









**RESPIRATORY PROTECTION** 



#### **EYE PROTECTION**



# **HEARING PROTECTION**







# **SPASCIANI 1892**

In 1892 Riccardo Spasciani understands the importance of designing and creating equipment to prevent accidents at the workplace and settles in a small laboratory in the heart of old Milan his company, which still bears his name.

MILANO



Thanks to a rapid and significant increase during the XX century, the Company moves first to Baranzate, where it remains for 46 years and then to Origgio, in a modern building which is now its General Headquarters. Here there are the administrative and commercial offices, the production and the laboratories of the Reaserch and Development department. The Laboratory, which has been always the pride of SPASCIANI, represents its essence and identity. All products are developed and then checked according to the European Standards thanks to specifics instruments. The military masks and the goggles for the soldiers of the First World War, the dust masks for the workers of XX century and the oxygen breathing apparatus for miners and fire fighters were born here. Thanks to its history full of important goals, SPASCIANI is now recognized as one of the most dinamic and solid companies of the sector, with its original patents which are still unique in the survey of the personal protective equipment. Leader in Italy, SPASCIANI has

a recognized position on the international market, thus acquiring the status of excellence of Made in Italy. Despite the numerous golas achieved in time, SPASCIANI SPA has never stopped covering its route in serach of continuous innovation and excellence.

It's this spirit that has guided the Company up to the acquisition of NUEVA SIBOL in Spain in June 2019.

The Spanish Company represents a fundamental asset for the growth of the Group. SPASCIANI SPA strenghens its production capacity in the filtration segment - high turnover market - and introduces in its commercial network new products such as disposable half masks, hearing protection devices and a new line of half masks and cartridges. Moreover, the Group strenghtens its position on the European market in a significant way.

# **THE RESEARCH**

#### Passion for research and innovation.

SPASCIANI design and creation focus in Origgio lab.

All products are tested in the laboratory, which certifies the quality and reliability according to the European rules and regulations, which govern the production and commercialization of PPE. Each product is the result of a continuous and precise research, which never betrays company history and identity, and always finds new materials and innovative solutions. The aim is just to create unique products through pioneer technologies in order to safeguard the human life.



# **PRODUCTS & SERVICES**

SPASCIANI offers a wide range of products which are conceived and produced for the protection of the breathing ways. They are divided in filtering devices (to be used in environments with oxygen value > 17%) and isolating devices (PPE independent from the surrounding environment, to be used in case it's not enough to filter the air). To complete the offer, SPASCIANI produces and distributes devices for the hearing protection and technical spectacles and visors for the eye protection.

As a matter of fact, there are numerous services and support activities, adapted to individual needs:

- Training courses
- Ordinary and extraordinary maintenance plans
- Support for choosing the best suitable product
- Feasibility study for new products
- Chemical and physical tests in the laboratory

# **APPLICATION AREAS**



Firefighting

industry



Asbestos

removal





Agriculture and food industry

Construction industry





industry

Mechanical industry

Marine

MFD

Chemical

industry



Refinery oil & gas







Painting



Escape

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#### **0**<sub>2</sub> < 17%

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# $\begin{array}{c} \textbf{MARKING} \\ \textbf{C} \in \textcircled{O} \quad \textcircled{S} \end{array}$



# SPASCIANI



Montes

ñes

The Spanish Branch focuses on the production and storage of consumable PPE, such as disposable half masks and all the products for hearing, eye and head protection.



Luino

Lago Maggior

Lavena Ponte Tresa

Induno Olona

Vedano Olona

Cairate

Busto Arsizio

Legnano

enta

Varese

allarate

Lugano

Chiasso

Lainate

Rho

Cislago

Sedriano

grasso

Como

Cantù

In the Headquarter based in Origgio there are the administrative and commercial departments, the specialised production and the laboratories of Reserach and Development of all the products devoted to the protection of the breathing ways.

Milan—

Sesto San G

Erba

Inverigo

Giussano

Seregno

Lisso

Rozzano

Corsico

Pieve Emanue



va Manara

Pavia

7









Foldable filtering halfmasks are devices that protect against toxic solid dusts and solid or liquid aerosols (water or oil-based).

Their wide surface ensures both a greater coverage of the user's face and a lower breathing resistance.

The facepiece is completely welded and its material does not release fibers.

Its foldable shape allows an easy storage

The exhalation valve (optional) reduces exhalation resistance and increases the user's comfort, thus facilitating the expulsion of hothumid air to the outside.

The nose clip allows an optimal adaptation of the face piece the to the different shapes of the face; while the elastics facilitate its correct positioning on the face.

The **D** marking (clogging test with Dolomite powder) guarantees an effective protection even in very dusty environments.

Some models are equipped with a layer of activated carbon which protects against unpleasant odors caused by gases and vapors, both organic and acidic, including ozone (ideal for welding operations), in concentrations below the threshold limit value (TLV).

Filtering halfmasks are available in a wide range of models to meet the most different and demanding requirements.

#### The RANGE PLUS is composed of 8 models

P/N	Description
WSB14011004	440 P1D FFP1
WSB14011013	440 P1DV FFP1 WITH VALVE
WSB14011019	550 P2D FFP2
WSB14011015	220 P2DV FFP2 WITH VALVE
WSB14011018	550 P2DV FFP2 WITH VALVE
WSB14011017	330 P2DVC FFP2 WITH VALVE AND CARBON
WSB14011021	990 P3DV FFP3 WITH VALVE
WSB14011020	330 P3DVC FFP3 WITH VALVE AND CARBON

The half masks of the range PLUS are distinguished by:

#### Models: wide range

Packing: single packing that allows you to maintain a high level of hygiene, combined with the possibility of opening the device without touching the internal part which is in contact with the user's face.
Performance: high in terms of filtering efficiency and respiratory resistance

- Materials: technological and of high quality
- Appearance: robust
- D marking (clogging test with Dolomite powder) which means
- high efficiency in very dusty environments
- Use: Disposable



## **FOLDABLE FILTERING HALF MASKS**

#### The **RANGE REUSABLE** is composed of 4 models

P/N	Description	
WSB14011019R	R2000 P2D FFP2	
WSB14011018R	R2000 P2DV FFP2 WITH VALVE	
WSB14011017R	R2000 P2DVC FFP2 WITH VALVE AND CARBON	
WSB14011021R	R3000 P3DV FFP3 WITH VALVE	



• Use: the halfmasks can be cleaned with a moistened cloth and disinfected, so as they can be reused

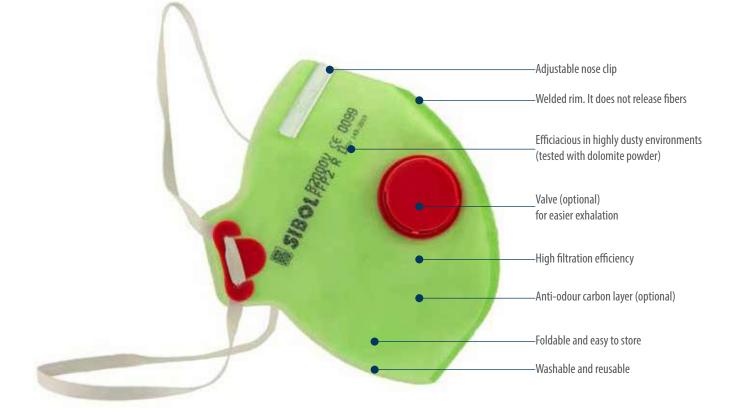
Appearance: robust

• Packing: single packing that allows you to maintain a high level of hygiene, combined with the possibility of opening the device without touching the internal part which is in contact with the user's face.

• Performance: high in terms of filtering efficiency and respiratory resistance

• **D marking** (clogging test with Dolomite powder) which means high efficiency in very dusty environments





#### Reusable

#### The **RANGE ECO** is composed of 5 models

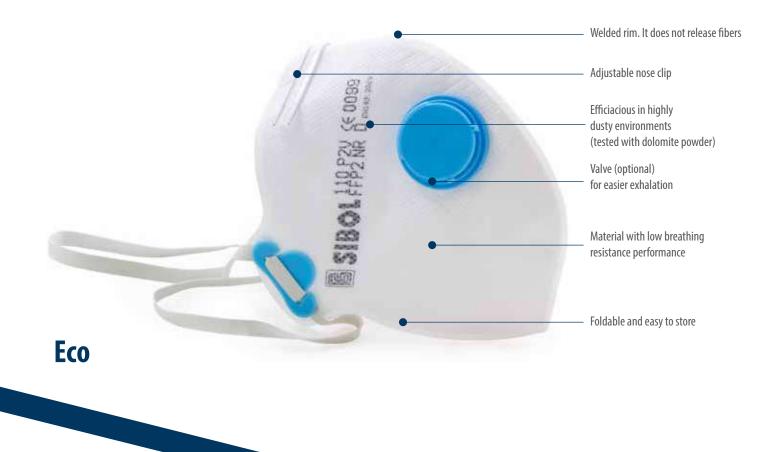
P/N	Description
WSB14011006	110 P1D FFP1
WSB14011008	110 P1DV FFP1 WITH VALVE
WSB14011058	110 P2D FFP2
WSB14011059	110 P2DV FFP2 WITH VALVE
WSB14011057PI	150 P3DV FFP3 WITH VALVE

The half masks of the **range ECO** are distinguished by:

- Packing: in light carton boxes
- Performances: good performances in terms of filtering efficiency and breathing resistance
- Materials: technological and of good quality

• **D marking** (clogging test with Dolomite powder) which means high efficiency in very dusty environments

Use: Disposable





# **CUP FILTERING HALF MASKS**



Foldable filtering halfmasks are devices that protect against toxic solid dusts and solid or liquid aerosols (water or oil-based). Their shell-shaped wide surface ensures both a greater coverage of the user's face and, thanks to the nose clip, fits perfectly from an anatomic point of view. The harness is with elastic bands.

The exhalation valve (optional) reduces exhalation resistance and increases the user's comfort, thus facilitating the expulsion of hothumid air to the outside.

The device is made of a soft multi-layer material, of non-woven fabric (TNT).

The **D marking** (clogging test with Dolomite powder) guarantees an effective protection even in very dusty environments. Some models are equipped with a layer of activated carbon which protects against unpleasant odors caused by gases and vapors, both organic and acidic, including ozone (ideal for welding operations), in concentrations below the threshold limit value (TLV).

The half masks of the **RANGE PLUS** are distinguished by:

- Models: wide range to cover all the demands
- Performance: high in terms of filtering efficiency and respiratory resistance
- Harness: with adjustable elastic bands
- Accessories: Internal nose clip
- Materials: technological and of high quality
- D marking (clogging test with Dolomite powder) which means
- high efficiency in very dusty environments
- Use: Disposable

#### The **RANGE PLUS** is composed of 6 models:

P/N	Description
WSB14012825	825 P1D FFP1
WSB14012825V	825 P1DV FFP1 WITH VALVE
WSB14012826	826 P2D FFP2
WSB14012826V	826 P2DV FFP2WITH VALVE
WSB14012826VC	826 P2DVC FFP2 WITH VALVE AND CARBON
WSB14012823V	823 P3DV FFP3 WITH VALVE





## **CUP FILTERING HALF MASKS**

The **RANGE ECO** is composed of 4 models:

P/N	Description
WSB14012801	801 P1D FFP1
WSB14012802	802 P2D FFP2
WSB14012802V	802 P2DV FFP2 WITH VALVE
WSB14012803V	803 P3DV FFP3 WITH VALVE

The half masks of the **RANGE ECO** are distinguished by:

• Performance: good in terms of filtering efficiency and respiratory resistance

- Harness: with fixed elastic bands
- Accessories: external nose clip
- **D** marking (clogging test with Dolomite powder) which means high efficiency in very dusty environments
- Use: Disposable
- Packing: in light carton boxes







Eco







## **HALF MASKS**

Professional, durable and decontaminable half masks to be used with the suitable anti-gas, dust and combined cartridges. These halfmasks can be used for sprayaing, for handling toxic substances and gases, solvents, pesticides and dusts. They are suitable to be used in chemical and pharmaceutical industries and in agriculture.

Cartridge masks and half masks		
102000000	Half mask DUO prolonged use	
102530000	Half mask DUETTA limited maintenance	
WSB14051560	FIT MASK P87. Blue TPE. Harness to the head FIT MASK 987. Blue TPE. Harness to the head	
WSB14051565		
113090000	Mask TR 2002 "DUPLA"	
Kit cartridge half masks		
103100000	DUETTA A1B1P2 + 50 prefilters BRICOLAGE	
103110000	DUETTA + cartridges 2040 A2P2 NR	
102100000	Kit DUO + cartridges 2040 A2P3 R	
102110000	Kit DUO + cartridges 2040 A2P2 NR	











#### **HALF MASKS**



## Fit Mask 87

#### FIT MASK 87

Twin-cartridge halfmask made of TPE, which is an odourless, hygienic and flexible material that easily adapt to differnt shape of the face. The one-pice headharness, with four points of connection integrated in the mask body, allows an homogeneous distribution of the pressure on the head and reduces the risk of leakage.

The internal rim of the mask body grants a perfect seal.

Thanks to the large volume of the halfmask and to the presence of the exhalation valve, the breathing resistance is very low. According to the types of filters used and chosen among the ones of series 87, this halfmask can be used for different applications.



#### Fit Mask 987

#### FIT MASK 987

Single-cartridge halfmask made of TPE, which is an odourless, hygienic and flexible material that easily adapt to differnt shape of the face.

The one-pice headharness, with four points of connection integrated in the mask body, allows an homogeneous distribution of the pressure on the head and reduces the risk of leakage.

The internal rim of the mask body grants a perfect seal.

Thanks to the large volume of the halfmask and to the presence of the exhalation valve, the breathing resistance is very low. According to the types of filters used and chosen among the ones of series 87, this halfmask can be used for different applications.

#### **HALF MASKS**



**DUETTA** is ideal for spray painting, pesticides spraying and for the handling and spilling of chemicals. Thanks to its soft edge, it fits comfortably on the user's face, by covering both his mouth and nose. A rigid shell supports the filters (it is always used with twin cartridges), optimally distributing their weight

Half mask **DUETTA** stands out for:

The harness made up of an elastic fabric band and a nape rest, which is particularly easy to adjust

Two valves integrated in the face piece – inspiration and expiration valve – make the respiration easier

The air, inspired through the correctly mounted filters, reaches nose and mouth, whereas the expired air is released in the outer environment through the exhalation valve. **DUETTA**, in combination with Spasciani cartridges series 2000, represents the filtering device with the best value for money. The filtering cartridges can be matched with special prefilters that preserve the exhaustion of the dust part of the filter in case of use in particularly dusty environments.



**DUO** is a professional durable halfmask that can be decontaminated. It is ideal for use in the handling of harmful chemicals, toxic gases, solvents, dusts and in spray painting.

This halfmask is suitable for workers employed in chemical or pharmaceutical industry, in agriculture and in the grinding of minerals.

Halfmask **DUO** stands out for:

Halfpiece made of anatomically moulded rubber, which can easily adapt to the user's face, thus ensuring the tightness of the halfmask A four-point harness made of an elastic band equipped with a with moulded polyethylene nape rest and a quick adjustable buckle. The harness is wide, comfortable and well-balanced thanks to its fourpoint attachment. The quick adjustable buckle facilitates donning. A mushroom-shaped rubber exhalation valve protected by a snap-in pre-chamber / cover. The valve facilitates the emission of hot and humid exhaled air, thus preventing it from accumulating inside the mask body

Two bayonet attachments made of anti-shock and anti-solvent plastic material, where appropriate filters chosen among series SPASCIANI 2000 must be applied. The bayonet connection is reliable and resistant both from a physical and chemical point of view (antisolvent)

We suggest you should use DUO halfmask in combination with filtering cartridges series SPASCIANI 2000. These filtering cartridges can also be combined with special prefilters that preserve the exhaustion of the dust part of the filter in case of use in particularly dusty environments.

#### HALF MASKS



Dupla adapter

Negative pressure full face mask with threaded connector EN 148-1. This mask can be used both with filters with threaded connectors EN 148-1 and with the special cartridges Spasciani series 2000. This mask is composed of:

- Ergonomic and bellows double sealing rim
- High visbility panoramic visor
- Connector group which integrates the exhalation valve, the speech diaphragm, the valve lid gasket and inhalation valve
- Inner half mask
- Five point harness
- Carrying strap

#### **KIT DUO and KIT DUETTA**

Made up of halfmask DUO or DUETTA, supplied in a carton box already including a couple of ready-to-use cartridges series 2000.

The type of filter chosen depends on the use. For the protection against viruses and bacteria, we supply kits DUO/DUETTA equipped with P3 filters. The other types of cartridges supplied with the kits are suitable for the combined protection organic gases + dust (A2P2/P3) or multipurpose anti-gas + dust (ABEK1P3).

The cartridges can be used also with special prefilters that preserve the exhaustion of the dust part of the filter in case of use in particularly dusty environments.





#### **Kit examples**

KIT DUO + cartridges 2040 A2P3 R KIT DUO + cartridges 2040 A2P2 NR KIT DUO + cartridges 2030 LD P3 R KIT DUETTA + cartridges 2040 A2P3 R KIT DUETTA + cartridges 2040 ABEK1P3 R KIT DUETTA + cartridges 2030 LD P3 R KIT DUETTA + cartridges 2030 A2

## FILTERS SIBOL 87 AND 987

Filters **Series 87** are equipped with a threaded connector M66x6 to be used, in pairs, on half masks **FIT MASK 87**. They are available in various gas, dust P2 or P3 models or combined P2 and P3 for the protection against gases and dusts to offer a complete protection in all sectors.

They are compact and light weight filters which do not interfere with the user's field of vision.

Filters **Series 987** are equipped with a threaded connector M66x6 to be used, singularly, on half masks **FIT MASK 987**.

They are available in various gas, dust P2 or P3 models or combined P2 and P3 versions for the protection against gases and dusts to offer a complete protection in all sectors

Filters have to be chosen according to the type and to the concentration of the toxic gas present in the environment. Filters may be re-used until their saturation. The end user becomes aware of saturation when he starts perceiving the smell/taste of the toxic gas and an increase in breathing resistance. At that point, filters have to be replaced in a safe zone, free from any dangerous substance.

Filters SIBOL are certified according to EN 141:2002, EN 143:2000+A1:2006 e EN 14387:2004 + A1:2008.

Series 2000	
113930000	2030 LD P3 R
113900000	2030 A2
114170000	2040 A2P2
114000000	2040 A2P3 R
113970000	2030 B1
114150000	2030 B1P2 NR
114040000	2040 B1P3 R
113880000	2030 A1B1
114110000	2030 A1B1P2 NR
114070000	2040 A1B1P3 R
113980000	2030 E1
114160000	2030 E1P2 NR
114050000	2040 E1P3 R
113960000	2030 A1B1E1
114140000	2030 A1B1E1P2 NR
114030000	2040 A1B1E1P3 R
113990000	2030 K1
114130000	2030 K1P2 NR
114060000	2040 K1P3 R
113890000	2030 A1B1E1K1
114120000	2030 A1B1E1K1P2 NR
114080000	2040 A1B1E1K1P3 R
155100000	SET 2 CARTUCCE 2040 A2P3 R



Reusable for more than one workshift. Possibility of disinfection

Compact filter, to be used with Spasciani

Protection against gases (active carbon), against dust (filtering disc P3) and combined (carbon + P2/P3)

#### Cartridges

(C0426 & ALE)

Series 87	
WSB14052314	87 A1
WSB14052011	87 A2
WSB14052012	87 B1
WSB14052013	87 A1B1
WSB14052114	87 A1B1E1
WSB14052014	87 K1
WSB14052025	87 A1B1E1K1
WSB14052016	75 ST P2
WSB14052017	76 ST P3
WSB14052316	87 P3
WSB14052312	87 A1P3
WSB14052111	87 A2P2 *
WSB14052311	87 A2P3
WSB14052113	87 A1B1P2 *
WSB14052115	87 A1B1E1P2 *
WSB14052317	87 A1B1E1K1P3
WSB14052123	Prefilter 87 P2
WSB14052124	Prefilter 87 P3 R

Series 987	
WSB14052001	987 A1
WSB14052002	987 B1
WSB14052214	987 A1B1E1
WSB14052004	987 K1
WSB14052015	987 A1B1E1K1
WSB14052006	82 ST P2 R
WSB14052018	987 P3 R
WSB14052211	987 A1P2 *
WSB14052104	987 A1B1E1P2 *
WSB14052023	Prefilter 987 P2



Compact and light filters reduced dimension so as not to interfere with the visual field

Threaded connection (maximum reliability on mask and filter connection)

Replaceable dust prefilters (P2 and P3) available to create combined filters

### Series 87



#### Series 987

Threaded connection (maximum reliability on mask and filter connection)

Low breathing resistance

High filtration efficiency

Replaceable dust prefilters (P2 and P3) available to create combined filters



# MASKS WITH THREADED CONNECTOR 🍙 🕼 🕗 🙆 🚱 🌚

These masks are equipped with a standard threaded connector EN148-1 and as such they can be used with all devices provided with the same connector (gas and particle filters, negative pressure BA, air line etc.).

**ST 85** is a professional and durable half mask. It is ideal for chemical and pharmaceutical companies, agriculture and mining industry. **TR82** and **TR2002** are masks with wide visibility visor and speech device. These masks are available in TPE, EPDM or Silicone.

SPASCIANI filters are available in many versions and capacities with high performances.

They are the result of the fruitful Research & Development and of the technology improvement.

Consult the table "GUIDE TO FILTER SELECTION" at page 114.





Masks with threaded connector EN 148-1		
111200000	ST 85 half mask	
113020000	TR 2002 CL2 full face mask	
113030000	TR 2002 CL3 full face mask	
113080000	TR 2002 CL3 full face mask yellow silicone	
112190000	TR 82 full face mask	
112240000	TR 82 full face mask hard coat visor	
112170000	TR 82 full face mask yellow silicone	
112220000	TR 82 full face mask safety glass	
112250000	TR 82 full face mask safety glass silicone	



# TR 2002 CL3

**TR 2002 CL3** is a mask fitted with a panoramic visor scratch and solvent resistant polycarbonate visor. It features two distinct areas to permit unaltered vision even downwards to see possible obstacles. The visor is Optical Class 2 (EN166).

The seal on the face is obtained by a double revert flap made of EPDM

or Silicone. The head harness with self-adjusting buckles is made of EPDM. The modern and endearing design allows a comfortable wear and an easy dismantling for cleaning and maintenance. The shape of the facepiece permits the use of safety caps and ear muffs. The mask is **Class 3**.



Masks with threaded connector EN 148-1	
113080000	Mask TR 2002 CL3 in silicone
113030000	Mask TR 2002 CL3 scratch resistant visor



#### TR 2002 CL2

**TR 2002 CL2** keeps the major characteristics of a modern and endearing design, comfortable wear and easiness of dismantling for maintenance and cleaning of the version in Class 3.

The main differences in respect to the better performing model are in the double revert seal facepiece which is made of TPE.

Moreover the wide panoramic visor is made of natural polycarbonate, it keeps the feature of avoiding vision distortion as all TR 2002. This mask is **Class 2**. More precisely it is suitable to all activities where resistance to radiant heath is not required.



Mask TR 2002	CL2	
1130200000	Mask TR 2002 CL2	

**TR 82** is a mask fitted with natural polycarbonate visor providing a wide field of vison. The seal on the face is obtained by a double revert flap made of EPDM or Silicone. The head harness with self-adjusting buckles is made of EPDM.

The classic design allows a comfortable wear particularly to thin or female faces. The maintenance is very simple and it is possible to easily replace the visor.

This mask is **Class 3**.

Masks with t	Masks with threaded connector	
112190000	Mask TR 82	
112240000	Mask TR 82 Solvent and Scratch resistant visor	
112170000	Mask TR 82 Yellow Silicone	
112220000	Mask TR 82 Safety Glass	
112250000	Mask TR 82 Safety Glass Visor Silicone	

TR87

Safety Glass

112220000





# TR 82 E

This mask is specifically designed to hook to the helmets of firefighters, the Police and Civil Protection. It meets DIN 58610. The unique anchorage system is complete with small levers which permit to adjust the tension of holding straps. This gives a perfect adherence to the face and a stable and solid helmet/mask combination. The **TR 82 E** is fitted with scratch and solvent resistant polycarbonate visor giving a wide field of vison. The seal on the face is obtained by a double revert flap made of soft EPDM. The maintenance is very simple and it is possible to easily replace the visor. This mask is **Class 3**.

Outer facepiece moulded in EPDM rubber

Wide visibility visor moulded in scratch and solvent resistant coated polycarbonate

Two anchorages to connect the mask to the helmet

Strap around the neck for carrying the mask during rests

Mask TR 82 E	
112100000	Mask TR 82 E

**ST85** is a half facepiece made of EPDM. Anatomically shaped it adapts itself to the user's face contour. The four pivoting rapid buckles allow a fine adjustment of the tension of the straps for the maximum comfort. The ST 85 is durable and decontaminable. It can be disassembled in all its components which snap into the elastic facepiece body. ST 85 is suitable for the handling of dangerous chemicals, toxic gases, solvents and dusts and for general use in chemical industries.

**RESPIRATOR DIN** is a single filter half mask in hypoallergenic black rubber, which easily adapts to any face shape. Head harness is also available as elastic band. The harness attachment points are integrated into the mask, so as to reduce the risk of leakage; moreover, the internal edge of the mask body guarantees a perfect seal. Thanks to the two exhalation valves, the exhaled hot-humid air flows freely, increasing operator comfort. Depending on the type of filter used, the half mask can be used for different applications.



Natural rubber body

Adjustable harness

High efficiency exhalation valve

Compact and lightweight design

**ST 85** 

ES EN14383 5004 EN 148-1 thread connection for suitable filters below 300 g

#### **Respirator DIN**

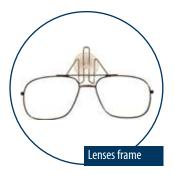
Halfmasks with threaded connector EN 148-1	
111200000	Halfmask ST 85
WSB14051006	RESPIRATOR DIN. Black rubber. Standard harness

# ACCESSORIES

To complete our offer we suggest a series of accessories and spare parts for the storage and maintenance of the masks.

Accessories	
156710000	TR 2002 SET OF SPARES HEAD HARNESS
118090000	TR 2002 NYLON BAG
118280000	TR 82/TR 2002 PACK OF 10 PROTECTIVE FILMS FOR VISOR
118290000	TR 82/TR 2002 PRESCRIPTION LENSES FRAME (with sucker)
118040000	TR 82 CONTAINER/BAG FOR 1 MASK+1 FILTER
118170000	TR 82 WALL PLASTIC CABINET (VED) FOR 1 MASK
118200000	TR 82 WALL PLASTIC CABINET (WID) FOR 3 MASKS
156150000	TR 82 HEADHARNESS SET (1 headharness + 1 strap)
903110000	TR 82 SAFETY GLASS VISOR
160090000	PACK OF 300 CLEANING AND SANITIZING TOWELS

Some maintenance interventions can only be made by the manufacturer or by an authorized service station. For both ordinary and extraordinary maintenance interventions, every time the mask is reassembled, the perfect efficiency of the mask must be checked. For further information see the information notice or contact the manufacturer.







### **SCREW FILTERS**

Screw filters		
12415LD00	100 LD P3 R	
124200000	200 A2	
124220000	200 LBR A2	
123100000	201 B2	
123110000	201 E2	
124210000	100 K2	
123200000	201 A2B2	
123220000	201 A2B2E2	
124410000	202 A2B2E2K2	
124430000	202 AX	
124550000	203 AXP3 NR D	
124420000	202 A2P3 R D	
123300000	202 B2P3 R D	
123310000	202 E2P3 R D	
124320000	201 K2P3 R D	
123320000	202 A2B2P3 R D	
123350000	202 A2B2E2P3 R D	
124530000	203 A2B2E2K2P3 R D	
124540000	203 A2B2E2K2HGP3 R D	
124600000	203 UP3	
124720000	205 A2B2E2K1 P3 R D Formaldeide	
124730000	205 A2B2E2K1 P3 R D Reactor	
124740000	205 A2 P3 R D Reactor	

Filters **Series 100** include dust filters P3, gas filters class 2 and combined filters class 1 and 2 P3, equipped with a standard threaded connector EN 148-1. They have a blue plastic case with diameter 100 mm.

Their height depends on the type (100, 200, 201, 202, 203) and they are available in a wide range of models, specific for certain toxic gases, multipurpose or universal for a complete protection.

Gas filters contain granular activated carbon that chemically and / or physically blocks contaminating gases and vapours.

Gas filters can be combined with an anti-dust element, consisting of a class P3 filtering pleated disc.

Dust filters contain one high efficiency class P3 filtering pleated disc only.



#### Screw filters EN 148-1

### **FILTERS FOR MASKS**

#### In combination with:

Filter Series 100 can be used with:

- Half masks ST85
- Full face masks TR82 and TR2002

All dust filters are certified according to EN 143:2000+A1:2006, whereas gas filters and combined filters are certified according to EN 14387:2004/A1:200

Filter 203 UP3 is an universal filter with double marking: according to EN 14387:2004 as multipurpose combined filter ABEK2P3 and according to DIN 58620 for the protection against CO (duration 20 min) and NO.

For further informations and details consult the table "MARKING - LEGEND" at page 120.

In our range we have a wide range of highly technical filters.





### **FILTERING ESCAPE DEVICES**



Emergency respirators SPASCIANI **M900** are escape devices with an incorporated combined filter **ABEK15** (gas) or **ABEKP15** (gas and dust). These innovative products take advantage of the memory of the silicone to reduce packing at minimum.

Thanks to their robust and ergonomic high visibility orange case, they are compact and easy to carry. The ergonomic design with non-slip surfaces allows an easy and safe handling.









Filtering escape devices				
117050000	M900 P3			
117060000	M900 ABEK 15			
117070000	M900 ABEK P15			
117080000	H 900 ABEK 15			
117090000	H 900 ABEK P 15			
117110000	H 900 CO P			
117100000	H 900 ABEK CO P			

The escape respirator **SPASCIANI M 900** is provided with gas filter **ABEK15** (Gases) or **ABEKP15** (gases and particles). This innovative products takes advantage of the memory of the silicone to reduce packing at minimum. The silicone of the facepiece makes the mask very comfortable and eases the leak tightness on the user's face. All that minimizes donning time.

The **ABEK15** filter gives a low breathing resistance and gives protection from different toxic gases for at least 15 minutes. The headband, soft and stable has two anchorage points. The halfmask has a perfect tightness on the face and the honeycomb design of the front of filter grants a low breathing resistance.

**SPASCIANI M 900** is a comfortable product and easy to use and don even with gloved hands. Its minimum size does not interfere with the escape pace.

#### Characteristics and advantages

#### **Option:** REFURBISHING KIT: M900 after 5

• Light and compact

- Quick and easy to don
- Easy to carry along in the
- pockets or at the waist belt
- Big handles for gloved hands



years can be refurbished



**ATEX** certification put on **M900** devices - where all the fields of application are explained - is the following:

#### ll 1G Ex h llC T6 Ga

Non-electrical devices for use in the surface industry, where there is the possibility that explosive atmospheres due to the presence of gas occur - **Zone 0** 

#### ll 1D Ex h IIIC T85°C Da

Non-electrical devices for use in the surface industry, where there is the possibility that explosive atmospheres due to the presence of dust occur - **Zone 20** 



Honeycomb design to minimize breathing resistance

M900	
117050000	M900 P3
117060000	M900 ABEK 15
117070000	M900 ABEK P15

**M 900** high visibility cases are compact and resistant, a built-in clip allows for portability. Very robust they protect from atmospheric agents and shocks and are provided with a sealing label and a OR gasket that ensures airtightness. The loop for the belt is 50 mm wide thus making it easy to hang the case to it or to the work garments granting great stability.





#### **QUICK DONNING**





**H900 ABEK** 



Emergency hoods series **H900** grant a 15-minute protection for esape from environments contaminated by chemical substances. They are disposable. To be disposed of after use. The emergency hoods have to be used only for self-rescue and for escape only. They must not be used during normal work conditions and not permanently for more than 15 minutes. They are available in one universal size.



**ATEX** certification put on **H900** devices - where all the fields of application are explained - is the following

#### 1G Ex h IIC T6 Ga

Non-electrical devices for use in the surface industry, where there is the possibility that explosive atmospheres due to the presence of gas occur - **Zone 0** 

#### 1D Ex h IIIC T85°C Da

Non-electrical devices for use in the surface industry, where there is the possibility that explosive atmospheres due to the presence of dust occur - **Zone 20**  Hoods series **H900** are composed of:

- Bag made of antistatic fabric with loops for belt, ring to hang it to the wall and lateral rings for the use with a shoulder belt. The hood is placed inside the bag, sealed into an airtight bag. The protective seals placed on the fastening of the package grant that it has not been opened.

-Orange hood equipped with a wide anti-fogging visor, with a sealed adjusting elastic harness and with an elastic tight collar

- Halfmask made of silicone, anatomically shaped, conceived to adapt optimally to any face.

- Exhalation valve protected by a cover

- Filter which is different according to the model chosen in order to grant various types of protection.

H900	
117080000	H 900 ABEK 15
117090000	H 900 ABEK P 15
117110000	H 900 CO P
 117100000	H 900 ABEK CO P



#### H900 bag



### **POWER ASSISTED RESPIRATORS**



**TURBINE** is a range of Powered Air Purifying Respirators (PAPR) for breathing protection fed by a fan.

They are provided with rechargeable battery and used with two dust or combined filters.

They replace the traditional filtering devices made of face piece and filter in heavy and prolonged works, because the continuous air flow reduces the respiratory effort.

They are suitable for tasks such as asbestos removal, work in dusty environments or in crop spraying.

Besides **TURBINE TM 1702** (full face mask), which has been on the market for sometime, the range has been widened with three new models: **TURBINE CFU** (helmet with visor), **TURBINE FU** (lightweight hood with visor) e **TURBINE H** (Tyvek F <sup>®</sup> lightweight hood).

**TURBINE PAPR** are designed to protect the operator granting high comfort, achieved by:

• supplying the mask, the helmet or the hood, with the ideal flow rate to reduce the breathing effort to a minimum without a disturbing flow on the face.

• the ergonomic waist belt provided with soft pad.

• the very low weight compared to the autonomy offered.

They are designed to withstand decontamination showers.

Power assi	Power assisted respirators			
130810000	Set Turbine TM 1702 2			
130860000	0860000 Set Turbine CFU helmet with visor			
130870000	Set Turbine FU light weight hood with visor			
130880000	Set Turbine H Tyvek F light weight hood			
Accessorie	s			
136620000	Battery charger 1000 mAh - Turbine 170			
124150000	Filter 100 P3 R			
123320000	Filter 202 A2B2P3 R D			
123350000	Filter 202 A2B2E2P3 R D			
911060000	PVC belt			









Turbine TM

### **TURBINE TM 1702**

Panoramic visor

in transparent

polycarbonate

**Turbine** is a range of respiratory protection equipment fed by a motor fan. They are fitted with a rechargeable battery and have to be used with two particle or combined filters. They replace the traditional RPDs made of a facepiece and filter in heavy duty and prolonged works because the respiratory effort is reduced by the injected air flow. Depending on the filter used, they are suitable for activities such as asbestos removal, dusty products handling and crops spraying.

**Motor fan** On the top there is the on/off button which also permits the selection of the desired airflow. The four luminous LEDs indicate low battery, insufficient air flow, below 120 l/min, air flow set at 130 l/min and airflow set at 170 l/min. The unit features an acoustic alarm which triggers when the airflow drops below 120 l/min due to TR 2002 CL3 / CL2 either clogging of particle filters or Full face mask, featuring chocking of the corrugated hose. an ample visor offering an extended field of vision. The mask is available in Class 2 (TPE) or Class 3 (EPDM). A version in Silicone is also Plastic available. material fittings #ddddddd Polyurethane corrugated hose E0426 8 P3 R Belt, padding and self-extinguishing webbing with nylon buckles

#### **TURBINE TM 1708**



### H/FU/CFU MODELS

**Hood Turbine H** 

Certified EN 166

scrapings.

Protection Class TH2

Applications: pharma industry,

chemical treatments, building,

#### Light visor Turbine FU

Certified EN 166. Protection Class TH2

Applications: All cases where protection of eyes and face are required (building, foundries, welding)

Hood fitted with an elasticated cover made of PU-coated Nylon fabric

> Flip-up visor made of polycarbonate which protects from impact (according to EN 166)

> > Adjustable head band

Light and well balanced

Lightness

Optimal air flow distribution and noise attenuation

Increased field of vision (both sideways and downwards). Reduced reflection and deformation

> Highly versatile rigid cap (Certified EN 397- Head Protection)

> > Light and well balanced

Wide visor giving best field of vision

#### **Helmet Turbine CFU**

Certified EN 166 and EN 397 (head protection). Protection Class TH2 Applications: grinding, building and scraping, chemical treatments, foundry, agriculture.

### ACCESSORIES

Accessorie	s
136620000	Battery Charger 1000 mAh -Turbine 170
124150000	Filter 100 P3 R
123320000	Filter 202 A2B2P3 R D
123350000	Filter 202 A2B2E2P3 R D
	PVC waist belt
TM1702	

130810000	Set Turbine TM 1702 TR 2002 CL2 TPE
130820000	Set Turbine TM 1702 TR 2002 CL3 EPDM
13082000S	Set Turbine TM 1702 TR 2002 S CL3 Silicone

TM1708			
130830000	Set Turbine TM 1708 TR 82 EPDM		
130840000	Set Turbine TM 1708 TR 82 safety glass EPDM		
130850000	Set Turbine TM 1708 TR 82 scratch resistant visor EPDM		
13083000S	Set Turbine TM 1708 TR 82 S Silicone		
130840005	Set Turbine TM 1708 TR 82 S vetro sicurezza Silicone		
Turbine H	/ FU / CFU		
130860000	Set Turbine CFU Helmet with visor		
130870000	Set Turbine FU Light visor		
130880000	Set Turbine H Tyvek F® Hood		

#### Combined filters for 130 l/m available with Turbine



Filter 202 A2B2E2P3 R D



Filter 202 A2B2P3 R D

### **CORRUGATED HOSE**





Art. 118420000 for hoods

The hoses used for the entire range of SPASCIANI products take advantage of a technolgy which reaches the highest quality level available. This allows to reduce the dimensions of connectors and as a consequence they make the product more practical and handy.

Hoses are much lighter which eases the wearer's activity. Moreover, hoses have highly rigid rings while keeping the best flexibility and extensibility due to the plastic material they are made of. They can extend twice their length to make wearer's movements more comfortable.



#### SANDBLASTING AND AIR LINE RESPIRATORS

RC4 is a filter respirator with hood. In combination with a P3 filter, it protects face and respiratory system from splinters, fumes, dusts and can be conveniently used for light duty sandblasting works. ACS
951 and ACS 952 are constant flow air line respirators. They protect both the respiratory tracts and the parts of the body more exposed to abrasive blasts. ACS 951 is provided with mask and hood, while ACS
952 with ABS helmet and waistcoat.

Air line constant flow breathing apparatus is ideal for use in chemical plants and in every industrial workplace.

They protect breathing ways from the dangerous effects of the handled chemicals.

**SET AC190** is provided with mask TR82 or TR2002, while **SET ACM 952 with helmet in ABS and waistcoat.** 





RC4







103000000	RC4 respirator half mask with hood		
1310200CJ	SET ACS 951 full face mask with compressed air line hood		
1315100CJ	SET ACS 952 compressed air line hood		
Air line res	spirators		
1300000EC	SET AC 190 TR82 full face mask with flow regulator		
1300100CJ	Set AC 190 TR2002 full face mask with flow regulator		
1306100CJ	Set ACM 952 hood with flow regulator		
Accessorie	s		
1393000CJ	Hose cut 8 x 17 10m with couplings		
1393100CJ	Hose cut 8 x17 20m with couplings		
1393300CJ	Hose cut 8 x 17 30m with couplings		
1393200CJ	Hose cut 8 x 17 50m with couplings		
1512400EC	Filter unit for compressed air for one operator		
1512500EC	Filter unit for compressed air for two operators		
1512600EC	Filter unit for compressed air up to three operators		
151240100	Coalescent cartridge for one operator		
151240200	Carbon cartridge for one operator		
151250100	Coalescent cartridge for two operators		
151250200	Carbon cartridge for two operators		

Sandblasting respirators







### SANDBLASTING AND AIR LINE RESPIRATORS

### Flow regulator AC 95

The regulator **AC 95** delivers to the wearer a continuous flow of air which can be varied by acting on the special knob. It is fitted with universal quick couplings to connect to the feeding hose. An alarm activates if the flow drops below a preset minimum. The regulator is mounted on a supporting plate complete with waist belt.

The **AC 95** is also fitted with a thread to lodge the filter silencer EOD 55 which beside dampening the noise generated by the airflow filters possible pollutants that may still be present in the hoses. The limited weight, considering the materials used, and the compact design offer an easy and effective use.

The **AC 95** can be used in combination with masks fitted with EN 148-1 connectors and with hoods in chemical protection or sandblasting.



**RC 4** 



### ACS 951

**ACS 951** is an isolating respirator fed with a continuous flow of compressed air complete with a hood and protective waistcoat which make it an effective means to protect both the breathing ways and the parts of the body more exposed to the abrasive blast.

The facepiece is made of a mask integral with the waistcoat which adapt itself to any face contour without any annoying pressure. Its compact design allows interventions even in awkward spaces.

The mask/hood is complete with two exhalation valves protected by a special cover and features two built-in ducts which lead the air flow to skim over the lenses to avoid steaming up. The head harness is outside and attached to the facepiece by means of self-adjusting buckles which permit a quick and easy donning. The hood is sewn to the mask and protects the body down to the waist.



### ACS 952

**ACS 952** is an isolating respirator fed with a continuous flow of compressed air complete with a helmet and protective waistcoat which make it an effective means to protect both the breathing pathways and the parts of the body more exposed to the abrasive blast.

The helmet is made of a shock-resistant material and fitted with adjustable head harness from size 55 to 61.

In the helmet, a duct leads the airflow to skim over the visor to avoid steaming up. The helmet is fitted with elasticated chin-strap adjustable by means of a sliding buckle, this keeps the helmet in place during any movement or position; two exhale valves protected by a special lid, a double visor, inside polycarbonate, outside glass, easily replaceable when worn out.

The waistcoat, made of a strong plasticized fabric, is sewn to the rubber gasket which connects it to the helmet.





### **FRESH AIR RESPIRATORS (DUCT)**

**DUCT** is a range of Isolating Fresh Air Respirators with full face mask designed to be used in oxygen deficient environments and narrow spaces such as tanks, silos, wells, sewer systems, etc., all confined spaces with a lack of oxygen and where the poor ventilation can suddenly modify the ambient concentration of toxics. For the use of this device it shall be possible to get uncontaminated air from outside the working environment.

#### **DUCT** is available in two versions:

**Fresh Air Respirators** 

14000Eco0

14001Eco0

113020000

112190000 14017EC00

118750000

911200000

14010EC00

14011EC00

46068EC00 14016EC00

Accessories

• **DUCT ECO**, runassisted fresh air respirator, for breathing the lung power only is necessary.

Fresh air respirator DUCT ECO (without mask)

TR 2002 CL2 full face mask

TR 82 full face mask

Harness for DUCT

Electric fan DUCT ECO

Kit 2<sup>nd</sup> operator DUCT ECO

Feeding hose - cut 10m

Corrugated hose TUR TM 2090 V0

Manifold with plug for DUCT ECO Manifold with valve for DUCT A ECO

Fresh air respirator DUCT A ECO (without mask)

• **DUCT ECO A**, assisted fresh air respirator. The respiration is facilitated by an electric fan. It can be used by two operators simultaneously.





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### **RESPIRATOR DUCT ECO / A ECO**

**DUCT** is a range of Isolating Fresh Air Respirators with full face mask designed to be used in oxygen deficient environments and narrow spaces such as tanks, silos, wells, sewer systems, etc., all confined spaces with a lack of oxygen and where the poor ventilation can suddenly modify the ambient concentration of toxics.

For the use of this device it shall be possible to get uncontaminated air from outside the working environment.

#### **DUCT** is available in two versions: **DUCT ECO** and **DUCT A ECO**

The **DUCT** comes with a 10 m long coiled PVC air supply hose.

It is possible to connect together several hoses to obtain different total lengths:

- 20 m for the non-assisted version
- 60 m for the assisted version if used by only one operator
- 30 m for the assisted version if used by two operators

Fresh Air Respirators	
14000Eco0	Respirator DUCT ECO (without mask)
14001Eco0	Respirator DUCT A ECO (without mask)

#### **DUCT ECO**

Unassisted fresh air respirator. Only the lung power is necessary for breathing.



#### SPASCIANI fullface masks - certified EN 136:1998 - designed for DUCT



### **DUCT A ECO**

**DUCT A ECO** is the "assisted" version; it has an electric blower attached to the end of the air supply hose which pumps fresh air to the operator, increasing comfort and decreasing difficulty in respiration.

Moreover, this system has an outflow valve which is useful for the release of possible excess air. The electric blower can supply two operators at the same time.

The **DUCT A ECO** is designed in such a way that in case the electric blower is turned off, the operator can continue to breathe, even if with a higher effort, and may safely move away from the contaminated area.



### **CORRUGATED HOSE**

The corrugated hoses used for the entire range of SPASCIANI products are made with a new technology which reaches the highest quality level available.

The corrugated hose for the DUCT is moulded with a special additive that makes it flame resistant. This technology allows shorter connections and as a consequence to get a more handy and manageable product.







### **EEBD - EMERGENCY ESCAPE BREATHING DEVICE**



**SK1203** is a breathing apparatus with open circuit with hood. Designed for use in emergency escape situations and in all the environments potentially dangerous because of the presence of fumes or low level of oxygen. It releases a constant air flow for 15 minutes.

**FUGE** is a Self Contained Breathing Apparatus designed for escape (Emergency Escape Breathing Device) that in case of emergency supplies, on demand, delivers an air flow for a minimum guaranteed time of 15 minutes. It is meant to be used in all environments where dangerous situations may occur due to fire fumes or lack of oxygen.







Emergency e	Emergency escape breathing device		
403010000	SK 1203		
40301000C	SK 1203C Composite		
403030000	Fuge TR 2002 BN CL3		
403050000	Fuge Rescue TR 2002 BN CL3		
403020000	Fuge Tail TR 2002 BN CL3		
40303000C	Fuge C TR 2002 BN CL3 Composite		
40305000C	Fuge Rescue CTR 2002 BN CL3 Composite		
40302000C	Fuge Tail C TR 2002 BN CL3 Composite		



### SK1203

Emergency escape breathing device SK		
403010000	SK 1203	
40301000C	SK 1203C Composite	

**SK1203** is a compressed air open circuit breathing apparatus with hood for escape, from all environments potentially dangerous because of the presence of fumes or lack of oxygen. It is designed to create a constant air flow of 15 minutes thanks to a 2 I 300 bar cylinder which is directly connected to the valve/reducer that is provided with a gauge which continuously indicates the pressure inside the cylinder.

**SK1203** SK 1203 is made of a cylinder (steel or composite), a valve / pressure reducer, a breathing tube, a hood and a carrying bag. Set complete with fully charge steel cylinder weights 6 Kg approx. Set complete with fully charge composite cylinder weights 4 Kg approx.



## (Ex) ATEX marking

Our breathing apparatus **SK** boast numerous certifications. They are Personal Protective Equipment (PPE), PED (equipped with compressed breathable air cylinder according to "Pressure Equipment Device") and MED (Marine Equipment Directiove) certified, which means that they can be used on board ships.

Starting from now, they have obtained the voluntary **ATEX** certification, which states that the device is suitable to be used in potentially explosive atmospheres, which means when the danger of a potential explosion is associated with the presence of gas or dusts on the surface (thus exluding mines and deep caves).

Below the details of the **ATEX** marking:

#### 1G Ex h IIB T6 Ga

Non-electric equipment intended for use in the surface industry, where explosive atmospheres due to the presence of gas may occur. - **Zone 0** 

#### 1D Ex h IIIC T85°C Da

Non-electrical devices for use in the surface industry, where there is the possibility that explosive atmospheres due to the presence of dust occur - **Zone 20** 

### FUGE

Emergency escape breathing device - FUGE			
403030000	Fuge TR 2002 BN CL3		
403050000	Fuge Rescue TR 2002 BN CL3		
403020000	Fuge Tail TR 2002 BN CL3		
40303000C	Fuge C TR 2002 BN CL3 Composite		
40305000C	Fuge Rescue CTR 2002 BN CL3 Composite		
40302000C	Fuge Tail C TR 2002 BN CL3 Composite		



### FUGE

**FUGE** is a Self Contained Breathing Apparatus designed for escape that in case of emergency supplies, on demand, an air flow for a minimum guaranteed time of 15 minutes with a 2 l/300 bar cylinder

It has great wearability and it's totally hermetic.

It is meant to be used by specialized operators in all environments where dangerous situations may occur due to fire fumes or lack of oxygen.

Set complete with fully charged steel cylinder weights 6.5 Kg approx. Set complete with fully charged composite cylinder weights 4.2 Kg.

ANTI

PRO

### **FUGE RESCUE E FUGE TAIL**

Fuge Rescue and Fuge Tail are provided with a supporting harness to keep the cylinder in position on the thigh. This allow a comfortable wear while enabling the wearer to adjust it according to his needs. This solution allows free movement even in ackward spaces.

**FUGE RESCUE** complete with fully charged steel cylinder weighs 6.7 Kg approx., with fully charged composite cylinder 4.4 Kg..

**FUGE TAIL** is provided with a 3-way valve with switch over device, and acts as a "back-up" to the compressed air systems fed from the line, thus granting, in case of blackout or disconnection from the line, a constant feeding of breathable air.

Set complete with fully charge steel cylinder weights 7,1 Kg approx. Set complete with fully charge composite cylinder weights 4,8 Kg and for this reason it is usable for a whole shift.





### **3 WAY VALVE**

The **3 way valve** is placed between the reducer, the demand valve and the feeding line.

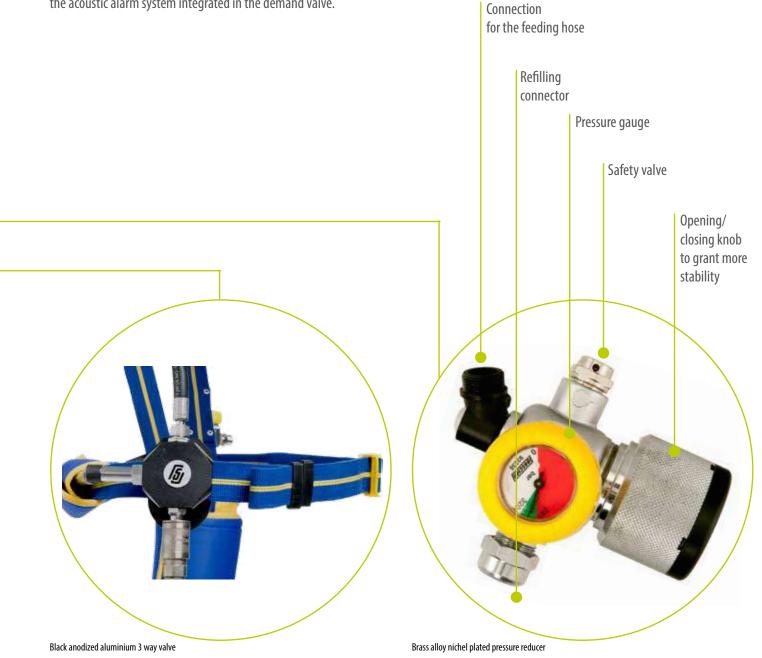
In case the air supply is cut off accidentally or intentionally, the 3 way valve switches automatically to the cylinder. In such a condition the warning, which is built into the demand valve, is activated. The signal originates from a sounding vibration caused by every inhalation. In this way the full capacity of cylinder is made available to the user for breathing. The acoustic warning is related to the respiratory frequency of the user and allows the user to distinguish his own signal from that emitted by nearby fellows or noise (Self Test Function).

The location of the warning device protects it from frost or dirt.

### This system makes use of the **AIS Technology**, the acoustic alarm system integrated in the demand valve.

The **pressure reducer** and the cylinder valve are integrated and provided with gauge indicating the pressure inside the cylinder. The pressure reducer keeps the outlet pressure steady throughout the emptying of the cylinder.

The opening/closing knob is anti-slip and easily allows to open/close the air supply.





## **Exclusive AIS Technology**

**3 minutes more of air** are extremely important when one works in critical conditions, during firefighting or in rescuing.

For this reason SPASCIANI developed and patented AIS Technology, a unique acoustic alarm integrated in the demand valve, which warns when the air in the cylinder is running out and activated by the wearer's inhalation without air waste.

It's a system **safe and protected** from external agents, such as frost or dirt, that **extends up to 30%** the time available to quit, in all safety, from the operation area.

# **3** minutes more



### **6 GOOD REASONS**



- 1. No air loss
- 2. Sealed warning device
- 3. Self-test
- 4. Alarm audible in any circumstances
- 5. Alarm at distance
- 6. Second operator alarm

### **SCBA SERIES FR FIRE FIGHTING**

They are self contained breathing apparatus specifically designed for fire fighting, whose duration depends on the cylinder mounted: 3 or 6 liter 300 bar steel or 6,8 or 9 liter 300 bar composite cylinders. **RN FR** can be supplied with mask and demand valve type A (EN148/3) or with mask and demand valve type BN (snap-in connector and threaded connector EN148/1 for filters). The breathing apparatus is ideal for fire brigades and rescue teams for fire fighting and activities in extremely polluted environments or in oxygen deficiency.

Back plates			
15875FR00	RN FR		
15871FREC	RN FR BIBO		
Masks			
11230FR00	TR 82 A CL3+		
112110000	TR 82 A E CL3+		
11231FR00	TR 82 B CL3+		
112120000	TR 82 B E CL3+		
11300FR00	TR 2002 A CL3+		
11301FR00	TR 2002 BN CL3+		
Demand valves			
1588500CJ	A		
1579100CJ	BN		
Cylinders			
923030000	Cylinder 3 L 300 Bar		
92303000C	Cylinder 3 L 300 Bar - Composite		
924630000	Cylinder 6 L 300 Bar		
92446000C	Cylinder 6,8 L 300 Bar - Composite		
92449000C	Cylinder 9 L 300 Bar - Composite		
92426000C	Cylinder 6,8 L 300 Bar - Composite PTFE unlimited life		
92427000C	Cylinder 7,2 L 300 Bar - Composite PTFE unlimited life		
92428000C	Cylinder 8,4 L 300 Bar - Composite PTFE unlimited life		
Accessories			
926900000	Flame resistant sleeve for cylinder (6 L/6,8 L)		
926910000	Flameproof sleeve for cylinder made of Nomex®		
9324400CJ	4Way valve		
151530000	Supplementary warning device		
936010000	Excess flow valve		
7799500CJ	Rescue hood		
EATEX0000	ATEX certification		



Fire, flames, toxic gases: these and many other risks have to be faced by firefighters and rescue teams. SPASCIANI offers with the RN FR a tool that allow to safely meet any situation.



### **SYSTEM MODULES**



#### TR 82 A / TR 82 E A TR 82 B / TR 82 E B TR 82 N

These full face masks can be used with RN FR SCBA. They are made of a EPDM face blank and a panoramic visor offering wide visibility. In the E version they are equipped with a special system of metal brackets to fit to the slots of Fire Brigades and Police helmets. The system assures a great stability and tightness of the mask on the face. TR 82 A models are positive pressure full face masks with threaded connector to EN 148-3 (M45x3) while the TR 82 B are positive pressure full face masks with bayonet fitting connector. The full face mask TR82 N models grant a high comfort and a great wearability under the firefighters helmet. All of them can be used with positive pressure SBCA and meet the requirements EN 136:1998 Class 3+ / EN 137.



#### **Demand valve BN**

Demand valve with quick connector to DIN 58600 activates at the first inhalation with two easy buttons to release the valve.



**Demand valve A** Demand valve with standard connection to EN 148-3 (M45x3), easy to screw onto the mask even with gloved hands.



#### Supplementary warning device

The accessory "supplementary warning device" can be mounted, on request, onto the reducer. This alarm gives the possibility to add a continuous whistle to the intermittent alarm signal built into the demand valve.



#### Second man air outlet

This medium pressure hose ending with a female quick connector allows the connection of a second man to the special outlet provided by the reducer RN FR. This connection can be used either by a full face mask with demand valve or a rescue hood, easier to fit to the casualty being rescued.



Twin cylinders The system RN FR can operate with two cylinders to extend the autonomy of the set. Simple T connectors allow the operator to equip with two composite cylinders of 6,8 l or 9 l.



#### **Composite cylinders**

The breathing apparatus RN FR can be outfitted with composite cylinders which lighten the set and grant more agility to the operator. The capacity of these cylinders can be 6,8 l 300 bar or 91 300 bar.



#### **Steel cylinders**

RN FR series can be equipped with steel cylinders of different volume and pressure capacity. SPASCIANI can offer 3 | 300 bar, 7 l 200 bar, 6 l 300 bar cylinders.



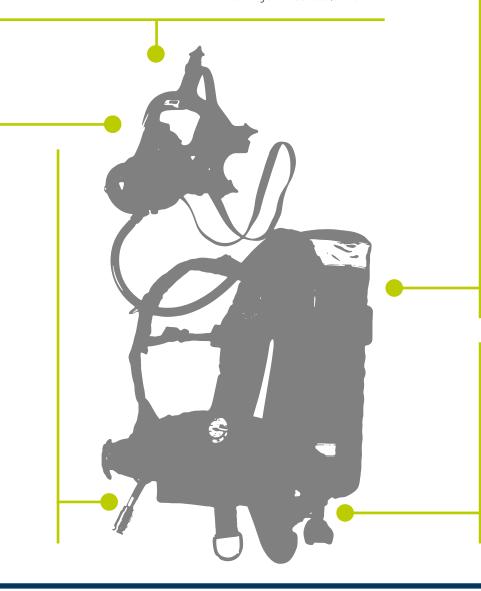
#### **Excess Flow Valve EFV**

The EFV, fitted onto SPASCIANI Self Contained Breathing Apparatus, limits the uncontrolled exit of compressed air from a high pressure cylinder in case of breaking of the valve or in case of unintentional and sudden opening.



#### **TR 2002**

Full face mask in EPDM, it features a modern design and its extremely broad visor grants a wide field of vision. The mask is available in two different versions: A and BN according to EN 136:1998 / EN 137.



### **SCBA SERIES INDUSTRIAL**

They are self contained breathing apparatus whose duration depends on the cylinder mounted: 3 or 6 liter 300 bar steel or 6,8 or 9 liter 300 bar composite cylinders. **RN** can be supplied with mask and demand valve type A (EN148-3) or with mask and demand valve type BN (snap in connector and threaded connector EN148-1 for filters; the masks automatically sets itself correctly for the negative pressure when used with filters). This breathing apparatus is ideal for maintenance interventions in chemical plants, to work in very polluted environments or in oxygen deficiency.

Back plates	
158730000	RN T1
158750000	RN
1587100EC	RN BIBO
158250000	BVF
158290000	BVF BU
158320000	RN MINI
Masks	
11230000	TR 82 A
11231000	TR 82
11300000	TR 2002 A CL3
11306000	TR 2002 S A CL3
11301000	TR 2002 BN CL3
11307000	TR 2002 S BN CL3
Demand valv	es
1588500CJ	A
1579100CJ	BN
Cylinders	
923030000	Cylinder 3 L 300 Bar
92303000C	Cylinder 3 L 300 Bar - Composite
924630000	Cylinder 6 L 300 Bar
92446000C	Cylinder 6,8 L 300 Bar - Composite
92449000C	Cylinder 9 L 300 Bar - Composite
92426000C	Cylinder 6,8 L 300 Bar - Composite PTFE unlimited life
92427000C	Cylinder 7,2 L 300 Bar - Composite PTFE unlimited life
92428000C	Cylinder 8,4 L 300 Bar - Composite PTFE unlimited life
Accessories	
926900000	Flame resistant sleeve for cylinder (6 L/6,8 L)
926910000	Flameproof sleeve for cylinder made of Nomex®
9324400CJ	4Way valve
151530000	Supplementary warning device
936010000	Excess flow valve
7799500CJ	Rescue hood
EATEX0000	ATEX certification



Confined spaces and oxygen deficient environments, tanks and plants inspections: RN breathing apparatus is the right product to face any risk safely.



### **RN MINI**

### A self contained breathing apparatus (SCBA) that uses an open-circuit breathing system, not depending from the environment.

The **RN MINI** are lightweight apparatus – the set weighs 10,5 Kg, complete with mask and 3 I 300 bar fully charged steel cylinder and 7,5 Kg with mask and fully charged 3 I 300 bar composite cylinder - intended for short interventions and equipped with a small and compact back-plate carrying system to allow operators to easily access confined spaces. SPASCIANI **RN MINI** self-contained breathing apparatus are classified as

Type 1 (device for industrial use) available with 3 l cylinders only. SPASCIANI **RN MINI** self-contained breathing apparatus are optionally provided with the Automatic 4-way valve, an accessory that allows to feed a second operator who will then be equipped with an individual warning device signal at his mask; with this accessory it is also possible to connect the self-contained breathing apparatus to an alternative source of air to prolong its autonomy and/or to ensure a safe escape whenever the main feeding source has suffered an accidental interruption.

SPASCIANI **RN MINI** self-contained breathing apparatus are certified with all Spasciani fullface masks.



# Self contained breathing apparatus provided with 3 liter 300 bar steel cylinder.

BVF is ideal for use in fast interventions in chemical plants or for the escape from dangerous areas.

The BU system allows to set the apparatus so that the alarm is immediately activated in case of a failure of the main air supply (compressor or cylinder). BVF adds the highest degree of safety and comfort to the efficiency, versatility and simple use of the RN System, as well as the astonishing field of vision of the SPASCIANI TR 2002 A mask.



### **SYSTEM MODULES**

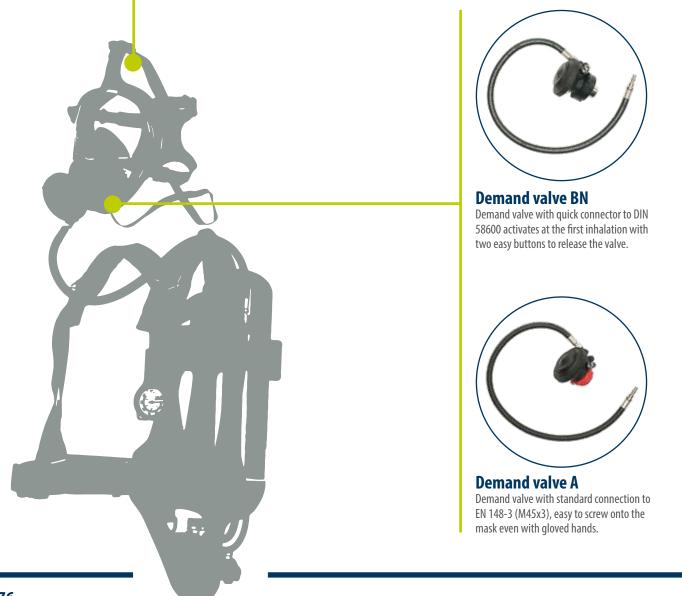


#### TR 2002 CL3 / CL2

Full face mask in EPDM, it features a modern design and its extremely broad visor grants a wide field of vision. The mask is available in two different versions: A and BN, both in class 2 and in class 3, according to EN 136:1998. They are also available in silicone.

#### TR 82 A / TR 82 B

These full face masks can be used with the breathing apparatus RN.They are made of a face blank manufactured in EPDM and a panoramic visor offering wide visibility. They meet the requirements EN 136:1998 Class 3. They are also available in silicone.





#### **Twin cylinders**

The system RN can operate with two cylinders to extend the autonomy of the set. Simple T connectors allow the operator to equip with two composite cylinders of 6,8 l or 9 l.



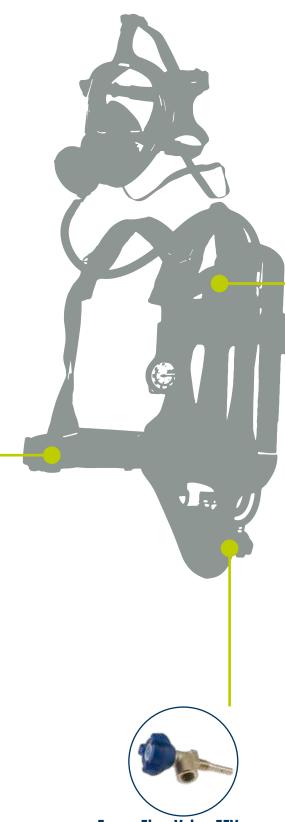
#### **Composite cylinders**

The breathing apparatus RN can be outfitted with composite cylinders which lighten the set and grant more agility to the operator. The capacity of these cylinders can be 6,8 I 300 bar or 9I 300 bar.



#### **Steel cylinders**

RN series can be equipped with steel cylinders of different volume and pressure capacity. SPASCIANI can offer 3 I 300 bar, 7 I 200 bar, 6 I 300 bar cylinders.



#### **Excess Flow Valve EFV**

The EFV, fitted onto SPASCIANI Self Contained Breathing Apparatus, limits the uncontrolled exit of compressed air from a high pressure cylinder in case of breaking of the valve or in case of unintentional and sudden opening.



#### Soft belt

This soft belt in the hips area improves portability of the breathing apparatus, increasing comfort when used for long periods of time.



# Supplementary warning device

The accessory "supplementary warning device" can be mounted, on request, onto the reducer. This alarm gives the possibility to add a continuous whistle to the intermittent alarm signal built into the demand valve.

## **ACCESSORIES FOR SCBA SERIES**



#### SCBA carrying case

Light ABS carrying case, is useful for the transport and protection of the breathing apparatus; it is available for one or two cylinders (for the twin-cylinder SCBA or spare cylinder). Its high visibility orange color is ideal for emergency situations.



#### Prescription lenses frame

Easy to use and extremely stable thanks to the strong sucker to be applied to the visor. This frame allows those that normally wear glasses to use a full face mask in total safety.



#### Wall mounted container in ABS

Wall installation with metal holder for the cylinder; it grants extremely quick donning time. The transparent cover makes the breathing apparatus always visible whilst protecting it from UV rays.

### 4 way valve

# The 4-way valve is a connector that links the RN to a compressed air line.

The **4-way valve** is an automatic device with two medium pressure inlets provided with male quick connectors and two medium pressure outlet provided with female quick connectors.

The device is mounted on an holder with two slits for the connection to the support belt of RN or BVF breathing apparatus or to the supporting belt used for holding the medium pressure hose of the RC or RL systems.

Two feeding sources at medium pressure can simultaneously be connected to the inlets, two operators can be fed by connecting their demand valves to the outlets.

The feeding sources that can be connected to the inlets are the main feeding from an air line system set at 5-6 bar (LINE inlet) and a breathing apparatus RN or BVF.

The **4-way valve** is automatic and it switches the feeding from air line to the isolating breathing device if the line is interrupted for any reason (accidentally or done on purpose by the user).



#### **Cylinder sleeve**

In flameproof material protects cylinders of different dimension, this protection helps maintaining in optimal conditions cylinders also when used in extreme conditions.



#### **Metal cabinet**

Wall container with metal holder, ideal for fixed and outdoor installations. Protects the breathing apparatus from the environment and grants an easy donning.



#### High pressure test group

The tester is used to check the pressure in the cylinders. With a connection EN 144 both male and female this item can be used also as double checking for the breathing apparatus gauge accuracy.



### **Rescue hood**

# The Rescue hood is a constant flow hood, used in case of emergency to help people in need.

It is extremely easy to use and can be worn by anybody regardless their face shape and size. The Rescue hood can be used with every SPASCIANI respirator connected to the second air outlet. The hood is **rapidly and easily** activated by connecting it to the second man air outlet, placing it on the casualty's head, tightening the hood's string.

The kit is held in a fire-resistant bag that can be hung to the waist belt, owing to velcro loops. It includes Rescue hood and 1200 mm breathing hose.

The Rescue hood has been tested and approved according to EN 137:2006.

### **BN Full face mask**

#### The mask TR 2002 BN "Multi-Purpose" can be used either with a breathing apparatus or with a filter, as it automatically switches from negative to positive pressure settings.

The full face mask is able to work both in **negative** and in **positive pressure** thanks to its special device, unique and patented, that recognizes automatically the system connected and pre-charges the mask valve when it is used with a positive pressure apparatus.

The mask is composed by a panoramic visor with wide visibility and face blank with double revert seal.

The TR 2002 BN can be used with breathing apparatus SPASCIANI with demand valve BN with bayonet quick connector according to DIN 58600. The mask can also be used with filters, e.g. like the SPASCIANI series 200, or negative pressure respiratory devices with standard screw connector (EN 148-1).

The full mask TR82 guarantees a high comfort and a great wearability under the firefighters helmet



## **MOBILE FEEDING UNITS**

#### Mobile feeding units for airlines

Mobile feeding units RC

With duration from 120 min to 15 hours approximately. Available with one or two 50 l cylinders 300 bar or 2 or 4 steel cylinders 6 l 300 bar. They can feed one or two men via hose cuts of 10, 20, 30 or 50 m.

In the **BUSS** version it is possible to connect the trolley to an airline so that it can act as a back-up. Should the air from the main supply be interrupted, the trolley automatically switches to the cylinder pack, thus ensuring continuity of operation.

All mobile units can be used with simple **kits RL**, full face mask - demand valve - waist belt or connected to any Spasciani breathing apparatus equipped with 4Way valve.







mobile recalling all its inc		
1513300CJ	CJ RC 2603 Twin Cylinder trolley 2x6l 300 bar, duration 2 hours approx.	
1514100CJ	RC 4603 Single Cylinder Trolley 4x 6l 300 bar cylinders, dur. 4 hours approx.	
1513700EC	RC 15002 Single Cylinder Trolley EN 144 w/o cylinder	
1513800CJ	RC 25002 Twin Cylinder Trolley EN 144 w/o cylinders	
932620000	932620000 RB Pressure reducer	
Mobile feeding units for RL		
1513600CJ	Cylinder and filter unit - 2x6l 300 bar (BUSS)	
1513900CJ	Cylinder and filter unit - 4x6 l 300 bar (BUSS)	
1513500EC	Filter unit - 2x50 l 200 bar (BUSS) EN144*	
4049900KT	4049900KT BVF/A BU 1303 breathing apparatus	
Cascade system		
*w/o cylinders		
Kit RL for one operator		
4058000KT		
4058200KT Kit TR 2002 BN, demand valve, waist belt		
Accessories		
1393000CJ	10 m 8 x 17 hose cut with connectors	
1393100CJ	20 m 8 x17 hose cut with connectors	
1393300CJ         30 m 8 x 17 hose cut with connectors           1393200CJ         50 m 8 x 17 hose cut with connectors		
		148130000
1588500CJ	Demand valve A	
11300000 Mask TR 2002 A		

## **RC 2603**

## **RC 25002**

The mobile feeding unit **RC 2603** is fitted with two cylinders 6 | 300 bar which ensure an autonomy of approx. 120 min to one user. The trolley is fitted with release and check valves which permit the replacement of cylinder in use to extend autonomy.

The reducer group is simple to operate and allows monitoring both the high and intermediate pressure. A whistle activates when the air reserve is going to finish. The mobile feeding unit **RC 25002** can hold two cylinders 50 l 200 or 300 bar which ensure with the latter an autonomy of approx. 120 min to one user.

This unit is designed to get maximum autonomy while keeping the system movable and handy. It can be displaced by one man only. The toolbox can hold all the accessories that make up the airline.



The mobile unit **BUSS 4603** is a backup system for airlines. It can be used independently with the same performances of a feeding unit or it can be connected to an airline through a filter group. In this configuration, should the air from the main supply be interrupted, the trolley automatically switches to the cylinder pack, thus ensuring continuity of operation. When the main air source is restored it switches back to normal operation.

It is also possible to replace cylinders during use to extend duration.









## **EYE PROTECTION**

The range of SPASCIANI-SIBOL glasses is designed to meet the different needs of face protection at the workplace. Safety but also comfort and excellent ergonomic adaptability make these eye protection devices perfect for every user, without neglecting the aesthetic and design.

### **TECHNICAL SPECTACLES**

SIBOL offers the best and most appropriate range of safety glasses with a wide variety of frames and lenses. Our glasses perfectly combine safety, comfort and design and meet the most demanding European safety standards.

### **DESIGN SPECTACLES**

Safety spectacles which match the most cutting-edge lines with comfort. SIBOL spectacles are made with the best quality optical lenses, class 1, suitable for continuous works.

Different frames and lens options in order to satisfy all possible work environment risks, with an extensive range of different models, SIBOL offers the most suitable eye protection range. SIBOL eye protection products comply with the most stringent European standards.

### **PANORAMIC GOGGLES**

Safety goggles which match the most cutting-edge lines with comfort. SIBOL goggles are made with the best quality optical lenses, class 1, suitable for continuous works.

SIBOL eye protection products comply with the most stringent European standards.

### **ADAPTORS AND VISORS**

SIBOL have a complete range of head and helmet adapters and visors with ergonomic design to protect the face against different hazards.













## **TECHNICAL SPECTACLES**

ESTELA			
WSB11111400	Grey Trivex colourless scratch-resistant		
WSB11113400	Black Trivex colourless scratch-resistant		
WSB11112000	Grey Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11114000	Black Polycarbonate Scratch-resistant Anti-fog colourless		
LUNA			
WSB11814002	Black Transparent side. Trivex colourless scratch-resistant		
WSB11814004	Blue Transparent side. Trivex colourless scratch-resistant		
WSB11811001	Black Transparent side. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11811003	Blue Transparent side. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11811501	Black. Black side. Polycarbonate SHADE 1.7 soldering irons		
WSB11811601			
SAFE			
WSB11504000	Crystal metallic core. Trivex colourless scratch-resistant		
WSB11521004	Crystal CP. Trivex colourless scratch-resistant		
WSB11521044	Crystal with rubber. Trivex colourless scratch-resistant		
WSB11521014	Black nylon CP. Trivex colourless scratch-resistant		
WSB11523000	Crystal CP. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11503000	Crystal metallic core. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11523040	Crystal with rubber. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11522010	Black nylon CP. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11522511	Black nylon CP. Polycarbonate DIN 1,7 soldering irons		
WSB11522611	Black nylon CP. Polycarbonate DIN 1,7 ovens		
BOL			
WSB11711000	BOL transparent side. Polycarbonate Scratch-resistant Anti-fog colourles		





Robust and with high degree of impact and splash resistance Mount sizes available: small, medium and large Reinforced pads with metal soul

Side protection transmissable stainless steel grille

Valid for prescription

### SEY

SEY brown grid side			
WSB10104000	Trivex colourless scratch-resistant Size S		
WSB10114000	Trivex colourless scratch-resistant Size M		
WSB10124000	Trivex colourless scratch-resistant Size L		
WSB10103000	Polycarbonate Scratch-resistant Anti-fog colourless Size S		
WSB10113000	Polycarbonate Scratch-resistant Anti-fog colourless Size M		
WSB10122000	Polycarbonate Scratch-resistant Anti-fog colourless Size L		
WSB10112506	Polycarbonate DIN 1,7 soldering irons		
WSB10112604	Polycarbonate DIN 1,7 ovens		
WSB10112303	Polycarbonate AA optol (UV) Size M		
SEY crystal grid side			
WSB11204000	Trivex colourless scratch-resistant Size S		
WSB11214000	Trivex colourless scratch-resistant Size M		
WSB11224000	Trivex colourless scratch-resistant Size L		
WSB11203000	Polycarbonate Scratch-resistant Anti-fog colourless Size S		
WSB11213000	00 Polycarbonate Scratch-resistant Anti-fog colourless Size M		
WSB11223000	Polycarbonate Scratch-resistant Anti-fog colourless Size L		

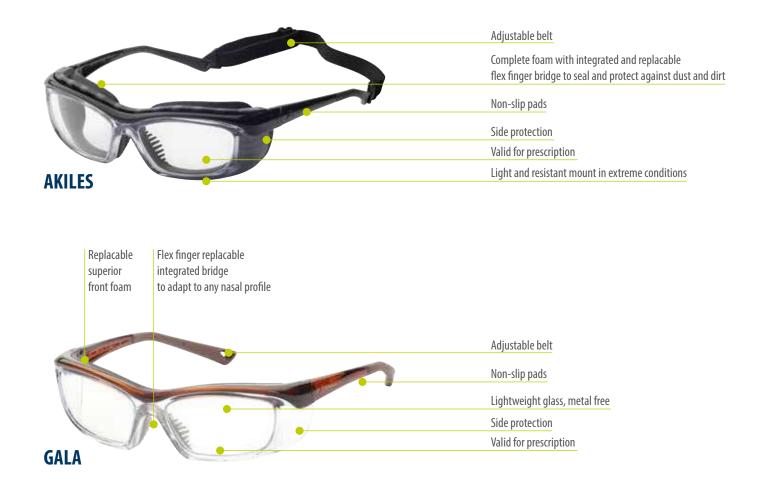


## **TECHNICAL SPECTACLES AND ACCESSORIES**

BASILE		
WSB12802000	Polycarbonate Scratch-resistant Anti-fog colourless	
AKILES	AKILES	
WSB12902000	000 Polycarbonate Scratch-resistant Anti-fog colourless	
GALA		
WSB12602000	Pink Polycarbonate Scratch-resistant Anti-fog colourless Size P	
WSB12702000	312702000 Brown Polycarbonate Scratch-resistant Anti-fog colourless Size M	

THEON	
WSB13904000	Trivex colourless scratch-resistant
WSB13914000	Black Trivex colourless scratch-resistant
WSB13902000	Polycarbonate colourless Scratch-resistant
WSB13913000	Black Polycarbonate colourless Scratch-resistant







Accessories teo	Accessories technical glasses		
WSB11562000	SAFE accessory. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11562303	SAFE accessory. Polycarbonate Scratch-resistant optol (UV)		
WSB11562501	SAFE accessory. Polycarbonate DIN 1,7 soldering irons		
WSB11562601	SAFE accessory. Polycarbonate DIN 1,7 ovens		
WSB11500300	CLIP ON accessory. Polycarbonate Scratch-resistant Anti-fog colourless		
WSB11503300	CLIP ON accessory. Polycarbonate Scratch-resistant optol (UV)		
WSB11505301	CLIP ON accessory. Polycarbonate DIN 1,7 soldering irons		
WSB11505601	505601 CLIP ON accessory. Polycarbonate DIN 1,7 ovens		

### **CLIP OPTIONS**

Foldable To be used with a wide range of frames Easily inserted They increase the duration of the visor



## **DESIGN SPECTACLES**

PERSEO				
WSB10906021	/SB10906025 Polycarbonate Scratch-resistant Anti-fog grey			
WSB10906025				
WSB10906022				
TRESOR				
WSB10906033	Polycarbonate Scratch-resistant Anti-fog colourless			
WSB10906034     Polycarbonate Scratch-resistant Anti-fog grey       SUA     WSB10906035     Polycarbonate KN colourless				
		WSB10906036	SB10906036 Polycarbonate KN grey	







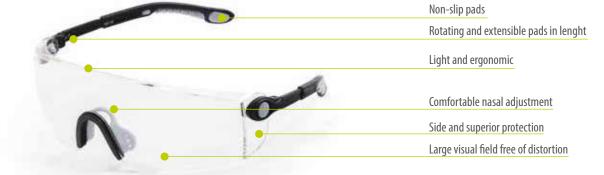
**PERSEO** 



TRESOR



EY	EY		
WSB10906001	6001 EY01 Polycarbonate Scratch-resistant Anti-fog colourless		
WSB10906003	EY02 Polycarbonate Scratch-resistant Anti-fog colourless		
WSB10906004	4 EY02 Polycarbonate Scratch-resistant Anti-fog grey		
WSB10906005	EY03 Polycarbonate Scratch-resistant colourless		
WSB10906006	B10906006 EY03 Polycarbonate Scratch-resistant grey		







Rotating and extensible pads in lenght
Non-slip pads
Comfortable nasal adjustment
Available lenses: colorless and grey
Light and sportive

**EY 02** 



Light and modern Transparent front for greater peripheral vision

Available lenses: colorless and grey





## **DESIGN SPECTACLES**

POLAR II	ABKC II	
WSB10905029 Polycarbonate Scratch-resistant Anti-fog colourless	WSB10907003 Polycarbonate Scratch-resistant Anti-fog colourless	
WSB10905030 Polycarbonate Scratch-resistant Anti-fog grey	PANORAMIC II	
WSB10905031 Polycarbonate Scratch-resistant Anti-fog optol	WSB11400315 Polycarbonate Scratch-resistant colourless	



Extensible pads in lenght Wide visual field Transparent side protection Available lenses: colorless grey and optol

Light and ergonomic

**ABKC II** 



Light and ergonomic Transparent front for greater peripheral vision Side protection with indirect ventilation to prevent the particular passage Wide visual field Visiting glasses. Possible use as glass cover

Panoramic II

603	
WSB10905032	Polycarbonate Scratch-resistant Anti-fog colourless
WSB10905033	Polycarbonate Scratch-resistant Anti-fog grey
WSB10905034	Polycarbonate Scratch-resistant Anti-fog optol

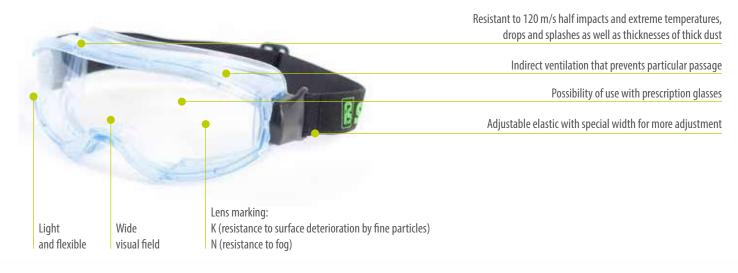


 603 Colorless
 603 Grey

Polar II Optol

## **PANORAMIC GOGGLES**

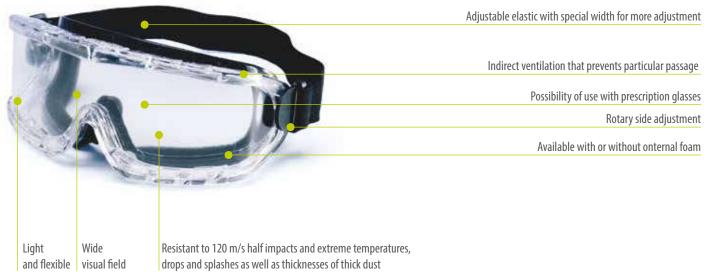
MARINA	
WSB12102105	Polycarbonate Scratch-resistant Anti-fog colourless
WSB12102106 FOAM Polycarbonate Scratch-resistant Anti-fog colourless BOGA	



### BOGA





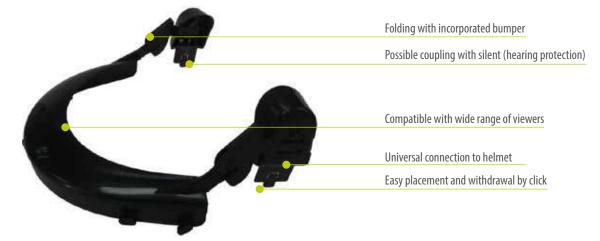


### MARINA

## **ADAPTORS AND VISORS**

SIBOL offers a complete range of adapters and visors for helmet. They have an ergonomic design which is able to protect the head in case of danger, by selecting the most suitable visor.

P/N	Description	P/N	Description
WSB10000210	ADAPTER universal aluminium helmet 28773 Helmet 3772	WSB10000214	ADAPTER TUCAN 2
WSB10000158	VIEWER Polycarbonate gold. DIN 5 Helmet for ovens 3772	WSB10000194	VIEWER Polycarbonate colourless. 200mm
WSB10000203	ADAPTER helmet Screen Holder	WSB10000199	VIEWER Polycarbonate colourless. 160mm
WSB10000230	ADAPTER universal aluminium helmet	WSB10000198	VIEWER Acetate colourless. 200mm
WSB10000194	VIEWER Polycarbonate colourless. 200mm	WSB10000200	VIEWER Acetate colourless. 160mm
WSB10000199	VIEWER Polycarbonate colourless. 160mm	WSB10000204	VIEWER Polycarbonate colourless rigid. Electric arc
WSB10000198	VIEWER Acetate colourless. 200mm	WSB10000232	VIEWER Polycarbonate gold DIN 5 ovens
WSB10000200	VIEWER Acetate colourless. 160mm	WSB10000227	VIEWER Polycarbonate soldering T5
WSB10000204	VIEWER Polycarbonate colourless rigid. Electric arc		
WSB10000232	VIEWER Polycarbonate gold DIN 5 ovens		
WSB10000227	VIEWER Polycarbonate soldering T5		



Helmet adapter screen holder

 Height adjustment in 3 positions

 Press to "fast" adjustment. Rotor system

 Incorporated antisweat band

 Compatible with wide range of viewers

 Large coverage in front and upper part

 Folding system. Adjustment by fixation

### Head adapter Tucan 2



### Universal helmet adapter



### Visor colorless polycarbonate

P	
A AN	Marking at resistant to particles at extreme temperatures and high energy of 190 m/s
	Anti-crossed rigid polycarbonate
	Resistant to electrical arc short circuits
	Resistant to founded metals and solid candents
	UV Protection

### Visor electric arch



### Visor welding DIN 5







## **HEARING PROTECTION**

### **EAR MUFFS**

Sibol hearing protection systems have been designed for personal safety against exposure to "all types and levels of noise" that are developed in work environments. Surprising, innovative, effective, ergonomic, hygienic, durable and with an exceptional design, they comply, scrupulously, all the guidelines and quality regulations and are the consequence of the constant research and investment in R&D of the firm.

### **EAR PLUGS**

Ear protection against exposure to all types and levels of noise. SIBOL provides a wide selection of ear plugs which includes disposable and reusable versions designed to combine comfort with effective protection. Efficient, ergonomic, hygienic, durable and with an exceptional design, that achieve, scrupulously, all the directives and quality standards.









## EAR MUFFS

EAR MUFFS	
WSB16102004	SILENT I: 30dB. Comfort. Adjustable items
WSB16102005	SILENT II: 28dB. Adjustable closure
WSB16102007	SILENT III: 24dB. Standard. Adjustable closure. REFLECTOR
WSB16102016	EP01 32dB. Comfort. Adjustable closure
WSB16102024	EP01 33dB. Comfort. Adjustable closure



**EP04 - 33 dB** For high levels of noise exposure



**EP01 - 32 dB** For high levels of noise exposure



Suitable to avoid over protection

## EAR MUFFS

UNIVERSAL HELMET EAR MUFFS		
WSB16102001	SILENTO Headset: 24dB	
EAR MUFFS ACCESSORIES / SPARE PARTS		
WSB41102001	SILENT I, SILENT II: Set of 20 pieces of ear caps	



ABS adapter for optimal fixation

Height adjustable cazolets

Rotating cazolets with position indicator

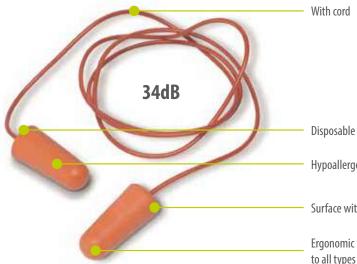
**SILENTO - 24dB** Suitable to avoid over protection



Available couplings: - only to helmet (universal connection) - screen holder adapter (integrated helmet and visor)

## **EAR PLUGS**

EAR PLUGS	
WSB16101005	Earplugs dispenser DCMAX. Includes 500 pairs of DCMAX earplugs: 34dB
WSB16101008	DCMAX 500 pairs: 34dB. Refill bag
WSB16101002	DCMAX 200 pairs: 34dB. Dispenser pack
WSB16101012	DCMAX 200 pairs with lace: 34dB. Dispenser pack
WSB16101016	DCMAX 100 pairs with lace TPR reusable: 29dB. Rigid individual pack or dispenser pack
WSB16101026	PASSTOP S silicone REUSABLE with lace and rigid individual pack: 25dB



Hypoallergenic material

Surface without roughness

Ergonomic form adaptable to all types of auditive ducts

DCMAX 200 Cord For high levels of noise exposure







### **TEST AND MAINTENANCE**

The periodic check of the respiratory protection device is an essential operation to have at any time an efficient and safe product ready for use.

SPASCIANI has realized a range of specific instruments for the check of the breathing protection devices to ensure that the performances of the reference standards are met. By means of these instruments specifically trained personnel can perform the scheduled maintenance.

Accessories	5
169050000	ARAC MINI
	ARAC MINI plus
	ARAC 2.5

**ARAC MINI** e **ARAC MINI Plus** are designed to carry out checks on the field in any environment of masks and breathing apparatus. The instruments are contained in a small case which is easily transportable. Completely analogic it does not require electricity nor compressed air.



# **ARAC 2.5**

#### **ARAC 2.5**

The new generation of SPASCIANI test benches for the check of respiratory protection devices. The new bench, beside the flexible software and tests as well as the rigid and inflatable head, features a series of automatic routines to make controls easier and quicker. The Data Base access and the management of data have been highly improved and strengthened thus making **ARAC 2** ideal for maintenance stations.

**ARAC 2.5** is managed by an on-board PC fitted with a touch screen, it is possible, though, to connect peripherals such as mouse, keyboard, bar code scanner to enhance data entry. It is also possible to connect the machine to the internet for remote assistance and software updates.



# **GAS AND DUST FILTERS**

When choosing a filter, it is necessary to consider a series of factors which cannot be defined beforehand but they come only from a proper and careful risk analysis.

The type of application, the pollutant(s), the concentration, the temperature, the relative humidity, the smell threshold, the individual characteristics of the user are only some of the factors to be considered for a correct selection of a filter.

Filtering respirators protect from gases and/or vapours and/or dusts, fumes, mists because the filters retain by a chemical/physical action the airborne pollutants.

Depending on the protection given filters are divided into Gas, Particle and Combined filters, the latter being a combination of the previous two.

The standard EN 14387 gives the minimum requirements, the test methods and the marking for gas and combined filters. The standard EN 143 gives the same for Particle filters.

In the standards above, gas filters are divided in types A, B, E, K plus some other special filter as NO and Hg depending on the chemicals they protect from.

They are also classified 1, 2, 3 according to their absorption capacity. Particle filters are indicated by the letter P followed by the number 1 or 2 or 3 according to their efficiency.

Each filter type is then given a specific colour code. Beside the main types, the so called multi-purpose filters offer at the same time the protection given by more filter types, e.g. AB, BK, ABEK.

SPASCIANI filters are produced in the series 100 and 200 with polypropylene housing, all fitted with standard connection EN 148-1. Filter respirators can only be used in environments where the Oxygen concentration in the air is at least 17% in volume.

When this condition is not granted the use of filtering devices is contraindicated. In such cases one shall resort to isolating breathing apparatus or to fresh air respirators.

It is not possible to state beforehand the duration of gas filters, this depending on the concentration of the pollutant but also on many more factors such as the humidity of air, the temperature, the breathing rate etc.

ТҮРЕ	COLOR	PROTECTION						
AV		Organic Vapours, b.p. <65 °C						
AX		Organic Vapours, b.p. <65 °C + dusts, fumes, mists						
Δ.		Organic Vapours, b.p. >65 °C						
Α		Organic Vapours, b.p. >65 °C + dusts, fumes, mists						
В		Inorganic Gases						
D		Inorganic Gases + dusts, fumes, mists						
E		Sulphur Dioxide and Acids						
E		Sulphur Dioxide and Acids + dusts, fumes, mists						
К		Ammonia and basic vapours						
ĸ		Ammonia and basic vapours + dusts, fumes, mists						
Р		Dusts, fumes, mists						
Hg		Mercury vapours + dusts, fumes, mists						
NO		Nitrous vapours + dusts, fumes, mists						
Reactor		CH <sub>3</sub> I + radioactive dusts, fumes, mists						
UP3		All gases and vapours + dusts, fumes, mists						

## **GUIDE TO FILTER SELECTION**

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	COLOR	ODOUR THRESHOLD mg/m³	TLV ppm	TLV mg/m³	PHYSIOLOGICAL EFFECTS
Acetaldheyde	75-07-0	СНЗСНО	28,8	AX	Brown	0,0002	25C	45C	Irritates nose, eyes ,cough headhache
Acetic acid	64-19-7	C2H4O2	118	A	Brown	2,5	10	25	Caustic, irritating, causes dermatitis
Acetic ether	-	-	-	A	Brown	-	-	-	Irritating: mucous membranes, narcotic, anemia, leukocytosis
Acetone	67-64-1	C3H60	56,6	АХ	Brown	47,5	500	1188	Irritating: skin, mucous membra- nes, respiratory tract
Acetonitrile	75-05-8	C2H3N	1,1	A	Brown	70	40	67	Highly toxic, headache, convul- sions, dizziness
Acetylene	74-86-2	C2H2	-84	**		657,2	nn	nn	Asphyxiating
Acetylene tetrachloride	79-34-5	C2H2Cl4	146,3	A	Brown	21	1	6,9	Nausea, vomiting, headache, gastrointestinal disorders
Acrolein	107-02-8	C3H40	52,5	A	Brown	0,05	0,1 C	0,23 C	Irritating eyes and respiratory tract
Acrylonitrile	107-13-1	C3H3N	77,3	A B	Brown Grey	8,1	2	4,3	Highly toxic, headache, convulsions, dizziness, suspect carcinogen
Acrylonitrile	107-13-1	C3H3N	77	A	Brown	8,1	2	4,3	Highly toxic, headache, convul- sions, dizziness, carcinogenicity
Allyl chloride	107-05-1	C3H5CI	44,6	АХ	Brown	1,41	1	3	Mucous irritants, liver and kidney damage
Ammonia	7664-41-7	NH3	-33,3	К	Green	0,026	25	17	Irritating eyes and respiratory tract, bronchitis edema
Aniline	62-53-3	C6H7N	184,4	A	Brown	-	2	7,6	Harmful central nervous system, eye disorders, tumors
Arsenic	7440-38-2	As4	-	P3	White	-	-	0,01	Highly toxic, carcinogen
Arsenic trioxide	1327-53-3	As203	460	BP3	Grey White	-	-	0,01	Carcinogen
Arsine	7784-42-1	AsH3	-55	В	Grey	0,84	0,05	0,16	Headache, gastric disorders
Asbestos	1332-21-4	-	-	P3	White	-	0,2	-	Carcinogen
Benzene	71-43-2	C6H6	80	Α	Brown	4,5	0,5	1,6	Toxic, irritating, carcinogen
Benzyl bromide	100-39-0	C7H7Br	198	Α	Brown	-	-	-	Tear gas and toxic
Benzyl chloride	100-44-7	C7H7CI	179	A	Brown	0,235	1	5,2	It irritates the mucous membra- nes strongly carcinogenic
Beryllium	7440-41-7	Ве	2970	Р3	White	-	-	0,002	Lung diseases. Carcinogenic suspicion
Bis (2-chloro- ethyl) sulfide	505-60-2	C4H8Cl2S	228	В	Grey	-	-	-	Strong irritant. Vomiting, headache
Bromine	7726-95-6	Br2	58,73	В	Grey	0,329	0,1	0,66	Irritates respiratory system burns on the skin
Bromoacetic acid methyl ester	96-32-2	C5H60Br	136	A	Brown	-	-	-	Tear gas, toxic
Bromoform	75-25-2	CHBr3	149,5	A	Brown	5300	0,5	5,2	Irritates the mucous membranes. At high doses it is deadly
Bromomethane	74-83-9	CH3Br	3,56	AX	Brown	80	1	9	Irritating nerve and vascular disorders
Bromotoluene	95-46-5	C7H7Br	183,7	A	Brown	-	-	-	Irritating
Bromotrifluoro- ethylene	598-73-2	C2BrF3	-2,5	АХ	Brown	-	-	-	Toxic damage the kidneys, liver. Cause of nausea

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	·		ODOUR THRESHOLD mg/m <sup>3</sup>	TLV ppm	TLV mg/m <sup>3</sup>	PHYSIOLOGICAL EFFECTS
Butyl alcohol (n-)	71-36-3	C4H100	117,5	A	Brown		0,36	50 C	152 C	Narcotic, dermatitis, liver dama- ge and eyes
Butyl alcohol (ter)	75-65-0	C4H100	99,5	A	Brown		219	100	303	Narcotic, dermatitis, liver dama- ge and eyes
Carbon dioxide	124-38-9	C02	-	**		//	-	5000	9000	Asphyxiating
Carbon disulfide	75-15-0	CS2	46,5	AX	Brown		0,024	10	31	Headache, dizziness, delirium, vomiting
Carbon monoxide	630-08-0	СО	-191	C0	Black		-	25	29	Strongly toxic, nausea, heada- che, dizziness
Carbon tetra- chloride	56-23-5	CCI4	76,8	A	Brown		60	5	31	Headache, vomiting, dizziness, liver disorders
Carbonyl chloride	75-44-5	COCI2	8,3	В	Grey		2	0,1	0,4	Irritating. Pulmonary edema. Very toxic
Chlorine	7782-50-5	Cl2	-34,5	В	Grey		0,03	0,5	1,5	Toxic, corrosive. Irritating the skin. Pulmonary edema
Chlorine dioxide	10049-04-4	C102	9,9	В	Grey		0,3	0,1	0,28	Irritating the mucous mem- branes. Stomatitis, pharyngitis edema.
Chloro Bromomethane	74-97-5	BrCH2CI	67,8	A	Brown		2100	200	1060	Irritating and narcotic
1-Chloro-1nitro propane	600-25-9	C3H6CIN02	134	A	Brown		-	2	10	Irritating
3-Chloro-1- propyne	624-65-7	СЗНЗСІ	31,6	AX	Brown		2000	5	20	Dizziness, anesthetic action, carcinogen
Chloroacetone	78-95-5	C3H5Cl0	119	AP3	Brown	White	-	10	3,8C	Tear gas
Chloroaceto- phenone (CAF)	99-91-2	C8H7Cl0	237	AP3	Brown	White	0,102	0,05	0,32	Strong tear gas
Chlorobenzene	108-90-7	C6H5Cl	131,7	A	Brown		0,98	10	46	Toxic to the central nervous system, spasms headache
Chloroethane	75-00-3	C2H5Cl	12,3	AX	Brown		21	100	264	Drowsiness, apathy, visual disturbances, tremor
Chloroform	67-66-3	CHCI3	61,26	AX	Brown		250	10	49	Narcotic, irritates mucous membranes, unconsciousness. Carcinogenic suspicion
Chloropicrin	76-06-2	CCI3NO2	112	AP3	Brown		5,4	0,1	0,67	Irritating, tear gas. Gastric disorders, vomiting
Chloroprene	126-99-8	C4H5CI	59,4	AX	Brown		-	10	36	Toxic central nervous system
Chlorosulfonic acid	7790-94-5	HSO3CI	151	BP3	Grey	White	-	-	-	Lacrimogen, sneezing
Cresol	1319-77-3	C7H80	200	A	Brown		0,001	5	22	Ulcerates skin, causes conjun- ctivitis
CS	-	-	-	ABEP3	Brown Grey	Yellow White	-	-	-	Lachrymatory
Cyanogen	57-12-5	CN-	-21	В	Grey		500	10	21	Irritating mucous membranes, headache, nausea. Mortal
Cyanogen chloride	506-77-4	CNCI	13,1	В	Brown		2	0,3C	0,75 C	Loss and leukemia
Cyclohexane	110-82-7	C6H12	80,7	A	Brown		1,43	300	1030	Irritating to the skin
Cyclohexanol	108-93-0	C6H120	161,5	A	Brown		400	50	206	Narcotic. It damages kidneys, liver, blood vessels
Cyclohexanone	108-94-1	C6H100	155,6	A	Brown		0,48	25	100	Poor narcotic, irritant

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	COLOR		ODOUR THRESHOLD mg/m <sup>3</sup>	TLV ppm	TLV mg/m <sup>3</sup>	PHYSIOLOGICAL EFFECTS
DDT	50-29-3	C14H9Cl5	-	AP3	Brown	White	5,07	-	1	Action on the central nervous system
Dichloro ethane	75-34-3	C2H4Cl2	83,5	A	Brown		445	100	405	Irritating
Dichloro ethylene	75-35-4	C2H2Cl2	59	AX	Brown		0,336	200	793	Irritating and narcotic
Dichloroethyl ether	111-44-4	C4H8Cl20	178,5	A	Brown		90	5	29	Irritating to mucous membranes. Eddema lung
Dichloro- methane	75-09-2	CH2Cl2	39,8	АХ	Brown		540	50	174	It hurts the eyes, narcotic. Headache, nausea. Carcinogenic suspicion
Dichloropropane	26638-19-7	C3H6Cl2	96,8	A	Brown		-	75	347	Dermatitis, liver damage, congestion
Dichloropropene	26952-23-8	C3H4Cl2	75	A	Brown		-	1	4,5	Strong irritant
Diethylamine	109-89-7	C4H11N	55,5	AK	Brown	Green	0,085	5	15	Dangerous for the eyes
Dimethyl formamide	68-12-2	C3H7N0	152,8	A	Brown		300	10	30	Irritating, liver damage
Dimethyl hydrazine	57-14-7	C2H8N2	63,3	К	Green		12	0,01	0,025	Irritating, suspicious carcinogen
Dimethyl sulfate	77-78-1	C2H6O4S	37,5	AX	Brown		-	0,1	0,52	Skin burns, conjunctivitis, paraly- sis. Carcinogenic suspicion
Dioxane	505-22-6	C4H802	101	A	Brown		0,018	25	90	Irritating to the mucous mem- branes. Liver problems
Ethane	74-84-0	C2H6	-172	**			-	-	-	Asphyxiant
Ethane trichloride	79-00-5	C2H3Cl3	74,1	A	Brown		542,8	350	1910	Narcotic, irritating
Ethanol	64-17-5	C2H60	78,3	A	Brown		0,34	1000	1880	Irritating eyes and respiratory tract
Ethanolamine	141-43-5	C2H7N0	170,5	A K	Brown		5,333	3	7,5	Irritating
Ethyl acetate	141-78-6	CH3COOC2H5	77,15	A	Brown		0,02	1440	400	Irritates mucous membranes, narcotic, anemia, leukocytosis
Ethyl bromide	74-96-4	C2H5Br	38,4	AX	Brown		890	5	22	Toxic narcotic. Causal conjunctivi- tis. Carcinogenic suspicion
Ethyl Ether	60-29-7	C4H100	34,6	AX	Brown		0,99	400	1210	Unconsciousness, paralysis, lack of appetite. Irritating
Ethyl methyl ketone	78-93-3	C4H80	79,5	A	Brown		0,738	200	590	Narcotic irritant
Ethylbenzene	100-41-4	C8H10	-	A	Brown		8,7	100	434	Irritating to mucous membranes
Ethylene	74-85-1	C2H4	-104	**	//	///	299	-	-	Asphyxiant
Ethylene diamine	107-15-3	C2H8N2	117,2	AK	Brown	Green	0,48	10	25	Caustic
Ethylene oxide	75-21-8	C2H40	10,7	AX	Brown		520	1	1,8	Strongly toxic, nausea, respira- tory disturbances
Fire Fume -CO	-	-	-	BP3	Grey	White	-	-	-	-
Fire Fume + CO	-	-	-	COP3	Black	White	-	-	-	-
Formaldehyde	50-00-0	CH20	-19,5	AX	Brown		1,47	C 0,3	C0,37	Irritating, pulmonary edema. Carcinogenic
Formic acid	64-18-6	CH202	100,8	A	Brown		0,005	5	9,4	Corrosive, ulcerative, irritant: mucous membranes
Freon	-	-	-	**	//	///	-	-	-	Asphyxiating, narcotic
Fumes	-	-	-	P3	White		-	-	-	-
Furfural	98-00-0	C5H602	161,7	A	Brown		0,24	2	7,9	Irritating. Damage to the eyes
Furfuryl alcohol	98-00-0	C5H602	171	A	Brown		32	10	40	Poison, high toxicity
Hexachloro cyclohexane	319-86-8	C6H6Cl6	-	AP3	Brown	White	-	-	0,5	Irritating acts on the central nervous system, convulsions, edema

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	R COLOR		ODOUR THRESHOLD mg/m <sup>3</sup>	TLV ppm	TLV mg/m <sup>3</sup>	PHYSIOLOGICAL EFFECTS
Hydrazine	302-01-2	N2H4	113,5	К	Green		3	0,01	0,013	Systemic poisoning, carcinogenic suspect
Hydrocarbons	-	-	>65	A	Brown		-	-	-	-
Hydrogen bromide	10035-10-6	HBr	126	В	Grey		6,66	3 C	9,9 C	Highly toxic, depression, skin rash
Hydrogen chloride	7647-01-0	HCI	-84,8	BE	Grey Green		7	5C	7,5C	Caustic, irritating, causes dermatitis
Hydrogen cyanide	74-90-8	HCN	25,7	В	Grey		0,9	4,7 C	5 C	Highly toxic, headache, convul- sions, dizziness
Hydrogen fluoride	7664-39-3	HF	19,4	В	Grey		0,033	3C	2,3C	Toxic, corrosive, causes burns, inflammatory
Hydrogen iodide	10034-85-2	HI	-35,3	В	Grey		-	-	-	Irritating the mucous mem- branes. Stomatitis, pharyngitis edema.
Hydrogen phosphide	7803-51-2	РНЗ	-87	В	Grey		0,028	0,3	0,42	Irritating. Anemia, appetite, bone fragility
Hydrogen sulfide	7783-06-4	H2S	-60,4	В	Grey		0,0004	10	14	Irritating, headache, cough very toxic
Insecticides	-	-	-	AP3	Brown White	2	-	-	-	-
lodide 131 methyl	74-88-4	СНЗІ	-	Reactor P3	Orange White	2	-	-	-	-
lodine	7553-56-2	12	184	В	Grey		-	0,1C	1C	It irritates the mucose. Stomati- tis, pharyngitis, edema.
lodine 131	7553-56-2	I2 131	-	Reactor P3	Orange White	2	-	-	-	-
lron pentacarbonyl	13463-40-6	C5FeO5	103	COP3	Black White	2	-	0,1	0,23	Nausea, vomiting, unconsciou- sness. Toxic
isoamyl alcohol	137-32-6	С5Н120	116	A	Brown		25,2	100	361	Irritating eyes and respiratory tract
lsobutylene	115-11-7	C4H8	-6,9	AX	Brown		54,96	-	-	Toxic corrosive. Irritating the skin. Pulmonary edema
lsocyanates	-	-	-	AP3	Brown White	2	-	-	-	-
lsopropyl alcohol	67-63-0	СЗН80	80,3	A	Brown		7,84	400	983	Irritating , eyes damages, narcotic
Ketene	463-51-4	C2H2O	-56	AX	Brown		-	0,5	0,86	Irritating, pulmonary edema
Lindane	58-89-9	C6H6Cl6	-	**			-	-	-	Irritating, acts as a central nervous system
Maleic anhydride	108-31-6	C4H2O3	202	A	Brown		1,84	0,25	1	Burns skin and eyes, pulmonary edema
Mercury vapors	502-39-6	Hg	356,9	HgP3	Red White		-	-	0,025	Inflammation of the mucous membranes, gingivitis, tremors
Methane	74-82-8	CH4	-161,5	**	$\mathbb{Z}$			-	-	Asphyxiant
2-Methoxy- ethanol	109-86-4	C3H802	156,4	A	Brown White	2	0,288	5	24	Irritating to occurring, kidney injury.
Methyl alcohol	67-56-1	CH40	64,5	AX	Brown		13,11	200	262	Harmful nervous system, optic nerve, liver. Dermatitis, nausea
Methyl Chloride	74-87-3	CH3CI	-23,7	**	///		-	50	103	Narcotic, it destroys eyes, liver, heart and central nervous system
Methyl formate	107-31-3	C2H4O2	32	AX	Brown	,	500	100	246	Narcotic, irritating to the eyes and respiratory tract
Methyl iodide	74-88-4	СНЗІ	42,5	AX	Brown		-	2	12	Carcinogenic suspicion
Methylene chloride	75-09-2	CH2Cl2	39,8	AX	Brown		540	50	174	It hurts the eyes, narcotic. Headache, nausea. Carcinogenic suspicion

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	COLOR		ODOUR THRESHOLD mg/m³	TLV ppm	TLV mg/m³	PHYSIOLOGICAL EFFECTS
Methylethyl ketone (MEK)	78-93-3	C4H80	79,5	A			0,738	200	590	Narcotic irritant
Mist (in general)	-	-	-	P3	White		-	-	-	-
n-Amil acetate	628-63-7	CH3C00C5H11	149	A	Brown		0,026	713	150	Irritates eyes, nose, throat. Nausea, cough, migraine
n-Butyl acetate	123-86-4	CH3COO(CH2)3CH3	126	A	Brown		0,009	730	150	Irritates eyes, nose, throat. Nausea,cough, migraine
Nickel carbonyl	13463-39-3	Ni(CO)4	43	COP3	Black	White	0,21	0,05	0,12	Dizziness, gastric disorders, haemorrhage, carcinogenicity
Nitric acid	7697-37-2	HN03	86	BP3	Grey	White	0,75	2	5,2	Toxic, corrosive, pulmonary edema
Nitrobenzene	98-95-3	C6H5N02	210,9	A	Brown		0,024	1	5	Cyanosis, headache, dizziness, nausea
Nitrogen Oxide	10102-44-0	N02	21	NO P3	Blue	White	2	3	5,6	Respiratory irritation, coughing, dyspnoea, pulmonary edema
Nitroglycerin	55-63-0	C3H5N309	-	A	Brown		-	0,05	0,46	Headache, dizziness, cirrhosis, tremors
NOx	-	-	-	NO P3	Blue	White	-	-	-	Respiratory irritation, coughing, dyspnoea, pulmonary edema
Petrol (vapour)			-	А	Brown		-	300	890	Eye disorders, carcinogen
Phosphorus pentachloride	10026-13-8	PCI5	166,8	В	Grey		-	0,1	0,85	Eye damage. Irritating
Phosphorus trichloride	7719-12-2	PCI3	74,2	В	Grey		-	0,2	1,1	Irritating to eyes, nose, throat
Phosphoryl trichloride	10025-87-3	POCI3	105	В	Grey		-	0,1	0,63	Eye damage. Irritating
Phthalic anhydride	85-44-9	C8H4O3	295	AP3	Brown	White	-	1	6,1	Irritating mucous membranes and cornea
Powders	-	-	-	P3	White		-	-	-	-
Propane	74-98-6	C3H8	-41	**			1800	-	-	Anesthetic, asphyxiating
Pyridine	110-86-1	C5H5N	115,3	A	Brown		0,009	5	16	Narcotic, irritating, headache, eczema
Sodium hydroxide	1310-73-2	NaOH	-	P3	White		-	-	2C	Corrosive, irritant
Spray paint	-	-	-	AP2	Brown	White	-	-	-	
Styrene	100-42-5	C8H8	146	A	Brown		0,43	20	85	Mystique, fissure, narcotic irritation
Sulfur Chloride	10025-67-9	S2CI2	138	BP3	Grey	White	-	1C	5,5 c	It irritates the mucous mem- branes of the eyes and the respiratory tract.
Sulfur dioxide	7446-09-5	S02	-10	E	Yellow		1,17	2	5,2	Harmfull for eyes and respiratory tract, bronchitis edema
Sulfur trioxide	7446-11-9	S03	44,8	EP3	Yellow	White	-	-	-	Harmfull for eyes and respiratory tract, bronchitis edema
Sulfuric acid	7664-93-9	H2SO4	330	EP3	Yellow	White	1	-	-	Caustic, destroys tissues, loss of knowledge
TDI	584-84-9	C9H6N2O2	-	A	Brown		0,14	0,001	-	Bronchitis spasms dermatitis
Tetrachloro- ethane	79-34-5	C2H2Cl4	146	A	Brown		0,2	1	-	Headache gastritis and soreness
Tetraethyl lead	78-00-2	C8H20Pb	198	AP3	Brown	White	-	-	0,1	Insomnia, hypothermia, tremitis, headache, nausea
Toluene	95-53-4	C7H9N	110,4	A	Brown		17,55	50	188	Toxic, irritating. Carcinogenic suspicion
Toluene diisocyanate	91-64-5	С9Н602	118	A	Brown		3,2	0,005	0,036	Bronchitis spasms dermatitis

CHEMICAL NAME	CAS N°	FORMULA	B.P. °C	FILTER	COLOR	ODOUR THRESHOLD mg/m <sup>3</sup>	TLV ppm	TLV mg/m <sup>3</sup>	PHYSIOLOGICAL EFFECTS
Trichloro ethylene	79-01-6	C2HCl3	87,1	A	Brown	1,134	50	269	Headache gastritis and soreness
Trifluoro- methane	75-46-7	CHF3	-82	**		-	1000C	5600C	Gastric disorders, headache, and soreness
Turpentine oil	8006-64-2	-	160	A	Brown	560	100	55,6	Visual headache, irritating headache
Vinyl acetate	108-05-4	C4H602	73	A	Brown	0,36	10	35	Irritating skin, narcotic
Vinyl chloride	75-01-4	C2CIH3	-13,4	AX	Brown	-	5	13	Dizziness, anesthetic action, carcinogen
Xylene, mixture of isomers	1330-20-7	C8H10	144,4	A	Brown	0,348	100	434	Toxic, irritating. Carcinogenic suspicion

### Legend

#### **B.P. (Boiling Point)**

Very important for Organic Chemicals as 65°C is the limit of filterability of those substances by a filter type A. Chemicals with lower b.p. can be retained by Type AX filters only. For some substances, it is recommended the use of compressed air breathing apparatus instead.

#### Filter

It indicates the filter(s) type(s) recommended for the chemical shown. Two \*\* indicate that the chemical is not filterable and it is therefore necessary to use compressed air or fresh air respirators

#### **Odour Threshold**

It shows the minimum concentration detectable by humans' nose. It is a mere indication and is taken from studies in the specialised literature.

#### TLV ppm (Threshold Limit Value)

The table shows the values the TLV-TWA published by the American Conference of Governmental Industrial Hygienists. They correspond to the concentration to which a worker can be exposed 8 hours a day for his entire working life without effect on his health. When the C appears, it means that it is a Ceiling Value, meaning that that concentration shall not be overpassed at any time. TLV-TWA are also commonly used when testing the breakthrough time of gas filters, i.e. the contaminant concentration in the effluent air which is considered to correspond to the exhaustion of the filter.

#### **Physiological effects**

It indicates very briefly the symptoms of chronic or acute intoxication of the concerned chemical. Sometimes reference is made to other entries either because they have similar effects or they are the same chemical referred to with different commercial or chemical names.

# **MARKING - LEGEND**

SPASCIANI S.P.A. has certified its own Quality System Managment according to the standard ISO 9001:2015

Every product is certified according to the current European standards which regulate the production and trade of personal protective equiment of the breathing ways, eye, hear and head protection.

### PPE

The personal Protective Equipment (PPEs) falls within the range of application of EU Regulation 2016/425, in force since 21 April 2018, replacing Directive 89/686 / EEC.

Personal Protective Equipment is defined as a"Device designed and manufactured to be worn or held by a person to protect themselves from one or more risks to their health or safety".

Personal protective Equipment belongs to the third cathegory and is called "complex design", which means intended to protect the user from the risk of death or serious and permanent personal injury. PPE belonging to the third category is subjected to the procedure of CE Certification by a Notify Body (form B of Regulation 2016/425). In addition, the PPE belonging to the third category must also be subjected to the control of production (form D of Regulation 2016/425). In case of production control, PPE must be CE marked reporting also the number of the Notify body carrying out the check (in the case of ITALCERT: CE 0426).

The product certification procedure (module B), called "Type certification", involves both the execution of laboratory tests and the evaluation and approval of the technical documentation, whose content must correspond to the requirements established in regulation 2016/425.

### MED

Marine equipment falls within the scope of Directive 2014/90 / EU (formerly 96/98 / EC). Any equipment falling within the definition of the directive 2014/90 / EU must be placed on board ships pursuant to international conventions on the safety of navigation and to IMO resolutions and circulars, as well as to the relevant international testing standards.

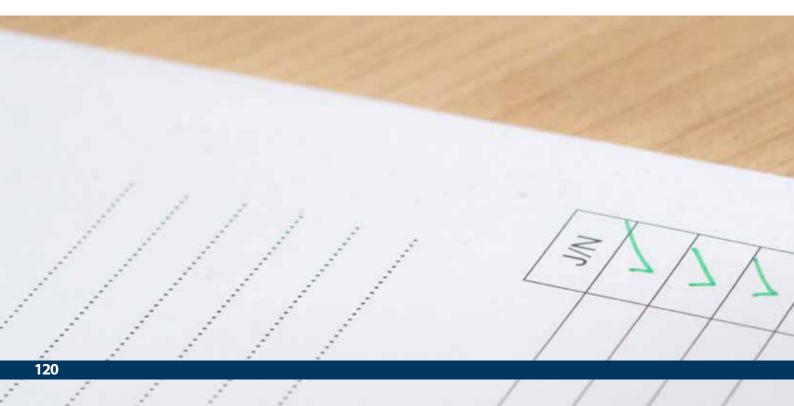
For equipment falling within the scope of the Directive 2014/90 / EU, the following conformity assessment procedures must be performed:

• MODULE B EC type examination

**CE ()** (Ex)

• MODULE D guarantee of production quality.

Marine equipment compliant with directive 2014/90 / EU subject to the required conformity assessment procedures, must bear a marking consisting of the symbol of a "wheelmark" followed by the four-digit numerical identification code of the Notify Body that performed the compliance assessment procedure if this participates in the control phase of the production, as well as the last two digits of the year in which the brand has been affixed. Example 0426/20



#### PED

Directive 2014/68 / EU (PED) governs the requirements of design, equipment manufacturing and conformity assessment of the pressure equiment and relevant sets. The 2014/68 / EU was implemented in Italy with Legislative Decree No. 26 of February 15, 2016 and repealed the previous directive 97/23 / EC from 19/07/2016. The PED applies to both individual equipment such as containers, pipes, safety accessories, pressure accessories subject, during their operation, at a maximum allowable pressure higher than 0.5 bar, both to units marketed and put into service as such. In order to assess compliance with the PED, the pressure equipment must first be classified into categories from the first to the fourth according to the following parameters:

- type of fluid GROUP 1 for dangerous fluids or GROUP 2 for all other fluids;
- energy potential PS X V or PS X DN
- Where:
- PS maximum allowable pressure in bar;
- V volume in liters;
- DN nominal size of the pipeline in millimeters

The sets are classified according to the highest category of the devices involved (not considering the safety accessories). Moreover there are pressure devices that fall under article 4 paragraph 3 and - despite the fact that they are not subect to the CE marking - must be designed and realized according to a correct building procedure and must be provided with user's instructions and marking. According to the category involved, you must chose the module or procedure of conformity assessment to be used among the ones required by PED directive. SPASCIANI devices belong to CATEGORY III and use the assessment procedure B+D.

#### ATEX

ATEX (ATmosphères and EXplosives) is the conventional name that groups two directives of the European Union:

2014/34 / EU for the regulation of equipment intended for use in areas at risk of explosion; the directive is addressed to the manufacturers of equipment to be used in areas with potentially explosive atmospheres and it requires the certification of these products. The directive 94/9/CE was repealed by this directive starting from 20 April 2016;
99/92 / EC for the safety and health of workers in explosive atmospheres; it is applied in environments with risk of explosion, where certified plants and equipment are put into operation and is therefore addressed to users.

Spasciani devices that have undergone tests to obtain the voluntary ATEX certification and that have obtained it are: Escape Breathing Apparatus SK, Escape Hood H900 and halfmask M900, half mask escape M900.



## **MERCHANDISING**



#### Samples Kit made of:

- TR 82
- TR 2002 CL 3
- DUPLA
- 220N ABEK 15
- DUETTA
- DUO
- ST 85
- Corrugated hose 11481
- Flow regulator
- AC 190 Overflow valve



**Counter display** 

• EOD Filter • Turbine Corrugated hose for Turbine

- 1 Filter ABEK
- 1 Filter UP3
- 2 Filters P3 for Turbine
- 2 Cartridges P3 • 2 Cartridges ABEK
- 2 Cartridges A2P3
- Holding bag















EUROPEAN SAFETY MANUFACTURER





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