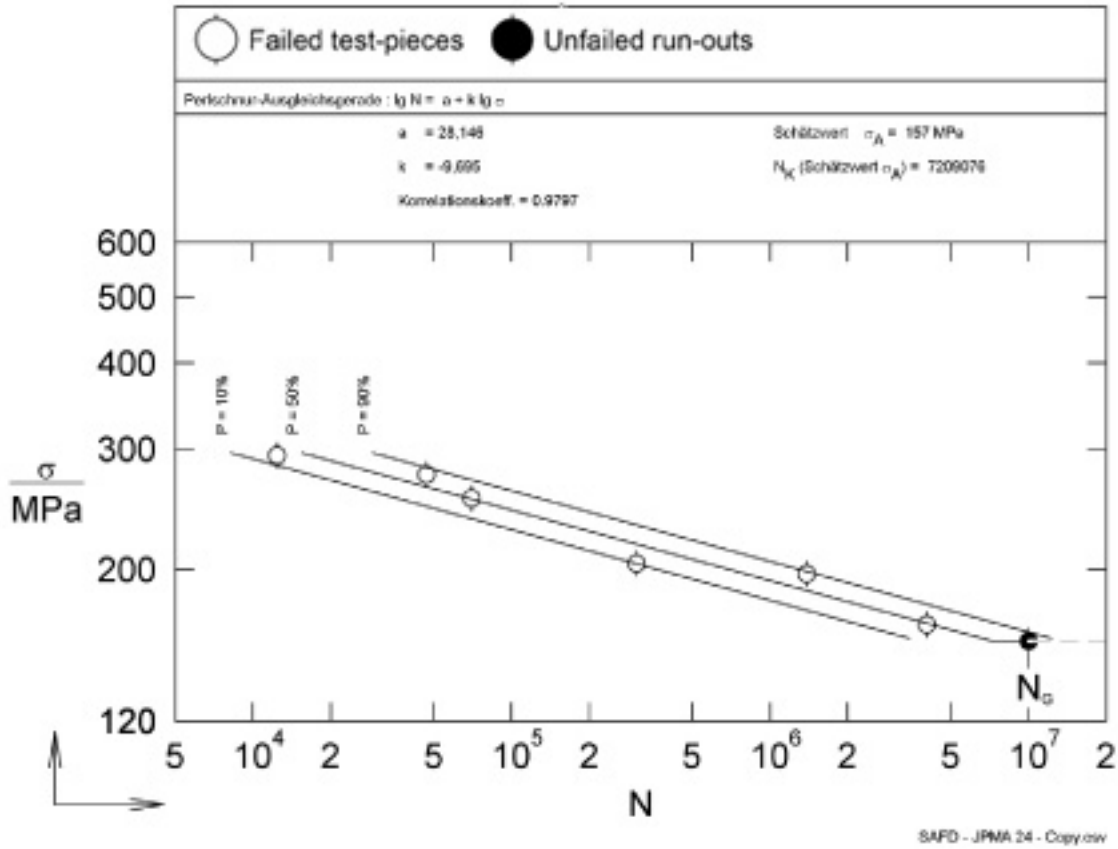


| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Material: | Fe-2 %Cu-0.8 %C, sponge iron | | | | | | | |
| | sintering: 1130 °C, 30 min, dissociated ammonia | | | | | | | |
| | heat treatment: - | | | | | | | |
| | density: 6.51 g/cm$^3$ | | | | | | | |
| | mech. properties: H = 63 HRB, $R_{p0.2}$ = -, $R_m$ = 335 MPa | | | | | | | |
| Specimen: | smooth, $K_t$ = 1.0, surface as sintered | | | | | | | |
| Loading mode: | plane bending, R = -1 | | | | | | | |
| Limiting no. of cycles: | $10^7$ | | | | | | | |
| Endurance limit: | 157 MPa | | | | | | | |
| Reference: | M. Onoda: Fatigue Strength of Sintered Structural Component Materials, Japan Powder Metallurgical Association, Tokyo, 1983 (in Japanese) | | | | | | | |
| | | | | | | | | |
| Stress amplitude: | 157 | 166 | 197 | 204 | 254 | 275 | 293 | MPa |
| Cycles to failure: | 10000.000 | 4096.454 | 1386.756 | 304.789 | 69.984 | 46.989 | 12.388 | · 1000 |