



Bellows

(protection for telemanipulators)

Customized **accessories** for **isolators** and **industries**





material categories

PIERCAN Bellows Performance

Thanks to the exceptional knowledge of the PIERCAN Group in glovebox gloves, PIERCAN offers high quality customized bellows for the protection of mechanical arms in isolators and other industrial applications. Bellows shape and materials can be adapted to each use by perfectly matching your specifications.



Wide Choice
of molds, shapes
and materials



Customized Products
perfectly matching
your specifications



Great Control
of the physicochemical
properties of elastomers



Protection of operators,
safety of preparations
and installations



Compatible with
cleaning agents and
surface decontamination

Areas of Application



HEALTH – PHARMACEUTICAL



HEALTH – HOSPITAL



SEMICONDUCTOR INDUSTRY



UNIVERSITY – RESEARCH



NUCLEAR



OTHER INDUSTRIES

Bellows for Remote Handling:

Available options per material

HIGH TEMPERATURE NATURAL RUBBER

Good mechanical and **elastic properties**. Good resistance at high temperatures (1h at 175 ° C / 20h at 120 ° C) and high pressure (up to 14 bars). Very easy transformation. **The least expensive of similar elastomers**; much more economical than silicones.

OPTIONS

- Standard sizes, possibility of customization
- Color: pale yellow

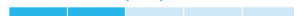
Dexterity



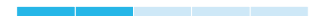
Temperature resistance



Mechanical properties



Price



NEOPRENE*

Polychloroprene material. **Good mechanical** protection. **Good resistance to chemicals** (versatility). **Great flexibility** and **excellent dexterity**. It also has oil resistance and **self-extinguishing** properties.

OPTIONS

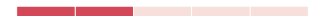
- Standard sizes, possibility of customization
- Color: black

* *Antistatic neoprene possible*

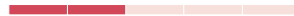
Flexibility



Chemical resistance



Mechanical properties



Price



OTHER MATERIALS

PIERCAN also offers models in many materials for bellows.

- > Natural rubber latex
- > Silicone
- > Nitrile
- > Polyurethane
- > Viton

SHORE HARDNESS

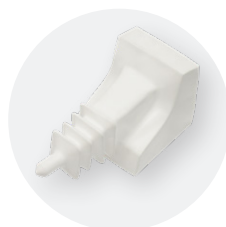
- 30 Shore A to 90 Shore A

TRANSFORMATION TECHNOLOGY

- Dipping, Compression, Vacuum casting, ...

OPTIONS

- Standard sizes, possibility of customization
- Color: variable according to materials



Natural rubber latex



Natural rubber latex



Polyurethane



Nitrile



Natural rubber latex



Natural rubber latex

From the design to the realized part of **the bellows**

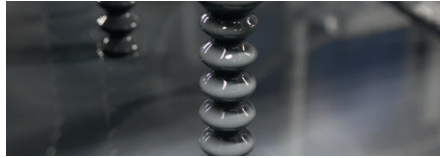
PIERCAN masters a wide range of elastomer processing techniques to realize your bellows and offers you the most suitable processes for your project.

THE DESIGN



- **Engineering office:** It analyzes your requests and assists you in finding the most suitable solution.
- **Molds and prototypes:** Development of prototypes using our specific equipment and our unit dedicated to the production of technical parts.
- **Economic optimization:** The study of solutions adapted to your needs integrates the factors of quality, time and production costs.
- **R & D laboratory:** Brings its scientific expertise to the development of products: materials tests, measurement of physicochemical properties ... etc.

MANUFACTURING



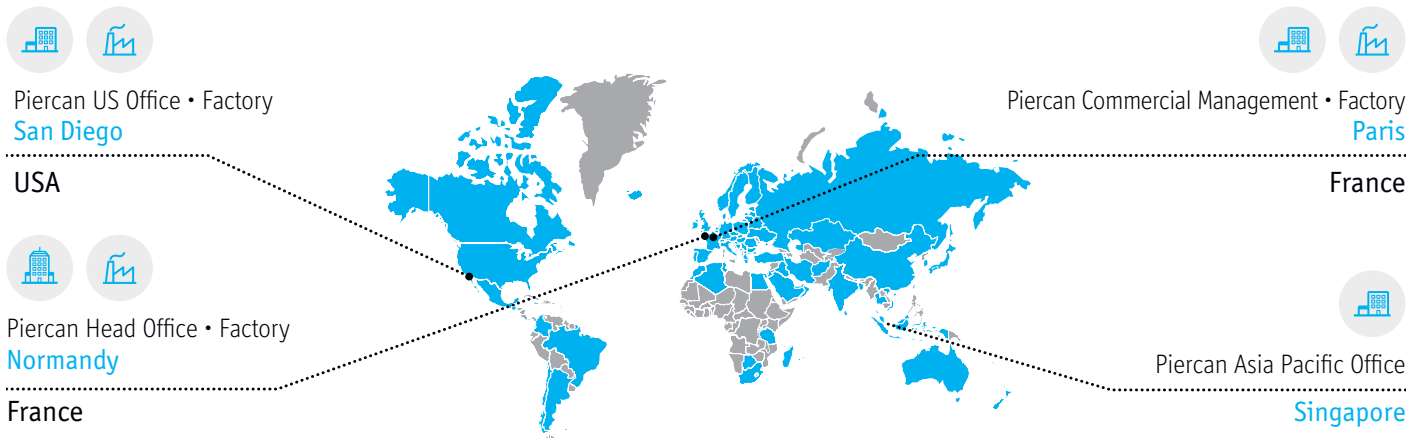
- **Dipping:** It involves immersing the mold in baths to create a piece that, after drying and curing, is demolded.
- **Calendering:** The elastomer passes between two cylinders to be conformed to the desired thickness, and then vulcanized.
- **Injection:** The elastomer is heated then injected into a mold and vulcanized. The piece is then demolded.
- **Compression:** The preform (sheet, plate ...) is placed in a mold and then compressed, vulcanized and demolded.
- **Extrusion:** The heated elastomer is pushed through a die. A profile is formed continuously, solid or hollow.

CONTROL IN THREE STEPS



- 1 • **Incoming inspection** of raw materials and tools with verification of dimensions on plan via our production management software.
- 2 • **Control during production** of physicochemical parameters by the quality control laboratory and production parameters by the operators.
- 3 • **Control of the finished product**
Two types of checks can be made according to the customer's requirements: PIERCAN standard control or plan control. The following checks are carried out: 100% visual inspection, dimensional inspection, marking for total traceability.

PIERCAN around the world



PIERCAN products are sold in 81 countries.



A QUESTION OR IN NEED OF INFORMATION?

Please do not hesitate to contact our sales team by phone or email.
PIERCAN's services and products are only one call away:

Telephone +33 (0)1 45 88 66 27 (FR)
+1 (760) 599 4543 (USA)

E-mail piercan@piercan.com



PIERCAN FRANCE

17-23 Rue Marcel Dassault - ZAE Marcel Dassault
93140 BONDY - FRANCE
T +33 (0)1 45 88 66 27 - F +33 (0)1 45 80 98 30
piercan@piercan.com | www.piercan.com

PIERCAN USA, INC.

160 Bosstick Blvd
92069 SAN MARCOS, CA - USA
T +1 (760) 599 4543
piercan@piercan.com | www.piercan.com

