

Technical parts

Piercan, the **solution** for your **elastomer parts** since 1948





Piercan, the elastomer solution

Founded in 1948, Piercan, an elastomer specialist, is now the world leader in glovebox gloves. The technical parts manufactured by Piercan are highly diversified in terms of shape, thickness, material and implementation processes. No matter how complicated your specifications are, Piercan will offer you the best elastomer solution as per your requirement.



3

manufacturing facilities
Port-en-Bessin and Paris in France,
San Diego in the USA



SPECIALIST

in dipped elastomers
The Piercan group has over 60
years of expertise in this domain



production units

in Port-en-Bessin, of which 4 are fully automated



62

countries

Piercan products are distributed and sold in 62 countries



WORLD'S LEADING MANUFACTURER

of glovebox gloves 350,000 gloves / year



4

laboratories
Research and development,
testing

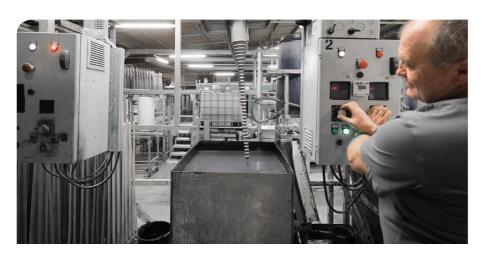
PRESENT IN A **VARIETY** OF SECTORS



Pharmaceutical, nuclear, composites, semi-conductors, aeronautics, veterinary, food, hospital, scientific research, etc.

Parts that **meet** your requirements

Whether you are looking for a particular product or a solution requiring the expertise of an elastomer specialist, Piercan will offer you the most appropriate solution. For specific requests, our engineers help you in the development of your customised product. Furthermore, a vast catalogue featuring parts and "standard" moulds is also available for your reference.



CUSTOMISED PARTS BY PIERCAN

- Analysis of your specifications by the design department
- Choice of the material (single or multilayer, natural rubber, neoprene, etc.)
- Choice of the technique (dipped elastomers, calendering, injection or extrusion)
- Tooling (moulds)

One production unit only manufactures technical parts (prototypes and series).

AN EXTENSIVE CATALOGUE OF PARTS

For your standard requests, the Piercan catalogue offers you a large choice of technical elastomer parts. The parts featuring in the catalogue are readily available and come at an attractive price.

Furthermore, Piercan offers you a large choice of moulds where you can choose the shape you require. All you have to do is choose the type of elastomer.



PIERCAN'S STRENGTHS



Consulting and support



Piercan design department



Wide choice of materials



Prototypes and large series



CONSULTING

Whether it is customised parts or parts from the catalogue, Piercan guides you in finalising your solution and its implementation in your production units.

Piercan can also assist you during audits or in the setting up of production lines integrating elastomeric transformation, or can advise you about the physicochemical properties of the



50 MODELS OF BELLOWS



TYPES OF DIPPED LATEX available



EXISTING MOULDS

From design to completion

Based on your requirements, whether it is customised parts or parts from the catalogue, Piercan offers you the best solution, via a controlled process - design, manufacturing, inspection - where respecting quality has been the focus of all our attention.

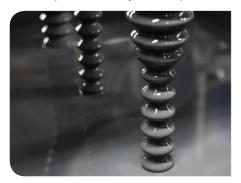


DESIGN

- Design department: it analyses your requests and assists you in finding the most appropriate solution. The design department also develops new products.
- Moulds and prototypes: specific equipment 3D printers and scanners facilitates
 the creation of moulds. Production units only
 manufacturing technical parts make it possible
 to manufacture prototypes in a timely manner
 and at reasonable costs.
- **Economic optimisation:** the design of solutions suited to your requirements includes quality factors, deadlines and production costs, hence facilitating the economic optimisation of your project.
- R&D laboratory: the research and development laboratory provides scientific expertise in the development of products. Material testing, measurement of the physicochemical properties, development of products and innovative production systems.

MANUFACTURING

Piercan is a specialist in a wide range of elastomer transformation techniques to manufacture your technical parts and offers you techniques that are best suited for your project.



Calendering

The elastomer is passed between two rollers to achieve the desired thickness, and then vulcanised.

Injection

The elastomer is heated and then injected in moulds and vulcanised. The part is then removed from the mould.

• Dipping | Piercan's traditional core business

70 years of experience and the world's leading manufacturer of glovebox gloves stand testimony to the brand's exceptional know-how. In dipping, the mould is immersed in baths to create a part that is then removed from the mould after drying and curing.

Piercan uses 2 types of baths: emulsions (natural rubbers, neoprenes) used primarily for technical parts and single layer or multilayer dissolutions (EPDM, CSM, butyl, polyurethane, etc.).

Compression

The preform (sheet, plate, etc.) is placed in a mould then compressed, vulcanised and removed from the mould.

Extrusion

The heated elastomer is pushed through a die. A continuous, hollow or solid profile is formed.

AVAILABLE MATERIALS



Materials used in emulsion

NEOPRENE ANTISTATIC NEOPRENE

NATURAL RUBBER

HIGH TEMPERATURE NATURAL RUBBER

Others

OTHER MATERIALS (DISSOLUTION DIPPING)

OTHER MATERIALS (OTHER TECHNIQUES)

This list of materials is not complete; do not hesitate to seek our help to choose the material best suited for your requirements.

THREE-STAGE INSPECTION

We guarantee the quality of our products by supervising every stage of the manufacturing process:

- **1 Prior inspection** of the raw materials and tools along with a check of the customised dimensions using our production management software.
- **2** Inspection of the physicochemical parameters by the quality control laboratory and the production parameters by the operators **during production**.

3 • Inspection of the finished product

Two types of inspections can be carried out depending on the requirements of the client: PIER-CAN standard inspection or customised inspection. The following inspections are performed:



100% visual inspection
Detection of defects and impermeability check.



Dimensional inspection Inspection of the length and thickness of the part.



MarkingIdentification of the inspected part for complete traceability.



CUSTOMISED

Compression bladders

Piercan specialises in manufacturing high temperature natural rubber latex bladders used for moulding by compressing composite material items.





We manufacture bladders in complex shapes, and small or large sizes (e.g. a spoiler auto of 1.5 x 0.5 x 0.2 m), used in the sports industry (competitive and non-competitive), automobile industry (Formula 1 and mainstream), cycling (competitive and non-competitive), aerospace industry, marine industry and in any other field whenever a hollow composite part is designed.

Precision is a priority: for high precision products, Piercan uses state-of-the-art technology, such as manufacturing of 3D printed

Price is a priority: for mass production, Piercan optimises every stage to offer you competitive rates.

Materials



Our strengths

- + innovative complex shapes
- + reduced manufacturing cost
- + reusable bladders
- + reduction in the finishing costs
- + perfect thickness control of the composite layer



(CUSTOMISED) (CATALOGUE)

Compression (isostatic) of powders

To compress powders, Piercan manufactures dipped natural rubber parts, whose mechanical properties (resistance to high pressures) are perfectly controlled.







Isostatic compression of powders is used for:

- Metallic or ceramic powders mixture for sintering
- Tungsten carbide compression (pressure 2000 bars)
- Creation of high density counterweights (F1, aircrafts)

The bladders offered include:

- Large-sized (up to 2 m long)
- Very thick (up to 3 mm)

Materials

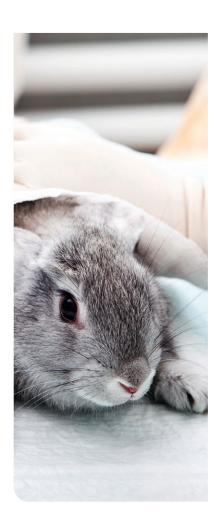






Our strengths

- + controlling the mechanical properties of natural rubber and dipped neoprene parts
- + multiple shapes, multiple moulds



(CUSTOMISED) (CATALOGUE)

Animal health / **Veterinary**

Piercan has developed a know-how renowned in the domain of animal health and reproduction.





We manufacture a number of customised objects or items mentioned in the catalogue meant for animal reproduction. These items are meant either for semen collection (condoms for bulls, ponies, etc.), or to stimulate the male breeding animal (artificial rabbit vagina, etc.), via systems such as specific textures or integrated liquid containers.

These parts are made with dipped elastomers or by cutting, pasting, etc.

Materials





Our strengths

+ a product catalogue whose effectiveness has been amply demonstrated



(CUSTOMISED) (CATALOGUE)

Bellows (telemanipulators)

World leader in glovebox gloves, Piercan is in fact a key player in the field of telemanipulator bellows. In this case, it is about protecting a mechanical arm in a glovebox.





The bellows have the same application as the glovebox gloves: pharmaceutical laboratories, nuclear, semi-conductors, research,

The bellows can be manufactured by dipping, by injection or by moulding.

Materials







Our strengths

- + wide choice of moulds and shapes
- + appropriate regulation of the physicochemical properties of single layer or multilayer



CUSTOMISED (CATALOGUE)

Tubes

A multitude of thicknesses, diameters, and materials. Our extensive range of tubes allows you to choose the tube best suited to your use. We can also manufacture tubes based on measurements taken by you.





Catalogue of tubes manufactured by dipping:

- Open or closed, round, flat, conical tubes, etc.
- 5 000 moulds in stock
- Diameters ranging from 2 mm to over 650 mm
- Thicknesses from 2/10 to 30/10 mm
- The crossing of these parameters results in a wide range
- Varied shapes: straight tubes, U shaped, S shaped, curved, etc.

Other possibilities:

If you require tailor-made tubes, other dimensions, other materials, other techniques (extrusion, etc.) we will support throughout the entire manufacturing process.



Our strengths

- + wide choice of materials
- + large number of existing moulds
- + tubes for holding samples in measuring devices/ open tubes (sprues)
- + experience, key manufacturer



(CUSTOMISED) (CATALOGUE)

Miscellaneous

The examples cited below shall give you a better idea about our ability to adapt to the requirements of elastomer technical parts of all kinds and for all types of activities.





All elastomers, all shapes, all techniques.

Examples

- Fighter pilot's face masks
- Safety hoods
- Embolectomy bulbs
- Membranes for Carmat[®] artificial hearts
- Rings for parachutes (220,000/year)
- Elastomer plates
- Protective caps for switch
- etc.

Materials

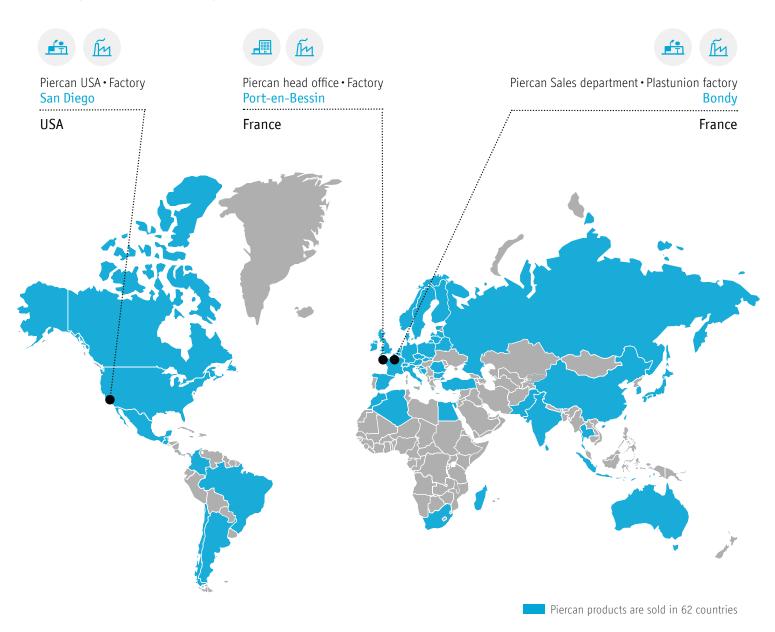


Our strengths

- + know-how
- + ability to adapt
- + as someone who offers solutions, we always have an answer for your questions
- + manufacturing PVC parts via our subsidiary Plastunion

Piercan around the world

PIERCAN is a French company and world's leading manufacturer of glovebox gloves. It has 3 manufacturing facilities across France and the United States, and a product distribution network in 62 countries. PIERCAN is capable of fulfilling your requirements of technical parts, regardless of where you are located.





A QUESTION, IN NEED OF SOME INFORMATION?

Do not hesitate to call us or to write us an e-mail, Piercan is always ready to help you accomplish your projects... Contact details:



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