***भारतीय मानक***

***Indian Standard***

**IS/ISO 6480 : 2019**

**क्षैतिजआंतरिक ब्रोचिंग मशीनों के लिएपरीक्षण अवस्थाएं — परिशुद्धता का परीक्षण**

*( पहला* *पुनरीक्षण* )

**Test Conditions for Horizontal Internal Type Broaching Machines —Testing of Accuracy**

*( First revision )*

ICS 25.080.30

Ó BIS 2024

Ó ISO 2019

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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**November 2024 Price Group X**

Machine Tools, Machine Tool Elements, and Holding Devices Sectional Committee, PGD 35

NATIONAL FOREWORD

This Indian Standard which is identical with ISO 6480 : 2019 ‘Test Conditions for Horizontal Internal Type Broaching Machines —Testing of Accuracy’ issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Machine Tools, Machine Tool Elements, and Holding Devices Sectional Committee and approval of the Production and General Engineering Division Council.

The objective of this standard is to supply information as wide and comprehensive as possible, on the tests performed on horizontal internal type broaching machines which can be carried out for comparison, acceptance, maintenance or any other purposes. This standard also establishes the tolerances for the test results corresponding to general purpose and normal accuracy horizontal internal type broaching machines.

This standard was originally published in 2017 based on ISO 6480 : 1983. This first revision has been undertaken to align it with the latest version of ISO 6480.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
2. Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

The major changes in this revision are as follows:

1. Title has been changed from ‘Conditions of acceptance for horizontal internal broaching machines — Testing of the accuracy’ to ‘Test conditions for horizontal internal type broaching machines — Testing of accuracy’;
2. Levelling test, **G01**, has been deleted and relevant explanations have been added to **5**;
3. **G1(a)** and **G1(b)** have been merged, consequently, only single tolerance is applied;
4. As the term “coincidence” no longer exists in IS 2063 (Part 1):2016/ISO 230-1:2012, the term “radial offset of coaxiality deviation” has been used for test item **G5**;
5. Item **7** has been created to provide considerations for machining tests to be agreed between manufacturer/supplier and user; and
6. Imperial units of measurement have been deleted and only metric units have been used.

In this adopted standard, reference appears to the following International Standard for which Indian Standard also exists. The corresponding Indian Standard which is to be substituted in its place is listed below along with its degree of equivalence for the edition indicated:

|  |  |  |
| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 230-1:2012 Test code for machine tools — Part 1: Geometric accuracy of machines operating under no-load or quasi-static conditions | IS 2063 (Part 1) : 2016/ ISO 230-  1:2012 Test code for machine tools: Part 1 Geometric accuracy of machines operating under no-load or quasi-static conditions (*third revision*) | Identical |

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*Second revision*).’