

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: 6.60 g/cm³

mech. properties: H = 106 HV10; $R_{p0.2}$ = 263 MPa; R_{m} = 336 MPa

Specimen: smooth, K_t = 1.0; ISO 3928; surface as sintered

Loading mode: axial, R = 0; 25 Hz

Limiting no. of cyles 2 · 10⁶

Endurance limit: 79 MPa (extrapolated)

Refernece: C.M. Sonsino: Ermittlung anwendungsrelevanter Kenngrößen für Sintermetalle. LBF-Report No. FB-158:

Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1981

Stress amplitude:	85	95	MPa
Cycles to failure:	171,384	48,303	· 1000
	315,479	62,513	
	436,486	73,277	
	926,766	86,093	
	1455.359	115,072	