



Material: Fe-1.5 % Cu-0.6 % C; iron: water atomised copper;
carbon: not specified; sintering: 800 °C, 30 min, 70 % N₂ + 30 % H₂ plus 1120 °C, 30 min, 70 % N₂ + 30 % H₂
heat treatment: -
density: 7.4 ± 0.05 g/cm³
mech. properties: H = -; R_{p0.2} = -; R_m = 500 MPa

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

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

Limiting no. of cycles: 2 · 10⁶

Endurance limit: 115 MPa (extrapolated)

Referenece: C.M. Sonsino: Schwingfestigkeit von verschiedenen Sinterstählen und Bemessungskriterien für gesinterte Bauteile
Report No. FB-170; Fraunhofer-Institut für Betriebsfestigkeit, Darmstadt, 1984

Stress amplitude:	151	221	MPa
Cycles to failure:	250,017	31,187	· 1000
	304,768	38,280	
	378,416	42,459	
	508,956	46,770	