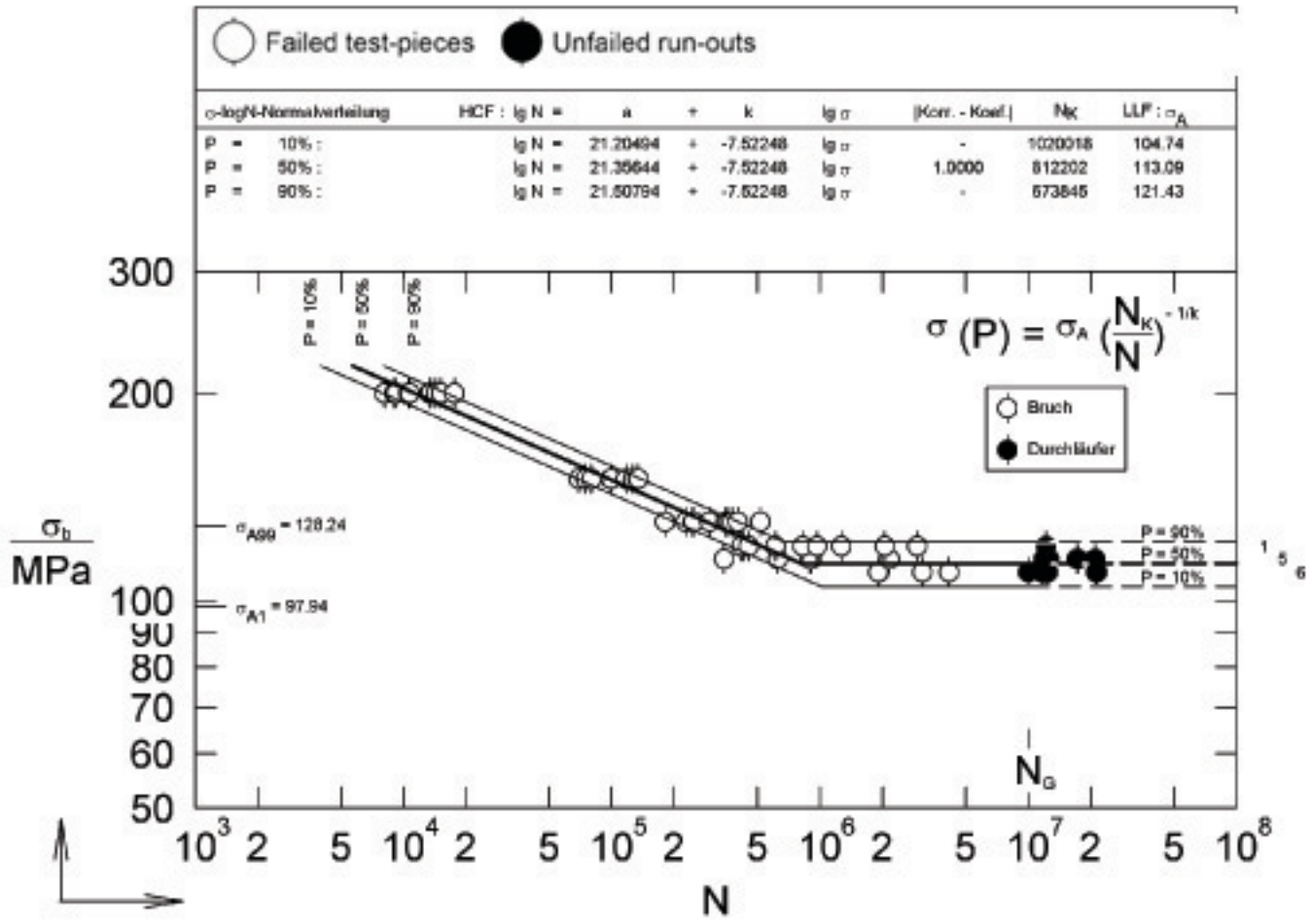

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized carbon: graphite UF4 sintering: ca. 1120 °C, ca. 20 min, 95 % N_2 + 5 % H_2, 0.8 °C/s cooling rate heat treatment: - density: 6.36 g/cm³ mech. properties: H =100 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	smooth, K_t = 1.0; ISO 3928; surface as sintered
Loading mode:	Plane bending; R = –1; two different types of machines with 50 Hz and 120 Hz
Limiting no. of cycles:	10^7
Endurance limit:	113.1 MPa
Reference:	A. Zafari, P. Beiss; Fatigue Strength of Iron-Copper-Carbon PM steels ;PM Auto 2008, Proc. CD, Isfahan, 2008

Stress amplitude:	110	115	120	130	150	200	MPa
Cycles to failure:	1922.700	20990.850	427.200	180.600	75.000	13.300	· 1000
	12435.700	345.800	12203.465	517.100	80.100	15.200	
	12132.400	11890.700	823.202	363.200	98.600	13.500	
	3111.900	12619.500	2046.800	294.632	133.361	8.100	
	11585.600	627.400	609.300	245.309	99.445	17.600	
	4174.772	908.800	1264.100	351.700	99.009	10.700	
	1911.741	896.500	968.100	245.900	133.943	10.600	
	21448.498	17318.000	419.505	377.600	126.400	9.200	
	10000.000	17117.500	455.590	402.500	117.000	9.000	
	21090.900	2157.600	2931.500	227.000	69.500	14.300	