

# Head Protection for High Temperature Applications



Special Helmets, Visors and Accessories



*MSA has been in industrial helmets for over 50 years and is today the world's leader in workers' head protection with more than 120 Million industrial helmets sold. Amongst the various helmet models many solutions for special applications are available. This flyer includes the solutions designed for elevated temperature working environments like foundries, steel mills and smelters.*

## Helmets



## Frames and Visors



## Accessories



*Because every life has a **purpose...***

# Helmets, Frames and Visors



ThermalGard high viz orange, frame ET with debris control and clear reflective visor

The ThermalGard safety helmet approved +150 C and special visor versions are designed for elevated temperature working environments like foundries, steel mills and smelters. Resistance and stability under heat as well as effective reflection of heat with coated visors ensure reliable protection. Various accessories are available to ensure all-day comfort.

## ThermalGard **Helmet**



- Safety helmet for use in high temperature environments
- Glass reinforced polyamide (Nylon) injected shell
- High temperature resistance +150°C (ambient heat) EN 397 and GOST option
- “Slippery” round shape designed to shed liquids including molten metals
- Approved protection against molten metal
- Provides lateral crush protection
- Standard slots to easily attach MSA ear muffs and/or visors
- Three shell colours: white, yellow, high viz orange



(1)

## Fas-Trac **Suspension for ThermalGard**

- Patented adjustment Fas-Trac with large wheel ratchet for quick adjustment even with gloves
- With over head straps made of woven polyester: it provides high comfort and long term, consistent shock absorption performance
- Ensure a consistent performance and comfort level even under the influence of moisture or extreme temperatures
- Sophisticated 4 point attachment: good positioning, stability and better air circulation
- Ideal positioning of the harness through height and length adjustment: perfect for use with full-face respiratory masks
- Wipeable PVC sewn sweatband with possibility to order additional Terri-Band sweatband (washable)

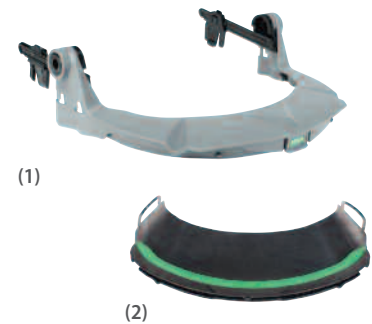


(2)

Materials & Details	Approvals	Part No	Description
<b>Helmet shell:</b> fiber glass charge polyamide	EN397= +150°C; Molten Metal “MM”; -30°C; Lateral Deformation “LD”	GV815-0000000-000	ThermalGard, white, Fas-Trac suspension
		GV825-0000000-000	ThermalGard, yellow, Fas-Trac suspension <b>(1)</b>
		GV895-0000000-000	ThermalGard, Hi-viz orange, Fas-Trac suspension
<b>Suspension:</b> 52–64 cm head straps: woven polyester	Tested with helmets EN397	GA90018	Spare part: Thermalgard Fas-trac suspension, sewn PVC sweatband <b>(2)</b>
		696688	Washable Terri sweatband, to add on sewn PVC sweatband (set of 10 pcs)

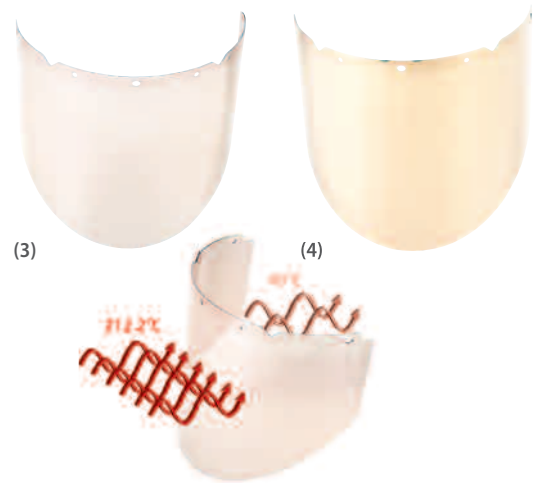
## V-Gard® Elevated Temperature Frame

- Elevated Temperature (ET) frame version designed to withstand temperatures of 177 °C (ambient heat) without warping, cracking or crazing
- Robust and impact resistant EN166 “B” at extreme temperatures “T”
- Sloped design makes it easy to clean the frame as rubbish just slides off the frame
- Works with or without ear muffs – Adapter is stowable in case you use ear muffs, no lost parts
- Optional debris control can be easily added to frame
- Debris control creates a tight seal between helmet and frame reducing potential ingress of contaminants



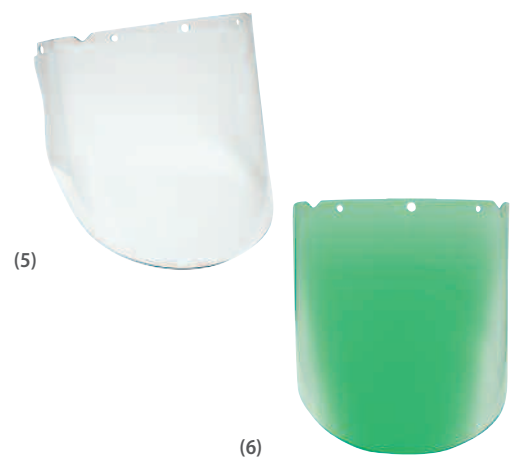
## V-Gard® Reflective Coated Visors

- For work places with high thermal radiation levels
  - Help to protect skin and eyes from IR exposure
  - Deflect a significant amount of IR between 780 nm and 2000 nm >60 %
  - Distort a significant amount of heat: during evaluations, with a heat source of 793.3 °C (irradiance 9.5 kW/m<sup>2</sup>) the temperature in front of the visor reached 212 °C but behind it (near the eyes) just 40 °C (for details see the specific MSA whitepaper)
  - Made of thick and injection moulded polycarbonate
  - Optically corrected to offer very good view and reduce fatigue during work
  - Robust and impact resistant EN166 “B” at extreme temperatures “T”
  - Extra wide to ensure complete face and ear coverage
  - Available as clear or tinted versions for dark vs. glare-riddled environments
- Note: these visors may not close fully when worn with helmet-mounted earmuffs.



## V-Gard® Polycarbonate Visors

- For work places with elevated temperatures, without infrared risks
- Developed for heavy duty use with thick and robust polycarbonate
- Moulded for superior optical quality
- Robust and impact resistant EN166 “B” at extreme temperatures “T”
- Resistant to molten metal splashes and electric arc EN166 “9” and “8”
- Premium anti-fog and anti-scratch coatings approved EN166 “KN”
- Ergonomically shaped to perfectly fit with helmet-mounted ear muffs
- Two clear versions in the standard height and with extended coverage
- Optional green version helps alleviate eye strain and fatigue by reducing excessive glare and light transmittance



Materials & Details	Approvals EN166	Part No	Description
Visor Frame PA Nylon	389 BT / EN1731-F Tested to withstand temperatures of 177 °C (ambient heat)	10121267	Standard frame (ET) Elevated Temperature grey (1)
		10116539	Debris control can be added to frame (2)
Visor Polycarbonate, reflective coated	2C-2,5 1BT 3R	10115848	Moulded V-Gard visor, PC, clear, reflective coated; 241x450x1.8 mm (3)
	2-4 1BT 3R	10115850	Moulded V-Gard visor, PC, green, reflective coated; 241x450x1.8 mm (4)
Visor Polycarbonate, antifog and antiscratch coated	2C-1,2 1 BT 389 KN	10115844	Moulded V-Gard visor, PC, clear, AS/AF; 235x432x2.5 mm (5)
	2C-1,2 1 BT 389 KN	10115853	Moulded V-Gard visor, PC, clear, AS/AF; 264x432x2.5 mm
	2-2 1 BT 39 KN	10115845	Moulded V-Gard visor, PC, green, AS/AF; 235x432x2.5 mm (6)

## left/RIGHT Ear Muffs

- Unique muffs designed to account for the anatomical individuality of the user
- Individual ear cups, left and right, for most comfortable protection on the market
- 3 distinct wearing positions of helmet mounted models
- 3 attenuations levels
- 4 colours: blue, white, yellow, black



left/RIGHT passive ear muffs	LOW SNR 25 dB (H=27 dB, M=22 dB, L=15 dB)	■ 10087438	□ 10087439	■ 10087437	■ 10101995
	MEDIUM SNR 28 dB (H=29 dB, M=25 dB, L=17 dB)	■ 10087429	□ 10087430	■ 10087428	■ 10101996
	HIGH SNR 31 dB (H=32 dB, M=28 dB, L=21 dB)	■ 10087423	□ 10087424	■ 10087422	■ 10101997
left/RIGHT electronic ear muffs	SNR 27 dB (H=31 dB, M=24 dB, L=16 dB)	■ CutOff Pro 10111826	■ CutOff Pro 10111823	■ Dual Pro 10111832	■ FM Pro 10111829

## Neck Cape

- Nomex orange neck cape protects from limited flame spread
- Fitted to the two rear tabs of the Fas-Trac suspension



## Winter Liners

- Winter Liners are easily attached to helmet suspensions to offer proper stability and position
- Adjustable hook and loop closure on neck
- Versions with flame retardant material – resists burning when flame is present
- Several versions feature ear muff compatibility with adjustable flaps



## Cooling Pads

- Innovative HyperKewl™ evaporative cooling pad provides extended relief from heat fatigue
- Lightweight, durable and non-toxic
- Easy and quick activation in water, re-usable
- 5–10 hours of cooling relief per soaking 6 to 12 °C lower than the outside temperature!
- Easily attached to helmet suspension, lays inside shell



Materials & Details	Tests	Part No	Description
<b>Neck Cape</b> orange 420 x 285 mm WxL Nomex Delta T/A 195 g/m <sup>3</sup>	Flame retardancy tested according to EN352:1995	T1900700	Neck Cape, Nomex (1)
<b>Winter Liners</b> 370 mm long Outside layer: 230 gsm cotton Inside layer: quilting (150 gsm green fabric + 80 gsm white felt) – Knit Fabric 700 gsm	Flame retardancy tested ISO EN 14116: 2008	10118425	V-Gard Select liner Extended, 3 layers; water repellent; arc resistant; flame retardant; with earmuff flaps (2)
		10118427	V-Gard Supreme Liner, 2-piece, Extended; 3 layers; flame retardant; water repellent; arc resistant (3)
<b>Cooling Pads</b>	Tested with helmets EN397	GA90022	Cooling Pad - Crown cooler (4)