

EUROPIPING[®]
Industrial Technologies



GRAPHITE GASKET MATERIAL



TECHNICAL DATA SHEET

EUROGRAPH ET316

APPLICATION

Production of sheets in graphite tanged is necessary as the alternative to asbestos for very HIGH TEMPERATURE, DIATHERMIC OIL, SUPERHEATED STEAM recommended for POWER GENERATION and PETROCHEMICAL INDUSTRIES. Standard used Material: graphite with purity 98,5% stainless steel 316/L insert.

On request: Graphite with purity 99,9% plus Inconel, Monel, Nickel and Titanium insert.

ISO-9001

| PROPERTIES | U.M. | METHOD | VALUES |
|----------------------------|--------------------------------|-----------------|-----------|
| Pressure Max Continuous | Bar | / | 200 |
| Temperature Min | °C | / | - 200 |
| Temperature Max Continuous | °C | OXIDISING/INERT | + 550/700 |
| Factor (m) (y) | (-----) (kg, cm ³) | / | (2) (60) |
| Tensile Strength | MPa | ASTM-F152 | 20 |
| Density | gr/cm ³ | ASTM C-559 | 1.1 |
| Compressibility | % | ASTM F36 | 35 |
| Recovery | % | ASTM F36 | 15-20 |
| Sealability | ml/hr | ASTM F37 | 0.5 |

On 1.5 mm thick sample

The data we are herewith providing are all based on manufacturer testing and are proposed to technical designers as possible and useful advices. Deviations from the values here above indicated may occur, but they do not constitute themselves either detriment of quality or reason for rejection.

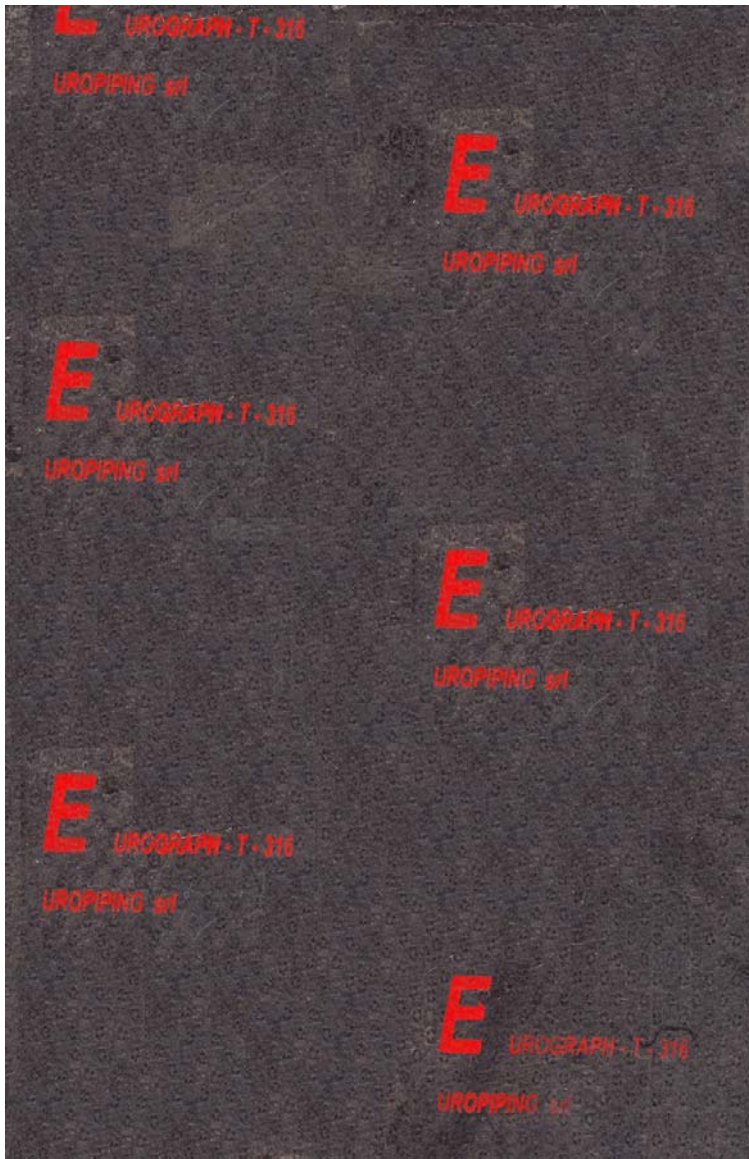
REV. 02

14 February 2002

Sheet thicknesses: 0.8 ÷ 4 mm
Tolerance:
for thickness < 1 mm: ± 0.1 mm
for thickness ≥ 1 mm: ± 10%

Sheet size: standard 1,000 x 1,000 mm
1,500 x 1,500 mm
On request: 1,500 x 3,000 mm
Tolerance: ± 50 mm

Available surface finish:
adhesive



ET316



EGT316



EF316



EFT316



EPG

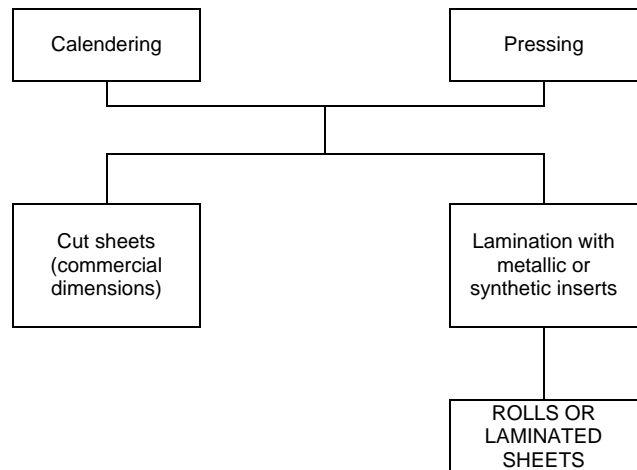
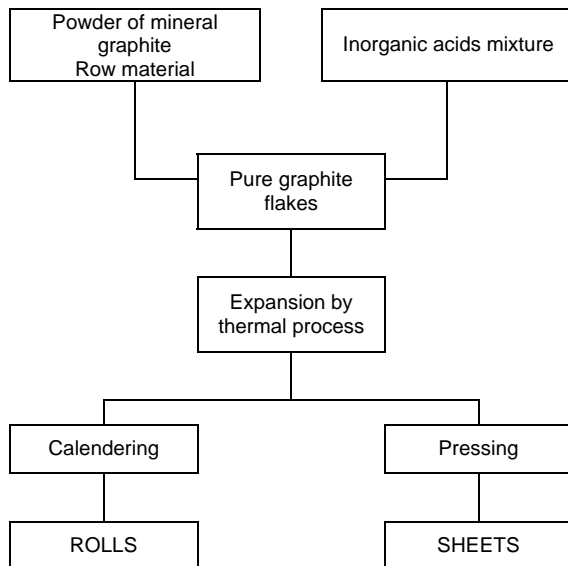


DIMENSIONS

| | | | | | | | |
|-------------------|------------------|-------------------|---------|-------------------|-----------|-------------------|---------|
| Sheet dim. | 1,000 x 1,000 mm | Sheet thk. | 0.8-1.0 | Rolls dim. | 1 x 30 mt | Rolls thk. | 0.25 mm |
| | 1,500 x 1,500 mm | | 1.5-2.0 | | 1 x 50 mt | | 0.40 mm |
| | 1,500 x 3,000 mm | | 3.0 mm | | | | |

MANUFACTURING PROCESS OF SHEETS AND LAMINATED IN MINERAL FLEXIBLE GRAPHITE (EUROGRAPH)

MANUFACTURING PROCESS OF SHEETS IN MINERAL FLEXIBLE GRAPHITE (EUROGRAPH)



COMPARISON TABLE OF TYPICAL FLAT GASKET MATERIAL

| PARAMETER | U.M. | ASBESTOS | ARAMIDIC FIBERS | CARBO FIBERS | GRAPHITE |
|------------------|----------|-------------|-----------------|--------------|-----------|
| M VALUE | - | 3 – 4 | 2 – 3 | 2 – 3 | 2 |
| Y VALUE | psi | 1600 – 6500 | 1600 – 5000 | 1600 – 5000 | 900 |
| SEALABILITY | mml/hr | 1.00 | 0.2 | 0.1 | 0.2 |
| COMPRESSIBILITY | % | 10 | 15 | 17 | 40-20 |
| RECOVERY | % | 55 | 57 | 50 | 20-50 |
| CREEP RELAXATION | % | 23 | 21 | 15 | 5 |
| DENSITY | gr/cmc | 2 | 2 | 1.6 | 1.1-1.3 |
| TEMPERATURE MAX | °F | 750 | 700 | 900 | 5000 |
| PRESSURE MAX | psi | 1800 | 1200 | 2000 | 3000 |
| PxT FACTOR | °F x psi | 350,000 | 350,000 | 700,000 | 1,000,000 |