



Material: Fe-1.5 % Cu-0.6 % C; iron: water atomised

carbon: not specified; sintering: 800 °C, 30 min, 70 % N₂ + 30 % H₂ plus 1120 °C, 30 min, 70 % N₂ + 30 % H₂ (DPDS)

heat treatment: -

density: 7.4 ± 0.05 g/cm³

mech. properties: H = -; R_{p0.2} = -; R_m = 500 MPa

Specimen: rectangular bar 90 x 11 x 5, central hole Ø 2mm, hole compacted, K_t = 2.8; surface as sintered

Loading mode: axial, R = -1; 25 Hz

Limiting no. of cycles: 2 · 10⁶

Endurance limit: 100 MPa

Referenece: C.M. Sonsino: Schwingfestigkeit von verschiedenen Sinterstählen und Bemessungskriterien für gesinterte Bauteile; LBF-Report No. FB-170; Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1984

Stress amplitude:	105	145	182	MPa
Cycles to failure:	1006.862	91,616	21,231	· 1000
	1255.943	97,044	25,059	
	1861.959	128,816	27,100	
	2004.334	165,566	33,264	
	2004.334			
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