



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: 6.72 g/cm ³ mech. properties: H = 32.1 HRC; $R_{p0.2} = -$; $R_m = 503 \text{ MPa}$
Specimen:	smooth, $K_t = 1.0$; surface machined
Loading mode:	rotary bending, $R = -1$
Limiting no. of cycles:	10^7
Endurance limit:	202 MPa {201 MPa this evaluation}
Reference:	M. Onoda: Fatigue Strength of Sintered Structural Component Materials; Japan Powder Metallurgical Association, Tokyo, 1983 (in Japanese)

Stress amplitude:	201	216	230	245	259	274	288	MPa
Cycles to failure:	10092.529	2113.489	2046.445	331.131	278.612	115.878	25.119	· 1000