

SINTERING-DATA-SHEET

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powder - code:	Diamix - C 20
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main component:	Fe, Cu	binder:	2 % alcohol	date:	07.07.2014
machine type:	DSP-25	aver. Grain size		testperson:	OE
utilisation:	Diabase-V21 B + 20 % Cu/Sn				

heating by	die:	X	temperature measurement by:	pyroscope:	
	punches:			thermocouple:	X

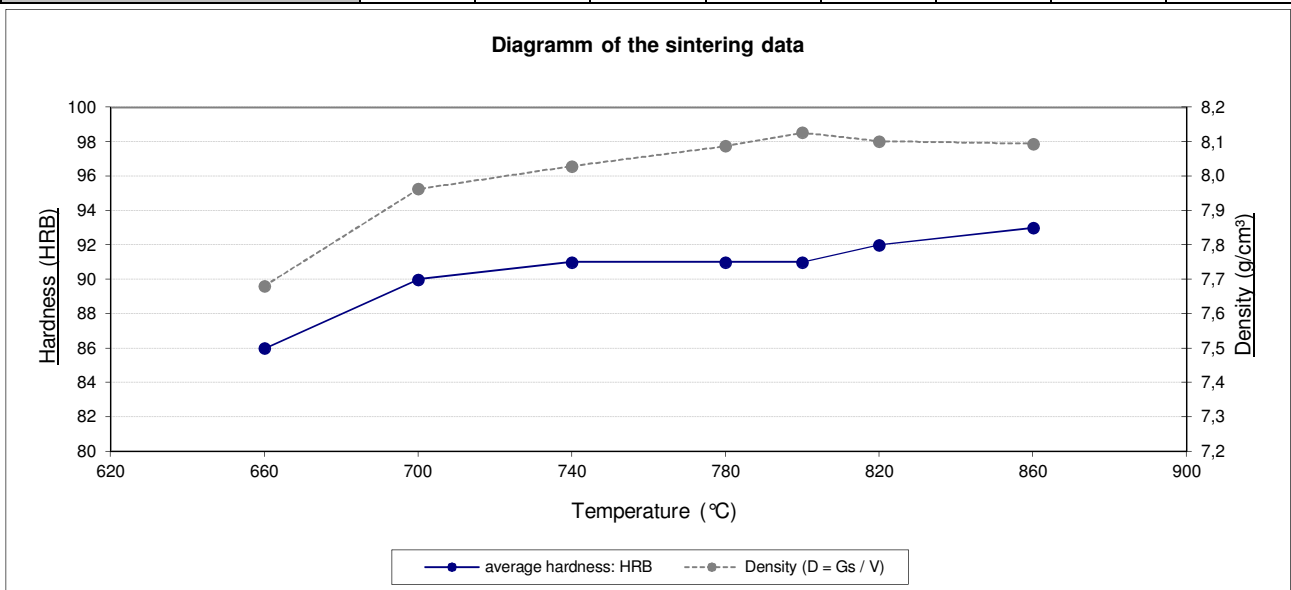
temperature:	°C	660	700	740	780	800	820	860	
specific pressure:	N/mm ²	35	==>						
sintering time:	min	3	==>						

bending strength:	N/mm ²								
stretch at break:	%								
average hardness:	HRB	86	90	91	91	91	92	93	
hardness scattering:	HRB	84-88	89-91	90-92	90-92	91-92	91-92	92-93	
average hardness:	HRC								
hardness scattering:	HRC								
weight:	g	17	==>						
weight after sintering:	g								

Volume ($V = G_s - G_w$)	cm ³								
Density ($D = G_s / V$)	g/cm ³	7,68	7,96	8,03	8,09	8,13	8,10	8,09	

weight loss ($G = G_e - G_s$)	g								
rel. Weight loss ($G_r = G * 100 / G_s$)	%						6,89	7,02	

notes:							extrusion	==>	
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Attention:

Depending on mould-geometry and type and place of temperature-measurement an increase up to 60 °C must be done to get the same result !
 In case of moulds with a high number of graphite punches a certain friction value needs to be considered. To obtain the detailed formula you are welcome to contact us.

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