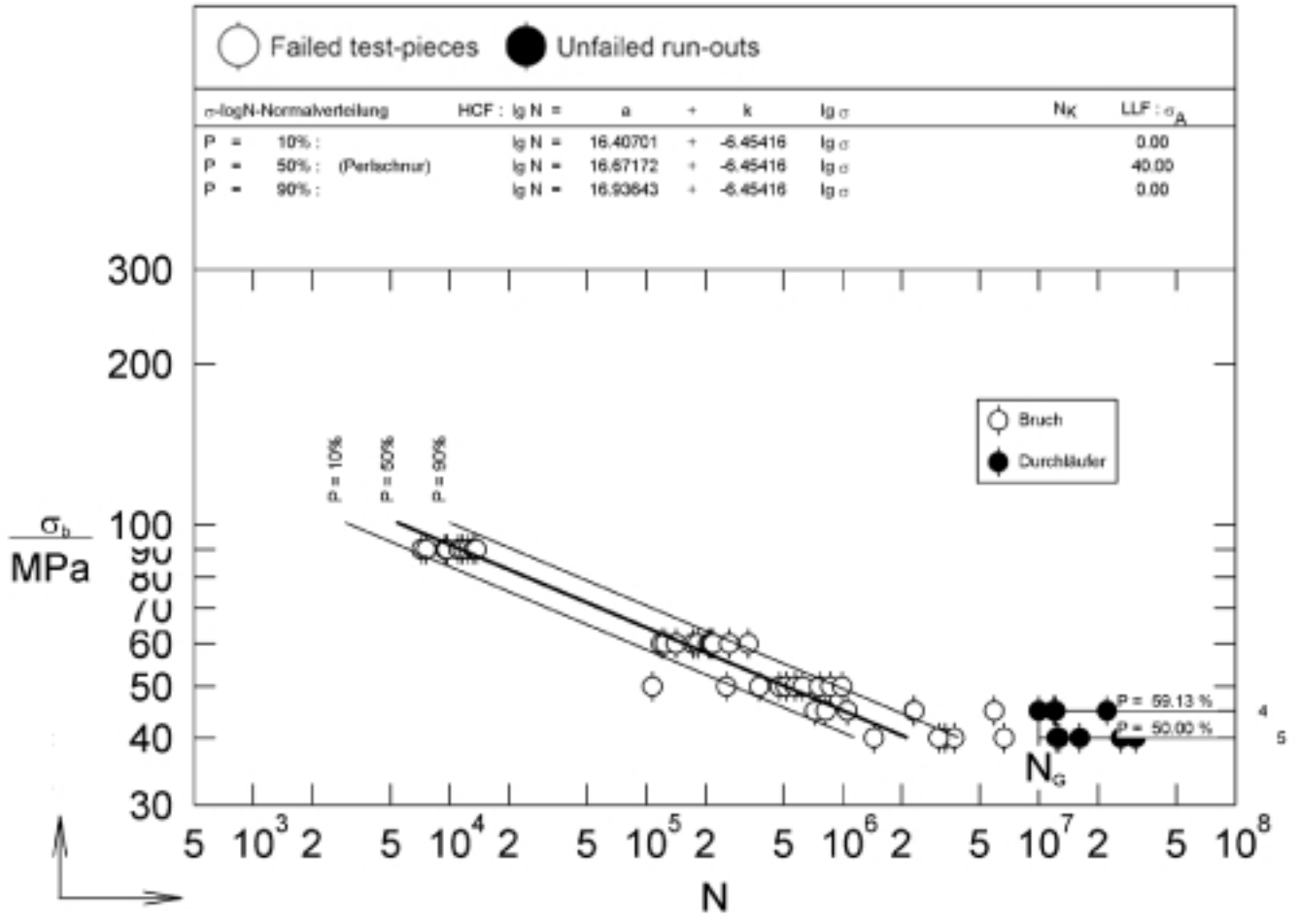

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized sintering: ca. 1120 °C, ca. 20 min, 95 % N_2 + 5 % H_2, 0.8 °C/s cooling rate heat treatment: - density: 5.91 g/cm³ mech. properties: H =93 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	notched, K_t = 1.8; ISO 3928; surface as sintered
Loading mode:	Plane bending; R =0 ; two different types of machines with 50 Hz and 120 Hz
Limiting no. of cycles:	10^7
Endurance limit:	40.0 MPa
Reference:	A. Zafari, P. Beiss; Fatigue Strength of Iron-Copper-Carbon PM steels ;PM Auto 2008, Proc. CD, Isfahan, 2008

Stress amplitude:	40	45	50	60	90	MPa
Cycles to failure:	6639.600	725.007	107.600	142.200	13.700	· 1000
	12652.700	2308.931	256.700	264.100	9.500	
	3329.200	12120.600	575.700	118.700	12.400	
	12337.372	822.200	516.400	218.700	11.100	
	16157.000	11887.100	868.000	212.753	11.600	
	3706.600	5911.200	626.100	173.012	13.700	
	26167.400	2316.880	376.000	207.500	9.700	
	1444.400	22256.318	477.500	124.600	13.200	
	30888.800	10000.000	991.300	331.000	7.600	
	3090.700	1054.200	764.800	181.900	7.200	