

DIN EN ISO 1463:2021-08 (E)

Metallic and oxide coatings - Measurement of coating thickness - Microscopical method (ISO 1463:2021)

Contents	Page
European foreword	3
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Principle	5
5 Factors relating to measurement uncertainty	5
5.1 Surface roughness	5
5.2 Taper of cross-section	5
5.3 Deformation of coating	6
5.4 Rounding of edge of coating	6
5.5 Overplating	6
5.6 Etching	6
5.7 Smearing	6
5.8 Magnification	6
5.9 Calibration of stage micrometer	6
5.10 Calibration of the microscope's length measuring device	6
5.10.1 Micrometer eyepiece	6
5.10.2 Digital image processing	7
5.11 Uniformity of magnification	7
5.12 Lens quality	7
5.13 Orientation of measuring lines	7
5.14 Tube length	7
6 Preparation of cross-sections	8
7 Measurement	8
8 Measurement uncertainty	8
9 Test report	8
Annex A (informative) Guidance on the preparation and measurement of cross-sections	9
Annex B (informative) Taper of cross-section and measurement of tooth-constructed coatings	12
Annex C (informative) Some typical etchants for use at room temperature	15
Bibliography	16