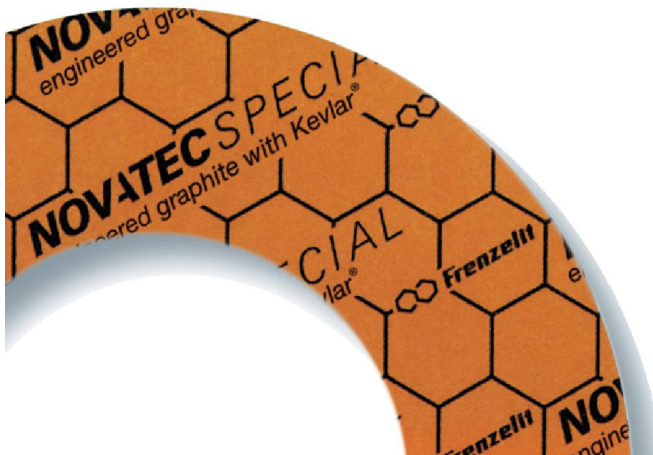


# novatec® SPECIAL - Engineered graphite with Kevlar®



## Reliable at temperatures up to 360°C

novatec® SPECIAL combines the positive gasketing properties of graphite and Kevlar®.

The material owes its excellent reliability even at extremely high temperatures to a very low percentage of binders used. The extraordinary safety in operation of novatec® SPECIAL reduces the costs for maintenance and changing the gaskets to a minimum; this investment is surely worthwhile in order to increase the safety in operation.

## Very high adaptability

Due to its material structure novatec® SPECIAL distinguishes itself by its excellent adaptability to flange irregularities. This flexibility allows novatec® SPECIAL to also be used in old flanges – which is surely a contribution to reducing costs.

## Very high stress relaxation

novatec® SPECIAL offers constant security during maintenance intervals due to its excellent long-term stability. The high stress relaxation as well as the longer life of novatec® SPECIAL increase the intervals between maintenance – a further contribution to cost reduction.

## Safe handling due to high flexibility

The patented combination of graphite and Kevlar® makes novatec® SPECIAL extremely flexible and resistant to fracture. Installation problems are a matter of the past.

## Dimensions in big sizes for gaskets from one piece

The available dimensions make superfluous complicated processing steps with special dimensions.

## “Tool-protecting effect“ in cutting

novatec® SPECIAL is perfectly suitable for cutting even with simple tools due to the “lubricating effect“ of the graphite and the missing metal inserts.

Kevlar® is a DuPont registered trademark.

## Material data

### General Data

Binders	NBR
Approvals	KTW
Colour	golden brown
Anti-stick coating	both sides A310 standard
Sheet size and thickness tolerance	acc. DIN 28 091-1

Physical properties	Standard	Unity	Value *
Gasket thickness 2.0 mm			
Identification	DIN 28 091-2		FA – A 1 - O
Density	DIN 28 090-2	[g/cm <sup>3</sup> ]	1.00 ± 0.05
Tensile strength	DIN 52 910		
longitudinal		[N/mm <sup>2</sup> ]	≥ 2.0
transverse		[N/mm <sup>2</sup> ]	≥ 1.2
Residual stress $\sigma_{dE/16}$	DIN 52 913		
175 °C		[N/mm <sup>2</sup> ]	≥ 40
300 °C		[N/mm <sup>2</sup> ]	≥ 38
Compressibility	ASTM F 36 J	[%]	45 ± 5
Recovery	ASTM F 36 J	[%]	≥ 8.0
Fluid resistance	ASTM F 146		
ASTM IRM 903	5h / 150 °C		
Weight change		[%]	≤ 45
Thickness increase		[%]	≤ 2
ASTM Fuel B	5h / 23 °C		
Weight change		[%]	≤ 40
Thickness increase		[%]	≤ 2

\* = Mode (typical value)

## Typical applications

- The steam gasket used in power plants
- Application in the general and chemical industry for oils, water, steam, weak acids and alkalis

## Supply data

- Dimensions in mm: 1000 x 2000  
1500 x 1500  
2000 x 1500
- Thicknesses in mm: 1.0/1.5/2.0/3.0
- Further dimensions and thicknesses are available on request.

## Quality Management

ISO 9001  
ISO/TS 16949

## Environmental Management

ISO 14001

GASKETS
TECHNICAL TEXTILES
EXPANSION JOINTS
INSULATION
NEW MATERIALS

Frenzelit Werke GmbH  
P.O. Box 11 40 · 95456 Bad Berneck · Germany  
Phone: +49 9273 72-0 · Fax: +49 9273 72-221  
info@frenzelit.de · www.frenzelit.com



creating  
hightech  
solutions