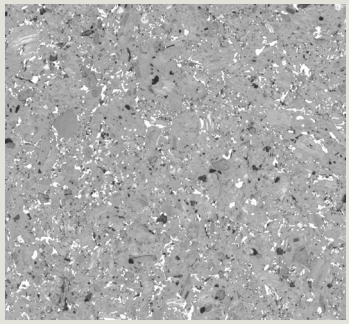
Range of materials – from hard to soft

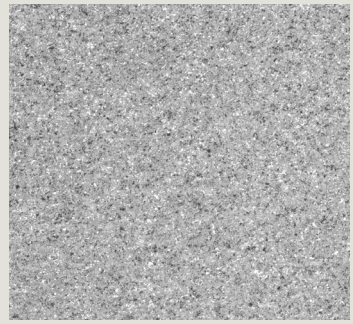
Material		CarSIK				FH				FE			FF
		SD	NT	CT	SiC30	42ZH	82A	82ZH	71ZH	45Y	65	679PS	521
Characteristics	Unit	SSiC	SiSiC	SiSiC-C	C-SiC	Carbon graphite				Electro graphite			Resin bonded carbon
Bulk density	g/cm³	3.10	3.09	2.90	2.65	1.70	2.15	1.80	2.80	1.70	1.80	2.20	1.75
Porosity	%	-	-	-	-	1	1	1	1	8	8	2	-
Flexural strength	MPa	390	280	120	140	60	90	75	75	40	45	90	60
Compressive strength	MPa	3800	3000	650	500	210	350	250	170	100	110	210	145
Young's modulus	GPa	400	360	260	140	18	26	24	27	12	13	20	20
Thermal expansion 20-200 °C	10^{-6}/K	4.0	3.9	3.9	3.0	4.6	4.5	4.7	7.0	3.6	3.1	4.1	23
Thermal conductivity	W/mK	110	120	120	125	11	9	8	6	65	65	45	5
Temperature limit, oxidized	°C	1720	1380	600	600	260	350	260	260	500	600	500	180
pH range		0-14	1-10	1-10	0-14	*	*	*		*			*
Chemical composition	% SIC	99	88	75	62	-	-	-	-	-	-	-	-

* The table shows a selection of our antifriction materials. The values in the table are typical values and are subject to material and product-specific variation.
For manufacturing our carbon and graphite materials, we exclusively use defined preparations or specified raw materials which are processed in accordance with precisely prescribed procedures. More information about the chemical resistance of the materials is available upon request.

metal-impregnated material



high-strength carbon material



C-SiC composite material