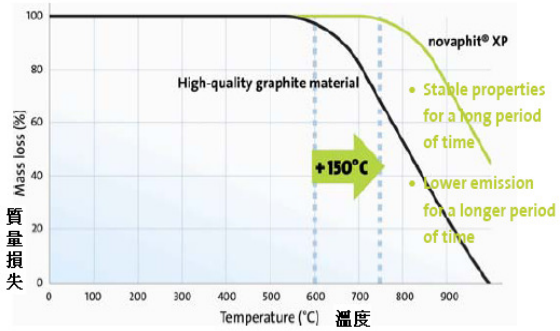
Engineered graphite with expanded metal gasket

ZW 6600
novaphit® SSTC / XP
novaphit® SSTC TA-L / XP

novaphit® SSTC XP consists of high-quality, expanded graphite (purity level at least 99%) and an expanded metal insert made from acid-proof stainless steel AISI 316L – DIN 1.4404 foil (0.15mm). Under high pressure the expanded graphite particles are compressed to films without adding any binders or fillers. The expanded metal is then incorporated into the sealing material. The special geometry of the expanded metal produces a three-dimensional-mechanical bond with excellent stress relaxation and recovery of the graphite. Novaphit SSTC XP has an excellent workability, long-term non-stick properties, outstanding thermal and mechanical loading capabilities and exceptional chemical resistance.

The exceptional product properties open a wide spectrum of applications including the most extreme operating conditions, novaphit products are especially suited for dynamic and static sealing assemblies where durability and resistance to deformation, flexibility, loading capacity and a good chemical resistance are mandatory.



Oxidation stability (TGA) 氧化穩定性

- **Approval**

∗ DVGW, KTW approval
∗ BAM (O_2: max. 200℃ / 130 bar, including liquid O_2)
∗ Fire Safe (DIN EN ISO 10497, API607, BS6755)
∗ Germanischer Lloyd
∗ TA-Luft (VDI 2440) and VDI2290

- **Physical Properties**

General Data Gasket thickness 2.0mm	Anti-stick coating	Both sides		
	Color	Grey		
	Binders	Without organic binder		
	Sheet size and thickness tolerance	DIN 28091-1		
	Identification	DIN 28091-4	GR-10-I-1M-Cr	
	Purity	99%		
	Temperature	-240~550℃		
	Pressure	Max. 250 Bar		
	Density	DIN 28090-2	[g/cm3]	1.35
	Tensile strength longitudinal transverse	DIN 52910 	 [N/mm2] [N/mm2]	 17 8
	Residual stress $\sigma_{dE/16}$ 170℃ 300℃	DIN 52913 DIN 52913	[N/mm2] [N/mm2]	47 45
	Compressibility	ASTM F36J	[%]	40
	Recovery	ASTM F36J	[%]	15
	Cold compressibility ε_{KSW}	DIN 28090-2	[%]	39.0
	Cold recovery ε_{KRW}	DIN 28090-2	[%]	4.0
	Hot creep $\varepsilon_{KSW/200}$	DIN 28090-2	[%]	2.0
	Hot recovery $\varepsilon_{KRW/200}$	DIN 28090-2	[%]	3.5
	Recovery R	DIN 28090-2	[mm]	0.070
	Specific leakage rate	DIN 3535-6	[mg/(m·s)]	≤ 0.100
	Specific leakage rate $\lambda_{2.0}$	DIN 28090-2	[mg/(m·s)]	0.050
Product data: Dimensions(mm) Thickness(mm) 1000x1000 1.0/1.5/2.0/3.0 1500x1500 1000x2000 Further dimensions and thicknesses are available on request.	Fluid resistance	ASTM F146		
	ASTM IRM903 Weight change Thickness increase	5h/150℃ 	 [%] [%]	 30 6
	ASTM Fuel B Weight change Thickness increase	5h/23℃ 	 [%] [%]	 30 6
	Chloride content	DIN 28090-2	[ppm]	≤ 50