ISO 4518:2021 (E)

Metallic coatings — Measurement of coating thickness — Profilometric method

Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Instrumentation — Operational parameters and measurement characteristics

- 5.1 Types of profile recording instruments
- 5.2 Stylus instruments
- 5.3 Inductive measuring probes or displacement sensors
- 5.4 Optical profilometers

6 Factors relating to accuracy

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

7 Calibration

8 Measuring procedure

- 8.1 Preparation of step
- 8.2 Recording of profiles
- 8.3 Measurement of thickness
- 8.4 Measurement accuracy

9 Test report

Page count: 8