



# Bellows

(protections and manipulators)

Customized **accessories** or catalog for **isolators** and **industries**





material categories

# PIERCANTECH bellows performance

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

## Areas of application



HEALTH – PHARMACEUTICAL



HEALTH – HOSPITAL



SEMICONDUCTOR INDUSTRY



UNIVERSITY – RESEARCH



NUCLEAR



OTHER INDUSTRIES

THEY TRUSTED US...  
They use PiercanTech bellows



Hospices Civils de Lyon



Hôpital européen Georges-Pompidou



中国核电  
CNNP



ROSATOM



Savannah River  
National Laboratory  
OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS



orano



INPS

# Bellows for remote handling: the options available according to material

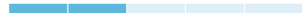
## HIGH TEMPERATURE NATURAL RUBBER

**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.

### Dexterity



### Mechanical properties



### Temperature resistance



### Price



#### OPTIONS

- Standard sizes, possibility of tailor-made
- Color: pale yellow

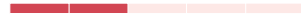
## NEOPRENE\*

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

### Flexibility



### Mechanical properties



### Chemical resistance



### Price



#### OPTIONS

- Standard sizes, possibility of tailor-made
- Color: black

\* Antistatic neoprene possible.

## OTHER MATERIALS

PIERCANTECH also offers multi-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 customizing
- Color: variable according to the materials



## OUR STRONG POINTS

- + Wide choice of molds and shapes
- + Great control of the physiochemical properties of monolayer or multilayer elastomers
- + Protection of operators, safety of preparations and installations
- + Compatible with cleaning agents and surface decontamination
- + Traceability
- + Storage guarantee

# From the study to the realization of the bellows

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

## THE STUDY



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

## MANUFACTURING



- **Dipping:** It involves immersing the mold in baths to create a piece that, after drying and curing, is demolded. An exceptional knowledge of the brand.
- **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



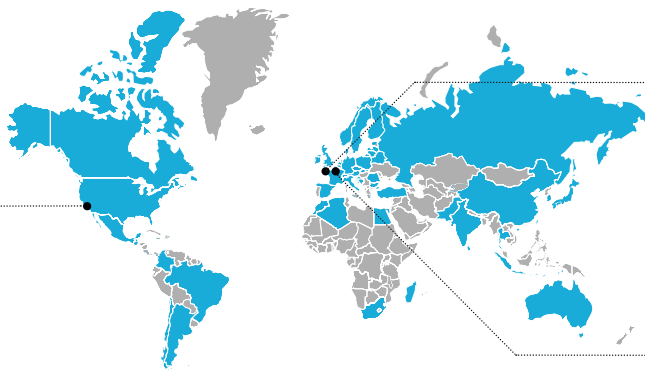
- **Prior inspection**  
Raw materials and tools with verification of dimensions on plan via our production management software.
- **Control during production**  
Physiochemical parameters by the quality control laboratory and production parameters by the operators.
- **Control of the finished product**  
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.

## PIERCANTECH around the world



Piercan USA • Factory  
San Diego

USA



Headquarters Piercan • Factory  
Port-en-Bessin

France



Piercan Sales Department  
• Plastunion Bondy Factory

France

Piercan products are sold in 62 countries



### IN NEED OF INFORMATION?

Do not hesitate to call or write us an email. Piercan is at the service of your projects:

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