



Material:	Fe-3 %Cu; water atomised 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: 6.89 g/cm ³								
	mech. properties: H=34.3 HRB; R _{p0.2} =-; R _m =611 MPa								
Specimen:	smooth, K _t = 1.0, surface machined								
Loading mode:	rotary bending, R=-1								
Limiting no. of cycles:	10 ⁷								
Endurance limit:	243 MPa								
Reference:	M. Onoda: Fatigue Strength of Sintered Structural Component Materials, Japan Powder Metallurgical Association, Tokyo, 1963 (in Japanese)								
Stress amplitude:	243	260	274	289	302	317	333	348	MPa
Cycles to failure:	10000.000	1555.965	606.736	488.652	258.226	58.210	55.463	21.038	· 1000