

novaphit® 400

The high-performance graphite gasket

Flat metal reinforced – for OEM and process industry applications



DICHTUNGENGASKETS

ISOLATIONEN INSULATION

KOMPENSATOREN EXPANSION JOINTS

HEIZSYSTEME HEATING SYSTEMS

HIGH-QUALITY PURE GRAPHITE

with an acid-resistant stainless steel insert



novaphit[®] 400 [mm] | 0.5 | 0.75 | 1.00 | 1.50 | 2.00 | 3.00

novaphit® 400 is a gasket sheet made from expanded graphite with an acidresistant chrome-nickel steel flat metal insert (material no.: 1.4404 / AISI 316 L).

ADVANTAGES:

- Very simple processing even with narrow gasket widths
- The flat metal insert prevents the risk of contact corrosion due to projecting metal
- No delamination during punching or plotting
- Improved handling compared to graphite gaskets without reinforcement

- TA Luft suitability for thicknesses 0.5 and 0.75 mm
- Reliable performance for application temperatures up to 500 °C
- Insensitive to changing loads
- High adaptability to flange unevenness
- Virtually no hot creep

novaphit® 400 with XP technology [mm] | 0.5 | 0.75 for higher performance



Thin thicknesses of 0.5 and 0.75 mm with a sheet dimension of 1000×1000 mm can optionally be equipped with XP technology. XP technology paves the way for a new generation of higher-performance gaskets for complex and intricate geometries like those found in many OEM applications.



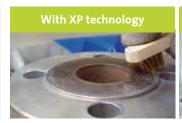
ADVANTAGES:



Optimal anti-stick properties enable quick gasket replacement and protect the flange surfaces



Increased oxidation resistance offers better long-term performance





Please read the complete brochure for novaphit® SSTC, novaphit® SSTC^{TA-L} and novaphit® MST for detailed information about XP technology for novaphit® gaskets.

The novaphit® family at a glance **Expanded** metal Without insert Flat metal insert Expanded and flat metal inserts metal insert Scan OR code (up to eight Frenzeli to find out more! graphite lavers and seven inserts depending on the material IZEli thickness). Frenzi novaphit® SSTCTRD 401 novaphite Vs iovaphite 55TCTRD 401 When a metal is not possible for chemical reasons ovaphit® SSTC Frenzeli Frenzi novaphit®

TECHNICAL DATA

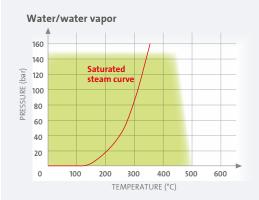
Notes and recommendations for use

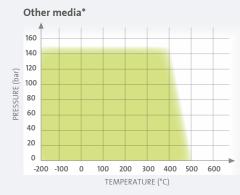
Material data

General data			novaphit® 400					novaphit® 400 with XP technology	
Approvals, tests			TA Luft (for thicknesses 0.5 and 0.75 mm)					TA Luft	
Color			graphite gray					graphite gray	
Printing			black honeycomb brand					blue honeycomb brand	
Material of metal insert			1.4404					1.4404	
Product data (tolerances acc. to	DIN 2809 ⁻								
Dimensions			[mm] 1000 x 1000 / 1500 x 1500 (≥ 1.00 mm)					[mm] 1000 x 1000	
Thicknesses			[mm] 0.5 / 0.75 / 1.0 / 1.5 / 2.0 / 3.0					[mm] 0.5 / 0.75	
Physical properties (typical valu									
Thickness			[mm]	0.50	0.75	1.00	2.00	0.50	0.75
Graphite purity		DIN 51903	[%]	≥ 98	≥ 98	≥ 98	≥ 98	≥ 98	≥ 98
Density		DIN 28090-2	[g/cm³]	1.80	1.45	1.40	1.20	1.80	1.45
Residual stress	300°C	DIN 52913	[N/mm ²]	≥ 45	≥ 45	≥ 45	≥ 45	≥ 45	≥ 45
Compressibility		ASTM F 36 J	[%]	25	38	40	45	25	38
Recovery		ASTM F 36 J	[%]	23	17	15	12	23	17
Specific leakage rate		DIN 3535-6	[mg/m/s]	0.03	0.04	0.05	0.08	0.03	0.04
Oxidation value	670°C	DIN 28090-2	[%/h]	≤ 4	≤ 4	≤ 4	≤ 4	≤ 3	≤ 3
Tensile strength transverse		DIN 52910	[N/mm ²]	40	27	25	13	40	27
Total chloride content		DIN 28090-2	[ppm]	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50
Leachable chloride content		PV01605	[ppm]	≤ 20	≤ 20	≤ 20	≤ 20	≤ 20	≤ 20
Total fluoride content		DIN 51723	[ppm]	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50

Recommendations for use

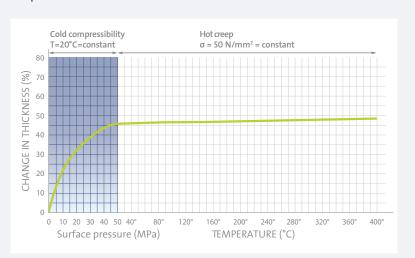
Depending on pressure and temperature levels





Setting behavior

Temp-Test 50 MPa / 20 - 400 °C



Note about the recommendations for use

The temperature and pressure recommendations in the graphs apply to 2.0 mm thick gaskets that are used with raised face flanges. Higher stresses are possible when thinner gaskets are used! The information provided should therefore be considered cautious estimates rather than specific operational limits.

^{*} Example for the most common other media. Precise data for individual cases can be obtained from the Frenzelit novaDISC program or by contacting our application engineering specialists.

FZ/4/05.19/005/KO

OUR COMMITMENT to people and the environment.

As a company with a rich tradition, we care about longterm success and the satisfaction of our customers. Quality is always a top priority for us – as is our commitment to the environment, society and our employees.

We also pride ourselves on always considering our customers' present and future needs, something that is apparent in our application consulting, training seminars and installation services.

A development partnership with us is an excellent opportunity for you to optimize products that are already a success – and a great way to get your new developments to the market even faster. We help you modify products or support you in implementing innovative material concepts - and create real added value for you.

The Frenzelit gasket division is certified according to:







GASKET MATERIALS

novapress® approx. -100 to 200 °C





novaphit® approx. -200 to 550 °C

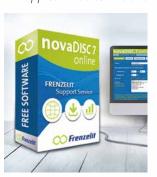
novamica® approx. -200 to 1000 ℃

novaplan® approx. -100 to 1000 ℃

INSULATION MATERIALS



isoplan® approx. -100 to 1100 °C



novadisc.de ONLINE Design Software

Your Specialist Partner

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