



Material:	Fe-1.5% Cu carbonitrided; iron: water atomised WPL 150							
	copper:							
	sintering: 1120 °C, 30 min, 70 % N <sub>2</sub> + 30 % H <sub>2</sub>							
	heat treatment: 920 °C, 3.5 h, endogas with 0.17 % CO <sub>2</sub> + NH <sub>3</sub> ; oil 60							
	no tempering mentioned; case depth: through							
	density: 6.8 ± 0.05 g/cm <sup>3</sup>							
	mech. properties: H = 537 HV10; R <sub>p0.2</sub> = -; R <sub>m</sub> = 625 MPa							
Specimen:	smooth, K <sub>t</sub> = 1.0; ISO 3928; surface as sintered							
Loading mode:	axial, R = 0; 25 Hz							
Limiting no. of cycle	2 · 10 <sup>6</sup>							
Endurance limit:	148 MPa (decided)							
Reference:	C.M. Sonsino: Schwingfestigkeit von verschiedenen Sinterstählen und Bemessungskriterien für gesinterte Bauteile; LBF-Report No. FB-170; Fraunhofer-Institut							
Stress amplitude:	140	145	149	154	169	184	219	251 MPa
Cycles to failure:	2000.000	2000.000	2000.000	2000.000	2000.000	147,901	27,988	6,067 · 1000
						188,786	31,693	9,099
						199,054	41,493	16,557
						205,575	72,941	
						304,768		
						441,540		