

SINTERING-DATA-SHEET

DR. FRITSCH GmbH & Co. KG

Dieselstraße 8

70736 Fellbach

Tel. 0711-518320; Fax 0711-5183210

powder - code:	Diaweld-5000
-----------------------	--------------

main component:	Fe, Co	binder:	2 % alcohol	date:	24.03.2014
machine type:	DSP-25	aver. Grain size		testperson:	OE
utilisation:	laserweldable backing for temperature > 740 °C				

heating by	die:	X	temperature measure-	pyroscope:	
	punches:		ment by:	thermocouple:	X

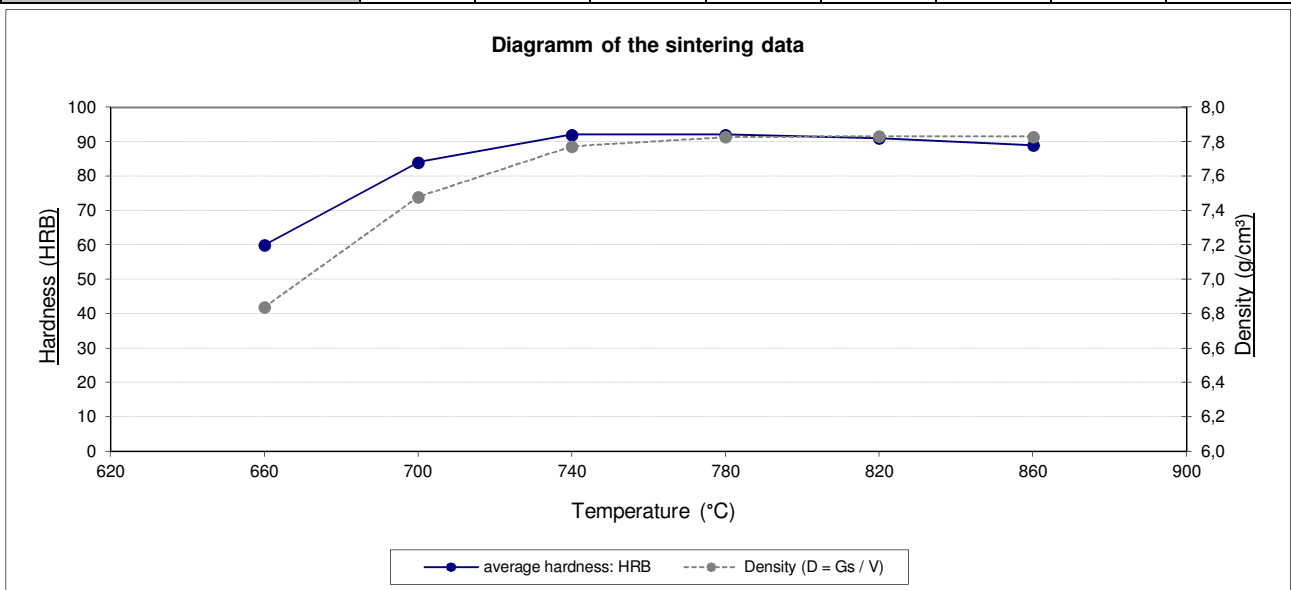
temperature:	°C	660	700	740	780	820	860		
specific pressure:	<i>N/mm²</i>	35	==>						
sintering time:	<i>min</i>	3	==>						

bending strength:	<i>N/mm²</i>								
stretch at break:	%								
average hardness:	HRB	60	84	92	92	91	89		
hardness scattering:	HRB	56-66	82-86	91-94	90-94	89-93	88-91		
average hardness:	HRC								
hardness scattering:	HRC								
weight:	g	17	==>						
weight after sintering:	g								

Volume ($V = G_s - G_w$)	<i>cm³</i>								
Density ($D = G_s / V$)	<i>g/cm³</i>	6,84	7,48	7,77	7,83	7,83	7,83		

weight loss ($G = G_e - G_s$)	g								
rel. Weight loss ($G_r = G * 100$)	%								

notes:									
---------------	--	--	--	--	--	--	--	--	--



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.

Property of Dr. Fritsch GmbH & Co.KG. Transmission only allowed in explicit agreement with the management.