DIN EN ISO 4518:2021-07 (E)

Metallic coatings - Measurement o f coating thickness - Profilometric method (ISO 4518:2021)

Contents

Page

European foreword 3

Foreword 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Principle 5

5 Instrumentation -- Operational parameters and measurement characteristics 5
5.1 Types of profile recording instruments 5
5.2 Stylus instruments 6
5.3 Inductive measuring probes or displacement sensors 6
5.4 Optical profilometers 7

6 Factors relating to accuracy 8
6.1 Profile record 8
6.2 Vertical magnification (only for instruments with chart recorders) 8
6.3 Graphical measurements 8
6.4 Applied force (only for profilometers with stylus) 8
6.5 Stylus diameter and surface roughness 8
6.6 Surface roughness 8
6.7 Vibrations 9
6.8 Surface curvature 9
6.9 Cleanliness 9
6.10 Temperature 9
6.11 Step configuration 9
6.12 Datum reference (only for profilometers with stylus) 9
6.13 Calibration 9

7 Calibration 9

8 Measuring procedure 10
8.1 Preparation of step 10
8.2 Recording of profiles 11
8.3 Measurement of thickness 11
8.4 Measurement accuracy 11

9 Test report 11

Bibliography 12