

Sheet lining

The well-known technique used in the corrosion resistance industry for more than 40 years now, is conventional lining or Sheet lining, which uses Fluoropolymers in form of Skived sheets, Isostatic, paste-extrude, laminates, and thin sheets.

The main feature of this process is fitting polymer sheet inside a metal structure in a room temperatures processing.

MB Plastics offers 2 groups of sheet lining :

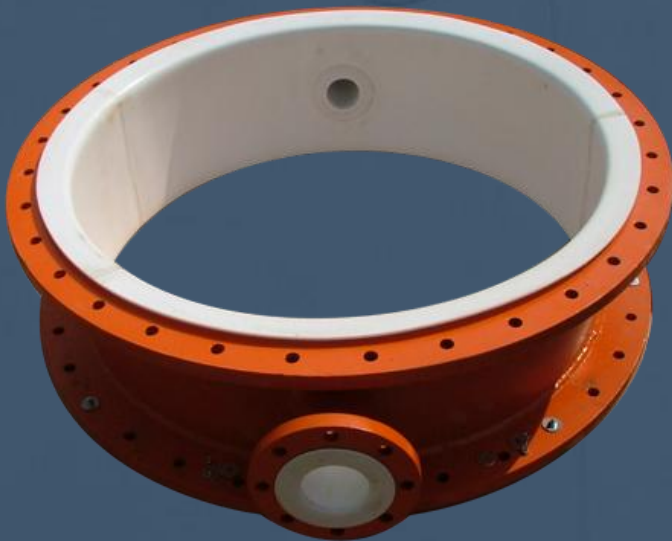
loose linings and bonded linings.



Loose Linings

Custom loose linings from MB are fabricated from virgin PTFE, TFM, PFA, MFA, FEP, PVDF, ECTFE, PP, PE and C-PVC, in thicknesses ranging from 1.3mm to 8mm. They provide unsurpassed corrosion protection under severe chemical services up to 200° C.

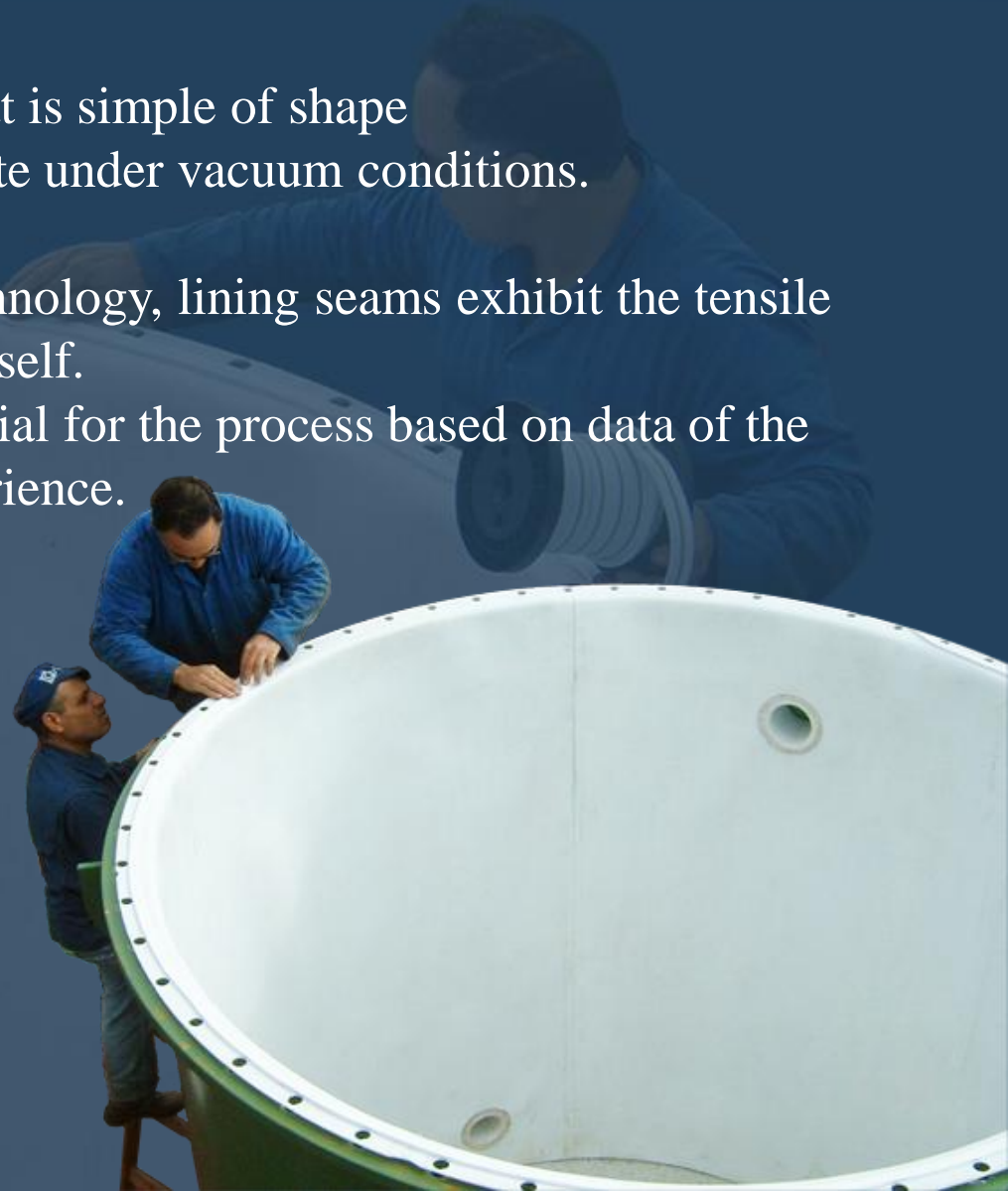
Their smooth interior surfaces provide excellent release properties for reduced material build-up.



Loose Linings are used for equipment that is simple of shape with flange connections and do not operate under vacuum conditions.

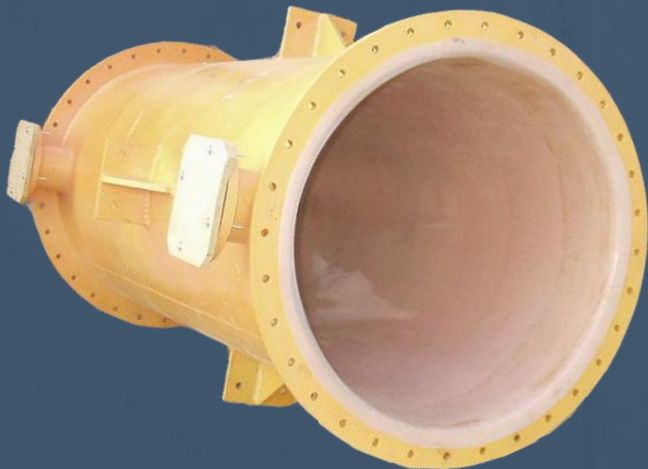
Thanks to proprietary fusion welding technology, lining seams exhibit the tensile and elongation properties of virgin film itself.

MB can recommend the best lining material for the process based on data of the polymer manufacturers and on own experience.



Main key products

- Columns
- Vessels
- Tanks
- Fittings
- Flow meters

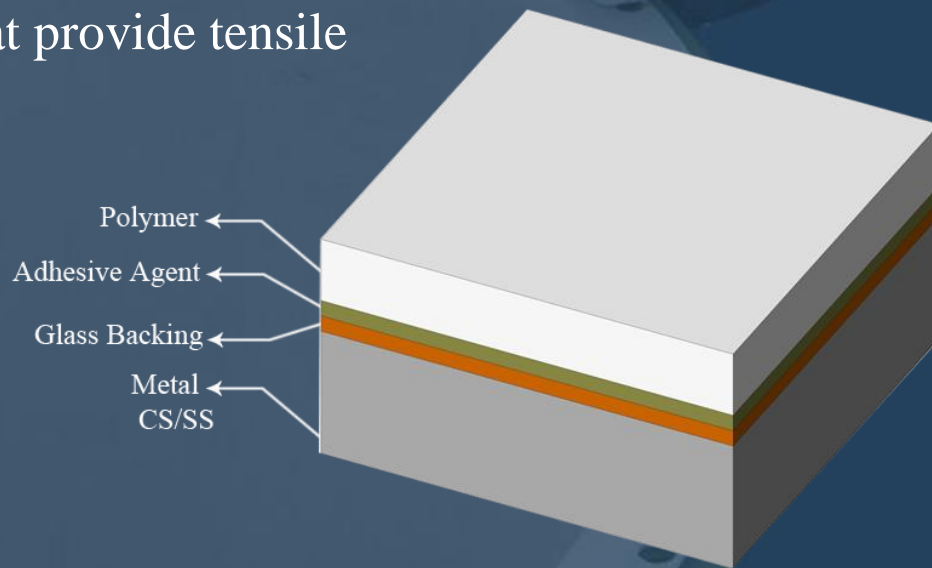


Bonded Linings

Engineered for vacuum and mechanical resistance applications, custom bonded liners from MB are fabricated in a variety of fluoropolymers including PTFE, TFM, PFA, MFA, FEP, ETFE, ECTFE, PVDF, E-CTFE, PP and (C)-PVC.

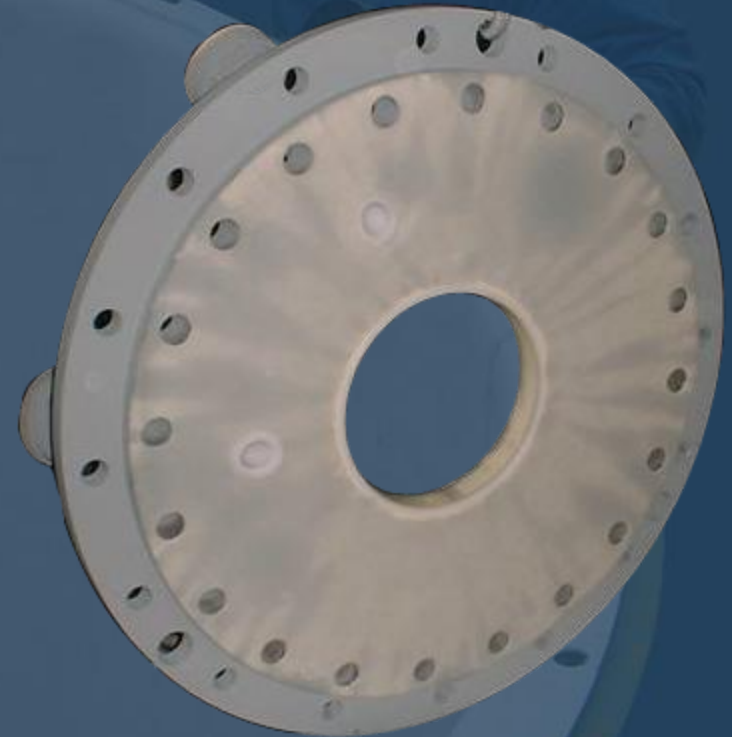
Virgin fluoropolymer sheet ranging in thicknesses from 1.3mm to 6mm, has a backing (Glass or textile).

Using an adhesive (epoxy based) the sheets are bonded to the metal substrate after which the sheets are welded together in a proprietary fusion welding process to create virtually indiscernible seams that provide tensile and elongation properties equal to those of the virgin material.



For complex shapes such as: Dished ends, Conical ends, rectangular walls etc, vacuum thermoforming is utilized.

MB custom bonded liners provide corrosion protection and resist permeation and delamination at temperatures up to 140° C, under severe agitation and vacuum conditions.



Main key products

- Columns.
- Complex shaped vessels.
- Complex shaped tanks.
- Complex shaped Fittings.
- Electrical – grade & high purity vessels and tanks.
- Chemical Pools.
- Rooms with corrosion fumes.



Fluoropolymers Sheets form

Material	Sheets	GBK	Max thickness	Cost
PTFE	√	√	5 mm	Medium
TFM	√	√	3.5 mm	High
PFA	√	√	2.3 mm	Very High
FEP	√	√	2.3 mm	High
ETFE	√	√	2.3 mm	Medium
ECTFE	√	√	2.3 mm	Medium
PVDF	√	√	4 mm	Low
PP	√	√	4 mm	Very low
PE	√	√	4 mm	Very low

Benefits Of Sheetlining:

- Unlimited size of vessels
- Ability to line complex shapes
- Homogenous thickness
- Thick material
- Vacuum resistance
- Broad array of materials
- Cost effectiveness

