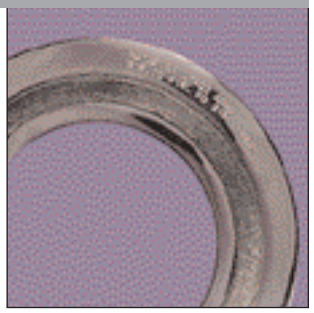
SPIRAL WOUND & GROOVED METAL GASKETS

METAFLEX® SPIRAL WOUND GASKETS



DESCRIPTION
James Walker Metaflex® gaskets are designed to seal flanges where temperature, pressure, vibration or flow rates are beyond the capability of conventional jointing materials.

They are wound in V-section metal strip and a softer filler material so that flange surfaces are presented with a spiral of alternate metal/filler layers.

TYPICAL APPLICATIONS
Pipelines and pressure vessels on steam, petrochemical, nuclear, marine and hydraulic plant; and heat-exchangers. **Metaflex Lolode** gaskets are recommended for flange joints where bolt loading is limited.

PRIME FEATURES
- Gaskets are made to a wide variety of sizes and shapes.
- Combinations of metal winding strip and filler are selected to suit the fluid media and operating conditions.
- Quick to install and remove.
- Operating temperatures from cryogenic up to 1000°C.
- System pressures from high vacuum to over 350bar.
- Support rings, inside and/or outside of spiral, make gasket suitable for high line pressure on flat or raised-flange faces.

SPECIFICATIONS
Products are manufactured in accordance with all relevant gasket standards to suit flange designations: ASME B16.5, BS1560, ASME B16.47 Series A (MSS-SP44), ASME B16.47 Series B (API605), BSEN 1092 (BS4504); plus DIN, JIS and NF.

MAXIMUM OPERATING TEMPERATURES OF FILLER MATERIALS

XA Compressed non-asbestos fibre	500°C
SPG Standard purity graphite (oxidising media)	500°C
SPG Standard purity graphite (inert/reducing media)	600°C
SPG Standard purity graphite (steam)	650°C
HPG High purity graphite (oxidising media)	500°C
HPG High purity graphite (inert/reducing media)	600°C
HPG High purity graphite (steam)	650°C
Fluolion® PTFE	260°C
HTF High temperature filler	1000°C

Aluminium and lead also available.

OPERATING PRESSURE
Metaflex gaskets seal up to 350bar, although higher pressures can be considered.

METAL WINDING STRIPS
Standard materials: stainless steels 304L and 316L. Other materials include: 310, 320 and 321; Monel 400 and K500; nickel 200; titanium; Inconel 600, 625 and X750; Incoloy 800 and 825; Hastelloy HB2 and C276.

SUPPORT RINGS
Standard material: carbon steel. Other materials include: stainless steel 304L, 316L, 320 and 321; titanium; Monel 400 and K500; nickel 200; Fluolion® PTFE (inner rings only); Duplex UNS 31803.

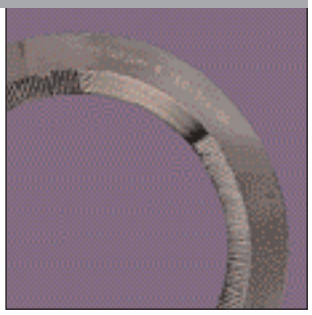
STANDARD SIZES (mm)

Nominal thickness	Compressed thickness	Minimum diameter	Maximum diameter
2.5	1.9/2.1	10	300
3.2	2.4/2.6	10	760
4.5	3.2/3.45	10	1520
7.3	4.7/4.9	60	3550

Largest non-standard gaskets manufactured to date are 5070mm diameter.

HOW SUPPLIED
Almost any combination of component materials is available. Profiles include circular, obround, square, oval and diamond. Gaskets for non-standard flanges are made to order.

METAKAMM: KAMMPROFILE GASKETS



DESCRIPTION
These grooved metal, Kammprofile-type gaskets comprise a metal core with concentric grooves on either side, and usually a soft layer of sealing material bonded to both grooved faces.

TYPICAL APPLICATIONS
Flanges of high temperature/pressure pipework and vessels where operating conditions can fluctuate; also heat exchangers.

PRIME FEATURES
- Accommodate a vast range of operating conditions.
- Line temperatures and pressures up to 1000°C or 250bar.
- Undamaged cores can often be fitted with new soft faces to reduce maintenance costs.
- ***Metakamm Easi-Fit** (EF type) gaskets come with two or four locating lugs to aid fitting.
- ****Metakamm Multifit** gasket fits Class 150 to 2500 flanges.

SPECIFICATIONS
See Metaflex specifications, alongside.

MAXIMUM OPERATING TEMPERATURES OF FACING MATERIALS

XA Compressed non-asbestos fibre	450°C
SPG Standard purity graphite (oxidising media)	500°C
SPG Standard purity graphite (inert/reducing media)	600°C
SPG Standard purity graphite (steam)	650°C
HPG High purity graphite (oxidising media)	500°C
HPG High purity graphite (inert/reducing media)	600°C
HPG High purity graphite (steam)	650°C
Fluolion® PTFE	260°C

Aluminium and silver also available.

OPERATING PRESSURE
Standard gaskets: 250bar max.

SERRATED METAL CORES
Available in stainless steels 304, 304L, 316, 316L, 316Ti, 321 and 347; Monel 400 and K500; nickel 200; Inconel 600, 625 and X750; Incoloy 800 and 825; titanium; Hastelloy HB2 and C276; copper.

SIZES
Standard diameters from 10mm NB up to 3600mm NB. Standard thicknesses: 3.0mm and 4.0mm cores with 0.5mm soft facings either side. Non-standard thicknesses: from 2.0mm core upwards.

HOW SUPPLIED
As six designs to suit different flange faces. Almost any combination of component materials is available. Special profiles include oval, rectangular and heat exchanger shapes with pass bars.

*METAKAMM EASI-FIT (EF TYPE)
To facilitate easier fitting and reduce material and machining costs, larger Metakamm gaskets can be supplied as types EF with either two or four locating lugs. The lugs aid fitting as a minimum number of flange bolts need to be removed to allow easy and accurate gasket positioning.

**METAKAMM MULTIFIT
A variation of a Metakamm gasket with four self-locating lugs designed to minimise the number of gaskets required to fit all flange Classes from 150 to 2500. Sizes: ½-inch to 24-inch NB, and equivalent DIN sizes up to 600mm NB.