

# GRAPHITE EQUIPMENT

Graphilor3 :  
graphite equipment excellence



We made it

# Graphilor 3 a decisive step against corrosion



## Properties

The only impregnated graphite with ultra-fine grain isostatic graphite

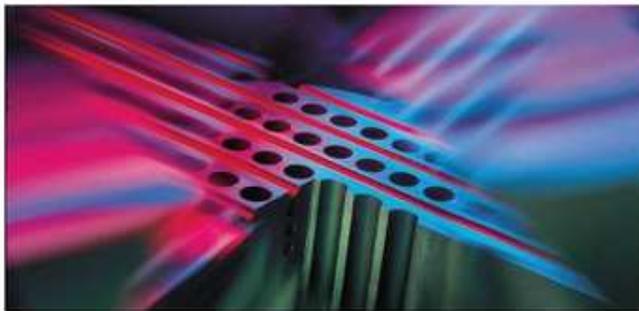
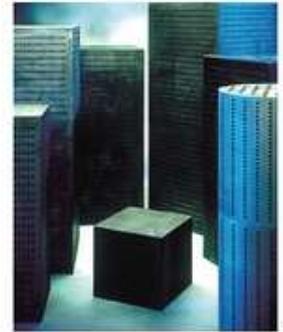
- High resistance to corrosion
- Resistance to temperature and thermal shock
- The highest mechanical resistance authorized by TÜV

## Impregnation

Three types of impregnation are available

- BS: Phenolic highly cross-linked resin,
- C: highly-temperature treated carbon,
- TH: PTFE = Teflon.

EXCLUSIVITY  
CARBONE LORRAINE



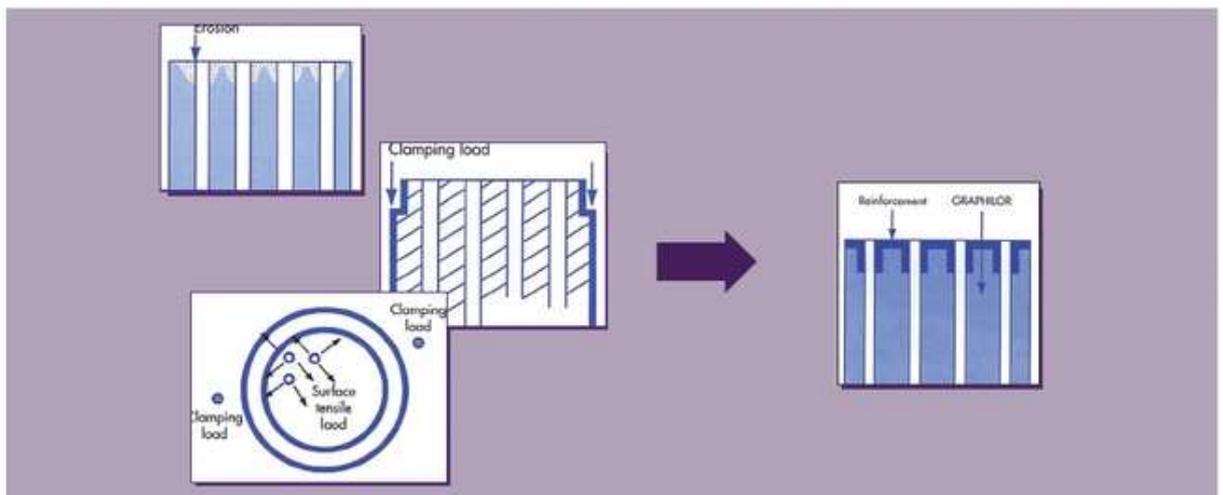
## Exceptional TÜV homologation

- XBS up to 220° C: G25-00-220 for blocks  
up to 220° C: G30-00-220 for tubes
- XC up to 430° C: G18-00-430
- XTH up to 250° C: G22-00-250

Tubes length up to 6 m  
with no joints



GRAPHILOR ML is an exclusive process against erosion and cracking



# Heat exchangers in GRAPHILOR

## POLYBLOC block heat exchangers

The high thermal conductivity and excellent compression strength make GRAPHILOR an ideal material for the construction of POLYBLOC® block type heat exchangers. The two fluids circulate through two sets of octagonal channels drilled in the GRAPHILOR block. Units with areas ranging between 0.1 and 1,500 m<sup>2</sup> can be produced using blocks varying in size between 140 and 1,800 mm diameter.



### Main advantages:

- Very robust,
- Reliable,
- Adaptable modular construction,
- Low maintenance cost,
- Very competitive.

## ■ Cubic heat exchangers

Cubic heat exchangers consist of a single GRAPHILOR block, with square cross section ranging from size 240 to 760 mm with varying height. They offer many optimised possibilities due to their various drilling and multipassing features. This equipment enables heat exchange between two corrosive fluids.



## ■ POLYTUBE shell and tube heat exchangers

POLYTUBE shell and tube heat exchangers are made from tubes and tubesheets of fine grain GRAPHILOR with high mechanical strength. POLYTUBE exchangers can be supplied with heat exchange areas up to 1,500 m<sup>2</sup>.



### Main advantages:

- Design on request, wide range of tubes
- Total GRAPHILOR bundle (including baffles and spacers),
- Easy maintenance,
- Most economic solution for high exchange areas.

## Installations and systems

### ■ Hydrochloric acid synthesis units SINTACLOR

Synthesis units have been designed for the industrial production of high purity hydrochloric acid from chlorine and hydrogen in a fully automatic plant.



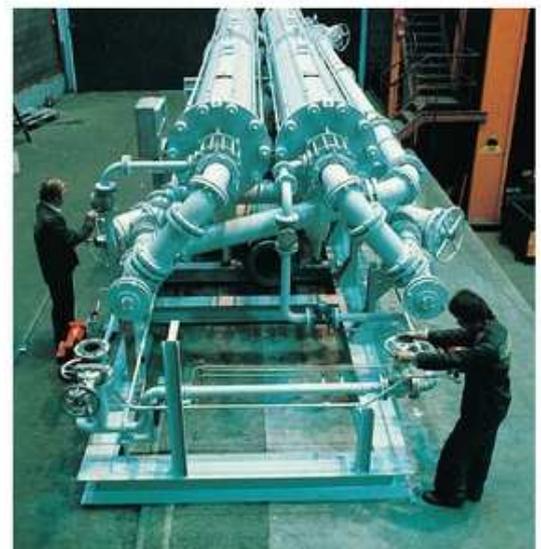
#### Main advantages:

- High purity level, highly concentrated acid,
- Very compact and robust design,
- Large range,
- Flexibility,
- Safe and reliable conditions of operation,
- Accept weak or very low pressure feed gas.



### ■ Package units

Equipment can be supplied in specially designed package units for many processes, such as: HCl absorption, desorption, sulphuric acid dilution, pickling baths, temperature control units, surface treatments,...



## Miscellaneous equipment in GRAPHILOR



### ■ Rupture discs

- Excellent corrosion resistance,
- Stability: no ageing, no fatigue and calibration,
- Reliability: immediate bursting (over pressure or/and depressure),
- 3 groups of products: Membrane, Monoblocs, Capsulated,
- Proposed diameters from 50 to 600 mm diameter,
- Effective bursting pressure from 0,07 to 100 bars.

### ■ Centrifugal pumps

- Totally in GRAPHILOR,
- Horizontal type meeting ISO 2858 requirement,
- Vertical type,
- Or submerged type.



### ■ Columns and accessories

- Distillation and absorption columns,
- Accessories: dip pipes, distribution tubes, internals for columns,
- Packing: raschig rings.





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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.

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