
**Test conditions for box type vertical
drilling machines — Testing of the
accuracy**

*Condition d'essai des perceuses verticales a montant (perceuses-
aléseuses) — Contrôle de l'exactitude*



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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 2, *Test conditions for metal cutting machine tools*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This first edition of ISO 2772 cancels and replaces ISO 2772-1:1973 and ISO 2772-2:1974.

Introduction

The purpose of this document is to standardize methods of testing the accuracy of box type vertical drilling machines including geometrical tests.

Test conditions for box type vertical drilling machines — Testing of the accuracy

1 Scope

This document specifies, with reference to ISO 230-1, geometrical tests on general purpose and normal accuracy box type vertical drilling machines. It also specifies the applicable tolerances corresponding to the above-mentioned tests.

This document deals only with the verification of accuracy of the machine.

It does not apply to the testing of the machine operation (vibrations, abnormal noises, stick-slip motion of components, etc.) or to machine characteristics (such as speeds, feeds, etc.), which are generally checked before testing of machine accuracy.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 230-1:2012, *Test code for machine tools — Part 1: Geometric accuracy of machines operating under no-load or quasi-static conditions*

ISO/TR 230-11:2018, *Test code for machine tools — Part 11: Measuring instruments suitable for machine tool geometry tests*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 230-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

drilling

producing holes in cold metal by the use of a rotating cutting tool

3.2

drilling machine

machine designed to produce holes in cold metal by the use of a rotating cutting tool

[SOURCE: EN 12717:2009, 3.1]

3.3

manual drilling machine

machine designed to produce holes in cold metal by the use of a rotating cutting tool where the axial motion of the cutting tool is controlled through the actuation of a handwheel or lever

Note 1 to entry: The handwheel or lever can include powered axial feed or powered unprogrammed positioning of spindle or workpiece.