ISO 5490:2025-09 (E)

Steel - Rating and classifying nonmetallic inclusions using the scanning electron microscope

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Principles 2

5 Equipment and software 4

6 Calibration and inspection of equipment 5

7 Sampling 5

8 Preparation of specimens 5

9 Procedure 5

10 Rating and statistical analysis of inclusions 7
10.1 Rating method 7
10.1.1 Morphology rating method 7
10.1.2 Chemistry rating method 8
10.2 Statistical analysis method 9

11 Test report 10

Annex A (informative) Typical acquisition analysis rules to be set for SEM analysis 11

Annex B (informative) Example of test results using morphology rating method 12

Annex C (informative) Examples of test results using statistical analysis method 14

Bibliography 19