



3M Science.
Applied to Life.™

3M Personal Safety

The complex hazards in the melting and casting process.

3M™ PPE solutions for the processing of metallic raw materials.

The hazards of the melting and casting process.

After the complex production of metallic raw materials such as iron, steel, copper and aluminium, they typically undergo further processing. A common next step is the casting process; remelting, further refining and creation of alloys, mould creation, pouring into the mould, knock-out and finishing. These processes are used to produce intermediate products such as engine blocks, turbine housings, and a wide range of cast metal parts both large and small. Casting process steps can result in worker exposures to extreme heat, infrared radiation, flying sparks, noise, dust, fumes, gases and vapours, leading to the need for reliable, adequate personal protection equipment.

Your team is exposed to a wide variety of extreme hazards due to:

- ⚠️ **Strong radiant heat**
- ⚠️ **Splashing melt and flying sparks**
- ⚠️ **Respiratory exposure to particulates including metal fume and respirable crystalline silica (quartz dust)**
- ⚠️ **Respiratory exposure to hazardous gases and vapours such as combustion gases**
- ⚠️ **Glare caused by molten metal, embers and arcs**
- ⚠️ **Falling objects and flying particles**
- ⚠️ **High noise levels**
- ⚠️ **Diffused light and poor lighting**
- ⚠️ **Working at height**

Everything from a single cast:

The modular 3M line of products and accessories is designed to work together optimally.

Extreme conditions – best possible protection:

The hazards of processing metallic raw materials are many and diverse. Comprehensive, flexible personal protection equipment (PPE) solutions are commonly needed that not only provide protection to the wearer, but can work in combination with each other and be suitable for use in onerous high heat applications.

Protect yourself optimally

- Comprehensive protection thanks to flexible and combination use of 3M™ PPE solutions designed with wearing comfort in mind: from respiratory, head and face protection to hearing conservation and welding protection.
- Fall protection during (renovation) work at height with 3M™ Fall Protection products.



Increase wearing acceptance

Great wearing comfort with light-weight helmets, low breathing resistance, premium anti-fog coatings for fog-free glasses and integrated communication.



Increase your productivity

Reduce physical strain and increase wearing times with ergonomic and flexibly usable PPE for fast, clean work.



Save space

Reduce inventory and increase flexibility with high PPE compatibility.

Find more segment-specific information on applications and hazards in the metal industry at
www.3m.co.uk/safety/metals

Request a demo and get expert advice.

Talk to our technically educated consultants or retail partners – no obligation!

The fast, flexible solution for hot jobs.

The 3M™ G3501 Heat Protection Helmet and its accessories provide protection from high temperatures and splashing metal.

For long, hot extreme cases.

Modular 3M™ powered air purifying respirator systems with heat protection covers offer comprehensive protection from radiant heat.

Robust and lightweight
at just 385 grams

Optimum heat protection
from high levels of radiant heat

Gold-plated visor

- Over the standard visor
- Reflects radiant heat and provides glare protection

Standard visor

- Enables permanent respiratory protection
- Mechanical protection from solid and liquid particles of metal

Powered air purifying respirators

- Permanent respiratory protection from solid and gaseous hazardous substances
- Integrated protection
- Cooling air flow in respiratory faceshield

Heat protection cover
made of an aluminized textile that reflects radiant heat

Compatibility
with other 3M PPE and accessories

Comfortable and secure fit
thanks to the 3M ratchet system

3M™ Hearing Conservation
Protection from strong grinding and machine noise

3M™ Protective Eyewear
Protection against flying particles










3M™ Respiratory Protection
Protection from fine dusts

3M™ Visors
Eye and face protection from high levels of radiant heat, liquid metal spray and glare

3M™ Versaflo™ M series
Heat protection solution with integrated head, respiratory, eye and face protection, including glare and heat protection and optionally to be equipped with hearing protection

3M™ Air Hose
with additional heat protection cover

3M™ Versaflo™ TR-600 Power Air Purifying Respirator System
with 3 air flow levels for more comfort and a wide filter portfolio

Product	Special features	Modular, flexible solution	Complete integrative protection
	3M™ G3501 Safety Helmet + Extremely robust and especially lightweight at just 385 g + Optimum combination of secure seating and comfort thanks to a ratchet system + Electrical insulation (1000 volts) as required by EN 50365 + Approved for working temperatures from -30° C bis +150° C + Protection against liquid metal splashes (MM)		
	3M™ V5 Face Shield Holder + Secure folding mechanism: quick replacement of visor possible		
	3M™ 5XG-IR5 Visor + Polycarbonate visor, gold-plated IR 5.0, thickness: 1mm, weight: 90 g + Protection from liquid metal splashes, IR radiation, radiant heat and medium energy impacts + Anti-fog coating		
	3M™ 5F-11 Face Shield + Protection from flying particles + Made of robust polycarbonate + Anti-fog, scratch-resistant coating		
	3M™ Front heat shield and neck protection for helmet combinations + Aluminised textile + Robust, flame-retardant and heat-resistant		
	3M™ SOLUS™ 1000 + Various premium coatings [3M™ Scotchgard™ Anti-Fog, RAS (scratch resistance)] and tints available + For better sealing fit with optimal foam gasket		
	3M™ Versaflo™ powered air purifying respirator systems TR-300/TR-600/Adflo with headtop M-307/M-407 (tested according to EN397) + Additional <u>radiant heat kit</u> available to reflect radiant heat · Gold-plated protective visor (UV/IR 5.0) · Heat protection cover for helmet part and air hose (Additional heat protection for our power air purifier systems available through partners. Please contact us!)		
	3M™ 6000, 6500 and 7500 Half Facepiece Series + Wide variety of filters (particles, gas/vapours and combination filters) available + 6500QL: particularly robust, with quick release for ease of wearing and removal – even with helmet.		
	3M™ Aura™ 9322+Gen3 (FFP2) and 9332+Gen3 (FFP3) Particulate Respirator + Low breathing resistance thanks to innovative filter technology and 3M™ Cool Flow™ comfort valve + Valve grip function for holding, putting on and correction the position of the mask + Sealing points on top of mask reduce fogging on glasses + Hygienic individual packages, folded flat, easy to carry		
	3M™ Speedglas™ Welding Helmet + Speedglas™ 9100MP welding helmet, can be combined with power air purifier and compressed air systems + Speedglas™ 9100QR welding helmet with adapter for 3M™ G3501 safety helmet		
	3M™ Ear Plugs + Hygienically packaged in pairs + Wide variety of insulating performance for various requirements		
	3M™ Peltor™ communications solutions (LiteCom series) + Compatible with headtops and helmets + Certified hearing conservation with integrated radio unit (eight channels) + Noise-compensating microphone + Integrated Bluetooth technology		
	3M™ Fall Protection + Full-body harnesses, connectors and technical systems for fall protection during (renovation) work at height + Available with flame-retardant or dirt-resistant equipment		



Personal Safety Division

3M United Kingdom PLC
3M Center,
Cain Road, Bracknell,
Berkshire RG12 8HT

Tel: 0870 60 800 60
www.3m.co.uk/confinedspace

3M Ireland Limited
The Iveagh Building
The Park, Carrickmines
Dublin 18

Tel: 1 800 320 500

Please recycle.
Printed in UK.
3M is a trademark of 3M Company.
©3M 2019. All rights reserved.