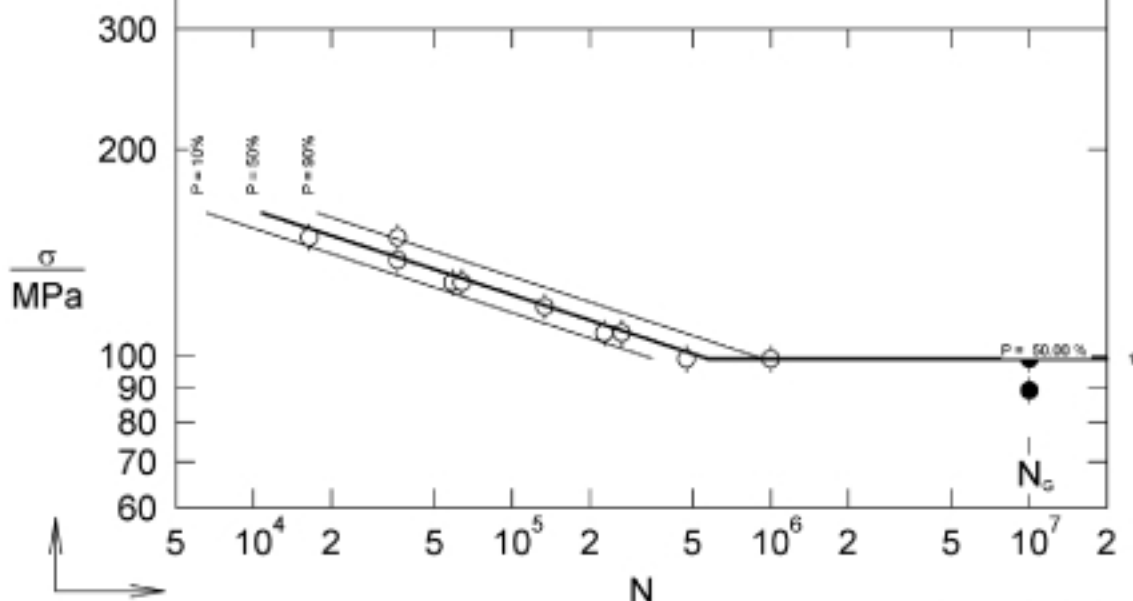


○ Failed test-pieces ● Unfailed run-outs

σ -lgN-Normalverteilung	HCF: lg N =	a	+	k	lg σ	N ₀	LLF: σ_A
P = 10% :	lg N =	21.73593	+	-8.11384	lg σ		0.00
P = 50% : (Perlschur)	lg N =	21.94987	+	-8.11384	lg σ	572381	99.00
P = 90% :	lg N =	22.16377	+	-8.11384	lg σ		0.00



SAPD - JFMA 20 - Copy.csv

Material: Fe-1.5 % Cu - 0.5 % C; sponge iron
sintering: 1130 °C, 20 min, endogas
heat treatment: -
density: 6.22 g/cm³
mech. properties: H = 37 HRB; R_{0.2} = -; R_m = 265 MPa

Specimen: smooth, K_t = 1.0; surface machined

Loading mode: rotary bending, R = -1

Limiting no. of cycles: 10⁷

Endurance limit: 93 MPa (99 MPa this evaluation)

Reference: M. Onoda: Fatigue Strength of Sintered Structural Component Materials; Japan Powder Metallurgical Association, Tokyo, 1983 (in Japanese)

Stress amplitude:	89	99	108	118	128	138	149	MPa
Cycles to failure:	10000.000	473.151	226.464	133.352	58.749	36.058	16.444	· 1000
		1000.000	264.850		63.826		36.058	
		10000.000						