GRAPHITE SHEETS
HEXAFLEX™

GFIPL
Graphite Foils India Pvt Ltd

MAIN FEATURES AND PROPERTIES

- Great chemical and thermal resistance;
- High recovery and compressibility;
- Low sulphur content;
- Suitable for oxidizing medias (Hexaflex™ Σ Sigma, θ Theta, 1θ 1Theta);
- Blow-out safety;
- Low leakage (conformity to DIN 3535-6);
- Anti-sticking properties in accordance with ASTM F607
- Fire safety (API Specification 6FB).

HEXAFLEX™ GRAPHITE SHEETS ARE MANUFACTURED USING ANY GRADE OF HEXAFLEX™ GRAPHITE FOILS AND GUARANTEE NO-COMPROMISE HIGHEST PERFORMANCE AND RELIABILITY. SHEETS CAN BE SUPPLIED WITHOUT REINFORCEMENT OR REINFORCED BY TANGED OR PLAIN STAINLESS STEEL OR OTHER ALLOY AS PER DEMAND OF THE CUSTOMER.

Hexaflex™ P1 – Tanged steel reinforced
Hexaflex™ M1 – Plain steel reinforced
Hexaflex™ N – Homogeneous

Parameter	Hexaflex™ P1	Hexaflex™ M1	Hexaflex™ N
Thickness, mm	0.76, 1.0, 1.5, 2.0, 3.0, 4.0	0.76, 1.0, 1.5, 2.0, 3.0, 4.0	0.5, 0.76, 1.0, 1.5, 2.0
Material for inserts	AISI 316L (0.1 mm)	AISI 316L (0.05/0.1 mm)	-
Dimensions, mm	1000x1000 / 1500x1500	1000x1000 / 1500x1500	1000x1000 / 1500x1500

APPLICATIONS

- Power generation, petrochemical, oil and gas industries;
- High-temperature and chemical equipment.

OPERATING RANGE

Temperature range
from -195°C / -319°F up to 450°C / 842°F (in water steam - 650°C / 1202°F).

SELECTION GUIDE

Hexaflex™ Γ-P1, where:
Γ – Grade of graphite,
P – type of insert,
1 – Number of inserts

AVAILABLE OPTIONS OF GRAPHITE FOIL HEXAFLEX™

PARAMETER	GRADE A ALPHA COMMODITY	GRADE B BETA INDUSTRIAL	GRADE Γ GAMMA HIGH-PURITY	GRADE Δ DELTA ULTRA-HIGH PURITY	GRADE Σ SIGMA ANTI-OXIDATION AND ANTI-CORROSION	GRADE Θ THETA HIGH-PURITY AND ANTI-OXIDATION	GRADE 1Θ 1THETA ULTRA-LOW LOSSES
Thickness & Density Variation, %	±10	±10	±5	±5	±5	±5	±5
Carbon, %	98,0	> 98,0	> 99,0	> 99,85	> 98,0 (99,0*)	> 99,0	> 98,0
Ash, %	2,0	< 2,0	< 1,0	< 0,15	< 2,0	< 1,0	< 2,0
Sulphur, Ppm	< 200	< 200	< 100	< 50	< 100	< 100	< 100
Chlorine**, Ppm	< 40	< 40	< 40	< 20	< 40	< 20	< 20
Fluorine**, Ppm	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Total Halogens (Cl+F+Br) **, Ppm	< 200	< 200	< 100	< 50	< 200	< 100	< 100
Tensile Strength, MPa	> 4,0	> 4,5	> 4,5	> 4,0	> 5,0	> 5,0	> 5,0
Compressibility, %	> 35	> 40	> 40	> 40	> 40	> 40	> 40
Recoverability, %	> 5	> 10	> 10	> 9	> 10	> 10	> 10
Oxidation And Corrosion Inhibitor	-	-	-	-	Yes	Yes	Yes
Weight Loss (670 °C), %/H	-	< 12	< 12	-	< 4	< 3	< 1
Compliance To Special Requirements	-	DIN 3535-6	BAM; ASTM F2168 Class 2 (B), DIN 3535-6	PMUC Norms; GS RC PVE 011; BAM; ASTM F2168 Class 2 (B), DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6

subject to variation due to thickness and density
* initial carbon content (before inhibitors added)
**leachable

CONTACT US

GRAPHITE FOILS
INDIA PRIVATE LIMITED
www.gfipl.in
info@gfipl.in

OUR LOCATION

Gallops Industrial Park, D-5,
Sarkhej Bavla Road, Rajoda - Changodar.
Ahmedabad, Gujarat – 382220