

- PPE for these parts of your body.
- If the garment has extra layers at the knees, this is only to enhance the strength of the garment or to enhance the comfort of the wearer. This is by no means a protection against knee injuries.
- If the garment has extra padding at the knees, this is there only to enhance the garment's strength and the wearer's comfort and is not intended to provide protection against knee injuries.
- This garment is suitable for wear during an entire workday and contains no toxic, carcinogenic, mutagenic, or other substances that adversely affect the health and hygiene of the wearer. There are no known allergic reactions due to skin contact with this garment.
- This garment can be recycled.
- Damage to this garment (e.g., holes and tears) will likely diminish the protection it provides. Regular checks on damage and wear and, if necessary, repairing or replacing the garment will ensure your protection.

#### Special warnings - heat and flame protection

- If splashed by molten metal, exit the work area and remove the garment carefully, ensuring the molten metal does not come into contact with skin. Depending on damage, the garment should either be cleaned or recycled. Please note that when in contact with molten metal, the garment may not protect against all burns when worn directly against the skin.
- It is impossible to protect all welding voltage carrying parts of arc welding installations against direct contact.
- This garment is designed to protect against brief contact with live parts of an arc welding circuit. Additional layers of insulation will be required where there is an increased risk of electric shock. The garment provides protection against short-term, accidental contact with live electric conductors at voltages around 100V (DC).
- This garment's flame-retardant properties will diminish if the garment is contaminated by flammable material (e.g., oil, dirt).
- Wetness, in the form of humidity and perspiration, will diminish the electrical insulation effect of garments designed for welding.
- An increase in the air's oxygen content will reduce the welding garment's protection against flame. Be especially attentive when welding in confined spaces where the atmosphere could become enriched with oxygen.

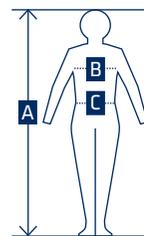
#### Special warnings - explosive atmospheres

- To ensure conductivity, contact between the garment and the wearer's skin is necessary. Please ensure that, as much as possible, the

garment is worn closed.

- To ensure the discharge of electrostatic charges, the garment must be grounded properly (e.g., maximum resistance, 10-8 Ohm).
- At the design stage, the manufacturer ensured that all metallic parts would be covered, during normal use, to prevent the generation of sparks. Please ensure that, while wearing this clothing, its metallic parts and accessories are covered at all times. Also make sure this garment covers, at all times, the clothing you are wearing under it (e.g., when you are bending or reaching).
- Do not attach any accessories or equipment to the outside of this garment unless they fulfill ATEX requirements (e.g., mobile telephones should be kept outside these work environments or turned off).
- This garment is not suitable for the risks related to working in oxygen-enriched environments.
- Electrostatic dissipative protective clothing is intended to be worn in Zones 1,2,20,21 and 22 (see EN 60079-10-1 and EN 60079-10-2) in which the minimum ignition energy of any explosive atmosphere is not less than 0.016mJ.
- Electrostatic dissipative protective clothing shall not be used in oxygen enriched environments, or in Zone 0 (see EN 60079-10-1) without prior approval of the responsible safety engineer.
- Under no circumstances should you remove this clothing in an explosive atmosphere or while handling flammable or explosive substances.
- Soiling will change the characteristics of the garment. Regular and thorough cleaning provides for the garment's continued performance (see care instructions).

#### Sizes



- A = total length (cm)
- B = girth of chest (cm)
- C = girth of waist (cm)

Consult the label in the garment to determine if the size is suitable for your body measurements.

#### Care and maintenance instructions

- Wash the clothing before first time wearing.
- Check the garment for damage before each wear.
- Entrust garment repair to professionals and be sure to use the materials used in original production.
- The frequency of cleaning should be relative to usage and to the degree of soiling.

- The materials used in the garment are suitable for domestic washing. To avoid damaging the garment we recommend washing the garment inside out, with fixtures (e.g., zippers, buttons, etc.) closed or fastened, and on a gentle cycle.
- No finishes are required to maintain the garment's flame-retardant characteristics.
- Wear will diminish the garment's antistatic properties; be sure to check the garment's capacity for protection regularly.
- Prolonged exposure to solvents, detergents, disinfectants, and stain removers will damage the garment.
- Clean or treat stains as soon as possible. Wipe grease and dirt with a damp cloth. Do not store soiled garments.

	The maximum washing temperature is 60°C / 140°F. Note: washing at lower temperatures will improve the service life of the garment. The garment's service life is also affected by the type and amount of detergent used. Reduce your footprint: wash less, save water and energy. Maximum 50 washing cycles for reflective tape.
	Do not use bleach or other chlorine based agents.
	Tumble dry at reduced heat (1 dot) Not exceeding 55°C or 131°F
	Ironing at a maximum sole temperature of 150°C / 302°F
	The garment can be dry-cleaned.

#### Disclaimer

Scandia is not liable for damages that result from the improper use or the abuse of this garment or as a result of not following instructions concerning proper maintenance and wear.

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# SCANPYRO AS

Protective Clothing



## User's Instruction

www.scandiagear.com

ROTTERDAM SINGAPORE HOUSTON DUBAI  
SINCE 1974  
MARITIME OUTFITTERS



# SCANPYRO AS

## Protective Clothing

### In compliance with:

EN 1149-5, EN ISO 11611 Class 1 – A1,  
EN ISO 11612 A1B1C1F1, EN 13758-2, IEC 61482-2

The clothing referred to in this user instruction complies with the essential requirements of the European Directive 89/686/EEC and / or EU Regulation 2016/425 concerning Personal Protective Equipment (PPE).

Type examination proved that this garment complies with the harmonized standards EN 13688 (2013), EN 1149-5 (2018), EN ISO 11611 (2015) class 1-A1, EN ISO 11612 (2015) levels A1 B1 C1 D0 E0 F1, EN 13758-2 (2006), and IEC 61482 (2018) class 1 and ATPV.

This garment's certification was conducted by the following notified body: Centexbel, Technologiepark 70, B-9052 Zwijnaarde (identification number: NB 0493).

The EU Declaration of Conformity (DOC) can be obtained through following link : [www.scandiagear.com](http://www.scandiagear.com)

## Reference

Following references are marked on the labels of these garments:

Coveralls : ScanPyro AS  
ScanPyro AS 003 (padded)  
Jackets : ScanPyro AS 001  
Trousers : ScanPyro AS 002

Read these instructions carefully prior to first wear and store them for future consultation.

## Application



EN ISO  
11612:2015  
A1B1C1D0E0F1

### EN ISO 11612:2015 - Protective clothing against heat and flame

This garment complies with standard EN ISO 11612:2015. The performance levels are: A1, B1, C1, D0, E0, and F1. Accordingly, the wearer is protected against short contact

with flame and limited protection against convection, radiation, and contact heat.

A1 indicates that flame spread has been tested using the surface ignition procedure.

- B indicates the performance level obtained for convection heat (1 is the lowest level, so to be used for limited risks)
- C indicates the performance level obtained for protection against radiation heat (1 is the lowest level).
- D indicates the performance level obtained for protection against molten aluminum (0 means that this capacity was either not tested or that the garment is not suitable for protection against this hazard).
- E indicates the performance level obtained for protection against molten metal (0 means that this capacity was either not tested or that the garment is not suitable for protection against this hazard).
- F indicates the performance level obtained for protection against contact heat (1 is the lowest level).



EN ISO  
11611:2015  
Class 1 A1

### EN ISO 11611:2015 - Protective clothing for use in welding and allied processes

This garment complies with EN ISO 11611:2015 for protective clothing used in welding and for work with comparable risks. This type of protective clothing is intended to protect the wearer

against small splashes of molten metal, short contact with flame, and ultra violet radiation.

EN ISO 11611 identifies 2 classes in which 2 is the highest. Alphanumeric codes A1 (surface ignition) and/or A2 (edge ignition) indicate how flame spread was tested. This garment complies with **class 1, A1** after 5 washes at 60°C / 140°F.

### Guidance for selection of class 1 garments

Class 1 garments are suitable for manual welding techniques with light formation of spatters and drops (e.g., gas welding, TIG/MIG welding, micro plasma welding, brazing, spot welding, and MMA welding [with rutile covered electrode]). Class1 garments are suitable for operating oxygen cutting machines, plasma cutting machines, resistance welding machines, machines used for thermal spraying, and bench welding.

### Guidance for selection of class 2 garments

Class 2 garments are suitable for manual welding techniques with heavy formation of spatters and drops (e.g., gas welding, TIG/MIG welding, MAG welding, micro plasma welding, brazing, spot welding, MMA welding [with basic or cellulose- covered electrode], self-shielded flux cored arc welding, gouging, oxygen cutting, thermal spraying).

Class 2 garments are suitable for use in confined spaces while operating oxygen cutting machines, plasma cutting machines, resistance welding

machines, machines used for thermal spraying, and bench welding.

### Information on Ultraviolet (UV) radiation hazards

ISO11611 indicates the minimum requirements for clothing to protect against hazards associated with welding, including UV radiation. UV radiation is produced in all electric arc-welding operations. As a result of wear, the garment may not continue to provide complete protection. Symptoms similar to those associated with sunburns indicate insufficient protection for the wearer. To check the garment's capacity, hold it up to the light of a 100W tungsten bulb at arm's length (approximately 1m away). If light can be seen through the fabric, UV radiation will affect the wearer. In such case, use higher levels of protection (e.g., leather apron and sleeves) or replace the garment.



EN 1149-5:2018

### EN1149-5:2018 Electrostatic properties

This garment is designed to prevent discharges of static electricity. This garment does not protect against main voltages nor does it

offer the wearer protection in oxygen-enriched environments.



IEC 61482-2  
:2018

### IEC 61482-2:2018 - Protective clothing against the thermal hazards of an electric arc.

Protective Clothing against the thermal hazards of an electric arc.

This standard is intended for protective clothing used for electro-technical work with electric arc hazards at medium voltages. The garments complying with this standard, guarantee that the consequences of exposure to an electric arc will not be aggravated by the clothing itself.

**Part 1-1:** Test methods – Method 1: Determination of ARC rating of material and clothing by using an open electric arc.

Test conditions:  
IEC 61482-1-1 ATPV method  
Min ATPV : 4 cal/cm<sup>2</sup>  
Arc current : 8 kA  
Voltage : 2000 V  
Distance to sample : 30 cms  
Duration : 0,05–1,5 sec  
Performance met:  
**ATPV= 6,1 cal/cm<sup>2</sup> - ELIM= 5,5 cal/cm<sup>2</sup>**

Note: The ELIM value is retrieved from the ATPV rating, which offers an extra safety margin on the ATPV outcome.

**Part 1-2 :** Test Methods – Method 2 : Determination

of arc protection class of material and clothing by using a constrained and directed arc (box test).

This method distinguishes 2 Arc protection classes (APC) for the short circuit current in the test; 4kA (APC 1) or 7kA (APC 2).

Other test conditions:

Voltage: 400 V  
Duration: 500 ms  
Distance from the mannequin to the box: 300 mm  
APC 1 - 4kA.

### Other test conditions:

Voltage: 400 V  
Duration: 500 ms  
Distance from the mannequin to the box: 300 mm  
Performance met: Class **1 - 4kA**.

### Notes:

- Requirements of this standard do not address electric shock hazards, but they can be used in combination with standards covering such hazards.
- Environmental conditions and risks at the working site shall be regarded.
- Deviations from the parameters in this standard may result in more severe conditions.
- Do not wear under garments (shirts and/or underwear) made of melting fibers



UV protection

### EN 13758-2:2003+A1:2006 UV protection

This clothing is designed to offer protection against exposure to solar UV radiation. The UPF measured is >50, meaning that the garment's

fabric blocks more than 98% of the harmful UV radiation. Garments in compliance with this standard offer the highest level of protection.

### Notes:

- Only those parts of the body that are covered are protected.
- Protection may be reduced through wear, when stretched, or when wet.

## General product use

- Even when wearing high quality protective clothing, please remember that your safety cannot be guaranteed under any circumstance.
- For full protection, the user shall wear a complete suit whose components provide the same level of protection (a suit means coveralls, a two-piece suit consisting of a jacket and a pair of trousers or a bib and braces).
- The design of two-piece suits takes into account an overlap of 20 cm between the upper and lower parts. Make sure to consider this when choosing your size.
- These garments do not offer protection for face, hands and feet. Make sure you use the adequate