MALAYSIAN STANDARD

MS ISO 5725-4:2002
(CONFIRMED:2015)

Accuracy (trueness and precision) of measurement methods and results - Part 4: Basic methods for the determination of the trueness of a standard measurement methods (ISO 5725-4:1994, IDT)

ICS: 03.120.30

Descriptors: trueness, standard measurement method, interlaboratory experiment, laboratory bias, statistical analysis, symbols

NOTE. This Malaysian Standard has been reviewed and confirmed as being current.

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Committee representation

The Quality Management and Quality Assurance Industry Standards Committee (ISC Y) under whose supervision this Malaysian Standard was developed, comprises representatives from the following organisations:

Construction Industry Development Board Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Institute of Quality Malaysia
Malaysian Administrative Modernization and Management Planning Unit
Malaysian Agricultural Research and Development Institute
Malaysian Institute of Management
Malaysian International Chamber of Commerce and Industry
Malaysian Automotive Association
Ministry of Defence (Defence Science and Technology Centre)
National Pharmaceutical Control Bureau, Ministry of Health
SIRIM Berhad
SIRIM QAS Sdn. Bhd.
The Institution of Engineers, Malaysia
Universiti Malaya
Universiti Utara Malaysia

The Technical Committee on Statistical Methods which developed this Malaysian Standard consists of representatives from the following organisations:

Institut Kimia Malaysia

Institute of Quality Malaysia

Jabatan Statistik Malaysia

Malaysian Institute of Purchasing and Materials Management

Malaysian Agricultural Research and Development Institute

Ministry of Defence (Defence Science and Technology Centre)

National Productivity Corporation

SIRIM Berhad (Secretariat)

SIRIM QAS Sdn. Bhd.

The Institution of Engineers, Malaysia

Universiti Malaya

Universiti Teknologi Mara

NATIONAL FOREWORD

This Malaysian Standard was developed by the Technical Committee on Statistical Methods under the authority of the Quality Management and Quality Assurance Industry Standards Committee.

This Malaysian Standard is identical with ISO 5725-4 : 1994, Accuracy (trueness and precision) of measurement methods and results – Part 4 : Basic methods for the determination of the truness of a standard measurement method, published by the International Organization for Standardization (ISO). The text of the International Standard is recommended for publication as a Malaysian Standard without deviation. However, for the purpose of this Malaysian Standard, the following apply :

a) in the source text, "this International Standard" should read "this Malaysian Standard"; and

b) the comma which is used as a decimal sign (if any), to read as a full point.

References to International Standard should be replaced by equivalent Malaysian Standard as follows :

Referenced International Standards	**Corresponding Malaysian Standards**
ISO 3534-1 : 1993, Statistics - Vocabulary and symbols – Part 1 : Probability and general statistical terms.	MS ISO 3534-1 : 1999, Statistics - Vocabulary and symbols – Part 1 : Probability and general statistical terms."
ISO 5725-1 : 1994, Accuracy (trueness and precision) of measurement methods and results – Part 1 : General principles and definitions.	MS ISO 5725-1 : 2002, Accuracy (trueness and precision) of measurement methods and results – Part 1 : General principles and definitions.
ISO 5725-2 : 1994, Accuracy (trueness and precision) of measurement methods and results – Part 2 : Basic method for determination of repeatability and reproducibility of a standard measurement method.	MS ISO 5725-2 : 2002, Accuracy (trueness and precision) of measurement methods and results – Part 2 : Basic method for determination of repeatability and reproducibility of a standard measurement method.

MS ISO 5725 consists of the following parts under the general title, Accuracy (trueness and precision) of measurement methods and results :

Part 1 : General principles and definitions.
Part 2 : Basic method for the determination of repeatability and reproducibility of a standard measurement method.
Part 3 : Intermediate measures of the precision of a standard measurement method.
Part 4 : Basic methods for the determination of the precision of a standard measurement method.
Part 5 : Alternative methods for the determination of the precision of a standard measurement method.
Part 6 : Use in practice of accuracy values.

NATIONAL FOREWORD *(Continued)*

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, wording and presentation of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21.

INTERNATIONAL STANDARD

ISO 5725-4

First edition
1994-12-15

Accuracy (trueness and precision) of measurement methods and results —

Part 4:
Basic methods for the determination of the trueness of a standard measurement method

Exactitude (justesse et fidélité) des résultats et méthodes de mesure —

Partie 4: Méthodes de base pour la détermination de la justesse d'une méthode de mesure normalisée

Reference number
ISO 5725-4:1994(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 5725-4 was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 6, *Measurement methods and results*.

ISO 5725 consists of the following parts, under the general title *Accuracy (trueness and precision) of measurement methods and results*:

— *Part 1: General principles and definitions*

— *Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

— *Part 3: Intermediate measures of the precision of a standard measurement method*

— *Part 4: Basic methods for the determination of the trueness of a standard measurement method*

— *Part 5: Alternative methods for the determination of the precision of a standard measurement method*

— *Part 6: Use in practice of accuracy values*

Parts 1 to 6 of ISO 5725 together cancel and replace ISO 5725:1986, which has been extended to cover trueness (in addition to precision) and intermediate precision conditions (in addition to repeatability and reproducibility conditions).

Annex A forms an integral part of this part of ISO 5725. Annexes B, C and D are for information only.