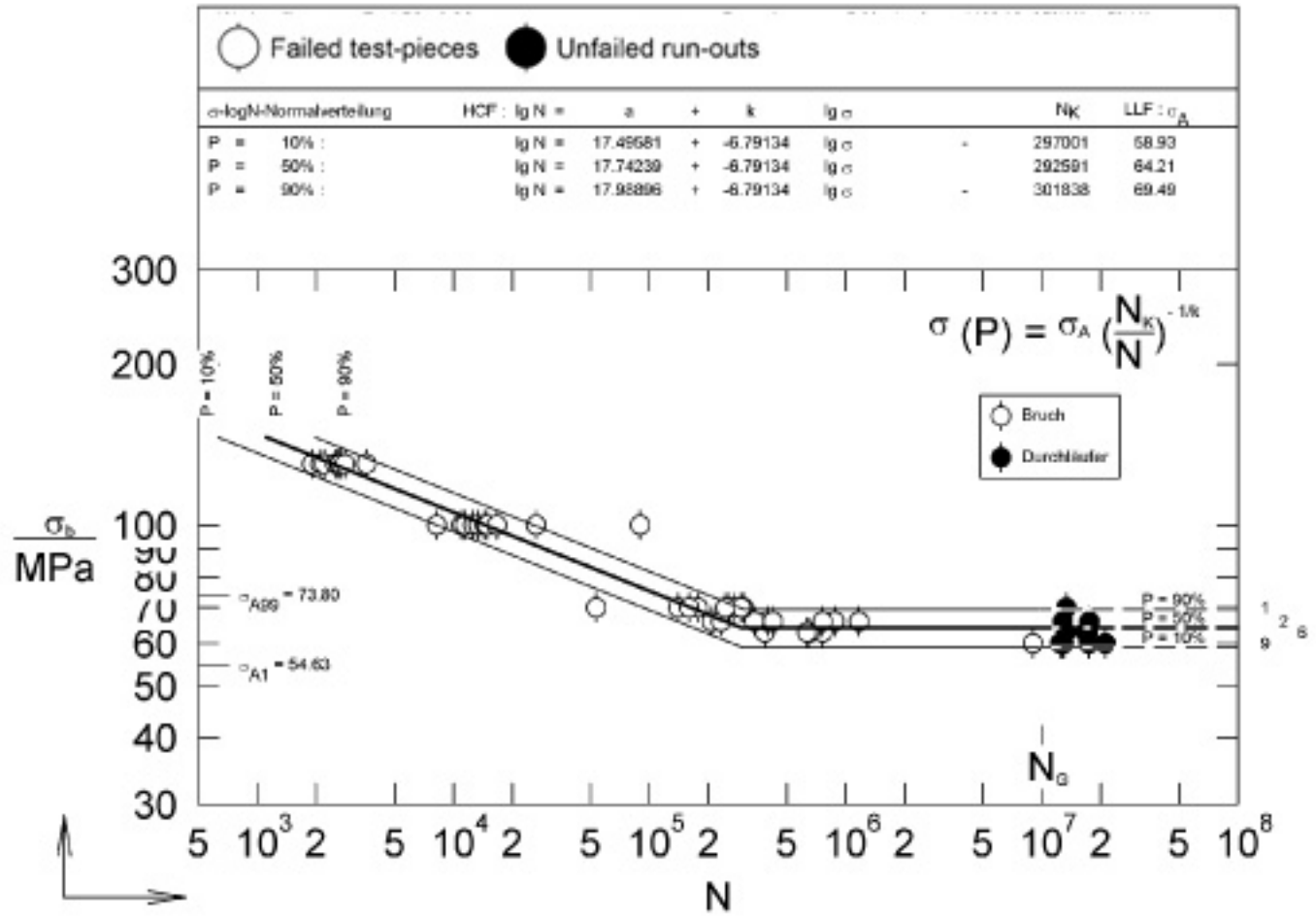

Material:	Fe-1.5 % Cu-0.6 % C; iron: water atomized carbon: graphite UF4 sintering: ca. 1120 °C, ca. 20 min, 95 % N_2 + 5 % H_2, 0.8 °C/s cooling rate heat treatment: - density: 5.83 g/cm³ mech. properties: H =77 HBW 2.5/62.5, $R_{p0.2}$ = - , R_m = -
Specimen:	smooth, K_t = 1.0; ISO 3928; surface as 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:	64.2 MPa
Reference:	A. Zafari, P. Beiss; Fatigue Strength of Iron-Copper-Carbon PM steels ;PM Auto 2008, Proc. CD, Isfahan, 2008

Stress amplitude:	60	63	66	70	100	130	MPa
Cycles to failure:	9002.000	762.136	399.991	13387.300	89.800	2.786	· 1000
	20971.489	657.005	208.072	176.700	11.000	2.486	
	17305.882	16706.600	12824.000	253.400	8.200	2.652	
	21108.500	16954.500	879.300	53.600	16.700	3.600	
	17516.700	16900.500	426.824	272.168	13.415	2.600	
	12414.100	13277.672	763.562	301.180	14.811	1.900	
	12927.835	636.857	17467.773	139.800	14.400	2.600	
	12758.485	17187.800	1172.950	292.759	12.600	2.200	
	12972.200	17163.600	341.700	244.559	11.500	2.639	
	12972.900	387.609	231.900	159.100	26.500	2.100	