



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: -

density: 6.60 g/cm<sup>3</sup>

mech. properties: H = 106 HV10; R<sub>p0.2</sub> = 263 MPa; R<sub>m</sub> = 336 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 · 10<sup>6</sup>

Endurance limit: 103 MPa (extrapolated)

Reference: C.M. Sonsino: Ermittlung anwendungsrelevanter Kenngrößen für Sintermetalle. LBF-Report No. FB-158: Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1981

Stress amplitude:	130	131	140	150	MPa
Cycles to failure:	176,592	424,590	52,477	43,649	· 1000
	211,334		59,152		
	225,928		71,116		
			82,402		
			102,322		
			117,211		
			186,625		