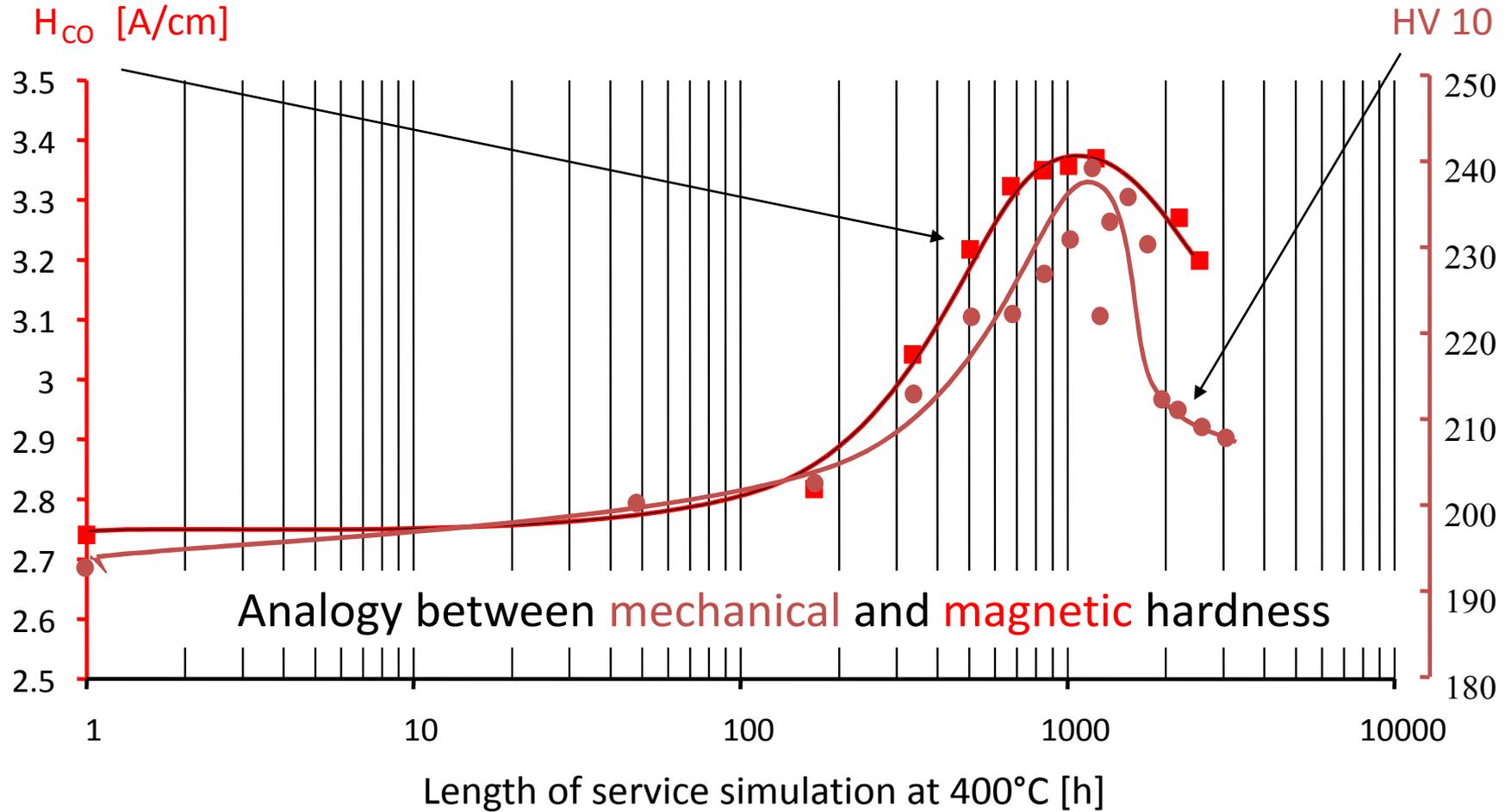
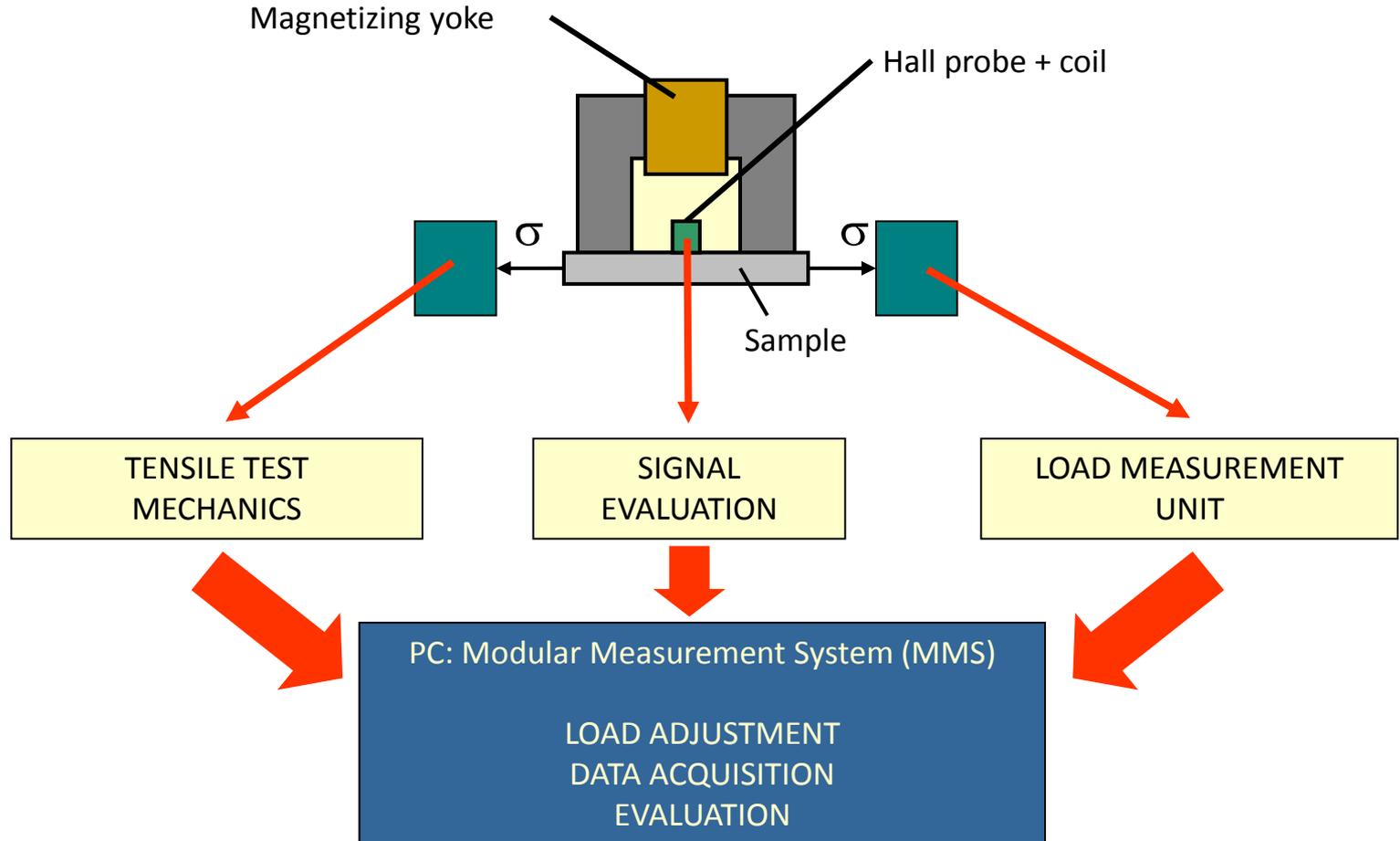


Ageing Phenomena: Thermal Ageing



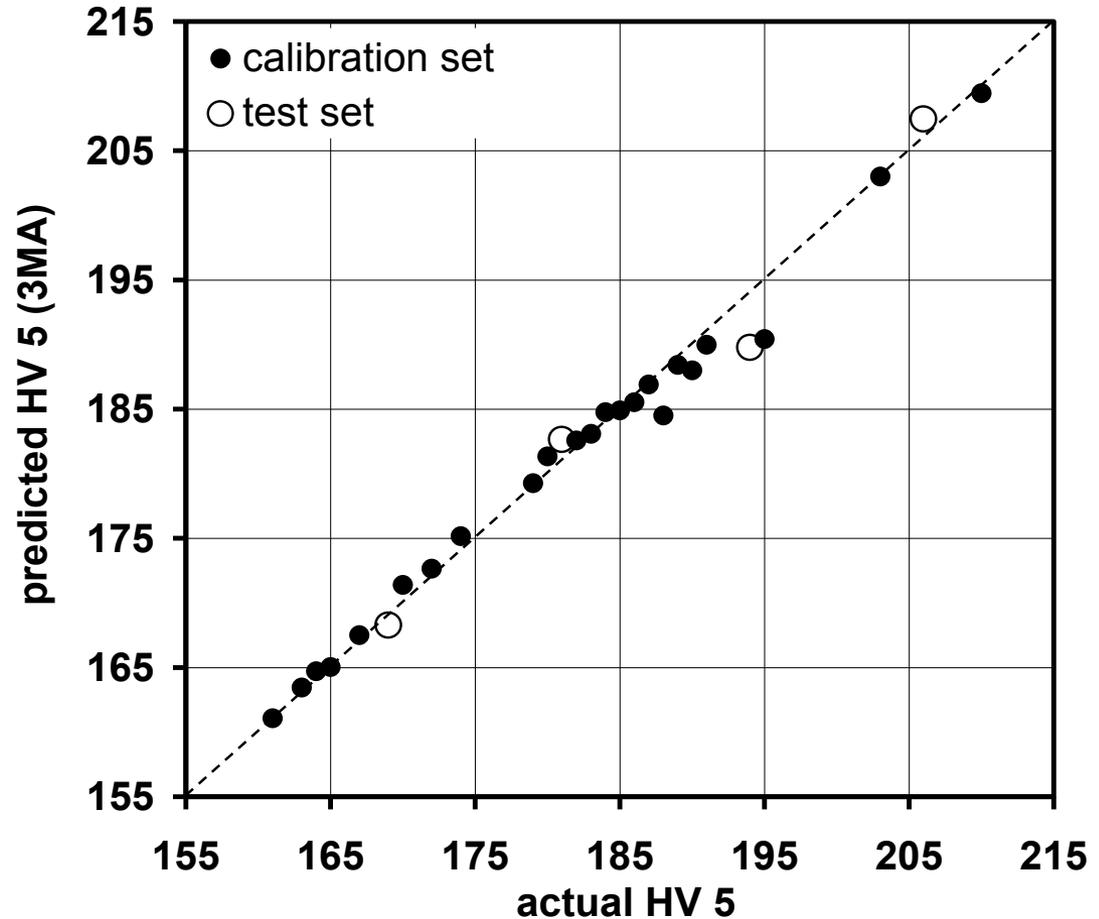
MATERIAL DEGRADATION EXPERIMENT



Thermally-induced embrittlement of WB 36 steel

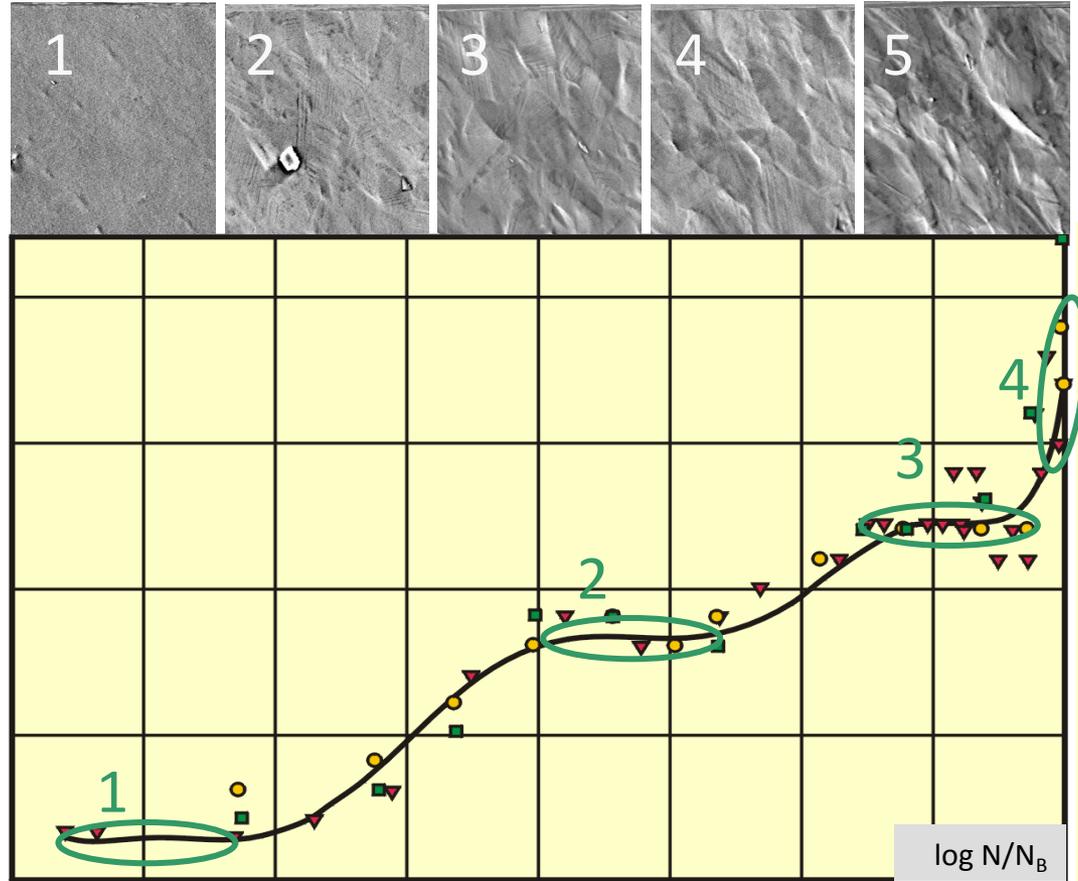
Combined Barkhausen noise, analysis of upper harmonics and eddy current analysis

Prediction of the Vickers hardness for WB 36



Fractal topography-analysis

X6 CrNiTi 18 10



1 dislocation generation →
Microstructure
local slip and rotation

2 \cong 3D domains

3 Cell structure, slip bands →
Mesostructure I

4 multiple slip bands →
Mesostructure II
 \cong 2D domains

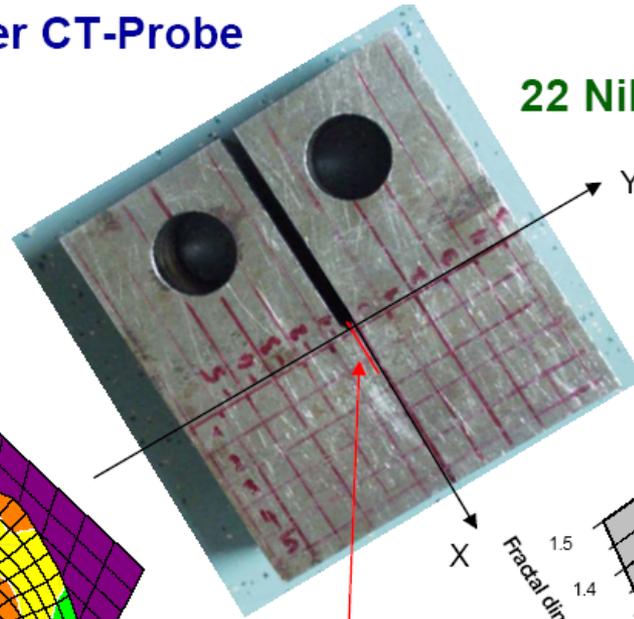
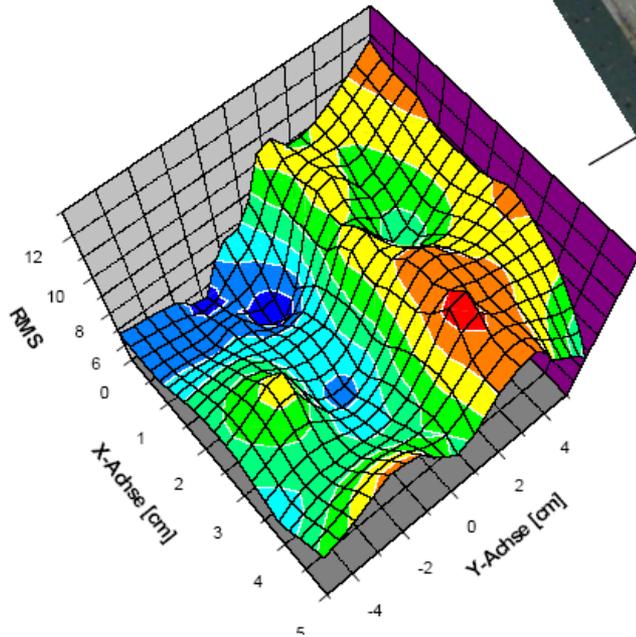
5 End of life →
Macroscopic cracking

D_F -Mapping an einer CT-Probe

22 NiMoCr 37

RMS ~ Eigenspannungen

Fraktale Dimension



Anriss

