



Material: Fe-1.5 % Cu-0.6 % C; iron: water atomised  
copper: FS  
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: rectangular bar 90 x 11 x 5, central hole ∅ 2 mm, hole compacted, K<sub>t</sub> = 2.0; surface as sintered

Loading mode: plane bending, R = -1; 25 Hz

Limiting no. of cycles: 2 · 10<sup>6</sup>

Endurance limit: 110 MPa (extrapolated)

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

Stress amplitude:	129	150	170	179	MPa
Cycles to failure:	435,482	176,185	49,087	32,357	· 1000
	452,866	200,433	74,812		
		208,435	80,532		
		216,755	83,362		
		239,867	91,195		
			104,947		