



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

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 = 2.0; surface as sintered

Loading mode: plane bending, R = 0; 25 Hz

Limiting no. of cycles: 2 · 10⁶

Endurance limit: 97 MPa (extrapolated)

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

Stress amplitude:	118	208	MPa
Cycles to failure:	245,454	26,422	· 1000
	454,957	27,163	
	693,378	29,921	
	1191,160	30,830	
		31,693	