

# ATAG

SERVING INDUSTRY SINCE 1947

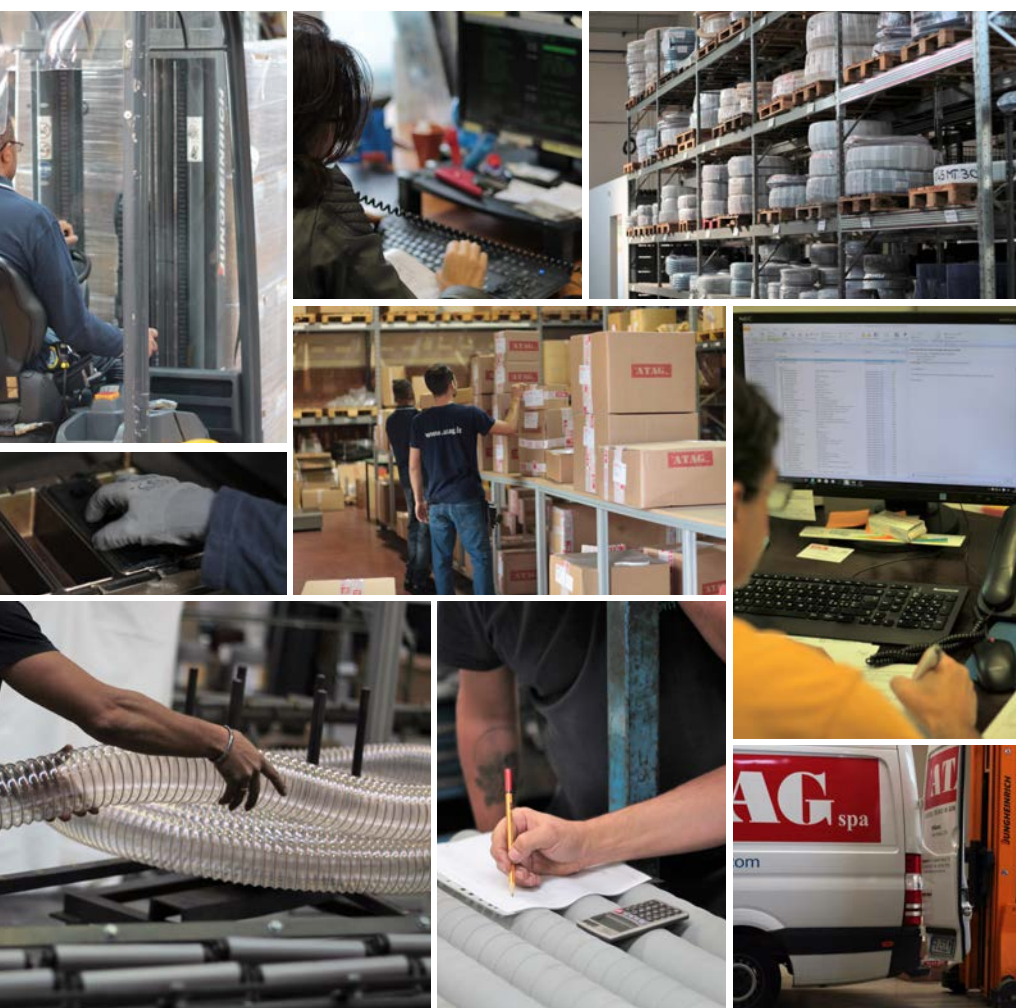


## PIERCAN SPECIAL GLOVES

- Products Range
- How to choose our gloves

# PAST, PRESENT, FUTURE

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**ATAG** is serving industry since **1947** and is constantly growing.

The wide range of products, the three domestic locations, the controlled companies, the large warehouses, the extensive sales network, the increasingly stringent internal workings, the website in constant evolution and a service based on the qualified technical expertise offered by our sales department, are the reasons why our customers rely constantly on ATAG.

In recent years we have incorporated complementary companies, using their great competencies to improve our own skills. An efficient export department, our European resellers and long-standing customers, allow us to have a better knowledge of foreign markets and strengthen our presence beyond the Italian borders.

Collaborations and agreements with international prestige partners enable us to offer our country products and solutions that are already appreciated and well established in Europe, and to stimulate our research into improved solutions for the Italian industry.

# SPECIAL GLOVES "PIERCAN"

ATAG has been the Italian supplier of **PIERCAN** gloves for special uses for years.

In all the industrial world, but especially in the fields of Pharmaceuticals, Food, Hospital, Nuclear and Chemical, it is usual to handle substances that need not be contaminated by external agents or must not contaminate the operators who handle them.

For these manipulations they use Glove Boxes. They may be simple transparent plastic boxes containing substances or objects to mix or manipulate, or well equipped laboratories designed to keep in two different worlds the worker and the substances that must be handled. The barrier between these two worlds are our highly technological gloves. Their elaborate production and the controls they are subject to guarantee complete separation and protection of the worker from what is contained in the Glove Box.

Some gloves are made of compounds and/or other materials specially combined to make them suitable to withstand the most varied mechanical stresses or any aggression of dangerous chemical substances, and to protect the worker from harmful contamination of crops or radiation. The gloves are often designed for specific customer use so to provide the best solution with respect to both price and safety of use.

The **PIERCAN** products are designed in accordance with the main European regulations concerning the PPE (Personal Protective Equipment) such as: EN420, EN374 (Rules concerning protection against chemical products), EN388 (against mechanical risks), etc..

Every item is individually and severely controlled in order to guarantee user safety. The vacuum packaging and the special care in the packing itself guarantee a perfect state of conservation of the items delivered.



## ONE PIECE GLOVES for Dry Box



The choice of the suitable glove depends on your specific needs with regard to working conditions, type of chemical products used, or mechanical requirements. This guide will help you making the most suitable choice.

Each glove for Dry Box is individually controlled and the severity of these controls guarantees a perfect safety for the user.

## Isolators GLOVES



Short gloves to use with arm guards. This choice allows a quick change of the single short glove when necessary in order to use the most suitable size for the hands of the operator or to replace the glove after being in contact with different substances that need to be manipulated.

The new plastic ring of connection between gloves and arm guards makes the change very fast and secure.

## ARM GUARDS for Isolators



We have developed a wide range of arm guards with large diameters for a best comfort; they are also especially suitable for use by operators with different physical features.

Our arm guards are made out of materials that offer both mechanical and chemical resistance.

The new plastic ring connects the arm guards to a wide range of short gloves.

## SAFE Automatic CONNECTION DRIVE DEVICE for Isolators Gloves



Replacing an insulating glove connected to an oversleeve was once an extremely long, complex, and difficult process.

This new coupling system ensures the completion of the entire operation in less than three minutes and with a safety level never reached before.

## General Characteristics

### H NATURAL RUBBER

- good behavior to acids, diluted bases and alcohols
- very high resistance to cold conditions (till -40°C)
- very good flexibility and dexterity

### C-CNS NEOPRENE

- good chemical resistance (polyvalent)
- good mechanical protection
- good behavior to ozone and UV
- offers excellent dexterity and flexibility

### BHP BUTILE HIGH PROPERTIES

- conductive gloves: do not attract powder and dust
- electrostatic dissipative Glove (ESD)
- good chemical resistance
- good resistance to ozone and UV
- offers excellent flexibility and dexterity
- excellent impermeability against gas and liquids

### PUR POLYURETHANE

- exceptional mechanical properties (puncture, tear, cut)
- high resistance to ozone and UV
- flexibility and dexterity
- excellent behavior against ionising radiations.
- very low specific surface wich prevents to catch and retain powder

### PUR/CHSP POLIURETHANE SHEELDING

- excellent behavior to ionising radiations, Gamma & Beta rays
- high level of mechanical protection (puncture and tear)
- high resistance to ozone and UV
- flexibility and dexterity allow to reduce exposure time to radiations
- does not contain lead, disposal of the glove as a non toxic waste

### PUR/Y POLIURETHANE/Csm

- exceptional level of mechanical properties (puncture, tear)
- excellent chemical resistance
- high resistance to UV and ozone
- offers good dexterity and flexibility
- good ageing against ionising radiation

### Y/PUR/Y Csm/POLIURETHANE/Csm

- good resistance to puncture and tear
- excellent chemical resistance
- high resistance to ozone and UV
- flexibility and dexterity.
- good behavior to ionising radiations
- excellent resistance to sterilisation agents (hydrogen peroxyde) and sterilisation processes (Gamma and Beta radiations)

### Y Csm

- excellent chemical resistance
- high resistance to ozone and UV
- offers excellent flexibility and dexterity
- excellent behavior against ionising radiations
- excellent resistance to sterilisation agents (hydrogen peroxyde) and sterilisation processes (Gamma and Beta radiations)

### EB EPDM BLACK FDA

- conductive gloves: do not attract powder and dust
- electrostatic dissipative Glove (ESD) in accordance with standard EN 16350/2014
- excellent chemical resistance (H<sub>2</sub>O<sub>2</sub>, Oxonia, Peracetic and Niric acid, ...)
- compatible with water steam, multiple sterilisations
- high resistance to ozone and UV
- very good flexibility and dexterity
- halogen free, phtalate free and thiuram free
- composition in compliance with FDA CFR 21 §177.2600

### CW NEOPRENE WHITE FDA

#### new material under certification process

- offers excellent dexterity and flexibility similar to natural rubber
- white colour
- higher elasticity
- higher tear resistance
- allergenic protein free
- composition in accordance with FDA positive list (CFR 21 §177.2600)
- compatible with sterilisation process

### EB/EW EPDM BLACK/EPDM WHITE

- halogen and phtalate free
- excellent resistance to chemicals (H<sub>2</sub>O<sub>2</sub>, peracetic acid, etc.)
- very good flexibility and precision
- composition in accordance with the FDA (CFR 21 § 177.2600)
- high resistance to ozone and UV.

# SPECIAL GLOVES "PIERCAN"

## Technical Characteristics

|  | NATURAL RUBBER   | NEOPRENE                  | BUTYL HIGH PROPERTIES | POLYURETHANE  | POLYURETHANE SHIELDING          | POLYURETHANE-CSM       | CSM - POLYURETHANE - CSM | CSM      | EPDM Black/EPDM White<br>comply with FDA CFR 21 §177.2600 | NEOPRENE White FDA          |                             |
|--|--|---------------------------|-----------------------|---------------|---------------------------------|------------------------|--------------------------|----------|---|-----------------------------|-----------------------------|
| <b>PHYSICAL PROPERTIES</b>   |  |                           |                       |               |                                 |                        |                          |          |   |                             |                             |
| Symbol   | H  | C - CNS                   | BHP                   | PUR           | PUR/CHSP                        | PUR/Y                  | Y/PUR/Y                  | Y        | Eb  | Cw                          |                             |
| Density  | 0,94   | 1,35                      | 1,07                  | 1,22          | 1,60                            | 1,23                   | 1,26                     | 1,30     | 1,02  |                             |                             |
| Temperature range (°C)   | -40/+80  | -20/+100                  | -30/+110              | -20/+90       | -20/+90                         | -20/+120               | -20/+120                 | -20/+120 | -30/+120  |                             |                             |
| <b>MECHANICAL PROPERTIES</b>   |  |                           |                       |               |                                 |                        |                          |          |   |                             |                             |
| Tensile strength (Mpa) *   | >20  | > 15                      | >13                   | >50           | >30                             | >30                    | >15                      | >18      | >18   |                             |                             |
| Elongation at break (%) *  | >500   | > 500                     | >400                  | >500          | >500                            | >500                   | >300                     | >300     | >400  |                             |                             |
| Softness / dexterity   | •••  | •••                       | ••                    | •             | •                               | •                      | ••                       | ••       | ••  | under certification process |                             |
| Puncture   | •  | •                         | ••                    | •••           | •••                             | •••                    | ••                       | ••       | ••  |                             |                             |
| Tear resistance  | ••   | ••                        | ••                    | •••           | •••                             | •••                    | ••                       | ••       | •   |                             |                             |
| Abrasion   | ••   | •                         | •                     | •••           | •••                             | •••                    | ••                       | ••       | ••  |                             |                             |
| Gases barrier  | -  | •                         | •••                   | •             | •                               | ••                     | ••                       | ••       | •   |                             |                             |
| Self extinguishing   |  | ✓                         |                       |               |                                 |                        |                          | ✓        |   |                             |                             |
| Antistatic   |  |                           | ✓                     |               |                                 |                        |                          | ✓        |   |                             |                             |
| <b>CHEMICAL RESISTANCE</b>   |  |                           |                       |               |                                 |                        |                          |          |   |                             |                             |
| Ultra violets , Ozone  | -  | ••                        | •••                   | •••           | •••                             | •••                    | •••                      | •••      | •••   |                             | under certification process |
| Alcohols   | ••   | ••                        | •••                   | -             | -                               | •••                    | •••                      | •••      | •••   |                             |                             |
| Acids / Bases  | ••   | ••                        | ••                    | -             | -                               | •••                    | •••                      | •••      | •••   |                             |                             |
| Strong oxydants  | -  | •                         | ••                    | -             | -                               | •••                    | •••                      | •••      | •••   |                             |                             |
| Ketonic solvents   | •  | •                         | •••                   | -             | -                               | -                      | -                        | -        | •••   |                             |                             |
| Chlorinated solvents   | -  | -                         | -                     | -             | -                               | -                      | -                        | -        | -   |                             |                             |
| Aromatic solvents  | -  | -                         | -                     | •             | •                               | -                      | -                        | -        | -   |                             |                             |
| Aliphatic solvents   | -  | ••                        | -                     | ••            | ••                              | •                      | •                        | •        | -   |                             |                             |
| <b>STERILIZATION PROCESS</b>   |  |                           |                       |               |                                 |                        |                          |          |   |                             |                             |
| Autoclave (steam sterilization 120°C)<br>number of cycles (30 minutes) | <10  | <15                       | <15                   | 0             | not tested                      | 0                      | 0                        | <3       | >50   | under certification process |                             |
| Test contact 1 face<br>Immersion<br>72 h 23°C<br>ISO 1817              | H <sub>2</sub> O <sub>2</sub> 5%<br>hydrogen peroxide  | •                         | •                     | ••            | •                               | not tested<br>CSM side | ••                       | ••       | •••   |                             |                             |
|  | H <sub>2</sub> O <sub>2</sub> 35%<br>hydrogen peroxide | •                         | •                     | ••            | •                               | not tested<br>CSM side | ••                       | ••       | •••   |                             |                             |
|  | Peracetic acid 3%                                      | -                         | •                     | ••            | •                               | not tested<br>CSM side | ••                       | •        | •••   |                             |                             |
| Gamma radiation 25-50 kGray<br>Vdmax25 / 1 cycle                       | •••  | •••                       | •                     | •••           | not tested                      | ••                     | •••                      | •••      | **  |                             |                             |
| <b>VALIDITY</b>  |  |                           |                       |               |                                 |                        |                          |          |   |                             |                             |
| Product warranty   | 2 years  | 3 years                   | 3 years               | 4 years       | 4 years                         | 3 years                | 3 years                  | 3 years  | 3 years   | 3 years                     |                             |
| Last delivery before warranty expiration                               | 6 months   | 9 months                  | 9 months              | 12 months     | 9 months                        | 9 months               | 9 months                 | 9 months | 9 months  | 9 months                    |                             |
| <b>LEGENDA</b>   | * ISO 37 - type 2                                      | ** Compatible<br>3 cycles | ••• Excellent         | •• Acceptable | • Usable in<br>somes conditions | - Not<br>recommended   |                          |          |   |                             |                             |

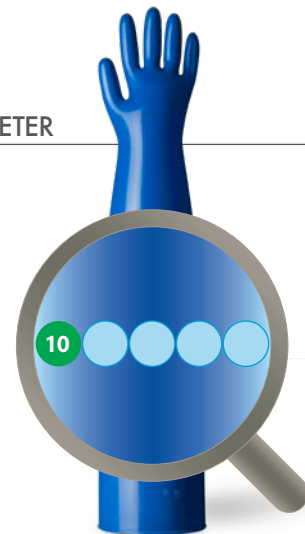
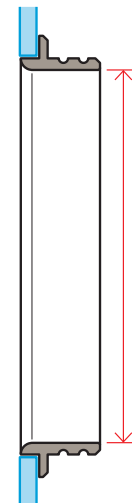
# SPECIAL GLOVES "PIERCAN"

## REFERENCE number guide for PIERCAN gloves for Dry Box

### 1 CHOOSE THE **SHAPE** OF THE GLOVE ACCORDING TO THE DOOR INTERNAL DIAMETER

- According to the **door INTERNAL diameter**, make reference to the chart to choose the shape of the glove

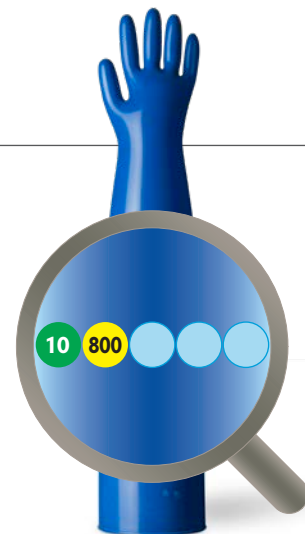
|             |  | INNER PORT DIAMETER |             |             |             |              |              |
|-------------|--|---------------------|-------------|-------------|-------------|--------------|--------------|
|             |  | 136mm<br>5"         | 156mm<br>6" | 186mm<br>7" | 220mm<br>8" | 250mm<br>10" | 300mm<br>12" |
| AMBIEXTROUS | Conical  | -                   | 10          | 13<br>16    | 18          | 85           | 97           |
|             | Conical without Wrist<br>(positive pressure box) |                     | 15          | -           | -           | -            | -            |
|             | Telescopic                                       | 14<br>64            | -           | -           | -           | -            | -            |
|             | Telescopic Large Wrist                           | 54                  | -           | 56          | -           | -            | -            |
| ANATOMICAL  | Conical  | -                   | 20          | 22          | 28          | -            | -            |



### 2 CHOOSE THE **LENGTH** OF THE GLOVE

- Available 2 standard lengths for each model of gloves: 750 and 800 mm. On request, some materials are available in other lengths

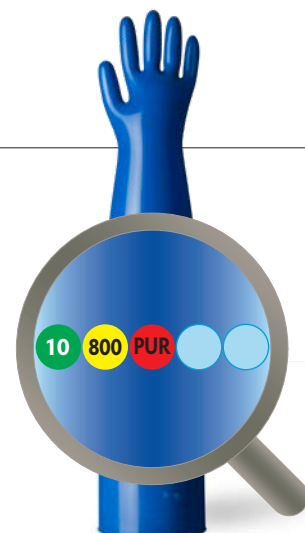
|          |                            | GLOVE LENGTH (MM) |          |     |
|----------|----------------------------|-------------------|----------|-----|
|          |                            | On Request        | STANDARD |     |
| MATERIAL | Natural Rubber<br>Neoprene | 500               | 750      | 800 |
|          | Other Materials            | -                 | -        | 800 |



### 3 CHOOSE THE **MATERIAL** OF THE GLOVE

- Once the material suitable for use is chosen, enter the material code according to pages 6 and 7 of the catalog

|          |                  |                        |                |                      |
|----------|------------------|------------------------|----------------|----------------------|
| MATERIAL | <b>H</b>         | Natural Rubber         | <b>PUR/Y</b>   | Polyurethane/CSM     |
|          | <b>C, CNS</b>    | Neoprene               | <b>Y/PUR/Y</b> | CSM/Polyurethane/CSM |
|          | <b>BHP</b>       | Butyl High Properties  | <b>Y</b>       | CSM                  |
|          | <b>PUR</b>       | Polyurethane           | <b>Eb</b>      | Black EPDM           |
|          | <b>PUR CH SP</b> | Polyurethane Shielding | <b>Cw</b>      | White Neoprene FDA   |



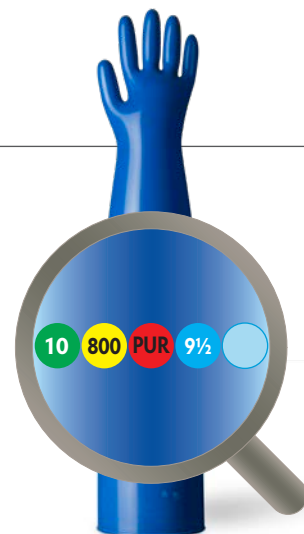
# SPECIAL GLOVES "PIERCAN"

## REFERENCE number guide for PIERCAN gloves for Dry Box

### 4 CHOOSE THE **SIZE** OF THE GLOVE

- Choice must be made among the available measures with regard to **shape** and **material** chosen

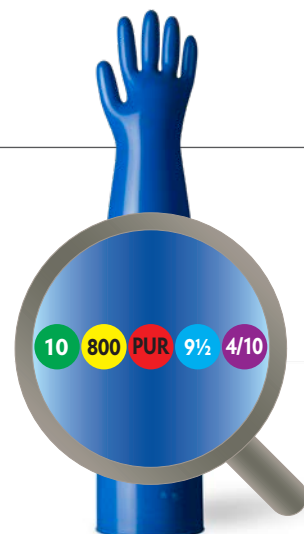
|              | Glove Shape | Natural Rubber / Neoprene | Other materials |
|--------------|-------------|---------------------------|-----------------|
| AMBIDEXTROUS | 10          | 7-8-9-10                  | 7½-8½-9½        |
|              | 13          | 6-7-8-9-10                | -               |
|              | 14          | 6-7-8-9                   | -               |
|              | 16          | -                         | 9-10-11         |
|              | 18          | 8-9-10                    | 8½-9½-10½       |
|              | 54          | -                         | 9½              |
|              | 85          | -                         | 9-10            |
|              | 97          | 9                         | 8½-9-10½        |



### 5 CHOOSE THE **THICKNESS** OF THE GLOVE

- There are 2 standard thicknesses for any glove model: 4/10 and 6/10 mm. On request, some materials are available in other lengths

|                            | GLOVE THICKNESS (MM) |          |            |
|----------------------------|----------------------|----------|------------|
|                            | STANDARD             | STANDARD | On Request |
| Natural Rubber<br>Neoprene | 4/10                 | 6/10     | 8/10       |
| Other Materials            | 4/10                 | 6/10     | -          |



### MARKING OF THE GLOVE

- the REFERENCE number, which contains all glove characteristics, is individually indelibly marked on every finished product



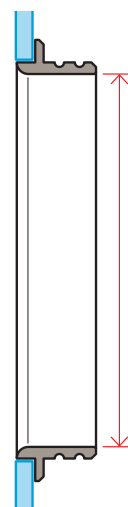
# SPECIAL GLOVES "PIERCAN"

## REFERENCE guide for ARM GUARDS and ISOLATOR GLOVES

### REFERENCES FOR ARM GUARDS

- The chart sets the upper and lower **diameters**, according to the internal diameter of the door
- The oversleeve **length** varies depending on diameters and material chosen
- For example: **MAN 229/90 BHP LG 550 6/10**  
(Butyl High Properties oversleeve for Ø250 door, length 550mm, thickness 6/10)

|                            |                            | INNER PORT DIAMETER |             |             |             |              |              |                |
|----------------------------|----------------------------|---------------------|-------------|-------------|-------------|--------------|--------------|----------------|
|                            |                            | 136mm<br>5"         | 156mm<br>6" | 186mm<br>7" | 220mm<br>8" | 250mm<br>10" | 300mm<br>12" | 320mm<br>12" ½ |
| UPPER Ø<br>flange side     | Natural rubber<br>Neoprene | 130                 | 146         | 172         | 190         | -            | 230          | -              |
|                            | Other Materials            | -                   | 146         | 178         | 200         | <b>229</b>   | 250          | 270            |
| Ø INFERIORE<br>gloves side | All Materials              | 90                  | 90          | 90          | 90          | <b>90</b>    | 90           | 90             |



### REFERENCES FOR GLOVES

- Our gloves are manufactured in one model only (*ELS10330*) and are both **ambidextrous**
- The chart lists the available **sizes** and **thicknesses** according to the type of selected material
- Available **lengths** are **330** and **360** mm according to the size
- For example: **ELS10330 CNS 8 5/10**  
(*CNS Glove, length 330mm, size 8, thickness 5/10*)

|          |               | STANDARD              |                | ON REQUEST            |             |                |
|----------|---------------|-----------------------|----------------|-----------------------|-------------|----------------|
|          |               | SIZE                  | THICKNESS      | SIZE                  | THICKNESS   |                |
| MATERIAL | H             | Natural rubber        | 7-8-9          | 5/10                  | 6-10        | 5/10           |
|          | C, <b>CNS</b> | Neoprene              | 7- <b>8</b> -9 | 3/10 <b>5/10</b> 7/10 | 6-10        | 3/10 4/10 7/10 |
|          | BHP           | Butyl High Properties | -              | -                     | 6-7-8-9-10  | 4/10           |
|          | PUR/Y         | Polyurethane/CSM      | -              | -                     | 6-7-8-9-10  | 5/10           |
|          | Y/PUR/Y       | CSM/Polyurethane/CSM  | 7-8-9          | 5/10                  | 6-10        | 6/10           |
|          | Y             | CSM                   | 7-8-9          | 4/10                  | 6-10        | 6/10           |
|          | Eb            | EPDM Black            | 7-8-9          | 4/10                  | 6-10        | 6/10           |
|          | Cw            | Neoprene White FDA    | <i>n.d.</i>    | <i>n.d.</i>           | <i>n.d.</i> | <i>n.d.</i>    |

*n.d.* - non definito



# SPECIAL GLOVES "PIERCAN"

## PACKING and MARKING features

### PACKAGING

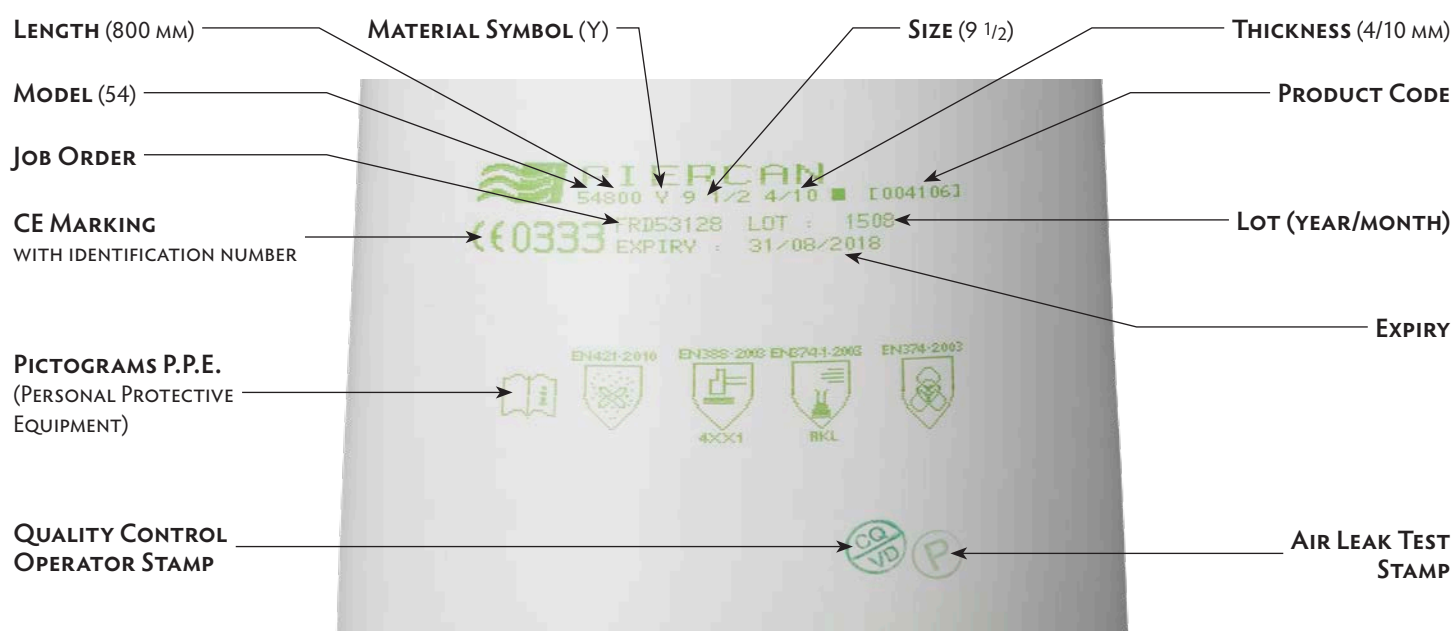
All PIERCAN products are packed using high technology equipment and have the following characteristics:

- Every item is packaged in single unit
- The envelope containing the item is in two colors (an opaque side and a transparent one) with a protective reinforced thickness (90 µm)
- The transparent side makes it easy to read the article code containing all the features of the product
- The envelope is sealed so that the item is held in a controlled vacuum in order to avoid the use of any support inside the glove to hold its shape
- The pre-cut notch facilitates the opening of the packaging without using any tools



### MARKING

- Each item is individually indelibly marked
- The mark contains all product information and technical data, as shown below
- It also guarantees the required traceability, from raw materials to quality control operators



# ATAG

SERVING INDUSTRY SINCE 1947



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