



Isolator Gloves and Sleeves

Hands under **high security**





Expertise that is renowned WORLDWIDE

PIERCAN Gloves is today the uncontested leader in the field of containment gloves, setting the standard in both Quality and Responsiveness.



€39 M

Annual revenues
for the Piercan Group



250

Employees
in France and in the USA



3

Production centres
Normandy and Paris in France
and San Diego in the USA



50

Countries buy
PIERCAN products



35 %

of sales are in
Pharmaceutical Sector



35 %

of sales are in
Nuclear Sector



5000

customers
worldwide



2000

Product
References

TWO MAJOR OPERATIONAL SECTORS



SECTOR 1
Nuclear industry

- **Usage of gloves:**
To protect operatives from
radioactive contamination and
ionising radiation.



SECTOR 2
Pharmaceutical industry

- **Usage of gloves:**
To protect medicines from the
outside environment and to
protect operatives.

PIERCAN is also present
in the following industrial
sectors: Hospitals, Research,
Aerospace, Food industry,
etc.

INNOVATION, our response to a world in constant flux

Understanding and, above all, anticipating the needs of our customers means that our R&D (Research and Development) and Innovation departments are able to offer solutions that are a perfect fit in terms of changes in the working environment and customer expectations. While the latest innovations involve safely and quickly changing gloves, PIERCAN is also very interested in improving glove traceability and researching new materials that perform more effectively.



PIERCAN'S R&D LABORATORY

PIERCAN invests heavily in Research & Development. Since its creation in 1948, R&D has been one of the core elements of the PIERCAN group's strategy. Its laboratory is equipped with the latest technology.



THE LATEST DEVELOPMENT: **EPDM** (ETHYLENE PROPYLENE DIENE MONOMER)

PIERCAN'S EPDM glove is the only one in the range with a composition that complies with the FDA positive list (§ 1772600, CFR 21). These features mean it is placed among the best elastomers with an outstanding ability to withstand steam sterilisation, excellent resistance to H₂O₂ along with very good mechanical resistance and superb flexibility.



THE **NEW SECURE CUFF RING** BY PIERCAN (BCS RING)

PIERCAN isolator gloves protect operatives and products from the risk of irreversible damage. The gloves fitted to the cuff ring will be changed on multiple occasions, which often involves delicate and complex handling that takes time. With the new secure cuff ring, PIERCAN offers an innovative and effective solution that simplifies operations and ensures they are conducted safely.



Glove Range NUCLEAR PHARMACEUTICAL

PIERCAN offers a wide variety of gloves, Sleeves and ELS gloves. Most polymers are available in a one piece glove, 13" glove, and 24" sleeve.



THE 3 TYPES OF GLOVES



1• One-Piece gloves: Also known as isolator gloves, these are one-piece seamless gloves that are used to handle objects in an enclosed environment.



2• Sleeves: Sleeve systems offer the operative an ergonomic fit and perfect freedom of movement. The sleeve is connected to an ELS glove via the Secure Cuff Ring developed by PIERCAN.



3• ELS gloves (or short gloves): ELS gloves are connected to sleeves. These ELS glove/sleeve systems are mainly used in pharmaceutical laboratories and hospitals.

Decontaminated and/or sterilized gloves

For over 10 years, PIERCAN has offered its customers decontaminated and/or sterilised gloves. This service is intended in particular for pharmacy environments (pharmaceutical laboratories, hospitals, etc.) but it may also be for industries in which an extremely high level of cleanliness is now absolutely vital (space, military, research, etc.). Please do not hesitate to request documentation about this service.



The Materials

CSM



- Very good ability to withstand chemical products and sterilizing agents
- Highly resistant to ozone and UV rays
- Very good ability to withstand sterilization (gamma and beta rays)



BLACK EPDM



- Excellent ability to withstand chemical products and chemical sterilizing agents
- Anti-static
- Good mechanical properties
- Excellent ability to withstand steam sterilizing

The composition of this glove is compliant with the FDA positive list (§ 1772600, CFR 21)



BLACK AND WHITE EPDM



- Excellent ability to withstand chemical products and chemical sterilizing agents
- Good mechanical properties
- Excellent ability to withstand steam sterilising
- Specially adapted for the constraints of a pharmaceutical laboratory in terms of the exterior colour (white)

The composition of this glove is compliant with the FDA positive list (§ 1772600, CFR 21)



NEOPRENE



- Good general resistance to chemical products
- Good mechanical properties
- Good resistance to ozone and UV rays
- Good flexibility and dexterity
- Good technical and cost-effective compromise

Cytotoxic agents: efficacy of Neoprene



POLYURETHANE



- Excellent mechanical properties (punctures, tears, abrasion)
- Highly resistant to ozone and UV rays



POLYURETHANE/CSM



- A glove that combines mechanical properties (polyurethane) with chemical resistance (CSM)
- Good resistance to chemical sterilizing agents (CSM side)



CSM/POLYURETHANE/CSM



- Excellent ability to withstand chemical products
- Good mechanical properties
- Highly resistant to ozone and UV rays
- Very good ability to withstand chemical sterilizing agents



LEAD-FREE LOADED POLYURETHANE



- Excellent protection from ionizing radiation (gamma and beta rays)
- High mechanical protections
- Highly resistant to ozone and UV rays



NATURAL RUBBER



- Excellent flexibility and dexterity
- Low cost



HIGH PERFORMANCE BUTYL



- Highly impermeable to liquids and gases
- Good ability to withstand chemical products
- Highly resistant to ozone and UV rays
- Good flexibility and dexterity
- Antistatic (compliant with European standard EN 16350-2014)



The **Manufacturing** processes

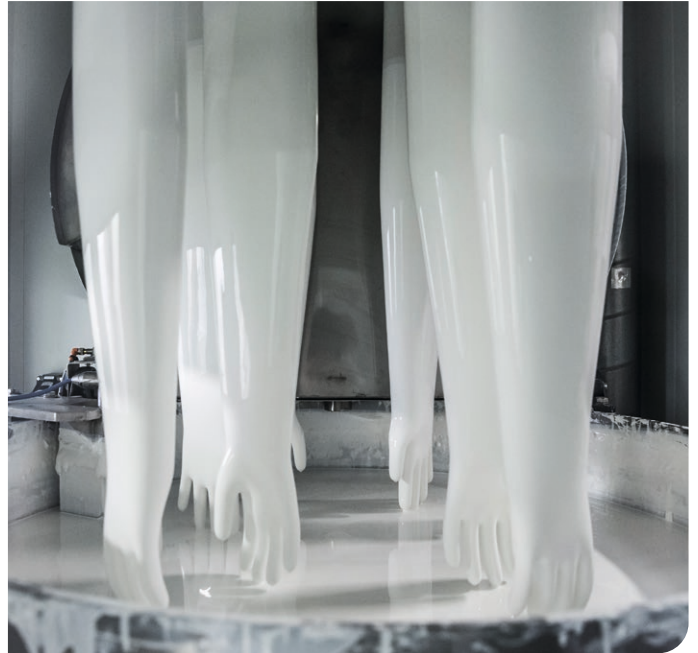
The PIERCAN process consists of dipping moulds either in an aqueous medium (emulsion dipping) or with a suitable solvent (dissolution dipping), depending on the type of elastomer being used. Emulsion dipping is the technique used for neoprene and natural rubber and solution dipping is used for CSM, EPDM, the various types of Polyurethane and BHP. After the various stages of dipping, the gloves are then vulcanised in order to give them the desired mechanical properties.

TWO DIPPING TECHNIQUES:

EMULSION



DISSOLUTION



The **Production sites**



NORMANDY (FRANCE):
159 STAFF
7 PRODUCTION LINES
6 000 M²

The Normandy site processes many elastomers to meet the needs of its customers. This is the group's headquarters on which €3 million was invested in 2019 and 2020.



PARIS (FRANCE):
37 STAFF
1 PRODUCTION LINE
1 000 M²

At the Paris site, PIERCAN manufactures and markets a range of FLEXIBLE PLASTIC products such as: isolator half-suits, sleeves, flexible wall isolators, bags, tunnel sleeves, sheaths, etc.



SAN DIEGO (USA):
54 STAFF
4 PRODUCTION LINES
6 000 M²

PIERCAN's US site, founded in 1995, manufactures the same products as our headquarters and markets all products made by PIERCAN. € 1 million was invested in 2020.

Exacting quality control for our gloves

PIERCAN guarantees the quality of these products because they are subject to a quality control procedure consisting of a number of steps that remains very strict through the processes of design, manufacture, testing and dispatch, while complying with PPE regulations.

1. TESTING **ON RECEIPT**

- Raw materials
- Checking compliance with the specifications
- Tooling

2. TESTING **DURING PRODUCTION**

- Physical and chemical parameters tested by the quality control laboratory
- Dipping parameters tested by the operatives

3. **PROPERTIES OF THE GLOVE TESTED BY AN EXTRENAL LABORATORY**

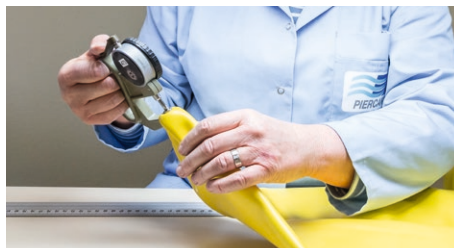
- Checking that the gloves comply with the claims made

4. FINAL TESTING **OF THE GLOVE IN 6 STEPS:**



• **Length check:**

Done by sampling, 1 glove per box. If the sample glove is non-compliant, testing is expanded and every glove is checked.



• **Beading check:**

By sampling, 1 glove per box. At the mid-point between the sides and at the fold of the glove.



• **Thickness check:**

By sampling, 1 glove per box. Thickness is measured in 5 places.



• **Visual inspection:**

100% are checked. Each glove undergoes inspection to detect any visual imperfections.



• **Glove integrity testing:**

100% are checked. Each glove is leak tested under negative pressure in line with the standard EN 421.



• **Marking:**

This ensures the total traceability of the finished product, from raw materials to the inspector.

Material Certificates



ISO CERTIFICATION

PIERCAN has been ISO 9001 certified for a number of years. Quality is therefore a core concept at a Group level.

TSE/BSE* Certification available for the following materials:

- Polyurethane
- CSM
- High Performance Butyl
- Polyurethane/CSM
- EPDM
- Neoprene
- Natural Rubber

*Composants are non-animal origin. In addition, no composant derived from TSE/BSE (Transmissible Spongiform Encephalopathy and Bovine Spongiform Encephalopathy) relevant animal species come into contact with the product or the equipment used in its manufacture.



THE FDA STANDARD

The latest development in the PIERCAN range is the EPDM glove. This is also the only PIERCAN glove with a composition that is compliant with the FDA positive list (§ 1772600, CFR 21).

Piercan around the world



Piercan USA Inc Office • Factory
San Diego

USA



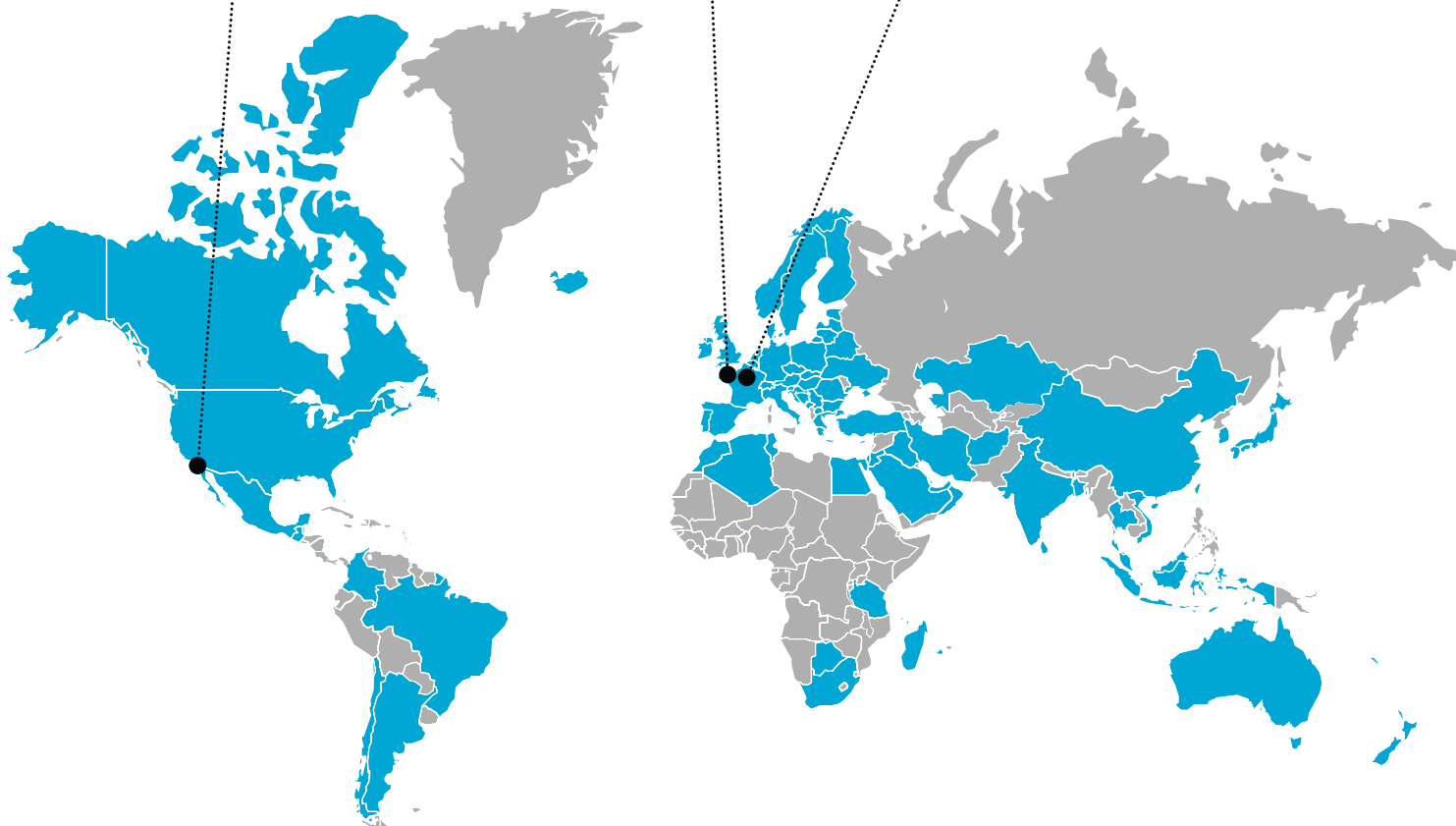
Piercan Headquarter • Factory
Normandy

France



Piercan Commercial Management • Factory
Paris

France



 Piercan products are sold in more than 50 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

