

# Manual for Usage, Storage and Maintenance of Protective Clothing for Welders







Welder's protective clothing for women and men, model: RINO TEXTILE LIGHT (the list of models is presented in Table 2) including a protective blouse and protective bib and brace overalls, optionally protective waist-high trousers, can be used during welding and related processes. The clothing provides protection against short-lasting contact with flame (flame spread: level A1 and A2), heat penetration (radiation) and impact of convective heat: level B1), heat radiation (level: C1), splashes of molten iron (level E1). It is also resistant to contact heat (level: F1). According to standard EN ISO 11611:2015, the clothing has been classified within Class 1. Class 1 clothing provides protection against less hazardous welding techniques and situations which generate lower levels of impact of splashes and thermal radiation. Table no 1 contains guidelines on the welders' protective clothing selection criteria.

Composition: 100 % cotton (flame retardant finish).

The product conforms to the relevant requirements of the EU harmonisation legislation; with Regulation (EU) 2016/425 and standards: EN ISO 13688:2013, EN ISO 13688:2013/A1:2021 and EN ISO 11611:2015 | EN ISO 11612:2015

The declaration of conformity is available on the website: www.robod.pl/ce

	EN ISO 11611:2015	EN ISO 11612:2015	
	Klasa 1 A1+A2	A1+A2 B1 C1 E1 F1	
1	2	3	4

Explanation of Graphic Characters and Protection Efficiency Levels:

- 1) The product conforms to the relevant requirements of the EU harmonisation legislation: Regulation (EU) 2016/425.
- 2) The protective clothing meels the reguirements of standard EN ISO 11611:2015. It is classified into Class 1. The flame spread test was carried out in conformity with the requirements of EN ISO 15025, procedure A letter code A1 (inner igni(ion) and procedure B letter code A2 (edge ignition).
- 3) The protective clothing meets the requirements of standard EN ISO 11612:2015. A1 + A 2 The flame spread test was carried out in conformity with the requirements of EN ISO 15025, procedure A - letter code A1 (inner ignition) and procedure B - letter code A2 (edge ignition).
- B1 Resistance to the convective heat impact at level 1.
- C 1 Resistance to heat radiation at level 1
- E1 Splashes of molten iron at level 1
- F1 Resistance to contact heat at level 1 4) Make yourself familiar with these instructions before use.

Select the protective clothing size to fit the user figure based on the sizes presented on the label attached to the product. The welder's protective blouse should be used jointly with the welder's protective trousers (protective bib and brace overalls or protective waist-high trousers), see table no 2. The clothing should always cover the body, shoulders and legs. Always make sure that the clothing is accurately fastened (buttoned up) when being used.

Carry out an accurate visual inspection of the clothing before each use. Damaged, e.g. torn, ripped or burnt-through clothing should be immediately withdrawn from use or repaired. Regularly clean the clothing as recommended by the Manufacturer. Check the clothing after it has been cleaned. Furthermore, it is recommended to use additional personal protective equipment, e.g. protective gloves, footwear, eye and face protective equipment, hoods providing protection against occupational hazards. The protective blouse should be used jointly with the protective trousers (bib and brace overalls or optionally waist-high trousers).

## Transportation and Storage:

Store the clothing in its genuine packaging. The clothing should be stored in a dry and well ventilated room, far from sources of heat and light, protected against getting soiled, stained and damaged and from the impact of Chemicals. Do not store the clothing for more than 5 years following the date of purchase.

### Cleaning and Maintenance:











The clothing may go through maximum 25 maintenance cycles

- 1. Maximum washing temperature: 40 deg. C.
- 2. Do not use chlorine emitting compounds for bleaching.
- 3. Do not use drum drying.
- 4. Maximum temperature of iron sole piate: 150 deg. C.
- 5. Suitable for Chemical cleaning.

## Disposal:

Dispose in conformity to the local regulations mandatory in the given country.



# Manual for Usage, Storage and Maintenance of Protective Clothing for Welders







Hazards caused by UV radiation

Clothing can protect the user against common hazards related to the welding process. The hazards include skin exposure to the ultraviolet (UV) radiation which is generated during all electric arc welding processes. The UV radiation includes intensely dosed UVA, UVB and UVC radiation. As the fabric gets worn out, the clothing made of it can lose its protective properties and not longer provide necessary protection, especially when it is used in some electric arc welding processes, particularly the MIG/MAG welding), where the damages caused by the intense UV radiation, thermal radiation, abundant sparking or drops of melted metal can very quickly reduce its efficiency. In such cases, use higher protection levels such as additional leather sleeves, aprons etc., which may extend the protective effect of the clothing product and protect the user. To carry out a simple (e.g. weekly) check if this kind of clothing offers continuous UV radiation protection, place the clothing under a 100 W tungsten bulb at an arm's length (that is, about 1 m). If the light is visible through the fabric, the UV radiation will also run through it. The users should be instructed that if they experience symptoms similar to a sunburn that will mean that the UVB radiation gets through. In every case, repair (if repairable) or replace the clothing.

#### Note:

To operational reasons, not all live parts of the electric arc welding system can be protected from direct contact.

① When this protective clothing is used, additional body protectors, e.g. protective gloves, footwear, eye and face protection and hoods (in case of overhead welding) etc. may be required.

Additional electrical insulation layers will be necessary in situations when there is a higher risk of electrical shock. The clothing is intended only for protection against short-lasting and non-intentional contact with live parts of the circuit for arc welding. The clothing is designed so as to provide protection from an accidental short-lasting contact with electric wires with a voltage up to 100 V direct current.

① In case when additional clothing products are used to protect selected body parts, the basic clothing product should at least meet Class 1 requirements.

① The anti-flame protection level will be lower if the protective clothing for welders is contaminated with flammable substances.

① If the clothing has been accidentally splashed with chemical substances or flammable liquids, the user should immediately leave the hazard zone and carefully take off the clothing while making sure that neither the chemicals nor the liquids have come in contact with the skin. After being taken off, the clothing should be cleaned or withdrawn from use.

① Electric insulation provided by the clothing will be decreased when the clothing gets damp, soiled or saturated with sweat.

The materials used to manufacture the RINO TEXTILE LIGHT protective clothing have not been found to contain substances likely to cause allergies. If you have noticed any allergic reaction, leave the hazard zone, take off the clothing and consult a doctor.

We recommend keeping the manual for future reference.

#### Criteria for selection of protective clothing for welders (reference items)

TABLE NR 1	Process-wise selection criteria	Environment-wise selection criteria	
Manual welding techniques with light splash and droplet		Operation of machines, e.g.:	
formation, e.g.		oxygen cutting machines,	
• gas welding,		plasma cutting machines,	
• TIG welding,		resistance welders,	
MIG welding,		thermal spray machines,	
micropiasma welding,		workshop welders.	
• soldering,			
• spot welding,			
MMA welding (with an electrode covered with rutile).			

TABLE NR 2

Protective blouse for welders (1) model: RINO TEXTILE LIGHT

Protective bib-and-brace overalls for welders (2) model: RINO TEXTILE LIGHT

Protective waist high trousers for welders (3) model: RINO TEXTILE LIGHT

To ensure the required level of protection, the protective blouse (1) must be used togetherwith the protective overalls or trousers (2 or 3). Table no 2

ROBOD S.A. 83-050 Bąkowo Ordynacka 12 info@robod.pl www.robod.pl The type examination certificate was issued by a notified body: Sieć Badawcza Łukasiewicz – Łódzki Instytut Technologiczny

This user manual is applicable to the following protective clothing models:

UI. Marii Skłodowskiej-Curie 19/27

90-570 Łódź, Polska

(Numer Jednostki Notyfikowanej: 1439)