



Material:	Fe-1.5 % Cu; sponge iron sintering: 1120 °C, 35 min, endogas heat treatment: case hardened with 0.8 % carbon potential; 900 °C, 60 min + 850 °C, 30 min; oil quench; 180 °C, 90 min density: 6.51 g/cm <sup>3</sup> mech. properties: H = 28.3 HRC; $R_{p0.2} = -$ ; $R_m = 444 \text{ MPa}$								
Specimen:	smooth, $K_t = 1.0$ ; surface machined								
Loading mode:	rotary bending, $R = -1$								
Limiting no. of cycles:	$10^7$								
Endurance limit:	194 MPa {195 MPa this evaluation}								
Reference:	M. Onoda: Fatigue Strength of Sintered Structural Component Materials; Japan Powder Metallurgical Association, Tokyo, 1983 (in Japanese)								

Stress amplitude:	195	202	217	231	247	260	274	289	MPa
Cycles to failure:	10000.000	5128.614	1145.513	794.328	148.594	211.836	83.946	32.137	· 1000