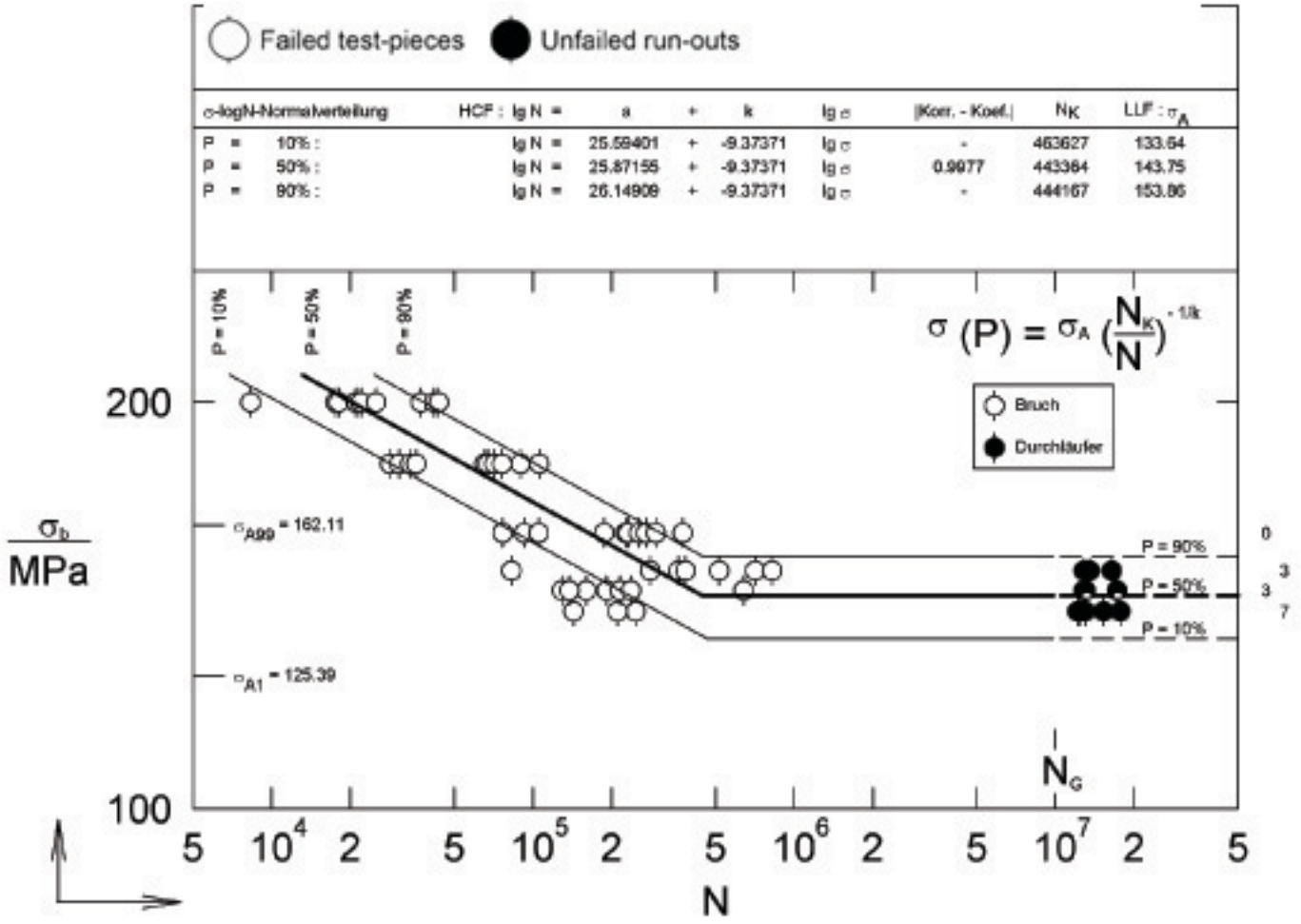

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized carbon: graphite UF4 sintering: 1100 ≤ T ≤1120 °C, 20 min, 95 % N_2 + 5 % H_2 , 0.8 °C/s cooling rate, surface slightly craburized, average carbon content 0.580 % heat treatment: - density: 6.95 g/cm³ mech. properties: H =152 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	smooth, K_t = 1.0; 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:	143.8 MPa
Reference:	A. Zafari, P. Beiss; Effect of Different Heat Treatments on the Fatigue Strength of Fe-Cu-C; Proc. EURO PM2007, Vol. 1, p. 175-180; EPMA, Shrewsbury, 2007

Stress amplitude:	140	145	150	160	180	200	MPa
Cycles to failure:	12423.6	17120.3	12788.1	92.4	35.7	37.2	· 1000
	12940.1	128.7	280.7	231.2	33.9	18.1	
	12952.4	638.2	13464.2	270.4	65.4	21.9	
	246.8	191.1	516.4	104.9	76.0	20.9	
	12978.1	214.5	359.6	225.8	105.4	25.1	
	210.4	13031.6	706.3	254.4	28.4	41.9	
	142.8	237.3	820.3	76.5	30.8	17.5	
	12109.3	12848.7	16388.9	186.9	67.3	43.6	
	15267.5	160.1	82.4	373.0	89.8	8.3	
	17708.0	137.6	382.5	295.9	71.1	21.1	