

Graphite Gaskets — Common Sizes / Applications

1) Flexible / Expanded Graphite (unreinforced graphite foil & sheets)

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Thickness (mm)	0.08, 0.13, 0.25, 0.35, 0.5, 1.0, 1.5, 2.0, 3.0	0.08 - 0.5 mm: thin heat-exchanger jacket gaskets, spiral-wound filler, vacuum seals. 0.5 - 2.0 mm: flange gaskets for steam, refinery and chemical process lines. 2 - 3 mm: thick cut gaskets for large flanges / heavy duty service.
Sheet / roll formats	Rolls & sheets: widths ~610 mm, 1000 mm, 1524 mm (24", 39.4", 60"); sheets/panels commonly 1000×1000 mm, 1500×1500 mm — custom sizes available.	
Typical ring / pre-cut	Die/CNC cut rings & multi-hole manifold gaskets from sheet stock	Refinery & petrochemical flanges, heat exchangers, steam lines, vacuum service.

2) Impregnated / Low-porosity Graphite Sheets

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Thickness (mm)	0.3, 0.5, 1.0, 1.5, 2.0, 3.0	0.3 - 1.0 mm: low-leak heat-exchanger jackets, vacuum ports. 1.0 - 3.0 mm: process flange gaskets, valves and pump housings where lower leakage is required.
Sheet sizes / rolls	Same roll widths / sheet panels as flexible graphite — panels for die cutting (1000×1000, 1500×1500 mm), rolls for thin foils.	
Typical industries	Refining, petrochemical, power generation, vacuum systems.	

3) Graphite Laminate with Perforated / Tanged Metal Insert (reinforced graphite laminate)

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Thickness (mm)	1.0, 1.5, 3.0	1 - 1.5 mm: valve bonnets, flange rings in Class 150 - 300. 3.0 mm: higher bolt load flanges, some heat-exchanger and pressure vessel gaskets.
Sheet formats	Standard panels (1000×1000, 1500×1500 mm) and custom cut rings	Petrochemical & refinery flanges where extra blow-out resistance is required; retrofit for worn flanges.

4) Metal-clad / Metal-faced Graphite (graphite bonded to thin metal foil)

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Overall thickness (mm)	1.0, 1.5, 2.0, 3.0, 4.0	1 - 2 mm: chemical & process flanges needing corrosion protection. 2 - 4 mm: high-duty steam/refinery flanges where oxidation protection is required.
Formats	Pre-laminated panels & pre-cut rings; custom laminates to order	Refining, petrochemical, pulp & paper, where graphite sealing is needed but flange face protection or reduced oxidation is required.

5) High-Purity / Low-Halogen Graphite Gasket Materials (nuclear, semiconductor, high-purity chemical)

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Thickness (mm)	0.5 - 3.0 mm typical (custom sizes to spec)	Reactor & nuclear plant flange gaskets, ultra-pure chemical processing, semiconductor process chambers, high-purity valves and flanges.
Format	Special cleanroom packaging, certified panels and pre-cut gaskets	Nuclear, semiconductor, pharmaceutical and high-purity chemical industries.

6) Graphite as Spiral-Wound Filler & Graphite Spiral-Wound Gaskets (filler variant)

Common sizes & typical application scenarios

Item	Typical stock / ranges	Typical application scenarios
Cross-section (mm)	3.0, 4.5, 6.0 (others on request)	3 mm: small NPS/low face load flanges. 4.5 mm: general petrochemical & steam service. 6 mm: large bore/high class flanges and cyclic service.
ASME flange coverage	Available for Class 150 up to Class 2500 flanges (sizes per ASME B16.5/B16.47 with inner/outer rings).	
Typical industries	Refinery, petrochemical, power plant, pipeline, high-temperature processing.	