

# S I N T E R I N G - D A T A - S H E E T

DR. FRITSCH GmbH & Co. KG

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<b>powder - code:</b>	V12-585
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<b>main component:</b>	Co	<b>binder:</b>	1,5 % alcohol	<b>date:</b>	28.4.88
<b>machine type:</b>	DSP-25	<b>aver. Grain size</b>	< 63 µm	<b>testperson:</b>	Ga
<b>utilisation:</b>					

<b>heating by</b>	<b>die:</b>	X	<b>temperature measure-</b>	<b>pyroscope:</b>	
	<b>punches:</b>		<b>ment by:</b>	<b>thermocouple:</b>	X

<b>temperature:</b>	°C	780	820	860	900	940	980		
<b>specific pressure:</b>	N/mm <sup>2</sup>	35	==>						
<b>machine pressure:</b>	bar	80	==>						
<b>sintering time:</b>	min	3	==>						
<b>bending strength:</b>	N/mm <sup>2</sup>								
<b>stretch at break:</b>	%								
<b>average hardness:</b>	HRB	81	92	98	97	95	95		
<b>hardness scattering:</b>	HRB	77-85	90-93	98-99	95-97	94-96	94-97		
<b>weight:</b>	g	20	==>						
<b>weight after sintering:</b>	g	19,026	20,502	19,579	18,559	18,49	18,183		

<b>volume:</b>									
<b>V = G<sub>s</sub> - G<sub>w</sub></b>	cm <sup>3</sup>	2,342	2,439	2,257	2,148	2,149	2,146		
<b>density:</b>									
<b>D = G<sub>s</sub> / V</b>	g/cm <sup>3</sup>	8,12	8,41	8,67	8,64	8,6	8,47		

<b>weight loss:</b>									
<b>G = G<sub>e</sub> - G<sub>s</sub></b>	g								
<b>rel. Weight loss:</b>									
<b>Gr = G * 100 / G<sub>e</sub></b>	%								

<b>notes:</b>	samples liquid ->
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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 !

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