

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	2
5 General inspection of the testing machine	3
6 Calibration of the force-measuring system of the testing machine	3
6.1 General.....	3
6.2 Determination of the resolution.....	4
6.2.1 Analogue scale.....	4
6.2.2 Digital scale.....	4
6.2.3 Variation of readings.....	4
6.2.4 Unit.....	5
6.3 Prior determination of the relative resolution of the force indicator.....	5
6.4 Calibration procedure.....	5
6.4.1 Alignment of the force-proving instrument.....	5
6.4.2 Temperature compensation.....	5
6.4.3 Conditioning of the testing machine and force-proving instrument.....	6
6.4.4 Procedure.....	6
6.4.5 Application of discrete forces.....	6
6.4.6 Verification of accessories.....	7
6.4.7 Verification of the effect of differences in piston positions.....	7
6.4.8 Determination of relative reversibility error.....	7
6.5 Assessment of the force indicator.....	8
6.5.1 Relative indication error.....	8
6.5.2 Relative repeatability error.....	9
6.5.3 Agreement between two force-proving instruments.....	9
7 Class of testing machine range	10
8 Verification report	10
8.1 General information.....	10
8.2 Results of verification.....	11
9 Intervals between verifications	11
Annex A (normative) General inspection of the testing machine	12
Annex B (informative) Inspection of the loading platens of the compression testing machines	13
Annex C (informative) Uncertainty of the calibration results of the force-measuring system	14
Bibliography	18