



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

carbon: not specified; sintering: 1120 °C, 30 min, endogas plus propane, reheated to 1120 °C in N₂, powder f

heat treatment: -

density: 7.76 g/cm³

mech. properties: H = 272 HB 2.5/187.5; R_{p0.2} = 587 + 598 MPa; R_m = 851 MPa

Specimen: smooth, K_t = 1.0; similar to ISO 3928; surface machined

Loading mode: plane bending, R = -1; 25 Hz

Limiting no. of cycles: 2 · 10⁶

Endurance limit: 415 Mpa

Reference: C.M. Sonsino: Einfluss sintertechnischer Grenzen für die Herstellung von schwingbeanspruchten Bauteilen a
Sinterstahl; LBF-Report No. FB-184; Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1989

Stress amplitude:	257	350	400	425	600	MPa
Cycles to failure:	2022.879	2001.282	2008.965	429.507	76.731	· 1000
		2001.282	2008.965	647.098	88.908	
		2001.282	2008.965	1124.527	89.944	
				1573.874	97.492	
				1879.187	107.392	
				2008.965	146.208	
				2008.965		
				2008.965		