
INTERNATIONAL STANDARD 2773/1

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Test conditions for pillar type vertical drilling machines — Testing of the accuracy — Part I : Geometrical tests

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2773/I was drawn up by Technical Committee ISO/TC 39, *Machine tools*, and circulated to the Member Bodies in June 1972.

It has been approved by the Member Bodies of the following countries :

Belgium	Italy	Spain
Czechoslovakia	Netherlands	Thailand
France	New Zealand	Turkey
Germany	Poland	United Kingdom
Hungary	Romania	U.S.S.R.
Ireland	South Africa, Rep. of	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Japan
Switzerland

Test conditions for pillar type vertical drilling machines — Testing of the accuracy — Part I : Geometrical tests

1 SCOPE AND FIELD OF APPLICATION

This International Standard describes, with reference to ISO/R 230, both geometrical and practical tests on general purpose and normal accuracy pillar type vertical drilling machines and gives corresponding permissible deviations which apply.

It deals only with the verification of accuracy of the machine. It does not apply to the testing of the running of the machine (vibrations, abnormal noises, stick-slip motion of components, etc.), or to characteristics (such as speeds, feeds, etc.) which should generally be checked before testing accuracy.

2 REFERENCE

ISO/R 230, *Machine tool test code*.

3 PRELIMINARY REMARKS

3.1 In this International Standard, all the dimensions are expressed in millimetres and in inches.

3.2 To apply this International Standard, reference should be made to ISO/R 230, especially for installation of the

machine before testing, warming up of spindles and other moving parts, description of measuring methods and recommended accuracy of testing equipment.

3.3 The sequence in which the geometrical tests are given is related to the sub-assemblies of the machine and this in no way defines the practical order of testing. In order to make the mounting of instruments or gauging easier, tests may be applied in any order.

3.4 When inspecting a machine, it is not always necessary to carry out all the tests given in this International Standard. It is up to the user to choose, in agreement with the manufacturer, those tests relating to the properties which are of interest to him, but these tests are to be clearly stated when ordering a machine.

3.5 When establishing the tolerance for a measuring range different from that given in this International Standard (see clause 2.311 in ISO/R 230), it should be taken into consideration that the minimum value of tolerance is 0,01 mm (0.000 4 in).

3.6 The practical tests relating to this kind of machine will be the subject of an Addendum constituting Part II.