



Material:	Fe-2 % Cu-0.76% C; iron: water atomised sintering: 1120 °C, 30 min, 90 % N <sub>2</sub> + 10 % H <sub>2</sub> heat treatment: cooling rate ≈ 0.8 °C/s density: 7.02 g/cm <sup>3</sup> mech. properties: -						
Specimen:	notched, K <sub>t</sub> = 1.50; rectangular bar 110 x 11 x 7 mm; lateral notches with R = 3 mm, cross-section 7 x 7 mm; chamfered; surface as sintered						
Loading mode:	axial, R = -1; 28-30 Hz						
Limiting no. of cycles:	2 · 10 <sup>6</sup>						
Endurance limit:	124 MPa						
Reference:	H. Ericsson: Influence of Notches on Fatigue Behaviour of PM Steels; Master's Thesis, Luleå University of Technology, 2003						
Stress amplitude:	120	129	130	140	160	170	MPa
Cycles to failure:	514,271	2000.000	846,742	169,504	h169.504*	h72.908*	· 1000
	2000.000		522,144				
	2000.000		722,583				

\*retested run-out