



Material of Construction

GT-FLON

Graphite impregnated with PTFE resin without solvent.

Extended corrosion resistance compared to graphite impregnated with phenolic resin. GT FLON can handle higher corrosion, higher temperature, thermal shock than traditional phenolic resin impregnated graphite.

World unique process of material treatment.

Micrography of our impregnated graphite

Graphite + coke material

Porosity filled with ptfe



Oppering conditions	Remark
Pressure	Up to 24barg (related to design adopted) and full vacuum.
Tempreture	Up to 300°C
Suitable corrosive medias	Adapted to most common acid media (HCl, H2SO4, H3PO4, organic acid), solvents, oils and organics medias. Extended resistance to oxidative media (HNO3, Cl2, and bases medias (pH>12). Caustic soda, potash at high concentration and hot. We study your operating conditions (concentration, temperature, pressure) for selection of our grade of material.
Cycling of temperature	Adapted to cycling of temperature and good resistance to thermal shock. Can handle alternatively cooling and heating mode.
Thermal conductivity	Good thermal conductivity.

Physical properties	GT-FLON
Graphite grain size (mm)	0.043-0.009
Impregnant type	PTFE resin without solvent
Density	1.92
Flexural strength (MPa – ASTM C651)	32.0
Compression strength (MPa – ASTM C695)	91.0
Young modulus (GPa – ASTM C559)	11.0
Thermal conductivity (W/m.K)	105
Codification AD-M 2000 N2	G 22-00-250

Other similar grade of materials available ;

GT-TOYO FLON : Same impregnation process with TOYO TANSO graphite. Higher mechanical strength.

GT-OXYFLON : Grade with extended resistance to very oxidative media like sulfuric acid at high concentration, nitric acid, peroxydes.