

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

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

heat treatment: density: 6.92 g/cm³

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

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

Loading mode: axial; R = 0; 25Hz

Limiting no. of cycles: 2 · 10⁶

Endurance limit: 104 MPa (extrapolated)

Reference: C.M. Sonsino: Ermittlung anwendungsrelevanter Kenngrößen für Sintermetalle. LBF-Report

No. FB-158: Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1981

Stress amplitude:	110	116	126	130	136	146	MPa
Cycles to failure:	387,231	54,824	67,293	12,531	16,942	5,571	· 1000
	2093.968	339,602		37,237	20,229		
	3019.743	378,416		42,852			
		434,480		45,917			