

Expanded graphite

TEADIT GR 1700	TEADIT GP 1520	TEADIT GR 1520/GE 1520	TYPE
Graphite sheet	Graphite sheet	Graphite sheet with plain (GR) or tanged (GE) metal insert	Composition
BAM Fire Safe according API 607, Blow-Out resistance	—	—	Tests Approvals
black	black	black	Colour
1,1 g/cm ³	1,0 g/cm ³	—	DIN Density
35 %	40 - 50 %	40 - 50 % / 30 - 40 %	ASTM F 36 Compressibility
15 - 20 %	> 10 %	10 - 25 % / 15 - 30 %	ASTM F 36 Recovery
-250 to 480 °C (steam up to 650 °C) inert atmosphere to 800 °C	-240 to 450 °C (steam up to 650 °C) inert atmosphere to 1000 °C	-240 to 450 °C (steam up to 650 °C) inert atmosphere to 800 °C	Operating Temp. Range (Peak)
Vacuum to 250 bar	30 bar	70 bar / 140 bar	Operating Pressure
> 98 %	> 99 %	> 98 %	Carbon
< 25 ppm	< 30 ppm	< 30 ppm	Chloride
< 300 ppm	< 1000 ppm	< 1000 ppm	Sulphur

Description:

TEADIT GR 1700 is a multilayer high strength graphite sealing sheet designed for high temperature applications. The sheet is comprised of 0.5 mm thick layers of highly oxidation resistant flexible graphite and 0.05 mm thick plain stainless steel foils.

Advantages:

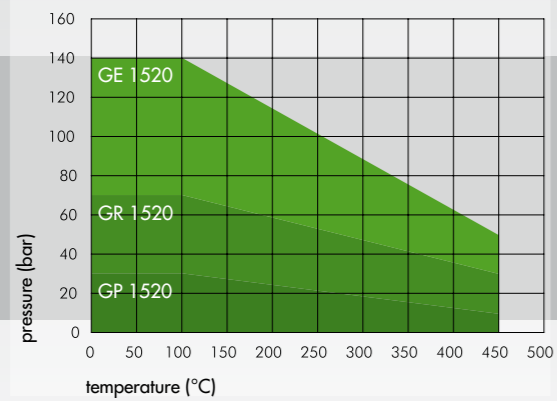
- ideal for critical applications.
- high mechanical strength and blowout resistance.
- wide range of working pressure.
- very low cold or hot relaxation.
- extremely high maximum permissible gasket stress.
- provides an excellent torque retention and high long term sealability.
- superior thermal stability.

Description:

TEADIT expanded graphite sheets are produced from pure, expanded flexible graphite and do not contain any other fibrous or filler materials. Because of their specific structure expanded graphite sheets are particularly suited for applications with extremely high or low temperatures, with highly corrosive and aggressive media, for sensitive flange materials (i.e. ceramic, glass, plastic) and for gas as well as steam applications.

Advantages:

- universally applicable for gases and fluids.
- chemically resistant against most media.
- excellent thermal conductivity.
- can be stored indefinitely.
- do not need anti-stick coating.
- extremely resistant to temperature cycles.



Dimensions:

GP 1520 / GR 1520 / GE 1520
1000 x 1000 mm
1,0 / 1,5 / 2,0 / 3,0 mm

GR 1700
1500 x 1500 mm
1,0 / 1,5 / 2,0 / 3,0 mm

- PTFE gasket material** ■ structured PTFE sheets ■ multidirectionally exp. PTFE sheets ■ multidirectionally exp. PTFE tapes ■ monodirectionally exp. PTFE tapes ■ **Braided gland packings** ■ Carbon / Graphite packings ■ PTFE packings ■ PTFE / Aramid packings ■ Aramid packings ■ Glass packings ■ Acrylic packings ■ Ramie packings ■ Polyimide packings ■ Novoloid packings ■ Nomex packings ■ Preformed packing rings ■ **Compressed fibre sheets** ■ Carbon / Graphite / NBR ■ Aramid /NBR ■ Cellulose / NBR ■ **Graphite sheets** ■ Graphite sheets with plain metal insert ■ Graphite sheets with tanged metal insert ■ Pure graphite sheets ■ **Gaskets** ■ PTFE envelope gaskets ■ Cut gaskets ■ Gaskets with metal eyelets ■ Double jacketed gaskets ■ Spiral-wound gaskets ■ Kamprofile gaskets ■ Hand- and manhole gaskets ■ Tank lid gaskets ■ Braided gasket tapes ■ **Jampak** ■ Injection gun ■ Jampak injectable compounds ■ Seal-Cage-System ■ **Expansion Joints** ■ Metallic and Non-Metallic Expansion Joints ■ **Accessories** ■ Various packing cutters ■ Packing extractors ■ Circular gasket cutter ■ **and many more...**

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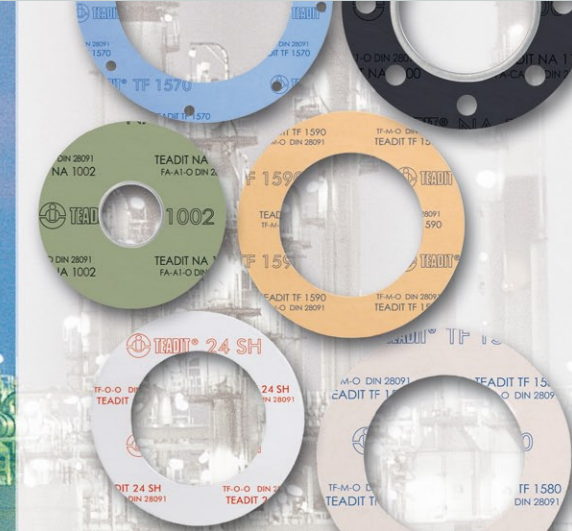


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GASKET SHEETS



Sealing for a safer and greener tomorrow



TYPE	ePTFE						Structured PTFE				Compressed fibre sheets					TYPE						
	TEADIT 24 SH		TEADIT 30 SH		TEADIT TF 1510		TEADIT TF 1570		TEADIT TF 1580		TEADIT TF 1590		TEADIT NA 1006		TEADIT NA 1005		TEADIT NA 1002EU		TEADIT NA 1122		TEADIT NA 1100	
Composition	100 % PTFE		100 % PTFE		PTFE with hollow glass micro spheres		PTFE with hollow glass micro spheres		PTFE with Barium Sulfate		PTFE with Silica		Aramid fibre sheet, bonded with Nitrile rubber (NBR)		Aramid fibres bonded with Nitrile rubber (NBR)		Aramid fibres bonded with Nitrile rubber (NBR)		Inorganic fibres and special fillers, bonded with nitrile rubber (NBR)		Graphite and carbon fibres, bonded with Nitrile rubber (NBR)	
Tests Approvals	BAM FDA, TA Luft, Blow-out test (VDI 2200), EU 1935/2004, EU 10/2011, USP VI, ABS Product Approval, DVGW, WRAS		BAM FDA, TA Luft, Blow-out test (VDI 2200), EU 1935/2004, EU 10/2011, USP VI, DVGW, WRAS, ABS Product Approval		— TA Luft, Blow-out test (VDI 2200)		BAM FDA, TA Luft, Blow-out test (VDI 2200), ABS Product Approval, EU 1935/2004, EU 10/2011		BAM FDA, TA Luft, DVGW, Blow-out test (VDI 2200), ABS Product Approval, EU 1935/2004, EU 10/2011		BAM FDA, TA Luft, EU 1935/2004, EU 10/2011, DVGW, KTW, W270, Blow-out test (VDI 2200), ABS Product Approval		— ABS Product Approval		— KTW, ABS Product Approval		BAM KTW, TA Luft, WRAS, Blow-out test (VDI 2200), DVGW-HTB, ABS Product Approval		— ABS Product Approval		— DVGW, KTW, TA Luft, Blow-out test (VDI 2200), ABS Product Approval	
Colour	white		white		white		blue		off - white		fawn		light green		blue		green		black		black	
Tensile Strength	ASTM F 152	> 20 MPa	> 25 MPa	14 MPa	14 MPa	14 MPa	14 MPa	14 MPa	14 MPa	14 MPa	14 MPa	14 MPa	6 MPa	11,5 MPa	12 MPa	9 MPa	15 MPa	15 MPa	15 MPa	15 MPa	15 MPa	15 MPa
Compressibility	ASTM F 36	> 45 %	> 45 %	50 %	25 - 40 %	4 - 10 %	5 - 15 %	15 - 25 %	7 - 17 %	5 - 15 %	7 - 17 %	5 - 15 %	7 - 17 %	5 - 15 %	7 - 17 %	5 - 15 %	7 - 17 %	5 - 15 %	5 - 15 %	5 - 15 %	5 - 15 %	
Recovery	ASTM F 36	> 10 %	> 10 %	> 16 %	> 30 %	> 40 %	> 40 %	> 35 %	> 45 %	> 50 %	> 40 %	> 50 %	> 40 %	> 50 %	> 40 %	> 50 %	> 40 %	> 50 %	> 40 %	> 50 %	> 50 %	
Leakage (TA Luft)	VDI 2440	2,6 · 10 ⁻⁷ mbar l/sm	8,3 · 10 ⁻⁷ mbar l/sm	1,1 · 10 ⁻⁵ mbar l/sm	3,7 · 10 ⁻⁶ mbar l/sm	5,9 · 10 ⁻⁷ mbar l/sm	1,1 · 10 ⁻⁶ mbar l/sm	—	—	—	—	—	—	—	—	5,5 · 10 ⁻⁷ mbar l/sm	—	—	—	—	1,87 · 10 ⁻⁷ mbar l/sm	
Operating Temp. Range (Peak)	-268 to 260 °C		-268 to 260 °C		-268 to 260 °C		-268 to 260 °C		-268 to 260 °C		-268 to 260 °C		max. 220 °C (300 °C)		max. 240 °C (400 °C)		max. 260 °C (400 °C)		max. 430 °C (550 °C)		max. 270 °C (450 °C)	
Operating Pressure (Peak)	Vacuum to 200 bar		Vacuum to 200 bar		Vacuum to 55 bar		Vacuum to 55 bar		Vacuum to 83 bar		Vacuum to 83 bar		max. 30 bar (80 bar)		max. 50 bar (110 bar)		max. 80 bar (110 bar)		max. 102 bar (150 bar)		max. 70 bar (130 bar)	

Description:
TEADIT 24 SH and 30 SH are gasket sheets produced from 100 % pure, multidirectionally expanded PTFE (Polytetrafluoroethylene).

Advantages:

- Universally employable gasket sheet for all applications. It is suitable for all types of flanges, nearly all media, a wide Temperature range and even for applications with the toughest demands on purity. It is inherently clean and nontoxic.
- Better creep resistance at higher temp. than other types of PTFE sheets.
- Excellent malleability.
- Gaskets cut from TEADIT SH sheets are dimensionally stable.
- TEADIT SH sheets are quick & simple to install.
- Can be stored indefinitely.

TEADIT 30 SH

- The newly developed TEADIT 30 SH gasket sheet provides, due to its much more homogeneous and considerably finer fibrillation, a drastically improved creep resistance, especially at elevated temperatures.
- With TEADIT 30 SH it is possible to make flange calculations according to EN 1591-1:2014 for all dimensions.

Dimensions:

24 SH / 30 SH
1500 x 1500 mm
0,5 / 1,0 / 1,5 / 2,0 / 3,0 / 4,0 / 5,0 / 6,0 / 9,0 mm

TF 1570
1500 x 1500 mm
1,5 / 2,0 / 3,0 / 4,8 / 6,4 mm
1200 x 1200 mm
1,0 mm

TF 1580 / TF 1590
1500 x 1500 mm
1,5 / 2,0 / 3,0 mm
1200 x 1200 mm
1,0 mm

Description:
TF 1510 has the highest compressibility of all TF-sheets, comparable to that of ePTFE material. It is produced from virgin PTFE resin filled with hollow glass micro-spheres.

Advantages:

- particularly well suited for use with uneven and / or older flanged joints.
- suitable for service with a wide variety of aggressive fluids.
- easy to cut.
- excellent malleability.

Description:
TF 1570 is a structured PTFE Gasket Sheet manufactured by a unique process which provides a high level of fibrillation to overcome the creep relaxation and cold flow problems associated with normal (skived or moulded) PTFE sheets. TF 1570 is produced from virgin PTFE resin filled with hollow glass micro spheres.

Advantages:

- Suitable for service with a wide variety of aggressive fluids.
- High compressibility.
- Excellent malleability.
- Quick and simple to install.

Description:
TF 1580 is a structured PTFE - Gasket - Sheet manufactured by a unique process which provides a high level of fibrillation to overcome the creep relaxation and cold flow problems associated with normal (skived or moulded) PTFE sheets. TF 1580 is produced from virgin PTFE resin filled with Barium Sulfate.

Advantages:

- Suitable for all types of flanges, nearly all media.
- Suitable for service with a wide variety of aggressive fluids, including hydrocarbons, moderate acids and strong caustics.
- The high purity of this gasket sheet makes it perfectly suitable for the food and pharmaceutical industry.
- Quick and simple to install.

Description:
TF 1590 is a structured PTFE - Gasket - Sheet manufactured by a unique process which provides a high level of fibrillation to overcome the creep relaxation and cold flow problems associated with normal (skived or moulded) PTFE sheets. TF 1590 is produced from virgin PTFE resin filled with Silica.

Advantages:

- Suitable for services with high pressures and temperature.
- Suitable for service with a wide variety of aggressive fluids especially strong acids (except hydrofluoric).
- TF 1590 is quick and simple to install.

Description:
TEADIT style NA-1006 is a compressed gasket-sheet produced from Aramid fibres, bonded with Nitrile rubber (NBR).

Advantages:

- Excellent general service sheet, formulated to handle lower pressures and temperatures.
- Suitable for water, gases, oils and acids in mild service.

Description:
TEADIT style NA-1005 is a high quality compressed fibre sheet produced from Aramid fibres, bonded with Nitrile rubber (NBR).

Advantages:

- Suitable for sealing petroleum derivatives, water, chemical products in general.
- Excellent cost-performance ratio.
- Recommend as insert for PTFE envelope gaskets.

Description:
TEADIT style NA-1002 is a high quality compressed fibre sheet produced from Aramid fibres, bonded with Nitrile rubber (NBR).

Advantages:

- Suitable for sealing petroleum derivatives, water, saturated steam, gases or chemical products in general. Exceptional performance in gas applications.

Description:
TEADIT style NA-1122 is an inorganic fibres sheet with special fillers bonded with Nitrile rubber (NBR).

Advantages:

- Developed to exhibit superior thermal stability during extreme thermal cycling applications.
- Specially recommended for saturated and superheated steam.
- Very effective in sealing liquids, Ethanol, Petroleum derivatives and other fluids.

Description:
TEADIT style NA-1100 is a top-quality gasket sheet with high temperature and pressure resistance, manufactured from graphite and carbon fibres, bonded with Nitrile rubber (NBR).

Advantages:

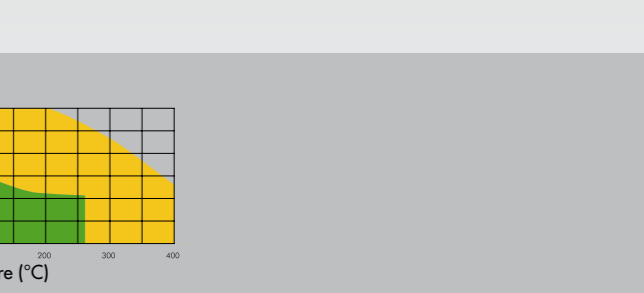
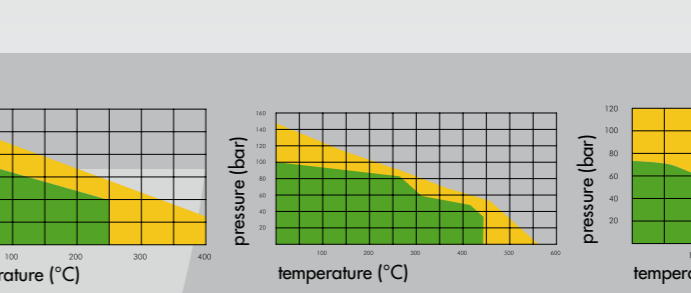
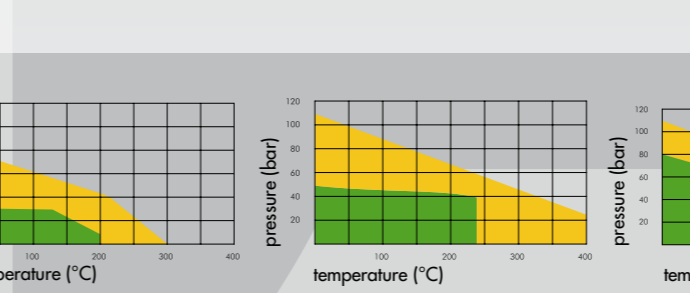
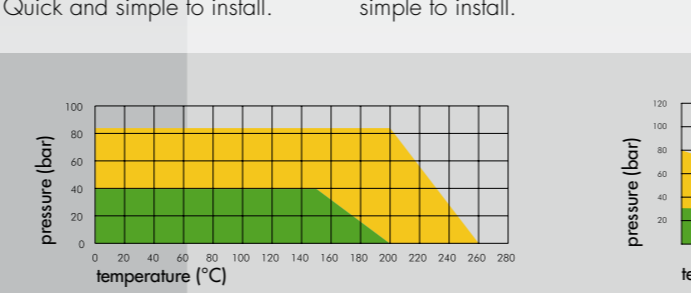
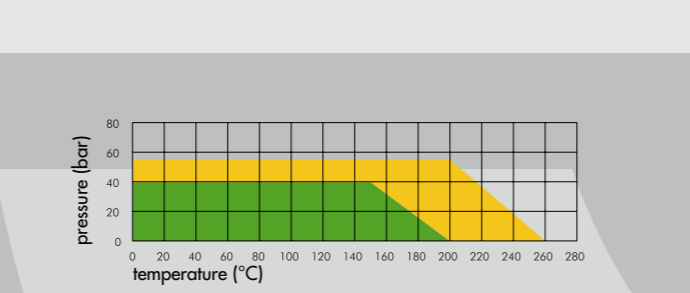
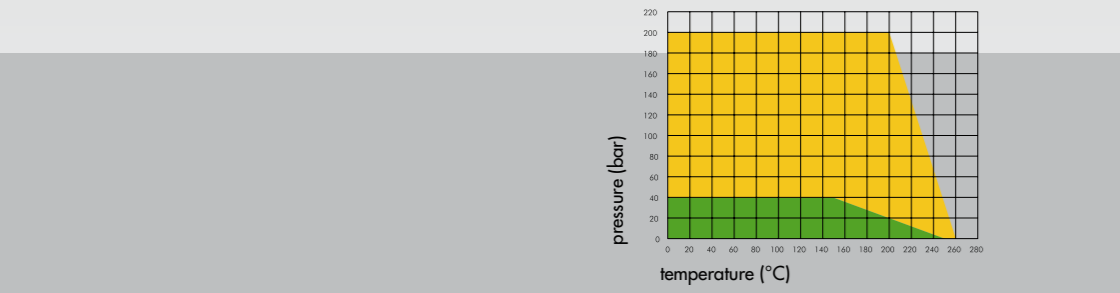
- Carbon fibres provide max. strength and stability.
- Up to 450 °C max. temperature.
- Outstanding chemical and steam resistance.

Dimensions:

1500 x 1600 mm
1500 x 3200 mm
3000 x 3200 mm

NA 1006
0,8 / 1,0 / 1,5 / 2,0 / 3,0 mm

NA 1005
NA 1002
NA 1122
NA 1100
0,5 / 1,0 / 1,5 / 2,0 / 3,0 mm



■ Standard range of service limits
■ Maximum application limits

All technical data and recommendations given are based on our experiences. However, we do not undertake any liability whatsoever. All data and values have to be checked by the user, since the effectiveness of a seal can only be judged correctly by evaluating all data and parameters directly on site. The stated parameters of all packing styles are approximate and may be mutually influenced if occurring together. We suggest you contact us in the case of special applications.