

THE LARGER RANGE WORLDWIDE

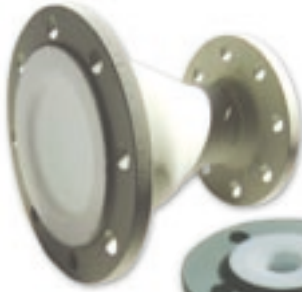
From DN 15 (1/2") to DN 600 (24") according to DIN 2848 or ANSI B 16.5 standards




Straight Length up to 6 m



Elbow



Concentric & Eccentric Reducer




Equal, Reducing and Lateral Tee



Cross



Reducing Flange



Reducing Cross

- On request: special pieces
- Example: - Manifolds
- Dip pipes
- Special fittings
- etc

Quick Service Center: 24/48 h service thanks to our worldwide workshop's network.

THE MOST COMPLETE RANGE WORLDWIDE

From DN 25 (1") to DN 1050 (42") in 2/3 or 5 convolutions

- **PLAIN BELLOWS:**
stainless steel rings for external reinforcement (type 207)



- Thanks to their great flexibility, our PTFE bellows can be used as expansion units in pipelines or as protection units for equipment in brittle materials (glass, graphite, etc).

- **COMPENSATORS:**
full stainless steel compensators lined PTFE (type 283).

- Designed for very high pressure (up to 18 bars).

- **REINFORCED BELLOWS (type 227)**

- Type 227 bellows are reinforced by stainless steel rings and stainless steel caps, making them suitable for high pressure service.

- **BELLOWS FOR VACUUM SERVICE:**
internal rings for vacuum resistance

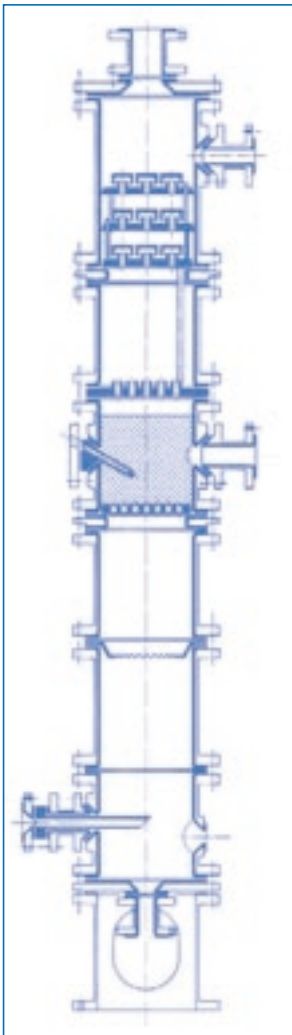
- Our bellows are available to be used under vacuum up to 180° C (V range).



ARMYLOR® Column DESIGN

■ ARMYLOR® Columns consist on a construction by element without gaskets:

- Flanged elements with maximum height of 1500 mm per section,
- Assembly without gaskets,



- Flat bolted Bottom & Top,
- Nozzles made by mechanical extraction,



- Support ring (donut) between elements for installation of internals,
- Internals in graphite, metals or plastic materials.



ARMYLOR® PTFE thick liners are loose inside the steel shell

■ Diameters up to 64" :

- Seamless liners,
- Standard or heavy duty PTFE thickness (up to 10 mm),
- Fine powders of PTFE.

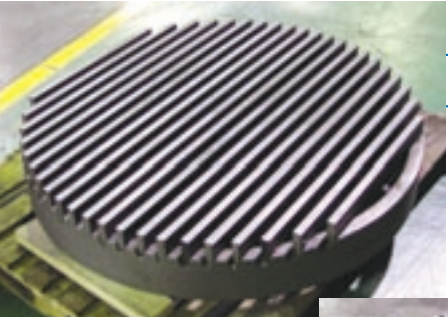
■ Diameters > 64" :

- Welded PTFE liners,
- Standard thickness 3 or 4 mm.



Internals

■ CARBONE LORRAINE supplies internals in various materials

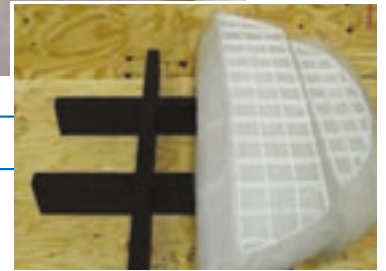
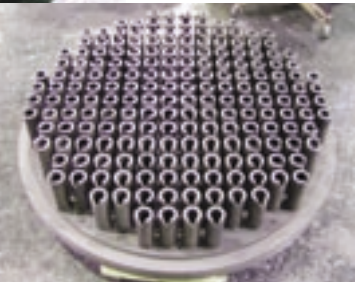


GRAPHILOR®
Support Grid



GRAPHILOR®
Re-distributor

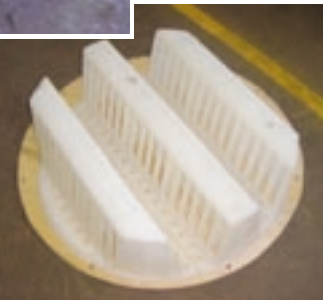
GRAPHILOR®
Distributor



Demister



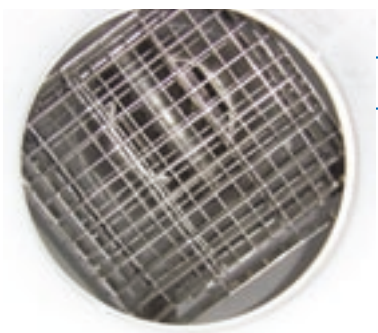
PVDF
Support Grid



PVDF
Distributor



PVDF
Feed Pipe



Hastelloy B3
Distributor

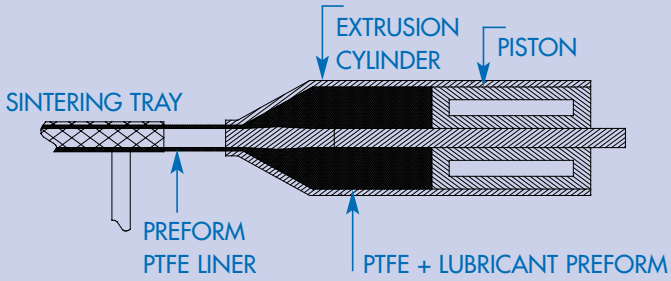
Hastelloy B3
Vortex Breaker





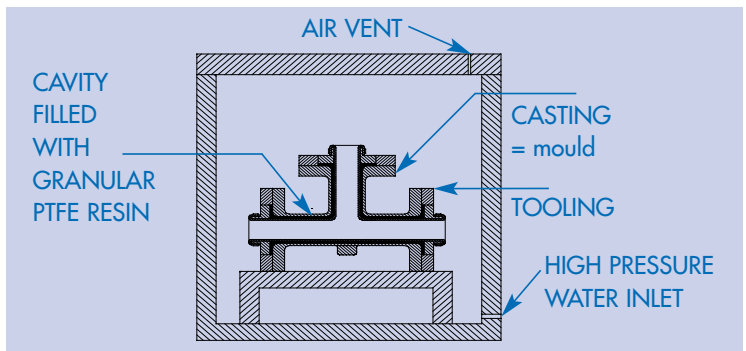
The paste extrusion process for pipe liner

- Advantages: flexlife + tensile strength



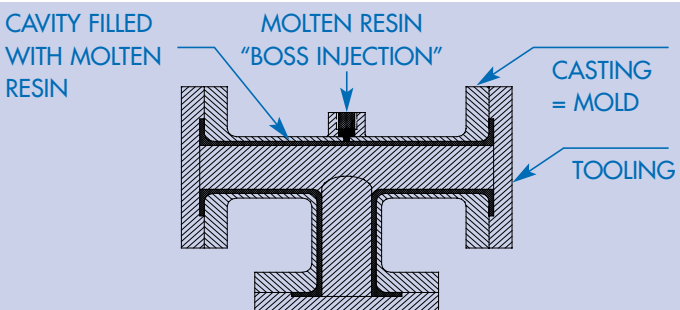
Isostatic molding of PTFE parts

- Advantages: cost + heavy wall thickness



PFA Transfer-molding

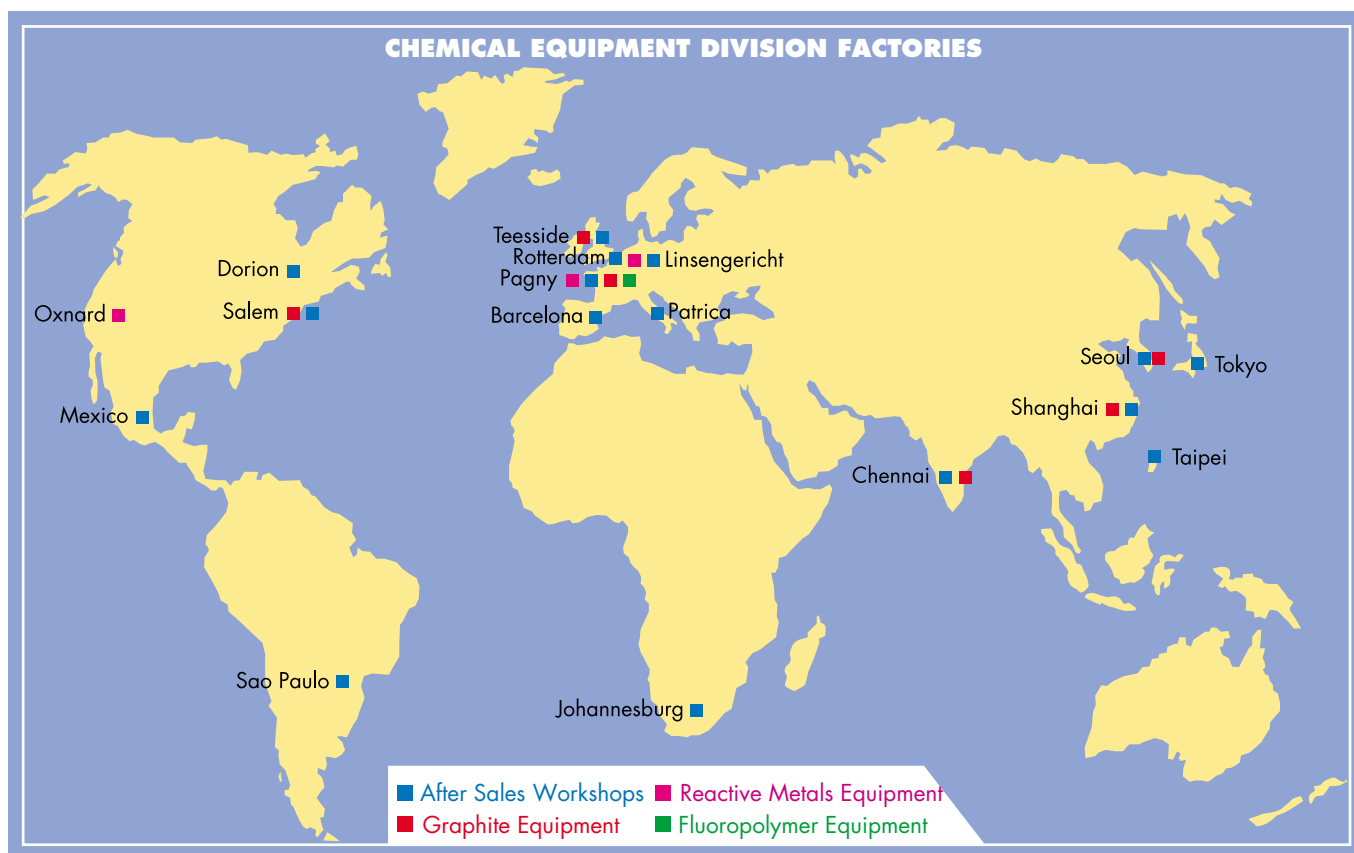
- Advantages: reliability - Monoblock parts



CHEMICAL EQUIPMENT DIVISION
worldwide specialist in corrosion resistant equipment

has built an international reputation.
Based on people, methods and technical expertise,
we contribute to our customer's success using the
quality and innovation of our products and services.

A global player



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Fluoropolymer Equipment FPE



We made it

CARBONE LORRAINE

The experience of a pioneer

The Chemical Equipment Division has been making PTFE/PFA lined piping since 1964, and is considered as a pioneer in the transport and storage of corrosive fluids.

ARMYLOR®, material made from PTFE/PFA, is suitable for almost all corrosive fluids within the temperature range from -50°C to $+230^{\circ}\text{C}$. It is an essential product for the chemical and pharmaceutical industries in the XXIst century due to its anti-static properties and food quality, and the fact that it is available in a number of variants.



- **PTFE/PFA : an exceptional material to fight corrosion**

- **Polytetrafluoroethylene is composed of a chain of carbon atoms completely protected by a fluorine spiral, and its chemical inertia and thermal resistance properties are due to this structure.**

