### E-1312 Welding Gloves

Especially designed for use in environments where heat is uncomfortable. Provides appropriate protection thanks to its high abrasion and puncture resistance. High burn resistance. Extra reinforcement on the thumb and palm.



#### Technical Specifications

Palm Material	Skin Leather			
Hand Top Material	Skin Leather			
Lining Material	Wool			
Size / Length	10/XL 35cm			
Box Quantity	30 Pairs			
Packaging	1 Pair			
Category	CAT II			
	EN 388:2016+A1:2018 (3222X)			
	EN 407 2020: (413X4X)			
Standards	EN ISO 21420:2020			
	EN 12477:2001+A1:2005 Type A			

#### REINFORCEMENT AREA and LINING INFORMATION



#### **REINFORCEMENT AREA**

The palm features reinforced buffalo leather sewn with aramid thread for extra protection.

**Aramid Yarn:** Due to its natural structure, it has a very strong strength and prevents the seams from coming apart easily.

#### LINING

Soft wool lining allows hands to work in comfort.

Specifies the reinforcement area.

#### STANDARDS

These gloves are designed to protect the hands against mechanical risks as defined in the PPE Regulation (EU) 2016/425. This product has passed EN ISO 21420 (General requirements and inspection methods for protective gloves), EN 388 (Protection against Mechanical Risks) and EN 407 (Protection against Thermal Risks) and EN 12477.



It is used in many industries in welding processes, handling and cutting of metal parts, assembly and coating processes, heavy metal processes, injection molds, cold and hot parts, repair, mining, load handling and iron and steel industry. It is suitable for deburring and hot metal working in the automotive and iron and steel industries and for working with sharp-edged sheet metal and metals.



#### STANDARD DESCRIPTIONS -

## EN ISO 21420:2020

#### EN ISO 21420:2020 General Specifications and Test Methods

This standard specifies the general requirements for glove design, construction, hazard protection, comfort, efficiency and marking and information applicable to all protective gloves. This standard also applies to arm protection. Some gloves designed for the most specialized applications, such as electrical technicians or surgical activities, are governed by specific stringent standards.

GLOVE SIZE	Suitable for Hand Size	Hand Circumference / Length	Min. Glove Length
6	6	152/160 mm	220 mm
7	7	178/171 mm	230 mm
8	8	203/182 mm	240 mm
9	9	229/192 mm	250 mm
10	10	254/204 mm	260 mm
11	11	279/215 mm	270 mm

#### EN 388:2016 EN 388:2016+A1:2018 Protective Gloves Against Mechanical Risks



abcdef

This standard covers specifications and test methods for protective gloves against **SPECIFICATIONS:** 

Protective gloves conforming to this standard shall meet all applicable specifications of EN 420. The performance level of a protective glove against mechanical risks shall be the higher level for one of the qualities (protection against abrasion, stab, tear, puncture and impact) classified according to the minimum characteristics of each level shown in the table below.

Note - Gloves that meet specifications for puncture resistance may not be suitable for protection against sharp-tipped objects such as hypodermic needles. **X** means that the test was not performed or cannot be performed.

PERFORMANCE LEVELS	1	2	3	4	5	
a - Wear resistance (number of cycles)	100	500	2000	8000	-	
b - Knife cut resistance (index)	1,2	2,5	5,0	10,0		)
c - Tear resistance (N)	10	25	50	75	-	
d - Puncture resistance (N)	20	60	100	150	-	
PERFORMANCE LEVELS	А	В	С	D	E	F
e - Cut Resistance (N)	2	5	10	15	22	30
f - Impact Protection	Pass (P) / Fail (no mark)					

\* For detailed information about the standards, you can access the EN European Glove Standards Guide at www.starlinesafety.com

#### STANDARD DESCRIPTIONS



EN 407:2020 Protective Gloves Against Thermal Risks

This standard covers the properties, test methods, information required to be provided and marking of protective gloves against heat and / or fire.

In the main pictogram for protective gloves against thermal risks, the performance levels are given in the following order.

a.Resistance to Ignition (0-4)

b.Contact Temperature Resistance (0-4)

- c.Transport Temperature Resistance (0-4)
- d.Radiant Heat / Radiant Heat Resistance (0-4)
- e.Resistance to small drops of molten metal (0-4)
- f. Resistance to large amounts of molten metals (0-4)

NOT E: Using an X instead of a number means that "the glove is not intended for the use covered by the relevant experiment".

PERFORMANCE LEVELS		1	2	3	4
Against Ignition	Flaming combustion Time (s)	≤ 20	≤ 10	≤3	≤2
Against ignition	Ember burning time (s)	-	≤ 120	≤ 25	≤5
Contact Heat	Contact Temperature (°C)	100°C	250°C	350°C	500°C
Contact Heat	Threshold Duration (s)	≥ 15	≥ 15	≥ 15	≥ 15
Convection Heat / Heat transfer delay (s)		≥4	≥7	≥ 10	≥ 18
Radiant Heat / Heat transfer delay (s)		≥7	≥ 20	≥ 50	≥95
Small Pieces of Molten Metal / Number of drops		≥ 10	≥ 15	≥ 25	≥ 35
Large Amount of Molten Metal / Molten mass (g)		30	60	120	200

### EN 12477 Protective Gloves for Welders

This standard is used for protective gloves used in manual metal welding, cutting and alloying operations. Protective gloves for welders protect the wrists and hands of the welder during the welding period. They protect against small splashes of molten metal, short-term contact with a restricted flame, conduction heat, contact heat and UV radiation from the arc. It also provides protection against spatial damage.

They are classified into two types according to their performance:

- Type A: Low proficiency (Other performance higher)
- Type B: High proficiency(Other performance lower)

NOT E: Protective gloves for special welding operations are excluded from this scope.

Maintenance and Cleaning We recommend cleaning gloves with a brush made of synthetic materials. Glove cleaning should not be made of hard and predatory materials. They should never be washed by hand or in the washing machine. Before use, it is the responsibility of the user to check whether the product is suitable for the intended use, whether it is complete and whether its protective functions are intact. The user must carry out an inspection for possible defects that could adversely affect the protective functions (holes, tears, damaged joints, etc.).



#### Service Life

Gloves must be used within five years from the date of manufacture. Many factors affect the service life of gloves such as cold, heat, chemicals, sunlight, and improper storage.



#### Storage

Storage is part of maintenance and cleaning, but is often overlooked. When not in use or during shipment, the glove should be stored in its original packaging that will keep it away from direct sunlight, chemicals and corrosive substances and protect it from physical

damage by hard surfaces or substances. The product should be stored in a dry and well ventilated place. Excessive humidity or intense light may adversely affect the quality of the product.

#### Order Information

MODEL	Size	Barcode	Box Quantity	Box Dimensions	RG Box Weight
E-1312	10 / XL	8680907550901	30 Pairs	33 x 40 x33cm	14kg.