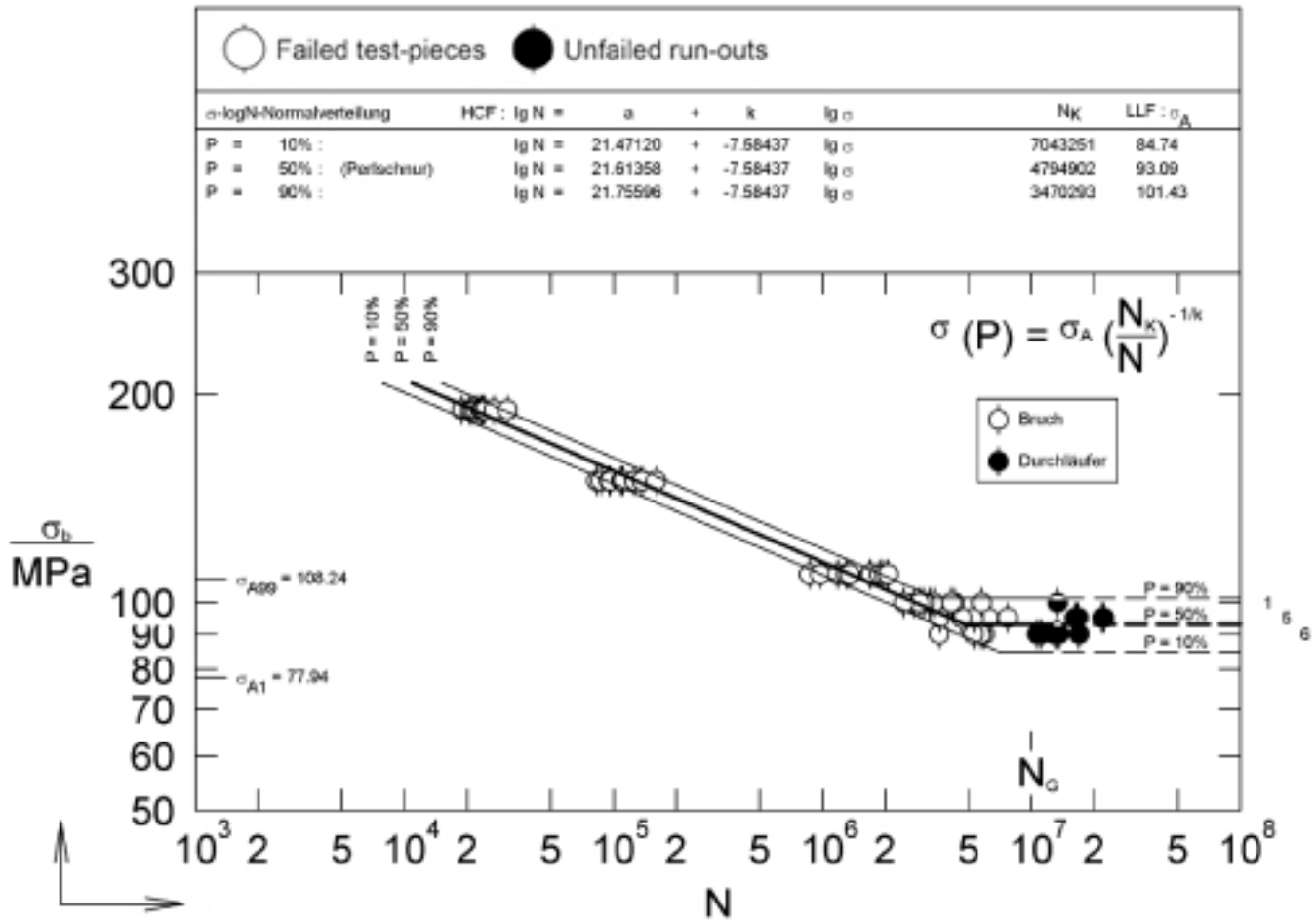

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized , carbon: graphite UF4 sintering: ca. 1120 °C, ca. 20 min, 95 % N_2 + 5 % H_2, 0.8 °C/s cooling rate heat treatment: - density: 6.47 g/cm³ mech. properties: H =123 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	notched, K_t = 1.8; ISO 3928; surface as sintered
Loading mode:	Plane bending; R =–1 ; two different types of machines with 50 Hz and 120 Hz
Limiting no. of cycles:	10^7
Endurance limit:	93.1 MPa
Reference:	A. Zafari, P. Beiss; Fatigue Strength of Iron-Copper-Carbon PM steels ;PM Auto 2008, Proc. CD, Isfahan, 2008

Stress amplitude:	90	95	100	110	150	190	MPa
Cycles to failure:	11138.300	16518.092	3266.407	1303.733	96.300	20.500	· 1000
	13466.900	16139.800	3407.489	2061.608	83.000	18.800	
	5941.868	3634.400	13344.900	1687.100	94.821	23.073	
	5719.481	6243.300	3035.800	864.900	108.405	23.600	
	13269.519	5301.800	2773.434	1699.944	86.700	31.100	
	10683.592	7677.799	5773.688	1871.726	125.700	24.379	
	3623.500	16761.103	2914.800	1347.000	137.125	26.748	
	12856.100	22300.691	4259.325	972.400	159.080	23.127	
	5268.800	21803.100	4147.312	1177.300	136.800	21.991	
	16855.032	4639.300	2441.500	1966.725	110.682	21.100	