ISO 4545-2:2017-12 (E)

Metallic materials - Knoop hardness test - Part 2: Verification and calibration of testing machines

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 General conditions 1

5 Direct verification 2
5.1 General 2
5.2 Calibration of the test force 2
5.3 Verification of the indenter 3
5.4 Calibration and verification of the diagonal measuring system 4
5.5 Verification of the testing cycle 4
5.6 Uncertainty of calibration/verification 5

6 Indirect verification 5
6.1 General 5
6.2 Test force and hardness levels 5
6.3 Measurement of reference indentations 5
6.4 Number of indentations 5
6.5 Verification result 5
6.6 Repeatability 6
6.7 Bias 6
6.8 Uncertainty of calibration/verification 7

7 Intervals between verifications 7

8 Verification report/calibration certificate 7
8.1 Knoop testing machine 7
8.2 Knoop indenter 8

Annex A (informative) Uncertainty of the calibration results of the hardness testing system 9

Bibliography 18