

# Silicon Carbide Block Heat Exchanger

Massive Blocks made of Silicone Carbide from DN 100 to DN 300



Wilk-Graphite Block heat exchanger are made of pure directly sintered SIC blocks, and do not contain free Silicone, which may reduce the chemical resistance.

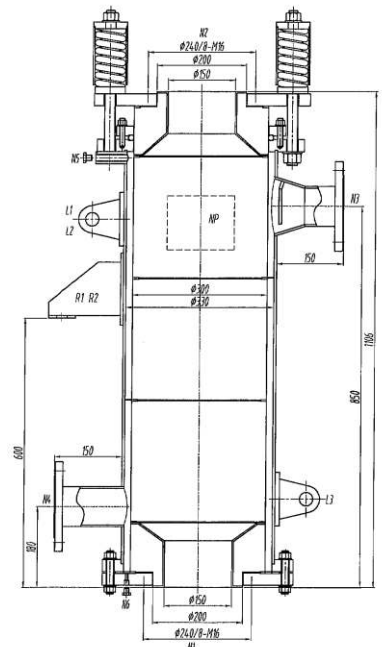
SIC offers a nearly universal chemical resistance, highest thermal conductivity. Extreme surface hardness allows protection again abrasion and results in high flow rates with increased thermal efficiency.

	Diameter	Height
Type 1	175	320
Type 2	222	320
Type 3	300	320

### Advantadges

- Universal chemcial resistance
- High thermal conductivity
- Abrasion resistance
- FDA approved

	Product	Service
Drilling	10 - 16 mm	8 - 10 mm
Rows	single or double	single



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## Properties of SIC

No	Properties / Eigenschaften	Units / Einheiten	Values / Werte
1	Composition / Zusammensetzung		Single phase, pressureless sintered SIC
2	Buld Density / Dichte	g/cm <sup>3</sup>	3,12 +/- 0,02
3	Apparent Porosity / Porösität	%	0,06
4	Fluxural Stength / Biegefestigkeit	Mpa	402+/-35
5	Vickers Hardness / Härte nach Vickers	Gpa	19,2+/-1,8
6	Fracture Toughness / Bruchzähigkeit	Mpa/m	3,8 +/-0,7
7	Elasticity modulus / E Modul	Gpa	410+/-10
8	Thermal conductivity / Thermische Leitfähigkeit	W/mk	130+/-10
9	Coefficient of thermal expansion / Ausdehnungskoeffizient	10 <sup>-6</sup> /K	4,66
10	test pressure / Testdruck	bar	100