

# novaphit® 400

Efficient, flat metal-reinforced graphite gasket for many different applications in OEM operations and process industry

400

novaphit 400

made in Germany

**Frenzelit**

novaphit 400

GASKETS

TECHNICAL TEXTILES

EXPANSION JOINTS

INSULATION

NEW MATERIALS



creating hightech solutions

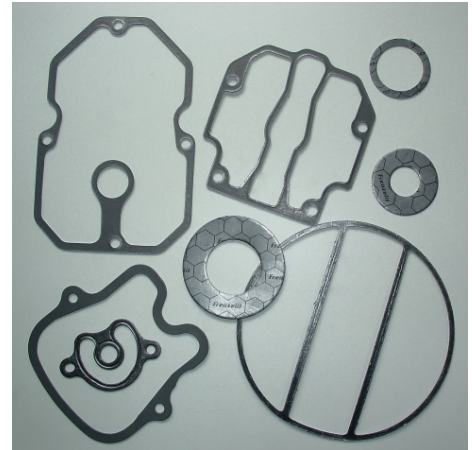
## Why novaphit® 400?

novaphit® 400 is a gasket sheet made from high-quality pure graphite that is reinforced with an acid-resistant stainless steel insert (material no.: 1.4404 / AISI 316 L).

The advantage of combination with flat stainless steel is, on the one hand, that it is an economic solution that performs better than gaskets which have no reinforcement or are reinforced with tanged metal. Another convincing advantage of novaphit® 400 is, on the other hand, extremely simple and effective processing, even in the case of thin gasket widths and filigree structures.

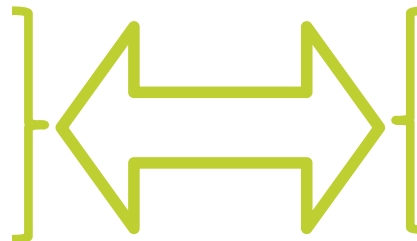
With novaphit® 400, we supply individual solutions that have these features:

- Filigree part geometries can be manufactured
- Very simple processing by all the standard processes (punching; plotting; circular cutting; plate shearing, snipping or knife cutting)
- Optimised handling, in contrast to graphite gaskets that are not reinforced
- Sealing at temperatures up to 500°C
- Insensitive to varying loads
- High adaptability to flange unevenness
- High flexibility with unfavourable sealing surfaces
- Practically no hot creep properties



## Applications

- OEM applications
- Filigree part geometries, low gasket thicknesses
- Machine and plant engineering
- Chemical and process industries
- Power stations



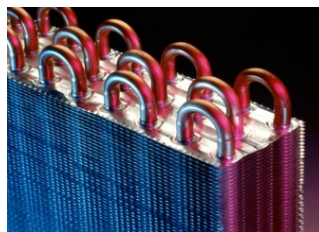
## Typical application areas

- Gaskets (high temperatures)
- Temperature-resistant compensation elements
- Equipment manufacturing
- Fitting production
- Valve engineering
- Steam pipes

## Sample applications



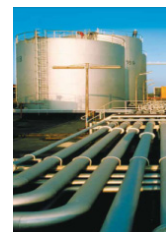
Pumps



Heat exchangers



Fittings



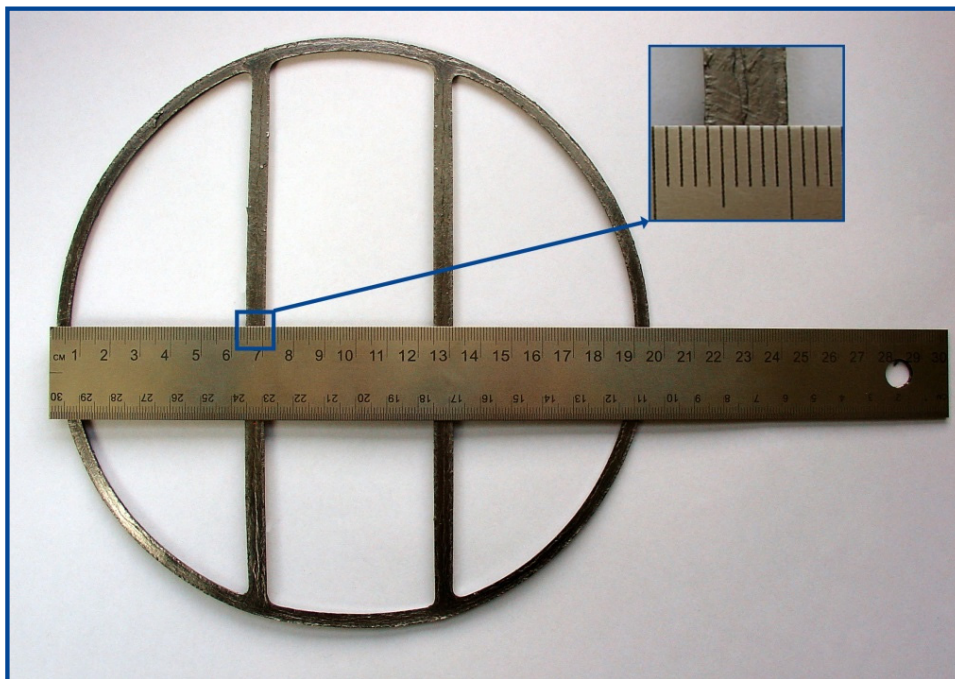
Chemical and process industries

## Technical characteristics

novaphit® 400		
Flat metal insert (1.4404 / AISI 316 L)	[µm]	50
Oxidation level acc. to DIN 28090-2	[%/h]	≤ 4
Thickness range	[mm]	0.5 / 0.75 / 1.0 / 1.5 / 2.0 / 3.0
Sheet length / width	[mm]	1000 x 1000 1500 x 1500 (≥ 0.75 mm)
Processability Punching, plotting, cutting etc.		✓✓✓
Application temperature		✓✓
Adaptability / flexibility		✓✓✓
Resistance to leakage		✓✓✓
Media resistance		✓✓
Handling		✓✓

✓ = basically suitable  
 ✓✓ = very suitable  
 ✓✓✓ = outstandingly suitable

## novaphit® 400: superior processing properties



- ✓✓✓ no danger of contact corrosion due to projecting metal
- ✓✓✓ no delamination during punching or plotting, even with complicated gasket geometries

If you have any application engineering questions, we will be delighted to answer them. Just contact:

[gaskets@frenzelit.com](mailto:gaskets@frenzelit.com)

# Good for people and the environment.

From research and development to our manufacturing operations and use of the product by the customer: quality assurance and a responsible approach to resources and the environment are a firm commitment we observe in everything we do throughout the life cycle of all products.

The Frenzelit gasket division has obtained certification that the company complies with the requirements of ISO 9001, ISO 14001 and ISO 50001. This means complete transparency in all areas and therefore provides a high degree of security – for the benefit of our employees, the environment and our customers.

## Quality management

ISO 9001







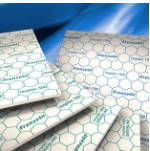
## Environmental management

ISO 14001

## Energy management

ISO 50001

## Engineered by Frenzelit: Gasket materials / fibre-reinforced compounds

novapress®	novatec®	novaflo®	novaphit®	novamica®	novaplan®	isoplan®
						
200°C	250°C	260°C	550°C	1000°C	1000°C	1100°C
-100°C	-100°C	-200°C	-200°C	-200°C	-100°C	-100°C
Elastomer-bonded fibre compound gaskets	Fibre-reinforced graphite gaskets	Modified and filled PTFE gaskets	Expanded graphite with/without stainless steel expanded metal insert	Phlogopite mica with/without stainless steel expanded metal insert	Soft layer/insert for heat shield applications and cylinder head gaskets	High-temperature insulation materials

### GASKETS

### TECHNICAL TEXTILES

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### INSULATION

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