ISO 2407:2024-08 (E)

Test conditions for internal cylindrical grinding machines with horizontal spindle - Testing of accuracy

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Machineconfigurations 1

5 Preliminary remarks 3
5.1 Measuring units 3
5.2 Reference to ISO 230-1, ISO 230-2 and ISO 230-7 3
5.3 Machine levelling 3
5.4 Temperature conditions 3
5.5 Testing sequence 3
5.6 Tests to be performed 3
5.7 Measuring instruments 3
5.8 Software compensation 4
5.9 Machining tests 4
5.10 Minimum tolerance 4
5.11 Diagrams 4

6 Geometric tests 5
6.1 Linear axes motions 5
6.2 Workholding spindle 7
6.3 Wheel spindle 11
6.4 Facing wheelhead 14

7 Positioning tests 18

8 Machining tests 23

Annex A (informative) Error motions of axes of rotation 25

Annex B (informative) Terms in other languages 29

Bibliography 30