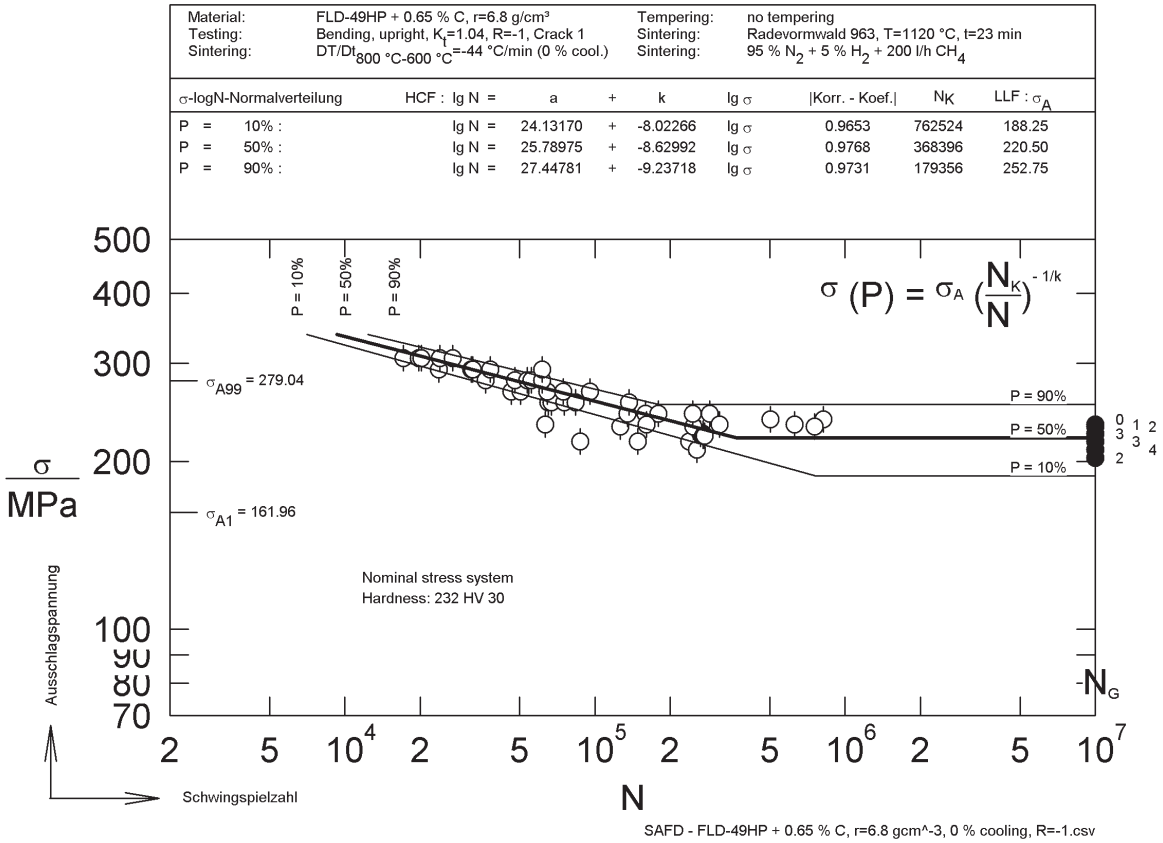
Appendix:

Fatigue data for PM steels: How the world's largest PM producer is facing the challenges of data generation and organisation

This relates to the article 'Fatigue data for PM steels: How the world's largest PM producer is facing the challenges of data generation and organisation', by GKN Sinter Metals' Dr Markus Schneider, Robert Maassen, Dennis Wawoczny and Christos Radis, published in PM Review, Spring 2021, Vol. 10 No. 1. The appendix consists of Figs. 24–29 of the article, containing further valuable raw data (Wöhler lines σ-N) on PM fatigue for Ancorsteel FLD-49 HP + 0.65% C.



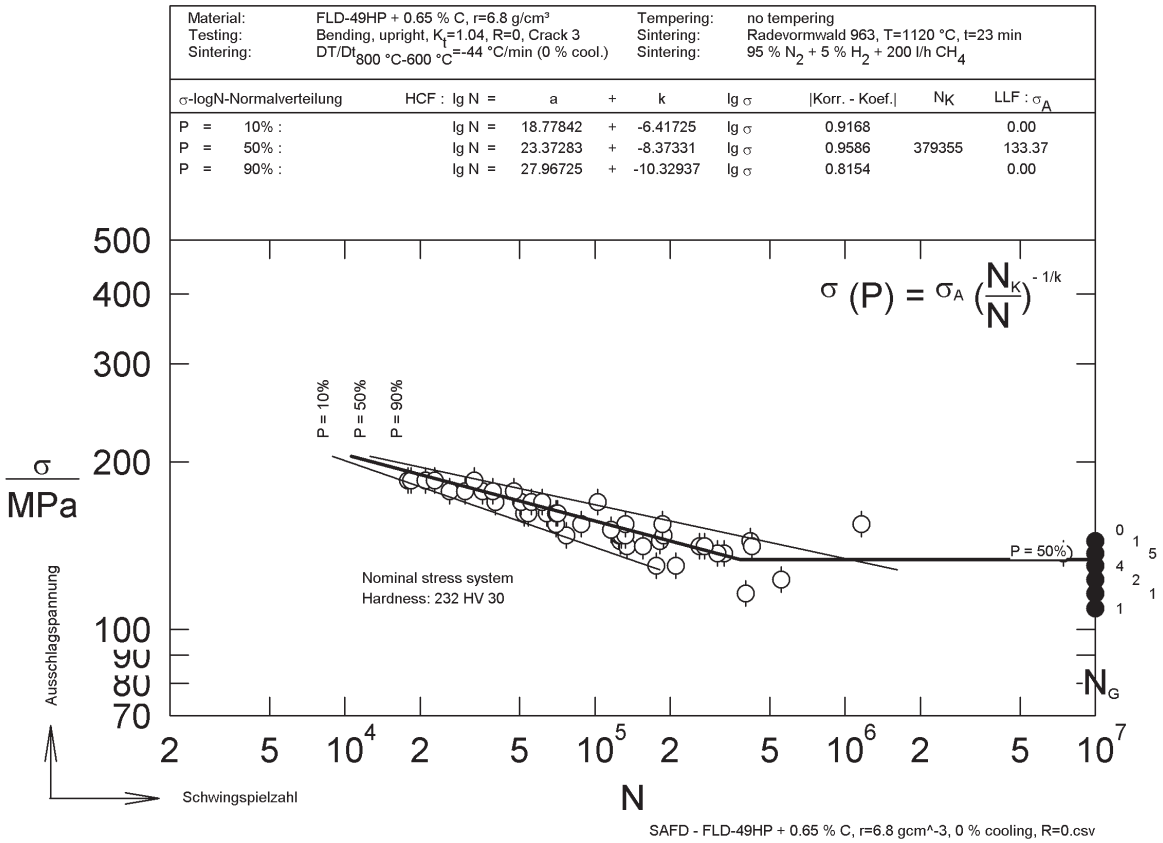
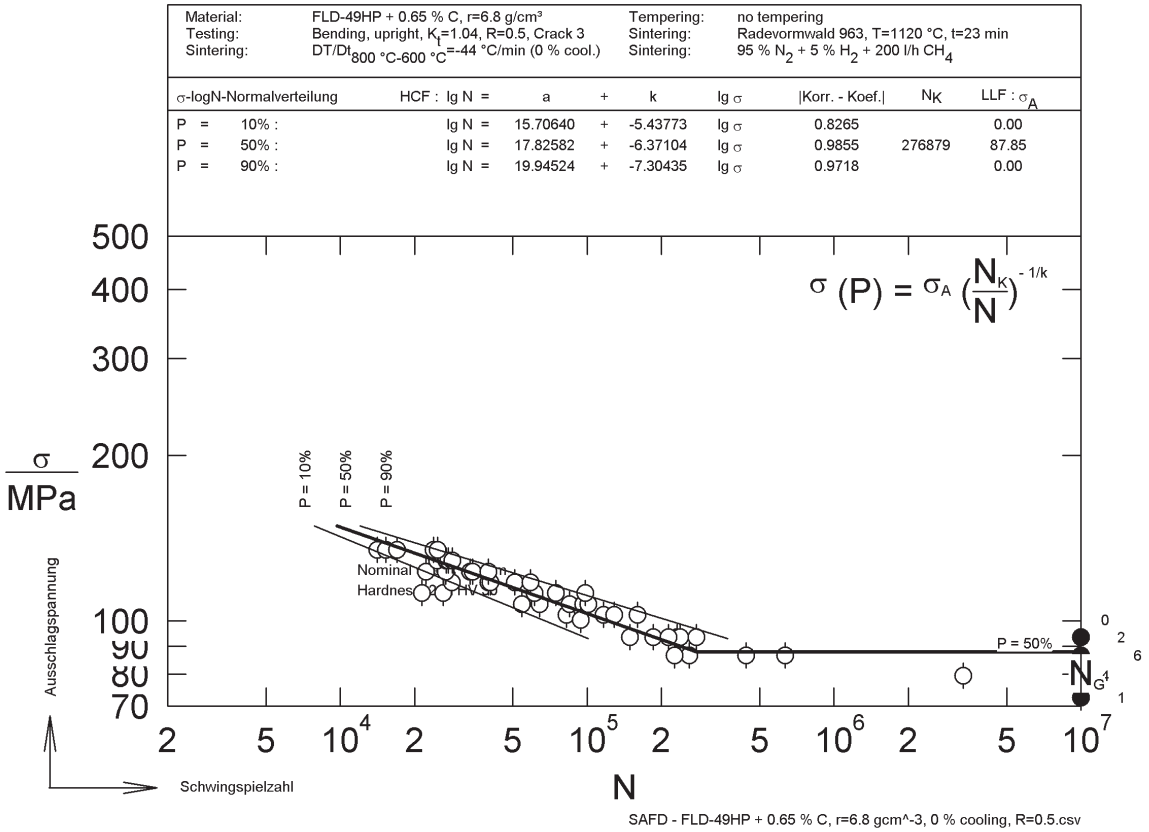


Fig. 24 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=6.8 g/cm³ (bending loading mode, survival probability: P_s=50%), R=-1 and K_t=1.04 (top) and R=0 and K_t=1.04 (bottom)



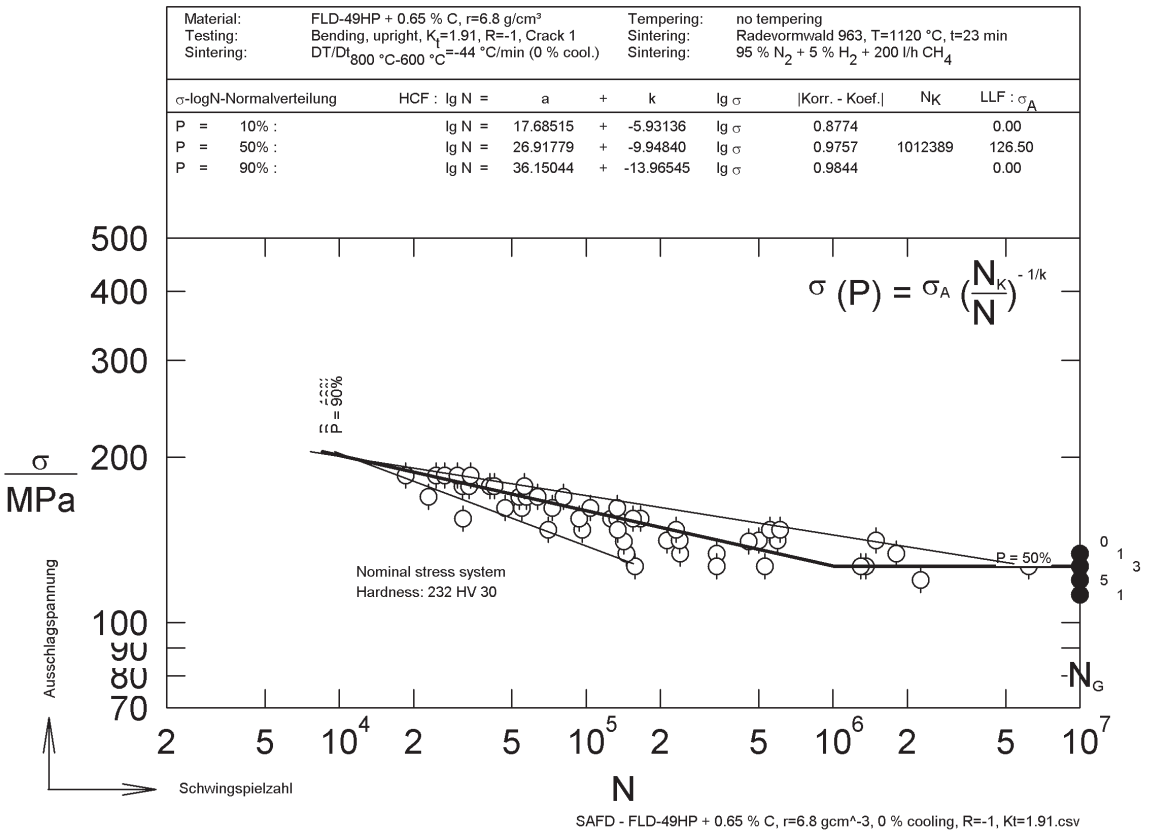
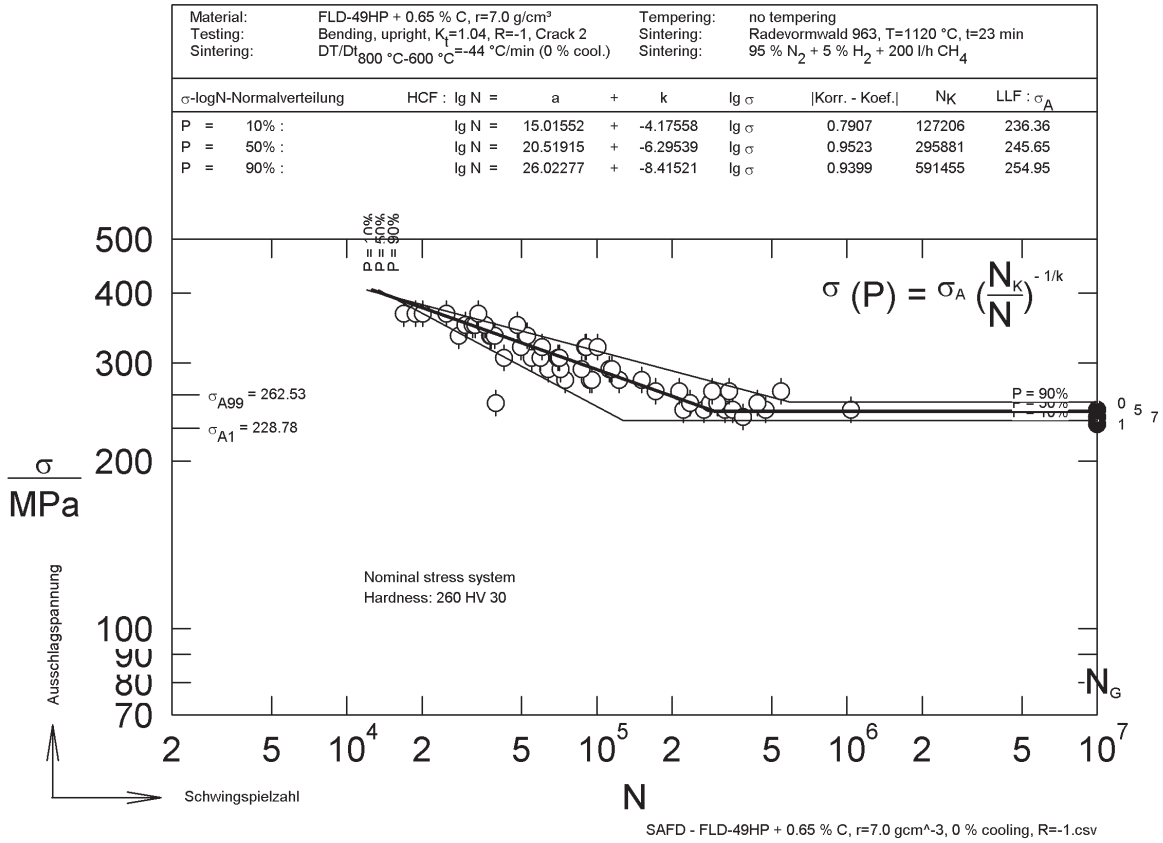


Fig. 25 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=6.8 g/cm³ (bending loading mode, survival probability: P_s=50%), R=0.5 and K_t=1.04 (top) and R=-1 and K_t=1.91 (bottom)



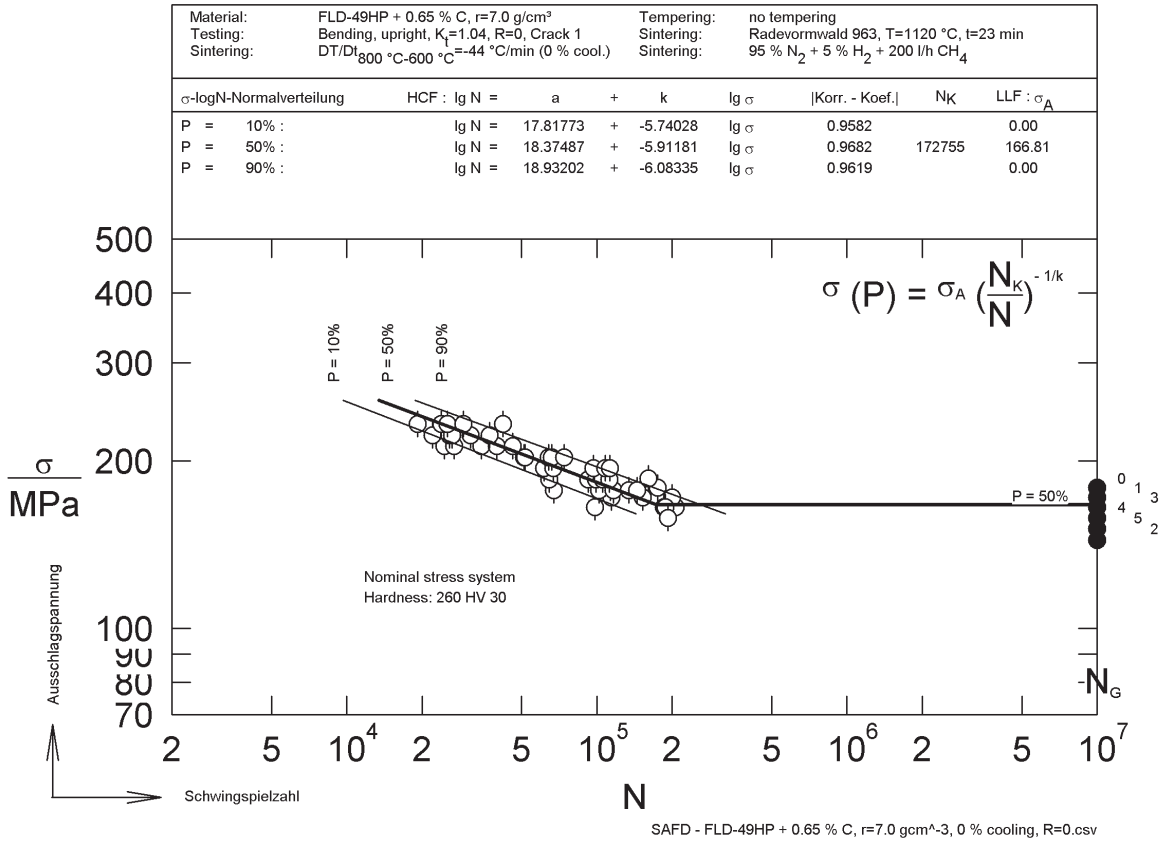
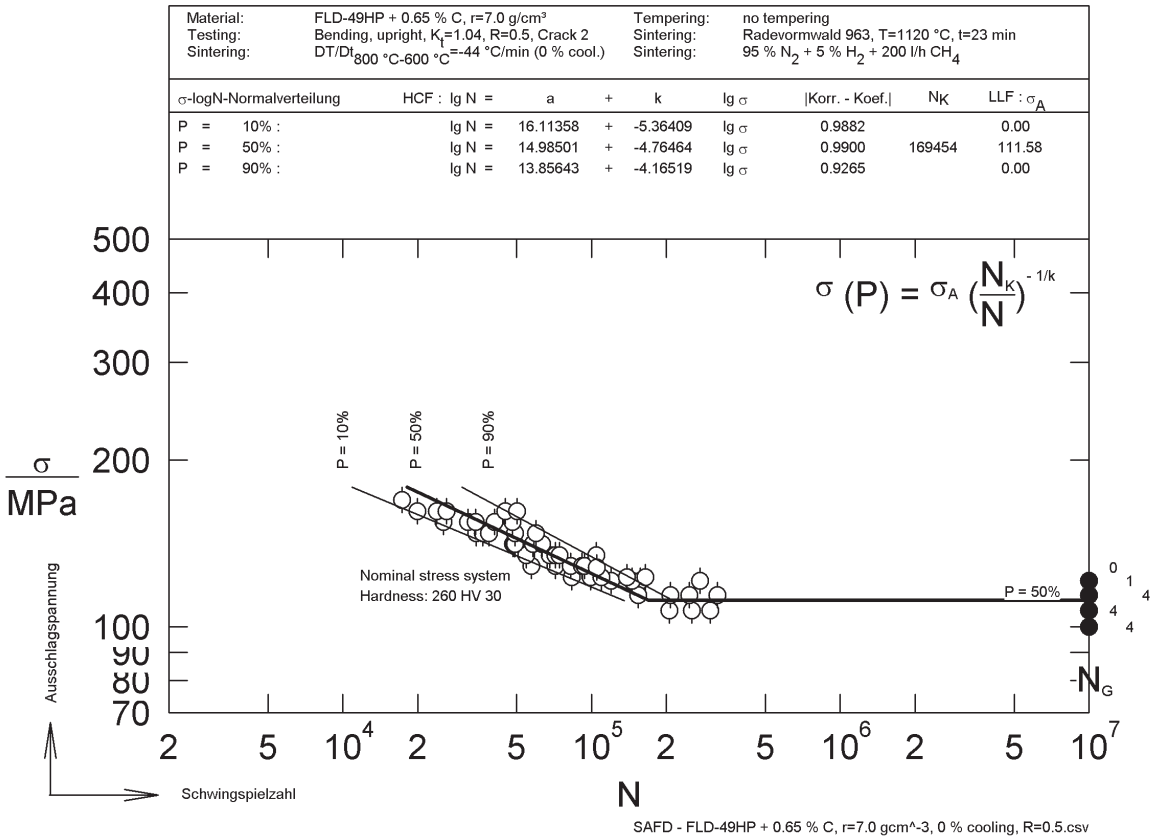


Fig. 26 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=7.0 g/cm³ (bending loading mode, survival probability: P_s=50%), R=-1 and K_t=1.04 (top) and R=0 and K_t=1.04 (bottom).



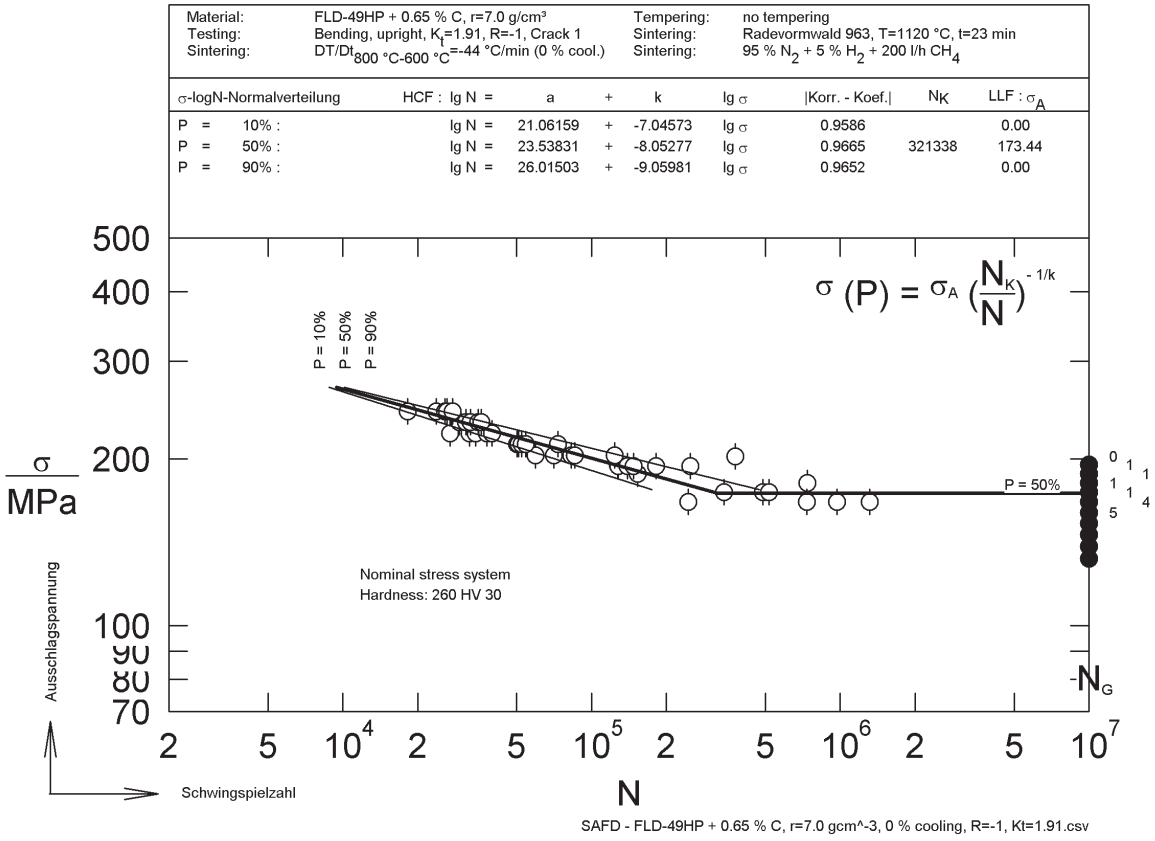
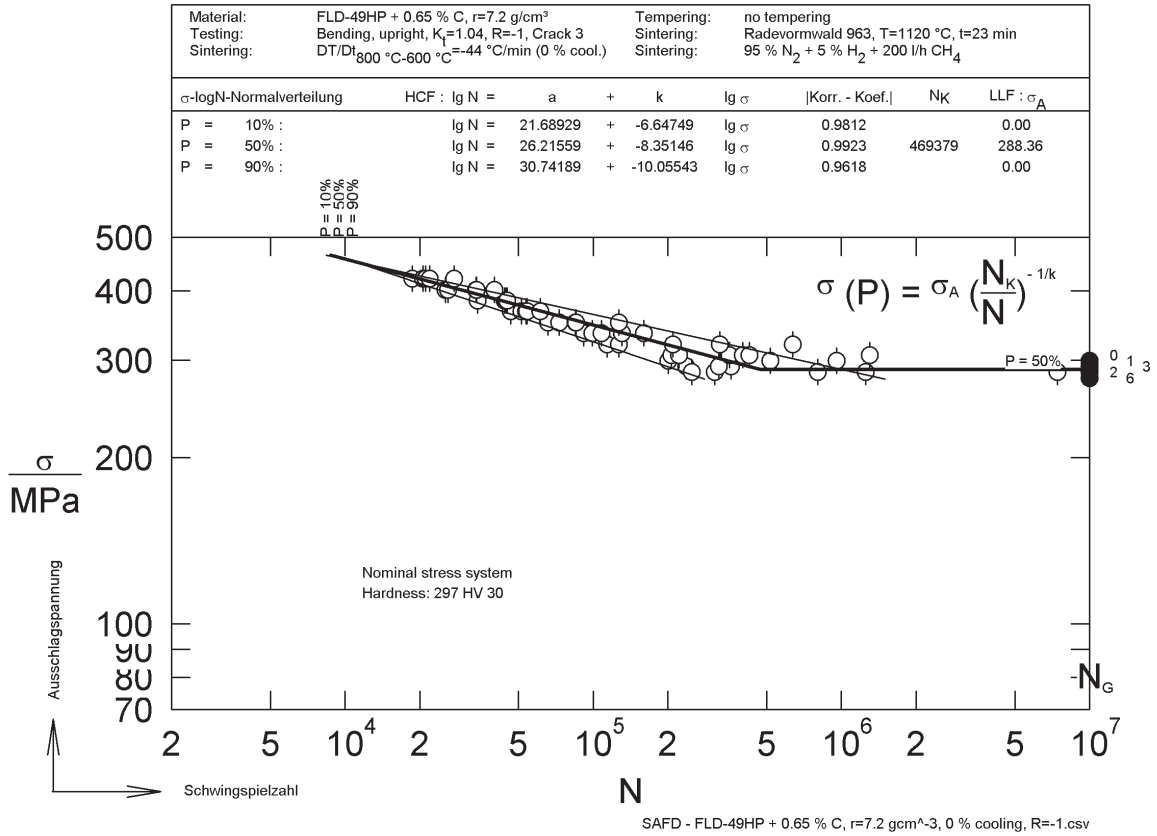


Fig. 27 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=7.0 g/cm³ (bending loading mode, survival probability: P_s=50%), R=0.5 and K_t=1.04 (top) and R=-1 and K_t=1.91 (bottom)



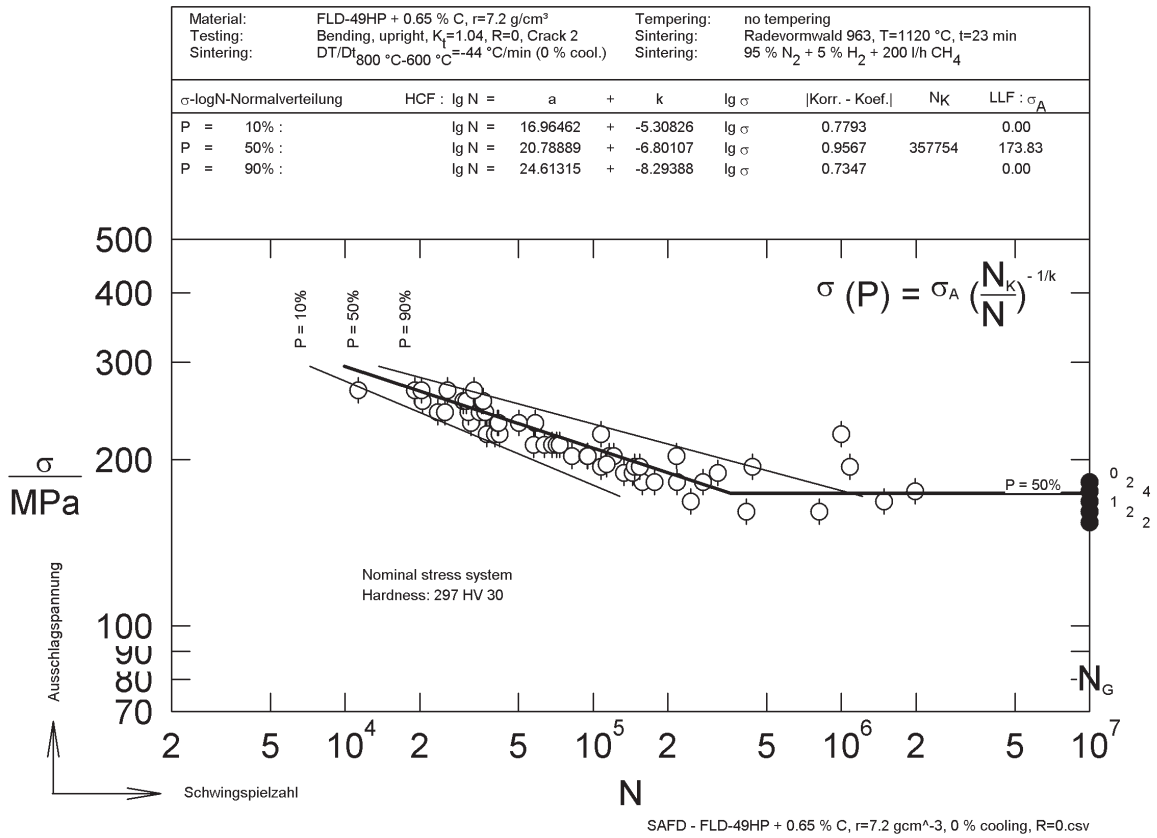
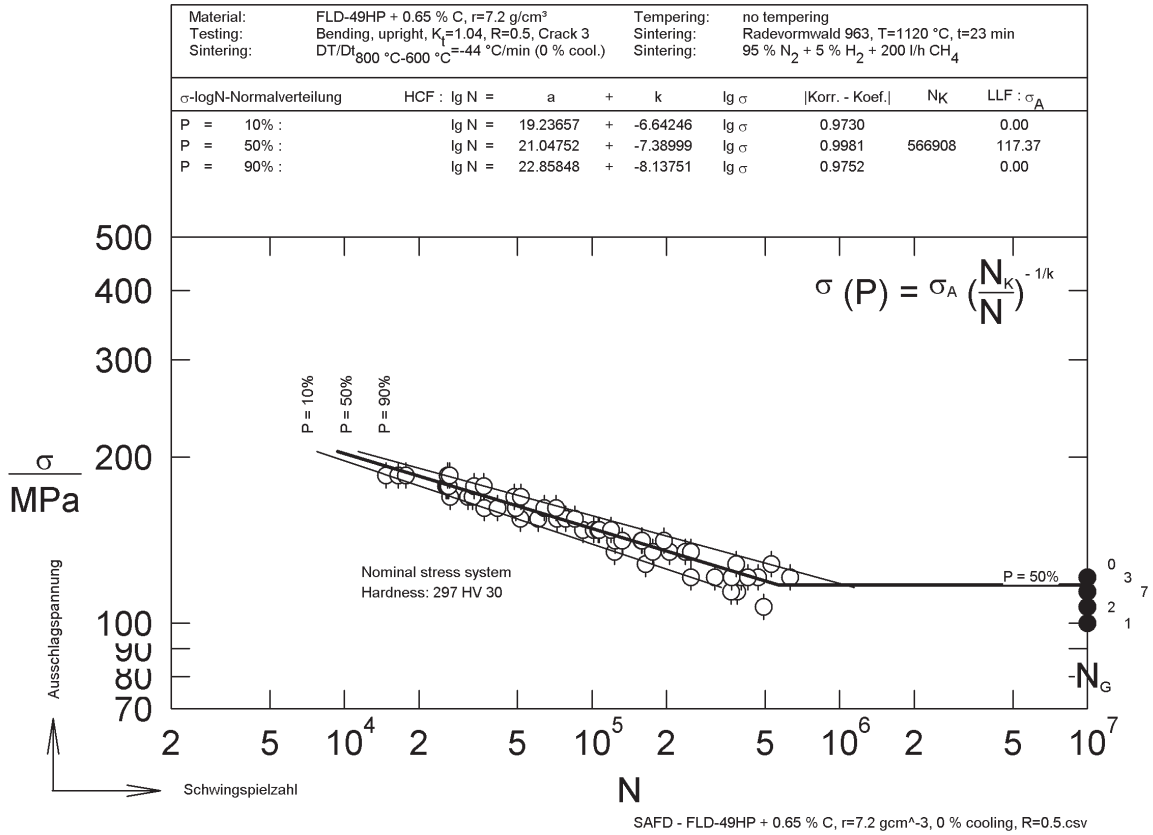


Fig. 28 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=7.2 g/cm³ (bending loading mode, survival probability: P_s=50%), R=-1 and K_t=1.04 (top) and R=0 and K_t=1.04 (bottom)



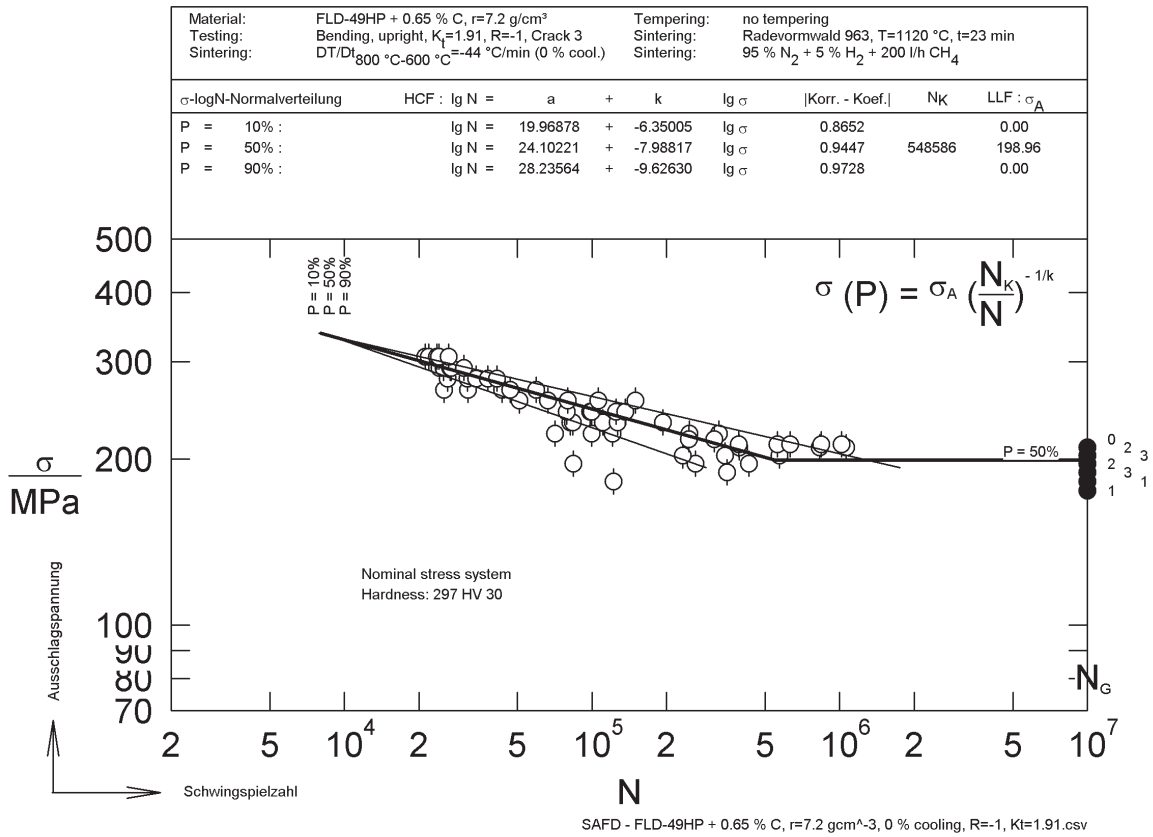


Fig. 29 Wöhler lines σ-N of Ancorsteel FLD-49HP + 0.65% C with a sintered density of ρ=7.2 g/cm³ (bending loading mode, survival probability: P_s=50%), R=0.5 and K_t=1.04 (top) and R=-1 and K_t=1.91 (bottom)