ISO 5725-4:1994-12 (E)

Accuracy (trueness and precision) of measurement methods and results - Part 4: Basic methods for the determinat ion of the trueness of a standard measurement method

Contents

Page

1 Scope 1
2 Normative references 1
3 Definitions 2
4 Determination of the bias of a standard measurement method by an interlaboratory experiment 2
4.1 The statistical model 2
4.2 Reference material requirements 2
4.3 Experimental design considerations when estimating the bias of a measurement method 3
4.4 Cross-references to ISO 5725-1 and I SO 5725-2 3
4.5 Required number of laboratories 3
4.6 Statistical evaluation 4
4.7 Interpretation of the results of the statistical evaluation 4
5 Determination of the laboratory bias of one laboratory using a standard measurement method 5
5 .1 Carrying out the experiment 5
5 .2 Cross-references to I SO 5725-1 and ISO 5725-2 6
5 .3 Number of test results 6
5 .4 Choice of reference materials 6
5 .5 Statistical analysis 6
6 The report to, and the decisions to be taken by, the panel 7
6.1 Report by the statistical expert 7
6.2 Decisions by the panel 7
7 Utilization of trueness data 7

Annexes
A Symbols and abbreviations used in ISO 5725 8
B Example of an accuracy experiment 10
B.1 Description of the experiment 10
B.2 Precision assessment 10
B.3 Trueness assessment 10
B.4 Further analysis 11
C Derivation of equations 21
C.1 Equations (5) and (6) (see 405) 21
C.2 Equations (1 9) and (20) (see 503) 22
D Bibliography 23