



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

carbon: not specified; sintering: 1120 °C, 30 min, 70 % N<sub>2</sub> + 30 % H<sub>2</sub>

heat treatment: 840 °C, 1h; oil 60 °C; 430 °C, 1h

density:  $6.8 \pm 0.05$  g/cm<sup>3</sup>

mech. properties: H = 252 HB 2.5/62.5; R<sub>p0.2</sub> = 730 MPa; R<sub>m</sub> = 750 MPa

Specimen: smooth, K<sub>t</sub> = 1.0; ISO 3928; surface as sintered

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

Limiting no. of cycles:  $2 \cdot 10^6$

Endurance limit: 250 MPa (decided)

Reference: 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:	277	342	MPa
Cycles to failure:	306,881	38,457	$\cdot 1000$
	512,826	68,544	
	696,578	86,491	
	2000,000	100,217	