



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

carbon: not specified; sintering: 1120 °C, 30 min, 70 % N₂ + 30 % H₂

heat treatment: -

density: 6.92 g/cm³

mech. properties: H = 122 HV10; R_{p0.2} = 359 MPa; R_m = 433 MPa

Specimen: rectangular bar 90 x 11 x 5, central hole Ø 2 mm, hole compacted, K_t = 2.0; surface as sintered

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

Limiting no. of cycles: 2 · 10⁸

Endurance limit: 89 MPa (extrapolated)

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

Stress amplitude:	120	129	139	MPa
Cycles to failure:	179,875	75,504	68,860	· 1000
	188,352	120,218		
	224,890	128,520		
		152,044		