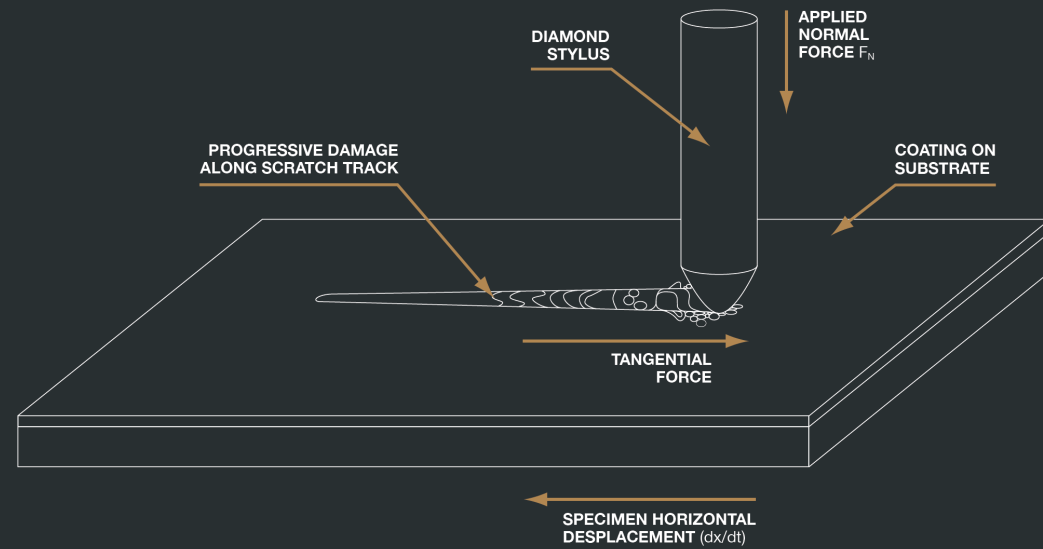




SCRATCH TEST SCHEMATIK



STANDARDS

DIN EN ISO 20502

High-performance ceramics –
Determination of the adhesion of
ceramic layers using the scratch test.

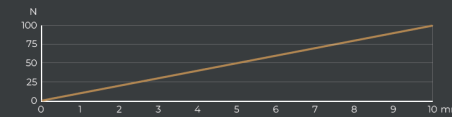
ASTM C1624

Standard test methods for the adhesion
strength and mechanical failure modes
of ceramic coatings.

PROCEDURE

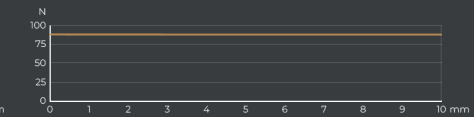
DIN: PFST - progressive force scratch test

ASTM: PL - progressive load



DIN: CFST - constant force scratch test

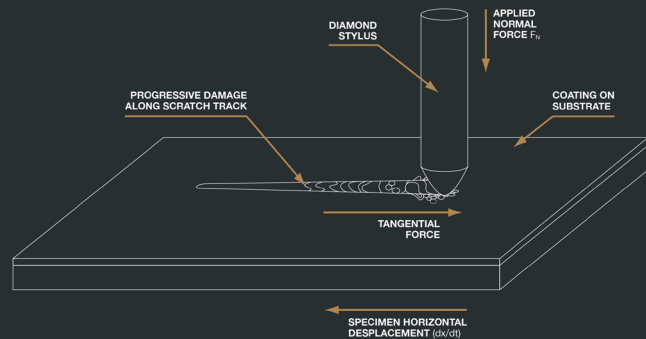
ASTM: CL - constant load



1 PERFORM SCRATCH TEST AND CREATE OVERVIEW IMAGE



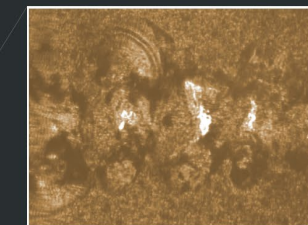
SCRATCH TEST SCHEMATIK



2 VERSAGENSEREIGNISSE DEFINIEREN UND ZUWEISEN

- Lc1** – plastic deformation, cracking
- Lc2** – spalling
- Lc3** – penetration of the coating down to the base material

Lc = 64 N

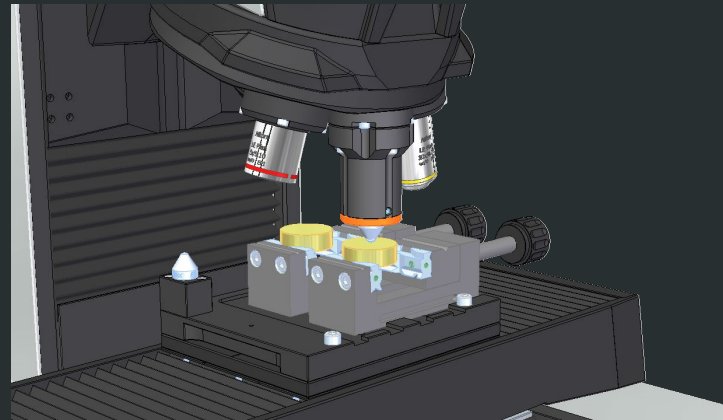




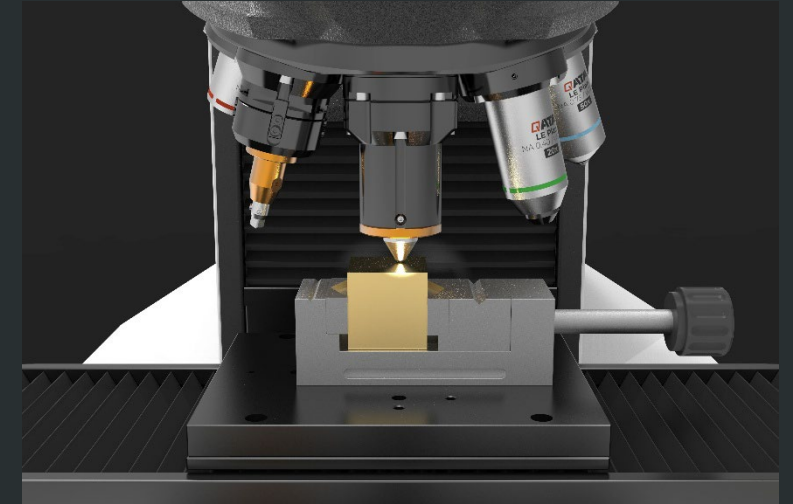
Qness 60 A+^{EVO}

Scratchtest Modul

- Load range: 0 – 200N
- Speed: 0 – 100 mm/min
- Scratch length: 0 – 100 mm



SAMPLE HOLDER FOR ROUND SAMPLES



PRECISION VISE SAMPLE HOLDER