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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 23569-2009

**Test conditions for heavy duty horizontal lathe -- Testing of the
accuracy**

重型卧式车床检验条件 精度检验

(English Translation)

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Appendix A (informative) This standard and ISO 1708. 1989 technical differences and their list of 28 reasons

Foreword

This revised standard adopts ISO 1708. 1989 "Test conditions lathe accuracy test" (in English).

This standard is based on ISO 1708. 1989 redrafted.

Taking into account China's national conditions, adopting ISO 1708. 1989 When do the technical content changes. About the technical differences have been incorporated into the text and They are involved in terms of the margin identified by a single vertical line. A list of these technical differences, see Appendix.

This standard also made the following changes.

- The "this International Standard" by "this standard";
- Use the decimal symbol instead of as a decimal comma " , " . " , " ;
- Deleted international standards foreword, introduction of international standards by way of expressing our language;
- To ISO 1708. 1989 and other international standards cited by international standards adopted in place of the corresponding standard;
- Chapter 1 expands the scope of the technical content;
- Title Chapter 3, "a brief description" to Chapter 4, "General requirements";
- Chapter 4, the heading "Test conditions and tolerance" to Chapter 5, "Geometric tests"

and Chapter 6, "Working accuracy test";

--- Chapter 5 to Chapter 8;

--- Section 3, Chapter 7 and Appendix A to increase the content;

--- Delete references Appendix A content.

Appendix A of this standard is an informative annex.

The standard proposed by China Machinery Industry Federation.

The standard metal cutting machine tools by the National Standardization Technical Committee (SAC/TC22) centralized.

This standard was drafted. Qi Heavy CNC Equipment Co., Ltd., Wuhan Heavy Duty Machine Tool Co., Ltd., Shanghai Heavy Machine Tool Plant Co., Spark Machine Tool Co., Qinghaihuading heavy machine tool company.

1 Scope

This standard specifies the geometric accuracy for general use and general precision heavy duty horizontal lathe, working precision CNC axis positioning accuracy and weight Re-positioning accuracy test and corresponding tolerances.

This standard applies to bed Maximum turning diameter 1000mm ~ 5000mm, the largest among the top quality of the workpiece is greater than or equal to 10t Common and CNC heavy duty horizontal lathe.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 17421.1-1998 Test code for machine tools - Part 1. under no-load or finishing conditions Geometric accuracy of machines (eqv ISO 230-1:1996) GB/T 17421.2-2000 Test code for machine tools - Part 2. CNC axis positioning accuracy and repeatability of determination (EqvISO 230-2:1997)

3 Code, axis coordinates and direction of motion

Code 3.1 axis

The standard coordinate axis motion code in Figure 1.

Figure 1 motion coordinate axis