## V-Gard **Head Protection System**

Because your head deserves the best







## MSA – A global leader in Head Protection

MSA has been in industrial helmets for over 50 years, and is today the world leader for workers' head protection worldwide. The V-Gard product is a proven and a well established brand, including the patented V shell design and trademark. More than 120 Million helmets have been sold. The V-Gard is the most recognised helmet in almost every region with the iconic "V".

MSA also serves a wide variety of markets with a unique range of high performance helmets:

- Fire and rescue helmets: with the unique Gallet F1 and F2 ranges, MSA protects firefighters in more than 80 countries worldwide
- Law enforcement and ballistic helmets: supplying head protection solutions to police and military around the globe
- Helicopter and jet pilot helmets













## Contents

Expertise, Approvals and markings	4
V-Gard Safety Helmets Range Overview	8
V-Gard Helmet Range & Specific options	10
V-Gard 900 Helmet Range & Specific options	16
V-Gard & V-Gard 900 Accessories	
- Customization	20
- Face Protection	22
- Hearing Protection	
- Eye Protection	29
- Accessory System Kits	30
- Cold Protection	32
- Heat Stress Protection	34
- Neck protection	35

#### MSA high quality – high competency

In MSA's european center of competence for head protection in France, MSA has its own, internationally accredited and certified test laboratory. Right next to the production lines and Research and Development center, helmets for industrial workers, fire fighters, police, military and jet pilots are tested every day. Modern technology in conjunction with experience in high-tech head protection assure the highest quality standards. MSA helmets exceed standards requirements for various criteria and provide best-in-class resistance and durability. For instance, penetration tests are always carried out after shock absorption to ensure continuity of protection.

Modern production methods and quality programs ensure the conformity of all helmets produced.





expertise and visit our plant: this QR code links to MSA video

#### Industrial head protection: EN 397

The aim of an industrial safety helmet is to protect the use against falling objects and consequently brain injury and skull fracture.

#### Mandatory tests



### Impact absorption test

- A 5 kg round striker is dropped onto the helmet from 1 meter
- The maximum transmitted force should not exceed 5 kN



#### Penetration test

- A 3 kg pointed cone is dropped onto the helmet from 1 meter
- The striker should not make contact with the headform underneath the helmet



## Chinstrap anchorage

- Initial 150 N applied, then increased 20 N/ min until
- Chinstrap anchorage should release at a minimum force of 150 N and no more than 250 N



#### Flame test

- A burner pointing the flame at 45° to any point between 50 and 100 mm from the crown, during 10 seconds
- No visible flame after
   5 seconds

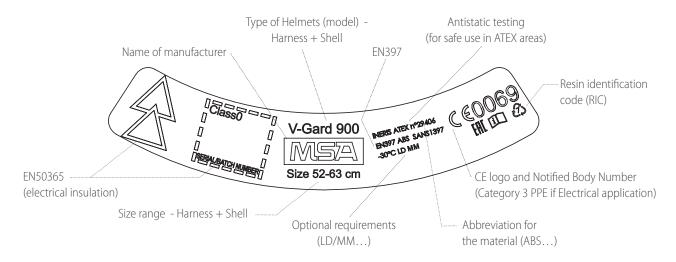
#### **Optional tests**

EN 397 includes a number of optional tests on helmets where additional protection is claimed: very high  $(+150 \, ^{\circ}\text{C})$  or very low  $(-30 \, ^{\circ}\text{C})$  temperatures, splashes of molten metal, electrical voltages up to 440 V and lateral deformation. MSA also tested and certified products to Eurasian regulation following the GOST standard which are based on EN 397 test methods and with additional temperature performance such as  $-50 \, \text{or} + 90 \, ^{\circ}\text{C}$  (depending on helmet model).





#### Markings on safety helmets according to EN397 (example)



#### Lifetime guidelines for MSA industrial helmets

As required by European regulations, MSA provides recommendation on industrial helmets service lifetime:

Helmet shell	Storage time (when helmet not used)	Service life (in addition to the storage time)
	HDPE	
V-Gard	2 years	+4 years
	ABS	
V-Gard 200	3 years	+5 years
V-Gard 500	3 years	+5 years
V-Gard 520	3 years	+5 years
V-Gard 930/950	3 years	+5 years
	Nylon	
ThermalGard	3 years	+5 years



NOTE: the "date code" on the brim of your MSA helmet is the date of manufacture (shell injection), not the actual starting date of use, as the period between manufacturing and actual distribution to the worker can vary



MSA recommends writing the date of first use onto a sticker (supplied with each helmet) and then sticking into the shell. This is normally the point at which service life starts

#### Antistatic testing for safe use in ATEX areas: INERIS ELECTROSTATIC testing

MSA industrial helmets and accessories are certified by the notified body INERIS to meet the requirements of EN 13463-1 non-electrical equipment for use in potentially explosive atmospheres, testing. This ensures that the equipment if used in ATEX areas cannot be the source of an electric, electrostatic or impact-induced arc or spark likely to cause an explosive mixture to ignite.



**MSA Helmets** 

Preventing electrostatic charge, all MSA V-Gard and V-Gard 900 helmets are suitable for use in ATEX environments.

- Industry:
   Dust: hazardous zones 20, 21, 22 (all zones)
   Gas: zones 1 and 2 with gas group IIA (Propane)
- Mines: any type of extraction and any depth

SA Accessories

Tests have been done by the laboratory INERIS.

- Dust only: Sheet PC and propionate visors
- IIA/Dust: V-Gard helmets, lamp brackets, earmuffs, frame, vinyle stickers, PC molded & chin guards
- IIB/Dust: ChemPro goggle, textile stickers
- IIC/Dust: Altimeter spectacles, chinstraps, knit cap

**Caution:** When working in an ATEX area operatives must be fully equipped with appropriate PPE eg. dissipative shoes (earth resistance less than  $1.10^{8}\Omega$ ), not just suitable industrial helmets!

In case of use of helmets + accessories, the worst zone should be taken into account for the assembly.

#### Electrical insulation - Industrial Safety Helmets

#### 440 V AC from EN397

• This test is a current leakage test performed in 3 different conditions to ensure there is no risk of the electrical current being transmitted to the wearer in case a powered wire is in contact with the helmet. The voltage used for this test is 1200 V AC

#### 1000 V AC from EN 50365



- Electrically insulating helmets for use on low voltage installations
- They offer reliable protection against electric shock up to AC 1000 V or DC 1500 V. The voltage used for this test is 10 000 V

### Arc flash resistance - Visors & frames



The risks from arc flash include ultraviolet and infrared radiation, intense light, convective heat and flying debris. Temperatures can reach 19,400 °C at the arc terminals. Appropriate PPE is crucial even though there is no common global standard against arc flash hazards. MSA offers appropriate, EN regulated, head and face protection, which should be selected according to each individual risk assessment.

#### Arc flash visors EN 166 (See pages 24-25)

EN 166 marking "8" indicates visors and frames which protect against an open circuit electric arc of 12 kA max, 380-400 V, 50 Hz nominal for 1 sec max. The requirements are: metal free, defined face coverage, visor thickness minimum 1,4 mm with a scale number of 2-1,2 or 2C-1,2.

MSA Visors certified to EN 166 personal eye protection, marking "8" - Short circuit electrical arc for 1.5 mm and 2.5 mm thick PC clear visors

#### Arc flash visors GS-ET-29 (See page 26)

GS-ET-29 "Supplementary requirements for the testing and certification of face shields for electrical works" first published in 2010 by german DGUV. Whilst an equivalent EN standard is in preparation, some users require visors certified for GS-ET-29. This is "Arc-in-the-Box" testing with parameters of 400 V AC; 50 or 60 Hz for 500ms and has 2 classes:

Class 1: 4 kA. 135kJ/m<sup>3</sup>

Class 2: 7 kA, 423kJ/m<sup>3</sup>

The main different to EN166 "8" is measurement of the temperature behind the visor at eye, mouth and chin level of the test head - maximum safe temperatures are given, to ensure that users will not be injured.

- MSA Arc flash visors tested to GS-ET-29 Class 1 4kA for 2.5 mm thick PC clear visors
- Arc flash visors certified to GS-ET-29 Supplementary requirements for the testing and certification of face shields for electrical works Class 2 - 7kA highest available class in GS-ET-29 standard for MSA special Arc Flash visors

Please see the MSA website for the video on GS-ET-29 arc flash testing.







### Markings on frames and visors according to EN 166

#### Filter class and scal number

• Increases with decreasing luminous transmittance through the visor:

2	Ultra violet radiation
2-C	UV radiation with enhanced colour recognition
2C-1.2	UV filter with enhanced colour recognition, light transmission 74.4%–100 % (UV EN 170)
2–2	UV filter, light transmission 29.1%–43.2 % (UV EN 170)
4–3/3	Shade 3 filter according to EN 171 (IR) and EN 169 (welding)
4–5 / 5	Shade 5 filter according to EN 171 (IR) and EN 169 (welding)

#### **Optical quality**

1	Highest optical quality for permanent use
	permanent use

#### Mechanical strength

F	High speed particles with low energy impact (45 m/s)
В	High speed particles with medium energy impact (120 m/s)
Т	Additional resistance at extreme temperatures (–5 and +55 °C)

#### Field of use

• Offers protection against:

3	Liquid droplets and splash
8	Short circuit electric arc
9	Non-adherence of molten metal and resistance to penetration of hot solids
K	Resistance to surface damage by fine particles
N	Resistance to fogging
R	Enhanced reflectance >60% in the infrared (780-2000 nm)

For GS-ET-29 markings please see page 26













MSA arc flash set before "arc-in-the-box testing" 7 kA



Arc flash 7 kA



GS-ET-29 class 2-7 kA certification passed. Head and face combination protects the wearer

## V-Gard® – **Safety Helmets Range Overview**







	V-Gard	V-Ga	rd 200	V-Gard
		vented	non vented	vented
Helmet Shell Material	HDPE	A	BS	
Weight (including Push-Key)	335g	325g	330g	335g
Weight (including Fas-Trac III)	360g	350g	355g	360g
Peak	Normal	Sh	ort	
Rain gutter / channels	-		•	
Ventilation system	-		-	
Integrated System				
Ventilation system  Integrated System  Colour options helmet shell (★ Fluorescent colours)		* *		* * *
Suspensions	4 options : Push-Key PVC, Push-Key foam, Fas-Trac III PVC, Fas-Trac III foam		ısh-Key foam, Fas-Trac III PVC, : III foam	4 options : Push-Key PVC,
EN 397 low temperature	-30℃	-3	0°℃	
EN 397 lateral deformation	-			
EN 397 molten metal	-	-	-	-
EN 397 +150°C EN 397 440V AC	-	-	-	-
EN 397 440V AC		-	•	-
EN 50365 (1000 V AC)		-	•	-
INERIS ELECTROSTATIC TESTING (EN 13463-1)	Zone 1, 2, 20, 21, 22	Zone 1,2	,20, 21, 22	
Additional Eurasian (EAC) options	GOST -50°C	-	-	-
Chinstraps	2 options: • 2-point • or 3-point (Fas-Trac III)	2 options: • 2-point • or 3-point (Fas-Trac III)		2 options:
Lamp attachments	3options: • Plastic front • Metal front • Plastic side	• Plast • Meta	tions: ic front al front cic side	
Badge holder	-	-	-	
Microball Reflective stickers			•	
Microprismatic Reflective stickers	-	-	-	-
Arc Flash ear-flaps	-	-	-	-
Individual naming stickers				
Logo customisation		•		-
Sweatbands	Fas-Trac III foam Terriband foam		: III foam nd foam	
Suspensions spare parts	Push-Key PVC susp, Push-Key foam susp Fas-Trac III PVC susp. Fas-Trac III foam susp	Push-Key PVC susp, Push-Key foam susp Fas-Trac III PVC susp. Fas-Trac III foam susp		
Frames and visors			•	
Helmet mounted Ear-muffs	•		•	
Helmet mounted Ear-muffs  Winter liners, cooling pads and neck capes  Google attachment	•	•	•	•
Google attachment	-	-	-	
Stow-Away eye protection	•		•	-





500	V-Gard 520	ThermalGard	V-Gar	d 930	V-Gard 950
non vented	non vented	non vented	vented	non vented	non vented
ABS	ABS	Nylon	Al	BS .	ABS
340g	325g	-	-	-	-
365g	350g	430g	495g	500 g	635g
Normal	No peak	Normal	Sh	ort	Short
	-	-	•	•	
-	-	-	•	-	-
			Over sp	ectacles	Face shield
	*				
Push-Key foam, Fas-Trac III PV	/C, Fas-Trac III foam	Fas-Trac III PVC		Fas-Trac III foam	
-30°C		-30°C		-30°C	
					•
-	-			•	•
-	-		-	-	-
			-	•	•
		-	-		
Zone 1, 2, 20, 21, 22		-	Zone 1, 2, 20, 21, 22		
-	-	GOST -50°C	_	-	-
• 2-point • 3-point (Fas-Trac III)	3 options: • 2-point • 3-point (Fas-Trac III) • 4-point			cions: point /-Gard 900	1 option:  • 4-point V-Gard 900
3options: • Plastic front • Metal front • Plastic side			•V-Gard 900 Badge • Front metal	/Lamp Holder Front	1 option:  • V-Gard 900 Badge/Lamp  Holder front
	•	-	V-Gard 900 Badge/Lamp Holder front		ront
	•	-			
-	-	-	•	•	•
-	-	-	•	•	•
•	•	-	•	•	•
•	•	-	•	•	•
Fas-Trac III foam Terriband foam		Fas-Trac III foam Terriband foam		Fas-Trac III foam Terriband foam	
Push-Key PVC susp, Push-Key foam susp Fas-Trac III PVC susp. Fas-Trac III foam susp		Fas-Trac III PVC susp. Fas-Trac III foam susp	6 point Fas-Trac III foam suspension		ion
	•		•	•	•
			•	•	•
				-	-
		-		-	•
-	-	-	-	-	-

9

The V-Gard helmet range uses a specific part numbering system to enable each configuration to have a unique part number attached to it.



\*Check below which colour is available with which helmet model

#### V-Gard

#### Solid "all-round" helmet

- The Original V-Gard, most popular style worldwide, >120 Million sold
- Reliable, UV stabilised HDPE helmet shell
- For many industrial applications the ideal and most economic solution
- GOST certified (-50°C)

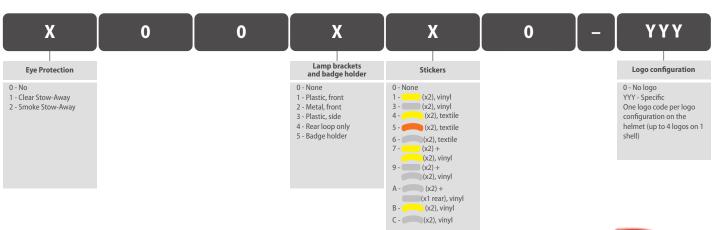


#### V-Gard 200

#### Functional and stylish

- UV stabilised ABS helmet shell offers good resistance to scratches
- Lightweight
- Stylish design
- Short peak for improved upward vision
- · Limited rain gutter
- Provides lateral crushing protection
- Effective ventilation system with larger holes on the upper part: most ventilated helmet of the market with 445 mm<sup>2</sup> of ventilation holes (only for the vented version)





#### V-Gard 500

#### **Comfort and protection**

- UV stabilised ABS helmet shell offering good resistance to scratches
- Provides lateral crush protection
- Built-in rain gutter for outdoor operations
- Ideal design for adapting earmuffs, visors or attaching headband of MSA eyewear with goggle adapter
- V-Gard 500 helmet can be delivered with a badge holder on the front (see page 14)
- Ventilation holes on the upper part for optimized airflow (only for the vented version)



#### V-Gard 520

### Non vented peakless safety helmet for work at height or confined spaces

- Selection of 2, 3 or 4 points chinstrap (not fitted onto the helmet)
- UV stabilised ABS helmet shell offers good resistance to scratches
- Provides lateral crush protection
- Built-in rain gutter for outdoor operations
- Ideal design for adapting earmuffs, visors or attaching headband of MSA eyewear with goggle adapter
- V-Gard 520 helmet can be delivered with a badge holder on the front (see page 14)



#### ThermalGard

#### Safety helmet for use in high temperature environments

- Glass reinforced polyamide (Nylon) injected shell
- High temperature resistance +150°C EN 397 and low temperature resistance (–50°C GOST option)
- Protection against molten metal
- Provides lateral crush protection



11

#### A big step forward on comfort and ease of use

- 4 suspensions:
- Push-Key with slide adjustment and sweat-wicking foam sweatband
- Push-Key with slide adjustment and wipeable PVC sewn in sweatband
- Fas-Trac III with wheel ratchet and sweat-wicking foam sweatband
- Fas-Trac III with wheel ratchet and wipeable PVC sewn in sweatband
- Overhead straps made of woven polyester providing high comfort and long term, consistent shock absorption performance
- Ensures consistent performance and comfort level even under the influence of moisture or low 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 face masks
- Self-adjusting textile crown straps for fast height adjustment and comfortable fit

#### Push-Key with slide adjustment

#### Push-Key suspension, a simple push changes everything

The Push-Key suspension with its innovative adjustment concept brings an extraordinary way to enhance user retention and comfort. Push-Key, the new suspension with the best cost-benefit ratio offered in the market. So there is no denying how much a simple "Push" changes everything!



#### EASE OF USE

- This is the fastest sliding suspension on the market: simple push to loosen, squeeze to tighten
- Can be adjusted with one hand even when worn

#### 2

#### SWEATBAND COMFORT

- 2 different options: sewn in PVC perforated wipeable or sweat-wicking foam

#### 3

#### SURE FITTING

- It offers greater retention capacity than competitive sliding suspensions because it's so much easier to select the best adjustment position.



#### Fas-Trac® III with wheel ratchet

Extensive customer research showed the Fas-Trac III suspension was preferred by most users over what they were currently wearing because it improved helmet comfort, retention and stability whilst being easy to use with or without gloves.



#### 1

#### **BALANCE & STABILTY**

- Lower nape strap improves retention: helmets stay on when leaning over
- Adjusts for a custom fit to the back of the head

#### **SWEATBAND COMFORT**

- Largest sweatband surface area on the market covers more of the headband and user's forehead for increased comfort
- 2 different sweatband options: sewn in PVC perforated wipeable or sweat-wicking washable

#### **HEADBAND COMFORT**

- -The comfort pad by separating the ratchet from the head, cradles the head increasing comfort and cooling airflow
- Prevents hair from getting pulled

#### EASE OF USE

- Ratchet offers smooth rotation: reduced effort to
- Easy grip knob adjustable even with gloves on

#### **ADJUSTABILITY**

- -Three levels of nape height adjustment giving
- Avoids interference with other PPE such as

#### Chinstraps

MSA chinstraps ensure a secure fit and stability.

- Easy to attach and remove from the shell thanks to plastic hooks
- Reliable, comfortable and adjustable
- Zebra design using contrast colours for webbing versions: highly visible

All MSA chinstraps comply with the requirements of EN 397 when fitted to our range of V-Gard industrial safety helmets.











#### Badge holder for V-Gard 500/520

The robust badge holder at the front is highly valueable for industries or construction sites when several operators are involved in the same work area. A business card, a magnetic access control badge or cards with worker specific "InCaseOfEmergency" information, authorisation and licences can be inserted.

- Transparent plastic embossed to avoid scratches damage
- Robust and watertight for outdoor applications
- Ultra sonic welding which resists a tearing test of more than 50 kg Must be ordered together with the helmet.



#### Lamp attachments

MSA offers 3 optional lamp brackets which are mounted in the production process (must be ordered together with the helmet): plastic front, metal front, plastic side (MSA offers ATEX lamps – XS, XP LED and XP Xenon).

V-Gard & V-Gard 200/500/520 with the plastic lamp brackets keep their electrical insulation (EN 397 440 V AC) and antistatic properties.













#### Sweatbands and suspensions

MSA helmets have suspensions with sewn in PVC or optional foam replaceable sweatband.

- Fas-Trac III features a replaceable premium foam sweatband which is machine washable for maximum comfort
- The compact Push-Key foam sweatband is easily replaceable



V-Gard 500 Push-Key with foam sweatband



V-Gard 500 Fas-Trac III with foam sweatband



V-Gard 500 Fas-Trac III with Terri-Band sweatband



#### Reflective stickers

In many working conditions wearing high-visibility clothes is mandatory. The MSA stickers increase the visibility of the wearer, especially when used in low light conditions to increase the contrasts (when illuminated by a light source, such as headlights).

- Retroreflective material according to ISO/EN 471 compliant (curved textile stickers)
- Flame resistant according to ISO/EN 14116 & 11612 compliant (curved textile stickers)
- Straight or curved (better visibilty from the top for applications such as crane driver and workers on the ground)

MSA reflective stickers can be mounted within the production process (see the configurator on page 10) or can be ordered separately as an accessory

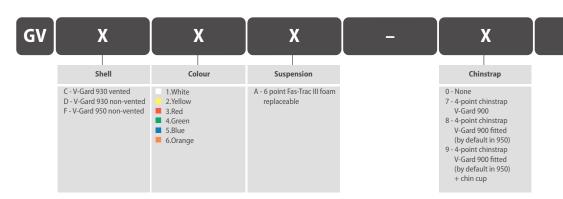






Configurable digit	Individual Part number	Description
Chinstraps		
GVXXX-1XXXXXXX-XXX	9100001	2-point chinstrap, zebra webbing (1)
GVXXX-2XXXXXXX-XXX	B0259378	2-point chinstrap, elastic (2)
GVXXX-3XXXXXXX-XXX	10147559	3-point chinstrap, zebra webbing, only suitable for Fas-trac III suspensions (3)
GVXXX-4XXXXXXX-XXX	10148055	4-point chinstrap V-Gard 520, zebra webbing (for V-Gard 500 possible at higher price) (4)
Lamp brackets		
GVXXX-XXXX1XX-XXX	not applicable	Front Plastic lamp bracket with Cable holder clip (rear) - 440 V electrical compliant (6)
GVXXX-XXXX2XX-XXX	not applicable	Front metal lamp bracket (7)
GVXXX-XXXX3XX-XXX	not applicable	Side plastic bracket for MSA by PELI lamps (XP, XS range) - 440 V electrical compliant (8)
Badge Holder		
GVXXX-XXXX5XX-XXX	not applicable	Front polycarbonate badge holder (5)
Reflective stickers		
GVXXX-XXXXX1X-XXX	GA90002-J0	Sticker set (2pcs) yellow, straight, vinyl (9)
GVXXX-XXXXX3X-XXX	GA90002-B0	Sticker set (2pcs) silver, straight, vinyl
GVXXX-XXXXX4X-XXX	GA90001-J0	Sticker set (2pcs) yellow, curved, textile premium
GVXXX-XXXXX5X-XXX	GA90001-R0	Sticker set (2pcs) orange, curved, textile premium
GVXXX-XXXXX6X-XXX	GA90001-B0	Sticker set (2pcs) silver, curved, textile premium (10)
GVXXX-XXXXXAX-XXX	not applicable	Sticker (x3) fitted (2x curved vinyl and 1x straight rear vinyl) (11)
GVXXX-XXXXXBX-XXX	GA90003-J0	Sticker set (2pcs) yellow, curved, vinyl
GVXXX-XXXXXCX-XXX	GA90003-B0	Sticker set (2pcs) silver, curved, vinyl
Spare Parts		
not applicable	10153518	Fas-Trac III premium foam sweatband (10 pcs)
not applicable	3335612-SP	Push-Key foam sweatband (10 pcs)
not applicable	696688	Cleanable Terri sweatband, to add on sewn PVC sweatband (set of 10 pcs)
not applicable	10162507	Push-Key suspension with sewn in PVC sweatband
not applicable	10162508	Push-Key suspension with replaceable foam sweatband
not applicable	10162752	Fas-Trac III suspension with sewn in PVC sweatband
not applicable	10162755	Fas-Trac III suspension with replaceable, washable premium foam sweatband

The V-Gard 900 helmet range uses a specific part numbering system to enable each configuration to have a unique part number attached to it.



V-Gard 900 helmet range features a dynamic design and a premium ABS shell for maximized strength. Available in two different models to suit your application and needs. Various cutomisation options (shell colours, stickers, badge holder, full colour printing), ease of use ans best-in-class comfort with Fas-Trac III suspension while optimizing wearer acceptance.

#### V-Gard 900 general helmets features

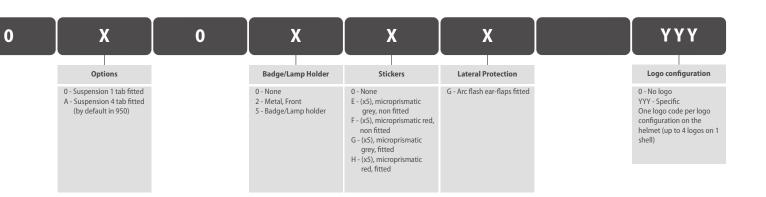
- Made of rubber-toughened ABS for strength and lateral crushing protection (LD option)
- Channel around perimeter of the helmet diverts rain and debris from
- GlareGard® under the brim to help dissipate bright light
- Protection against Molten Metal (MM option)
- Modern, dynamic and sportstyle shell
- Quick access to integrated eye protection (V-Gard 930) or face protection (V-Gard 950) eliminates a second piece of PPE.

#### V-Gard 900 Fas-Trac III suspension features

- 6-point Fas-Trac® III ratchet suspension with premium washable and replaceable sweatband
- Overhead straps made of woven polyester providing high comfort and long term, consistent shock absorption performance
- Balance and stability with the lower nape strap
- Comfort pad by separating the ratchet from the head cradles the head increasing comfort and cooling airflow
- Ratchet offers smooth rotation
- Easy grip knob adjustable even with gloves on
- Three levels of nape height adjustment giving superior nape fit







#### V-Gard 930

#### Integrated over-spectacles

- Balanced, low profile with premium eye protection
- Integrated over spectacle fits over all corrective glasses by sliding the suspension, and offer premium anti-fog and anti-scratch (EN166 K+N
- Intelligent adjustment and innovative rubber seal to ensure gap free eye protection on the face
- Grip area with rail system for quick and easy lens stowing
- Replaceable over spectacles without any tool





#### Vented version



EN166: 1 2C-1,2 B KN



Non vented version



EN166: 1 2C-1,2 B KN





#### V-Gard 950

#### Integrated visor

- Balanced, lightweight and low-profile electrician helmet
- Visor protects against impact, chemical splash, UV radiation, molten metal splash and electrical arc to GS-ET-29 class 1 (4kA)
- Premium anti-fog and anti-scratch coating visor fits over all corrective or safety glasses
- 2 face shield positions (up or completely down)
- Replaceable lenses without any tool
- Compatibility with hearing protection
- Helmet delivered in a protective reusable storage bag
- Reliable one handed smooth movement, even –gloved
- Complete with 4-point chinstrap for better helmet retention
- Optional arc flash ear-flaps to ensure side protection against arc flash



Zone 1, 2, 20, 21, 22



EN166: 2C-1,2 1 3 B 8-1-0 9 KN





17

When you need more than just a helmet MSA offers you various options providing additional protection, comfort levels and adaptations for environmental conditions.

#### Chinstrap and chincup

MSA chinstraps ensure a secure fit and stability.

- Easy to attach and remove from the shell thanks to plastic hooks
- Reliable, comfortable and adjustable
- 4 point version is perfectly adapted for work at height and doesn't interfere with the earmuffs
- Optional chin cup for 4 point chin strap offers higher neck & face coverage agains arc flash

All MSA chinstraps comply with the requirements of EN 397 when fitted to our range of V-Gard industrial safety helmets.

MSA chinstraps can be mounted within the production process or can be ordered separately as an accessory



#### Badge/ Lamp holder, Headband retainer clip

MSA offers innovative solution for combining badge and lamp holder.

- Robust and watertight for outdoor applications
- Clear material for perfect readability ultrasonic welded
- Ultrasonic welded during production process: Must be ordered together with the helmet.

#### Lamp holder:

- Designed for using with any headband lamp
- Used in combination with Headband retainer clip GA90042 prevents google and lamp headbands slipping at the rear. Available as spare part.

#### Badge holder:

- Can receive a business card, a magnetic access control badge, cards with worker specific "InCaseOfEmergency" information, or authorisation and licences (max dimensions: 85 x 54 x 0.8mm)
- Highly valueable for industries or construction sites when several operators are involved in the same work area.

Also available with metal front lamp bracket (V-Gard 930 only). See details on page 14.





#### Overspectacles and face shield spare

- Replace when damaged or scratched or when connected pivots are damaged
- Replaceable without any tool
- Possible to convert the V-Gard 930 (GVCXX & GVDXX) with over spectacles to an helmet with face shield by installing the face shield spare and vice versa





#### Arc Flash Ear-flaps for V-Gard 950

- Unique washable arc flash ear-flaps to ensure side protection against arc flash (antistatic and arc flash resistant textile according to GS-ET29 Class 1: 4kA)
- Green color inside (visible in upper position/stand by position) and grey color outside (visible in down position / safety position): you know when your workers are protected!
- Can be washed 5 times (washing machine / 40°C)
- Can be mounted within the production process or can be ordered separately as an accessory



#### Reflective stickers

- Impact resistant prismatic lens reflective sheeting precoated with pressure sensitive adhesive
- Microprismatic grey or red retroreflective stickers
- Applied during the production or ordered separately
- Visibility of the wearer at 360°
- Similar daytime and nighttime appearance
- Exceeds the reflectivity values of EN 12899-1:2007 for class RA2 materials
- MSA reflective stickers can be mounted within the production process or can be ordered separately as an accessory



#### Sweatbands and suspensions

• Fas-Trac III features a replaceable premium foam sweatband which is machine washable for maximum comfort

Configurable digit	Individual Part number	Description
Chinstraps		
GVXXX-1XXXXXX-XXX	9100001	2-point chinstrap, zebra webbing
GVXXX-8XXXXXX-XXX	GA90038	4-point chinstrap V-Gard 900 (1)
GVXXX-9XXXXXX-XXX (chinstrap +chincup)	GA90040	Chincup for V-Gard 900 4-point chinstrap (2)
Badge/ Lamp holder, Headband r	etainer clip	
GVXXX-XXXX5XX-XXX	not applicable	Front polycarbonate badge holder
not applicable	GA90042	Headband Retainer Clip
Reflective stickers		
GVXXX-XXXXXGX-XXX (fitted) GVXXX-XXXXXEX-XXX (non fitted)	GA90036	5 grey microprismatic retroreflective stickers (set for one helmet)
GVXXX-XXXXXHX-XXX (fitted) GVXXX-XXXXXFX-XXX (non fitted)	GA90037	5 red microprismatic retroreflective stickers (set for one helmet) <b>(6)</b>
Fabric Accessoires		
GVXXX-XXXXXXG-XXX	GA90033	Arc-flash ear-flaps (pair) (V-Gard 950 only) (5)
Spare Parts		
not applicable	696688	Cleanable Terri sweatband, to add on sewn PVC sweatband (set of 10 pcs)
not applicable	10153518	Fas-Trac III premium foam sweatband (10 pcs)
not applicable	GA90041	6-point Fas-Trac® III suspension with ratchet and replaceable, washable, foam sweatband
not applicable	GA90034	Clear face shield with connection rails (3)
not applicable	GA90035	Clear over spectacles with adapters (4)

#### Logo customisation

#### Why to customise your helmet?

- Use PPE as a **branding vector** for the company on site
- Strengthen the pride of your workers as a company or in a community
- Promote the safety image of your company
- **Spread messages** to the workers eg. "Think Safety"
- **Promote a specific event** such as "year of", "50 years of the company..."
- **Identify your workers** when they are operating on construction sites along with other contractors
- Identify the particular status or function of the wearer such as "Safety officer", "Team Manager", "Maintenance"
- **Identify** the first aid workers









#### Pad printing service

### MSA integrated process includes made in France clichés/plates, ink mixture, production

- Top-quality printing, durable and weatherproven
- Up to 4 logos per helmet can be printed (front, rear, left, right). On V-Gard 500, logo on peak is also possible.
- Possible to print logo, pictures and text
- Minimum order quantities start with 20 helmets (V-Gard 950: 24 helmets)
- 2 colour technologies:
  - **Pantone**: solid colour or colour gradient, up to 8 colours per logo
  - Image 2000™ Service: unique feature of MSA Logo Express premium printing 4C process, you can even print pictures or very complicated logos, relevant using high colour. White background needed except on white shells.





MSA's highly skilled graphic artists will accurately blend your logo to give an outstanding rendering when it's printed across the curve of the shell!











#### Logo Express easy process

#### For new logo:

- 1. Select your helmets
- Send your vectorial logo (eps, ai, cdr) or high resolution bitmaps (bmp, jpg, tif) with the info on 4C or pantone colour code and logo size to your local distributor.
- 3. Approve as soon as possible the validation form your distributor will send you within 3 days.
- 4. MSA produces your logoed helmets within 10 working days (for helmet orders >320 pcs MSA has to confirm individually).

#### For existing logo:

- Just place the order with your dedicated P/N (for each logo configuration a dedicated P/N)
- 2. MSA produces your logoed helmets within 10 working days (for helmet orders >320 pcs MSA has to confirm individually).





Validation form

#### Table with helmet models and dimensions per side

Models	Front	Sides	Rear	Other logo locations
V-Gard	60 x 90 mm	60 x 90 mm	60 x 90 mm	N/A
V-Gard 200	60 x 90 mm	60 x 90 mm	60 x 90 mm	N/A
V-Gard 500	60 x 90 mm	60 x 90 mm	30 x 80 mm	30 x 30 mm (peak)
V-Gard 520	60 x 90 mm	60 x 90 mm	30 x 80 mm	N/A
ThermalGard	60 x 90 mm	60 x 90 mm	60 x 90 mm	N/A
V-Gard 930/950	60 x 90 mm	60 x 90 mm	60 x 90 mm	30 x 80 mm (top of the badge holder)

Please contact us for any specific requests such as bigger dimensions or different locations than standard ones. MSA integrated Logo Express department can support you with their expertise.

#### Individual naming

MSA offers a front badge ID card holder option, identifying each worker on site. If you require individual naming MSA's cost effective solution is to use individual named stickers, allowing individual traceability of the PPE.

- Sticker adhesive and colorants preselected to ensure no long term effects on shell materials
- Minimum order quantity: 40 pieces (mixed names)

Part No	Description
GA90029	Sticker white (11,2 x 1,2 cm)
GA90025	Sticker transparent (11,2 x 1,2 cm) -not recommended for darker shell colours black, grey, blue, green etc.

Sticker approved with all MSA helmets during penetration and shocks tests, and after hot and cold conditioning.

#### How to proceed?

- 1. Just **ask your local MSA contact** to get the Excel form and **provide us with the list** of your workers.
- 2. **You will receive** then the individual stickers easily applied by the end user when the helmet is delivered.

Names and information supplied covered by EU data protection directive.



V-Gard accessory system is an integrated solution to protect your face, eyes, neck and chin. Frames, visors and chin protectors have been designed and certified as a system with MSA helmets and brow guard to ensure product compatibility, a crucial component of compliance and safety. With its trully global platform, MSA offers ideal protection around the globe.

#### V-Gard – Frames

#### Standard frames

- Slot adapters compatible with all MSA helmets and included in each frame package
- Suitable for electrical applications as standard frame contains no metal parts
- Sloped design makes it easy to clean the frame as rubbish just slides off the frame
- Works with or without earmuffs Adapter is stowable in case you use earmuffs, no more lost parts
- Standard frames can be ordered with or without debris control
- Replaceable debris control creates a tight seal between helmet and frame reducing potential ingress of contaminants\*
- Elevated Temperature (ET) version designed to withstand temperatures of 177 °C without warping, cracking or crazing



#### Universal frames

- Heavy-duty, flat rubber strap allows easy and secure placement of universal frame on a helmet
- Pivot location leaves accessories slots open so that other safety equipment like existing earmuffs can be used
- Sloped design makes it easy to clean the frame as rubbish just slide off the frame
- Universal frames can be ordered with or without debris control
- Replaceable debris control creates a tight seal between helmet and frame reducing potential ingress of contaminants
- Suitable for electrical applications as universal frame contains no metal parts

Standard frames									
m 3	V-Gard standard frame	10121266							
	V-Gard standard frame Elevated Temperature (ET) version	10121267							
	V-Gard standard frame with debris control	10115730*							
	Standard frame slot adaptor replacement	10117496							

* Except V-Gard 900 - Not Approved with V-Gard 930 or V-Gard 950 helmets	5
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Universal frames		
	V-Gard universal frame	10121268
	V-Gard universal frame, with debris control	10115822*
	Universal frame heavy duty rubber strap replacement	10117495

Standard & universal frames								
	Debris control replacement, for standard and universal frame	10117539*						

### V-Gard Headgear – Brow guard



All V-Gard visors are designed to fit MSA's V-Gard Headgear brow guard. From MSA, one visor that fits both helmets and brow guards for when you only need face protection.

Please see the separate V-Gard Headgear leaflet.



#### Chemical application quick reference guide

V-Gard Polycarbonate and Propionate visors are resistant to several chemicals. To proof individual performance we made intensive tests. The results shown in the table below were obtained under lab conditions  $(23 \pm 2^{\circ}\text{C} \text{ and } 25 \pm 5\% \text{ relative humidity})$  in the MSA test labs.

For testing purposes, V-Gard visors were secured to V-Gard frames in the "as worn" position.

Because each working environment is unique it is recommended you test your selected visor to see actual performance based on external factors and individual chemicals blend and concentrations. The results shown in this Quick Reference Guide are intended as a guide only to help in the selection of the proper V-Gard face protection products. While the table shows the performance against certain chemicals, it is not intended to be all-inclusive and such testing is not required by safety standards.

Use only V-Gard frames or V-Gard Headgear with V-Gard visors. Other product combinations are not certified and may not function as intended.

Chemical Family	Representative Chemical		Polycarbonate clear flat sheet (1.5 mm thick), coated (10154949, 10154950, 10154961, 10154962)	Polycarbonate moulded, clear (2.5 mm thick), coated (10115844, 10115853, 10115845)	Propionate clear moulded (2.5 mm thick), uncoated (10115851, 10115855, 10115856)
Organic Chemicals					
Alcohol	Ethanol	***	***	***	***
Aldehyde	Butyraldehyde	NR	NR	*	*
Aliphatic Hydrocarbon	Gasoline	*(1)	NR	***	*
Aromatic Hydrocarbon	Toluene	NR	NR	*	*
Ester	Butyl acetate	NR	NR	*	*
Ether	Ethyl ether	*	*	*	*
Ketone	Methyl isobutyl ketone (MIBK)	NR	NR	NR	*
Inorganic Chemicals					
Inorganic acid	Hydrochloric acid (35% wt)	***	NR	***	***
Inorganic base	Ammonium hydroxide (28% wt)	***	***	***	***
Inorganic base	Sodium hydroxide (25% wt)	***	NR	***	***
Other			'		
Bug spray	DEET	NR	NR	*	*

<sup>(1)</sup> Not Recommended (NR) against this chemical when using a PC, clear flat, uncoated, 1.52 mm visor (10115840).

Three-star (\*\*\*): No cracking observed on visor under microscope after chemical spray. Only negligible haze may have been observed. The visor passes impact testing at 120 m/s after spray.

**Two-star (\*\*):** No cracking observed on visor under microscope after chemical spray. Slight haze may have been observed, but an assessment of the extent of visor usability as a result is subjective. The visor passes impact testing at 120 m/s after spray.

One-star (\*): No cracking observed on visor by un-aided eye after chemical spray. Visible haze may have been observed, but an assessment of the extent of visor usability as a result is subjective. The visor passes impact testing at 120 m/s after spray.

NR (not recommended): Crack(s) and/or severe warp and/or severe haze (i.e., that which renders the visor unusable) can be observed on visor after chemical spray; or the visor fails impact testing at 120 m/s after spray.

In all cases, visor should be inspected and replaced if damaged in any way that renders it unusable in a particular environment.

#### Visors for general use

- Polycarbonate sheet visors reliably protect against impact, chemical splash and ultraviolet radiation
- Visors are contoured for a closer fit and improved resistance to impact and splash hazards
- Good optical quality allows permanent use
- 2 thickness depending on your needs and budget
- Can be worn with helmet mounted earmuffs
- Available with premium anti-fog/-scratch coatings
- Modified "nitrometer" versions, to fit V-Gard chin protectors
- Visors with green tint help alleviate eye strain and fatigue by reducing excessive glare, with Ultraviolet (UV) filter, great for outdoor use in bright light conditions.



		60		The second second	<b>(2)</b>	0	÷'nv	60		<u> 3.6</u>
Sheet V-Gard visor, PC, clear, 203x432x1 mm EN 166 (2C–1.2 1B)	10115836 10115837*	:	<b>*</b>	:			:			
Sheet V-Gard visor, PC, clear, 241x432x1 mm EN 166 (2C–1,2 1B)	10115863	•		•						
Sheet V-Gard visor, PC, clear, 203x432x1.5 mm EN 166 (2C–1,2 1B 389)	10115840	•		•			•		•	EN 166/8
Sheet V-Gard visor, PC, clear, AF/AS, 203x432x1.5 mm EN 166 (2C–1,2 1B 389 KN)	10154949 10154950*	-	<b>*</b>	-	:	:	:		:	EN 166/8 EN 166/8
Sheet V-Gard visor, PC, green tinted, AF/AS, 203x432x1.5 mm EN 166 (2–2 1 B 39 KN)	10154961 10154962*	-	*	-	:	:	:	-	:	

#### Visors for chemical and general splash protection

- V-Gard propionate visors provide good impact and splash protection especially for those applications where chemical splash hazards exist (mainly against organic chemicals such as solvants).
- Moulded and thicker with higher impact resistance than compareable acetate visors in the marketplace
- Superior optical quality for permanent use.







#### Visors for sophisticated purpose

- V-Gard PC moulded visors keep workers safe and comfortable in environments such as steel/smelting plants where they are exposed to high levels of heat and/or excessive glare
- Developed for heavy duty use and are thicker than most visors in the marketplace, which not only ensures impact resistance, but also reduces heat warping
- Moulded for superior optical quality
- Clear versions: electric arc (tested according to GS-ET-29 Class 1) and molten metal EN166 "8" & "9"



		66			0	÷'nv	60	<b>G</b> mana.	7./kg	
Moulded V-Gard visor, PC, clear, AF/AS 235x432x2.5 mm EN 166 (2C–1,2 1BT 389 KN) 264x432x2.5 mm EN 166 (2C–1,2 1BT 389 KN)	10115844	:	:	:	:	:		•	EN 166/8  EN 166/8	
Moulded V-Gard visor, PC, green tinted, AF/AS 235x432x2.5 mm EN 166 (2–2 1BT 39 KN)	10115845	•	•		•		•	•		•

<sup>(1)</sup> Tested according to GS-ET-29 class 1 (4kA)

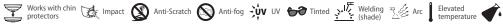
#### Visors for welding, cutting and brazing protection

- V-Gard PC shaded moulded visors protect against damage from impact and infrared (IR) radiation
- Designed for autogenous welding, metal pouring, gas soldering, and light cutting/brazing
- Developed for heavy-duty use
- Thick for high impact and heat resistance

		66		THE STATE OF THE S	<u>ښار :</u>	
Moulded V-Gard visor, PC, Shade 3 IR 203x432x1.8 mm EN 166 (3.0/4–3 1BT 39)	10115859 10115860*	:	<b>*</b>	:	:	:
Moulded V-Gard visor, PC, Shade 5 IR 203x432x1.8 mm EN 166 (5.0/4–5 1BT 39)	10115861 10115862*	:	<b>■</b> *	•	:	•

<sup>\*</sup> For chin protector adaptation (retractable chin protector: 97 mm in height, standard chin protector: 72.6 mm in height).





























#### Visors for radiant heat and elevated temperature protection

- V-Gard polycarbonate reflective coated visors deflect a significant amount of heat.
- The reflective coating helps filter IR radiation and dissipate radiant heat
- EN 166 'R' certified: spectral reflectance of IR between 780nm and 2000nm is >60%, helping to protect skin and eyes from IR exposure
- Clear or tinted versions are available for dark vs. glare-riddled environments

			÷μν	G
Moulded V-Gard visor, PC, clear reflective coated 241x450x1.8 mm - EN 166 (2C–2,5 1BT3R)	10115848	•	•	•
Moulded V-Gard visor, PC, green reflective coated 241x450x1.8 mm - EN 166 (2–4 1BT3R)	10115850	•	•	•



#### Visors for arc flash protection Class 2

#### MSA visor GS-ET-29 class 2= 7 kA and EN 166

- Patented injection moulded blend of dyes and nano particles in a polycarbonate matrix
- Superior protection from electric arc, convective heat, high temperatures, flying debris and UV radiation
- GS-ET-29 Class 2 (7 kA), EN166, EN 170 certified
- Light green offers highest visual light transmission according to GS-ET-29 (VLT Class 0) providing maximum light transmittance and colour recognition, under typical working conditions additional lighting may not be required
- Optically corrected to give a very clear view and reduce fatigue during use
- 2 visor versions: earmuff compatible or with extended ear protection
- Retractable chinquard certified in combination to protect the neck
- Certified in combination with MSA electrician helmets V-Gard, V-Gard 500 (unvented) and V-Gard 520

		66		THE STATE OF THE S		÷'nv	60		<u> </u>
V-Gard Visor Arc Flash Protective for chinguard combination; compatible with Ear Muffs** GS-ET-29 Class 2 (7 kA) EN166 (2C-1.2 MSA 1 B 8-2-0 3 CE 1883) EN 170 203x432x1.7 mm	10163457*	•	•	•			•		EN 166/8 GS-ET-29 class 2
V-Gard Visor Arc Flash Protective for chinguard combination; extended Ear Protection** GS-ET-29 Class 2 (7 kA) EN166 (2C-1.2 MSA 1 B 8-2-0 3 CE 1883) EN 170 203x438x1.7 mm	10163456*		•	•	•	•	•	•	EN 166/8 GS-ET-29 class 2

<sup>\*</sup> For chin protector adaptation (retractable chin protector: 97 mm in height).

<sup>\*\*</sup> Please order as well retractable chin protector (Part No. 10115828).





























#### Mesh visors

- Reliable protection with excellent visibility and water run off
- Wide stainless steel mesh honeycomb design, for enhanced visibility
- Visual Light Transmittance excellent at 74%!
- Brown shade to reduce light reflection
- Lightweight and durable with high strength thermoplastic edging
- Market leading impact protection certified to EN 1731/EN 166 "F" 45s/m
- Wide face coverage
- Suitable for use with helmet mounted earmuffs
- Visor available for retractable and standard chin protectors







Mesh visor compatible with a chin protector 10155775

#### V-Gard – Chin Protectors

V-Gard chin protectors provide extra protection from impact, arc flash and splash hazards to face and neck, approved in combination with frames and visors.



#### Retractable chin protector

- Unique retractable plates allow greater flexibility of head movement both up and down, as well as side to side
- Opaque material ensures safety and standards compliance with clear, tinted, shaded and coated V-Gard visors
- Certified in combination with MSA visor GS-ET-29 class2 for arc flash protection

Part No	Description
10115828	Retractable chin protector 97 mm in height



#### Standard chin protector

- Compact and lightweight design provides additional protection between chin and neck area
- Opaque material ensures safety and standards compliance with clear, tinted, shaded and coated V-Gard visors

Part No	Description
10115827	Standard chin protector 72.6 mm in height









#### left/RIGHT earmuffs

#### Passive earmuffs

Unique muffs designed to account for the anatomical individuality of the user

- Individual ear cups, left and right. The most comfortable protection on the market
- Helmet mounted and headband muff models
- 3 distinct wearing positions of helmet mounted models
- 3 attenuations levels
- 4 colours: blue, white, yellow, grey

#### **Electronic earmuffs**

Muffs enabling protection and listening at the same time

- Level dependent hearing protector CutOff: face-to-face communication, hearing and amplification of important sound and warning signals while beeing protected
- Hearing protector Radio FM: excellent radio reception and superior sound guality
- Dual: combination of CutOff and FM All feature e.g.:
- Sound levels from microphones and speakers are limited to max 82 dB(A)
- Easy to use operated by three distinct push buttons
- Battery save and low battery warning system



	LOW SNR 25 dB (H=27 dB, M=22 dB, L=15 dB)	<b>1</b> 0087438	□ 10087439	<b>1</b> 0087437	■ 10101995
left/RIGHT passive earmuffs	MEDIUM SNR 28 dB (H=29 dB, M=25 dB, L=17 dB)	<b>1</b> 0087429	□ 10087430	<b>1</b> 0087428	■ 10101996
	HIGH SNR 31 dB (H=32 dB, M=28 dB, L=21 dB)	<b>1</b> 0087423	□ 10087424	<b>1</b> 0087422	■ 10101997
left/RIGHT electronic earmuffs	SNR 27 dB (H=31 dB, M=24 dB, L=16 dB)	CutOff Pro 10111826	CutOff Pro	■ Dual Pro 10111832	■ FM Pro 10111829

Accessories for left/RIGHT earmuffs				
10092878	Hygiene kits for left/RIGHT Low			
10092879	Hygiene kits for left/RIGHT Medium			
10092880	Hygiene kits for left/RIGHT High			
10094605	Hygiene kits for electronic left/RIGHT			





#### Classic Line earmuffs

Range of muffs designed to provide economic and reliable solution for most environments where hearing protection is required.

- Patented spring design offers low pressure tension and a good level of comfort
- Three distinct wearing positions for ease of use
- Excellent grip even when wearing gloves



#### **EXC**

EXC features unique moulded inserts to ensure excellent noise attenuation for medium noise levels and provide enough space for the ears inside the cup.

Part No	Description
SOR10012	SNR 26 dB, H=29 dB, M=23 dB, L=15 dB



#### HPE+

In environments with very high noise levels, especially in low frequencies, HPE offers reliable protection. Thick, soft, foam-filled cushions provide good comfort and perfect seal.

Part No	Description
SOR12012	SNR 31 dB, H=32 dB, M=28 dB, L=22 dB



MSA offers a full range of high quality spectacles and googles. The following are just a selection. Please ask for separate leaflets.

The following selected models are the perfect solution to fix the headband on the rain gutter of a V-Gard 500 or 520 helmet with two special brackets.

Part No	Description	
GA90006	Bracket to attach a goggle to V-Gard 500/520 (2 clips)	





#### Altimeter

#### Hybrid design for universal use.

- Delivered with comfortable headband and lenght adjustable soft temples
- Headband option is ideal for use with earmuffs
- Complete eye enclosure and superior shock absorption.
- · Sightgard anti-fog coating with good antiscratch properties
- · Headband can be opened with one click without taking off the helmet



#### ChemPro

#### Fresh look, safe fit and complete protection.

- Protects against impacts, liquids, coarse dust and metal splash.
- "Soft touch" body adapts perfectly to the
- Coating options: Sightgard+ or OptiRock
- Exchangeable lens
- Indirect but effective ventilation





#### FlexiChem

#### Comfortable goggle with increased chemical resistance.

- · With an acetate lens it protects against splashes and large dust particles
- The pliable frame and indirect ventilation enhances comfort and fit
- Sightgard+ premium anti-fog coating EN 166 "N" with good anti-scratch properties.

Part No	Description			
10145583	Altimeter (with temples and headband) smoke, Sightgard coating, Premium UV400, EN 166: 5-2.5 MSA 1 FT CE			
10153915	Altimeter (with temples and headband) clear, Sightgard coating, Premium UV400, EN 166: 2C-1.2 MSA 1 FT CE			
10145597 ChemPro clear, OptiRock coating (durable high performance anti-fog coating with outstanding anti-scratch properties EN 166 "KN"), EN 166: 2C-1.2 MSA 1 BT 349KN CE				
10104671	ChemPro clear, Sightgard+ coating (premium antifog coating EN 166 "N" with good anti-scratch properties), EN 166: 2C-1.2 MSA 1 BT 349N CE			
10145578	FlexiChem clear, Sightgard+ coating (premium antifog coating EN 166 "N" with good anti-scratch properties), EN 166: 2C-1.2 MSA 1 FT 34 N CE			

#### Integrated eye protection Stow-Away\*

- Fully integrated head and eye protection. The Stow-Away "stows away" inside the helmet when eye protection is not required - protecting the visor from damage. Extremely comfortable, with no pressure points behind the ears.
- Compatible with helmet mounted earmuffs.
- For V-Gard and V-Gard 200 helmets.

Part No	Description		
10002674	Stow-Away visor, clear, coated antifog		
10002675	Stow-Away visor, tinted		





*V-Gard accessory system kits are designed to offer easy customer solutions for a variety of needs – all in one convenient box.* 

#### V-Gard Forestry kits

- Robust frame to withstand chainsaw rebound
- Reliable protection with excellent visibility and water run off
- Wide stainless steel mesh. honeycomb design, for enhanced visibility
- Visual Light Transmittance excellent at 74%!
- Brown shade to reduce light reflection
- Lightweight and durable with high strength thermoplastic edging
- Market leading impact protection certified to EN 1731/EN 166 "F" 45s/m
- Wide face coverage

#### Options:

- High visibility reflective stickers
- Retractable chin guard





#### Basic

#### Ideal for lumberjacking

- Orange V-Gard helmet with Push-Key
- Standard V-Gard frame
- V-Gard metal mesh visor
- EXC earmuffs 27 dB
- PVC neck cape

#### Premium

#### Complete kit for forest activities

- Orange V-Gard 500 vented helmet with Fas-Trac III and premium foam replaceable sweatband
- Standard V-Gard frame
- V-Gard metal mesh visor
- left/RIGHT earmuff 28 dB
- PVC neck cape

#### Premium with chin guard

### Ideal for tree lumberjacking and trimming

- Orange V-Gard 500 helmet vented with Fas-Trac III with premium foam sweatband
- Standard V-Gard frame
- V-Gard metal mesh visor with slots for chin guard
- left/RIGHT earmuffs 28 dB
- PVC neck cape
- · Retractable chin guard



Part No	Description	
GV161-001700E-000	Basic	
GV469-0017004-000	Premium (without reflective stickers)	
GV469-0017044-000	Premium (with reflective stickers)	
GV469-0018004-000	Premium with chin guard (without reflective stickers)	
GV469-0018044-000	Premium with chin guard (with reflective stickers)	



#### V-Gard Electrician Kit Basic EN 166

Components are pre boxed. Ideal for applications with limited arc flash risks.

- Helmet, V-Gard white with Push-Key suspension, PVC sweatband (EN 397 440 V AC and EN 50365)
- V-Gard frame (EN 166: 389 BT)
- Electrician visor basic V-Gard sheet visor, 203x432x1,5mm (EN 166 2C–1,2 1B 389)

Part No	Description
GV111-0024000-000	Basic Electrician Kit



### V-Gard Electrician Kit Premium EN 166 & GS-ET-29 class 2 (7 kA)

#### Most compact arc flash set GS-ET-29 class 2 available today!

Components are pre boxed. Ideal set for applications requiring arc flash protection, especially in confined spaces.

- Helmet, V-Gard 520 white with Fas-Trac III ratchet suspension, replaceable foam sweatband (EN 397 440 V AC and EN 50365 GS-ET-29 Class 2)
- V-Gard frame (EN 166: 389 BT; GS-ET-29 Class 2)
- Electrician visor Premium V-Gard arc flash visor compatible with earmuffs, retractable chin guard (EN 166 and GS-ET-29 Class 2 EN 166 2C-1.2 1 B 8 2 0 3)

Part No	Description	
GV919-0029000-000	Premium Electrician Kit EN166 and GS-ET-29 class 2	











MSA offers three categories of V-Gard winter liners:

- **Supreme:** multiple layers, permanent flame retardance, arc thermal performance, water repellent.
- Select: 2 layers of fabric, limited flame performance (25 or 50 washings).
- Value: provides excellent protection against cold with maximum economy.

All range is auto-certified Category 1 according to the following annex II of the PPE directive: "6.7 Clothing and/or accessories (whether or not detachable) designed and manufactured to provide protection against weather conditions which are neither exceptional nor extreme, for professional use". In addition, these liners have been added to the MSA V-Gard safety helmets certificates after checking of penetration and shocks test when used with helmets.

#### Flame retardancy

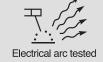
The MSA winter liners offer 2 level of protection against flame

- Supreme liners garments are made of special flame resistant fibers. Flame resistance cannot be removed by washing.
- Select liners garments have been chemically treated to ensure flame retardancy up to 50 washings. The flame resistance performance of our Select and Supreme liners have been tested at the specialist notified test house BTTG according to ISO EN 14116 paragraph 6.1, 6.1.4. Test reports are available on request.



#### Electrical arc

The Supreme liners in addition to cold and flame performance, offer protection from arc exposure:



- Resistant to exposure to an ATPV (Arc Thermal Performance Value) of 8 cal/cm<sup>2</sup>
- Tested to ASTM F 1959/F 1959M-06 a **E**1 test method
- Perfect combination with V-Gard 500 unvented, V-Gard frame and 2.5 mm PC GS-ET-29 arc tested visor.

#### Water Repellancy

• Supreme and Select liners are water repellent for outdoor operations, performance Grade 3 according to AATCC 22 2010



#### Knit cap

- Can be worn under any model of helmet
- Perfect ear protection without obstructing vision
- Helmet remains stable on the head



#### Attachment to helmet suspension

- 2 velcro straps, wrapped around helmet headband
- Offers proper stability and position
- Easy to don, no adjustment required



## Neck pocket for warming pack (Supreme only)

- Integrated pocket 9.5 x 5.7 cm to place a warming pack for enhanced warmth
- Warming pack not supplied with liners, available in most sporting goods retailers



#### Earmuffs compatibility

- Quilted, adjustable flaps to provide continuous cold protection with or without earmuffs
- For use with earmuffs won't compromise attenuation levels
- Earflap opens and stores with hook and loop on back of liner when in use with earmuffs





The Safety Company

	Part No	Description	Lenght	Warmth level	Flame retardancy	Water repellency	Withstands arc exposure	Can be worn with earmuffs	Sale Units
							Electrical are tested	60	in pcs
V-Gard Sup	oreme Liner	S							
	10118425	V-Gard Supreme liner	370 mm			•	-	•	3
	10118427	V-Gard Supreme liner, 2-piece	370 mm						3
V-Gard Sel	ect Liners								
	10129659	V-Gard Select liner, 2-piece	370 mm		50x	•			12
10	10118424	V-Gard Select liner, Yellow high visibility	370 mm		25x			•	12
V-Gard Val	ue Liners								
	10118417	V-Gard Value liner knit cap	300 mm						12
	10118418	V-Gard value liner can be worn over or under helmet	370 mm						12
1	10118419	V-Gard Value liner	280 mm						12
V	10118422	V-Gard Value liner	370 mm						12









MSA offers two innovative cooling pads. HyperKew<sup>™</sup> evaporative cooling provides extended relief from heat fatigue and heat stress.

- · Lightweight, durable and non-toxic
- Easy to activate and re-usable approx 100 activations
- 5–10 hours of cooling relief per soaking 6 to 12°C lower than the outside temperature!
- CE certified (PPE category 1)
- Both have passed testing to EN 397
- Accessories in V-Gard certificate

#### How it works?

A water management system created from the HyperKewl™ fabric absorbs and releases water within the multi-layered material.

- Simply submerge the product in water for 1 minute allowing the HyperKewl™ fabric to absorb the water
- Gently squeeze out the excess water, wipe dry and wear
- Before first use: follow activation proceeding above and let the product dry completely. This is necessary for the cooling fabric fibers to set into the product.
- The product can be activated 100 times
- For washing, it needs to be washed with a brush and light soap

#### Crown cooler

- Protect from dangerous heat
- · Hook and loop conveniently attaches easily to V-Gard helmet suspensions
- Colour: royal blue

Part No	Description
GA90022	Crown cooler



#### Crown cooler with neck shade

- Protect neck and head from dangerous heat and sun
- Hook and loop conveniently attaches to V-Gard helmet suspensions
- Colour: Hi-Viz orange (meets EN 471 requirement and doesn't attract insects.)

Part No	Description
GA90023	Crown cooler + neck shade













Neck capes provides protection from wind and rain, dust, debris and liquid splash.

Two different washable neck capes are available with all MSA helmet models. Both neck capes have to be fitted to the two rear tabs of the MSA suspensions.

# Part No Description GA90005 PVC fluo orange neckcape T1900700 Nomex orange neckcape

\* Oil, Gas and Petrochemicals

# PVC fluo orange neckcapeProtects from wind, rain, debris

and liquid splashMainly used in forestry applications



### Nomex orange neckcape

- Protects from limited flame spread
- Mainly used for OGP\* applications or steel industries



### Follow our V-Gard range on MSA Social Media









35





#### MSA V-Gard is a protection icon in the PPE world

You can find V-Gard helmets around the world in different markets and industries.

MSA V-Gards are the most recognised industrial helmets globally. Everybody knows its "V" shape, not only workers but famous people around the globe.

Everyday you will see in movies, TV programs and TV news V-Gard helmets on the heads of celebrities: Beyonce, Pope Francis, the Chilean miners, the French Prime Minister, the street art creator JonOne and even Walker the bear at a Scottish zoo for who's favourite toy is a V-Gard. Let's play recognise the "V" and send us any funny pictures or pictures of famous people wearing V-Gards.

#### V-Gard is our brand but also your brand.

Your direct contact

Great Britain
Hopton Park, Devizes , Wiltshire, SN10 2JP
Phone. 0800 066 2222
info.GB@MSAsafety.com