

Silicon carbide ready-to-press granules for solid-state (SSiC) sintered technical ceramics.

Densitec granules are spray dried granules, based on our standard green Sintex 15C. The premix is doped with sintering additives, temporary binder and pressing aids, and is ready to be pressed into a green body. SIKA Densitec 15 is ideal for drypressing and particularly suitable for isostatic pressing.

Packaging 15 kg plastic pails

Composition

	Sintering additives		Binder content (total organic)	Moisture content	SiC type
	Carbon	Boron	%	%	balance
Densitec 15	Resin	Boron carbide	approx. 9.5	approx. 0.6	Sintex 15C

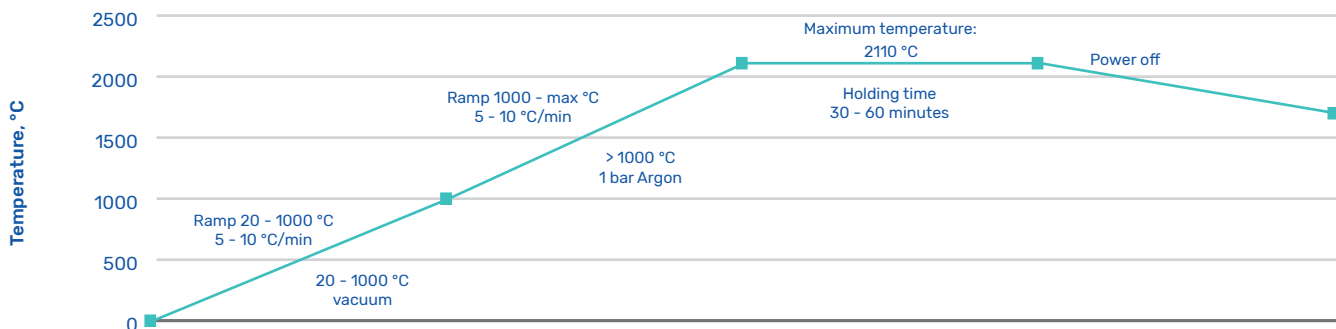
Typical physical properties

	Granules				Green body						
	Size		Bulk density	Hall flow-meter	Green density			Green strength diametral compression			
	max	Average			125 MPa	150 MPa	225 MPa	curing 120 C			
			Sec / 25g					150 MPa	30 min	1 h	2 h
Densitec 15	250	100	0.85	45	1.8	1.85	1.88	0.5 MPa	1 MPa	1.3 MPa	2.3 MPa

Typical properties of sintered parts

	Density	Microhardness HV 1000	Indentation fracture toughness, K_{IC}	Linear shrinkage	Bending strength
	g/cm ³	GPa	MPa/m	%	4 point MPa
Densitec 15	3.17	26	4.0	approx. ~ 18	500

Typical Sintering Cycle



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