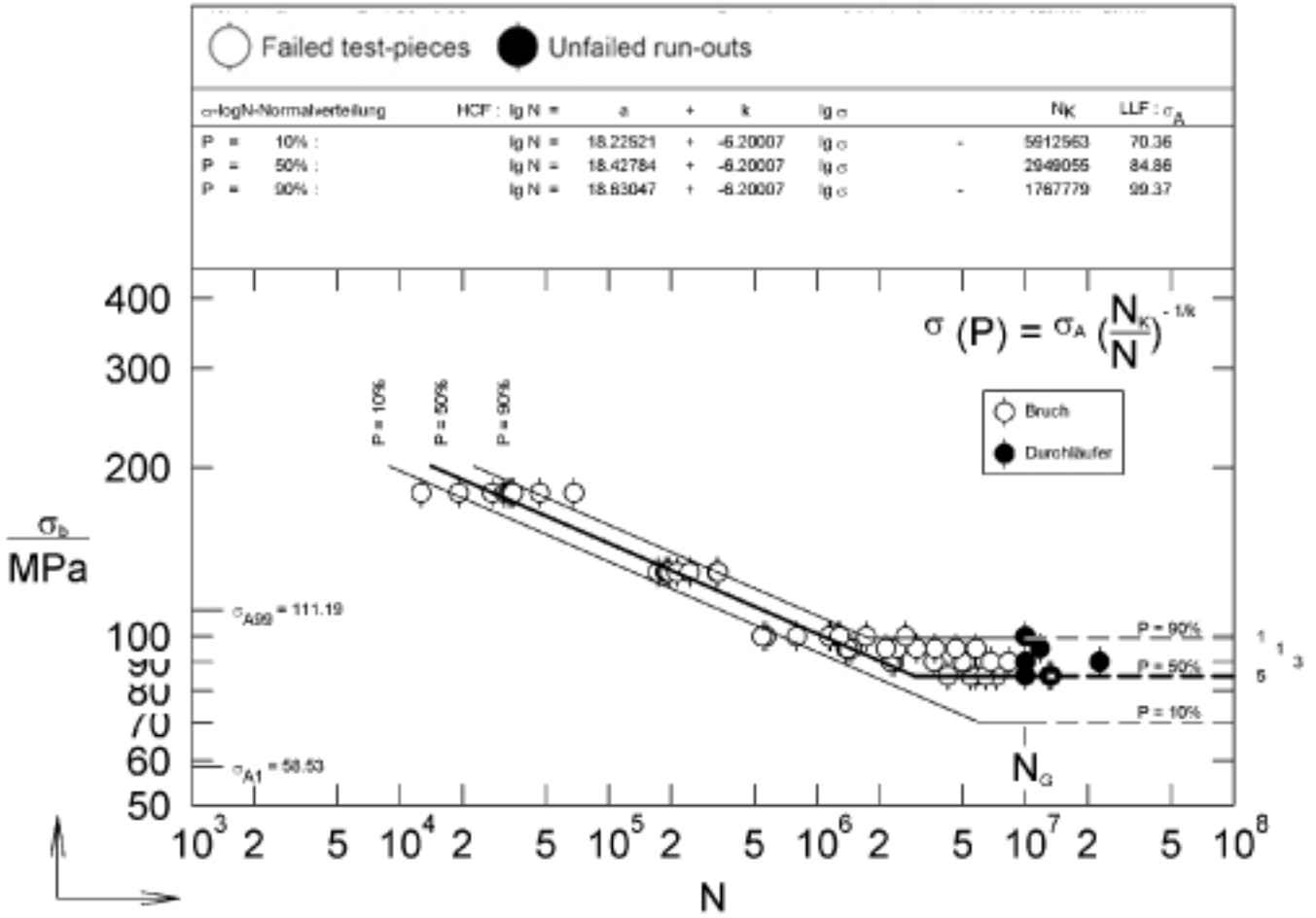

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized carbon: graphite UF4 sintering: ca. 1120 °C, ca. 20 min, 95 % N_2 + 5 % H_2, 0.8 °C/s cooling rate heat treatment: - density: 6.94 g/cm³ mech. properties: H =154 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	notched, K_t = 1.8; ISO 3928; surface as sintered
Loading mode:	Plane bending; R = 0; two different types of machines with 50 Hz and 120 Hz
Limiting no. of cycles:	10^7
Endurance limit:	84.9 MPa
Reference:	A. Zafari, P. Beiss; Fatigue Strength of Iron-Copper-Carbon PM steels ;PM Auto 2008, Proc. CD, Isfahan, 2008

Stress amplitude:	85	90	95	100	130	180	MPa
Cycles to failure:	5813.500	6833.200	1374.300	10000.000	196.200	33.100	· 1000
	5446.600	8331.400	2421.000	1726.500	172.200	27.600	
	10000.000	3632.600	11716.300	800.900	334.200	19.100	
	12978.900	2341.500	1468.300	1261.100	330.800	31.600	
	10000.000	10000.000	2995.500	2668.200	186.700	34.700	
	13364.500	10000.000	4644.800	570.300	194.100	68.200	
	7245.300	22621.700	5822.800	545.500	212.900	27.600	
	6426.300	2264.900	1399.300	1157.700	195.100	46.800	
	4233.800	5162.400	3676.300	1142.700	189.500	33.900	
	10000.000	4983.700	2142.800	1282.800	244.800	12.600	