



Material: Fe-1.5 % Cu-0.6 % C; iron: water atomised copper;  
carbon: not specified; sintering: 1120 °C, 30 min, 70 % N<sub>2</sub> + 30 % H<sub>2</sub>  
heat treatment: -  
density: 6.92 g/cm<sup>3</sup>  
mech. properties: H = 122 HV10; R<sub>p0.2</sub> = 359 MPa; R<sub>m</sub> = 433 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: 126 MPa (extrapolated)

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

Stress amplitude:	179	189	200	MPa
Cycles to failure:	120,218	50,812	31,548	- 1000
		77,441	37,237	
		80,904	57,806	
		102,087	59,152	
		108,635		
		115,337		