we recognised an industry need and then went on to revolutionise welding safety. From personal safety and healthcare, to vehicle graphics and computer security, our inventions provide customers with tools and methods to help them perform more productively and more safely than they could ever have imagined.

Product excellence: Imaginative, ergonomic design. Intelligent integration of world-leading proprietary technologies. Dependable performance. All built into everything we do.

Knowledge and expertise – our commitment to customer service:

Our technical and product specialists are not only constantly amassing knowledge relating to their chosen industries, but it's also their job to understand the working practices and regulations that affect your business. So, when you buy one of our products, we can offer on-going technical support via our dedicated help-line or arrange for our welding specialists to personally visit you. We will even help you meet essential servicing requirements. In fact, we can be with you all the way.



For more information on all our products, call 3M Personal Safety Division on **0870 60 800 60 (UK)** and **1800 320 500 (Ireland)** or visit **www.3M.co.uk/safety**



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