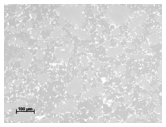
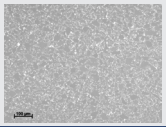
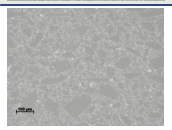
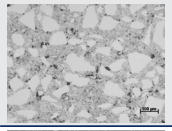
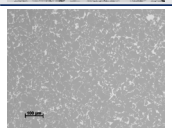
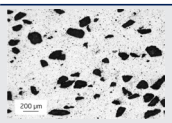
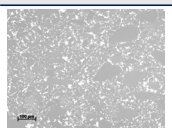
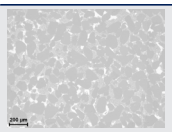
Technical Ceramics

Ceramic materials in comparison

Here you will find a comparison of all materials from Schunk Technical Ceramics

Material	Image	Bulk density [g/cm³]	Open porosity [Vol.%]	Flexural strength (4 Point) [MPa]	Com-pressive strength [MPa]	Modulus of elasticity [GPa]	Hard-ness	Thermal expansion coefficient RT – 400 [µ/K]	Thermal conduc-tivity [W/mK]	Chemical composition
CarSIK-B_4C		2.85	0	220		350	29,000			B_4C: 30 % SiC: 57 % Si: 12 %
CarSIK-G		3.09	0	280	1,000	360	25,000	4.9	160	SiC: 88 % Si: 11 %
CarSIK-GD		3.1	0	280	1,000	360	25,000	4.9	160	SiC: 89 % Si: 10 %
CarSIK-NG		2.85	1	200		220		4.6	12	SiC: 65 % Si_3N_4 + Si_2ON_2: 27 % Oxide: 8 %
CarSIK-NT		3.09	0	280	3,000	360	25,000	3.9	120	SiC: 88 % Si: 12 %
CarSIK-SD		3.1	0	390	380	400	25,000	4.0	110	SiC: 98,5 %
CarSIK-Z		3.09	0	280	1,000	360	25,000	4.9	160	SiC: 88 % Si: 11 %
IntrinSiC		3.05	0	210		380	25,000	3.9	200	SiC: 86 % Si: 14 %
CarSIK-70ZA		2.1	25	30				5.0	7	SiC: 70 %
ZirSIK-95 TA		4.3	25					9.6	2	ZrO_2: 95 % CaO 4 %
AluSIK-99ZA		3.8	0	300				8.0	25	

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