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

GB/T 23280-2025

Replacing GB/T 23280-2009

Open front mechanical power presses - Testing of the accuracy

开式压力机 精度

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 23280-2009 "Accuracy of Open Presses". Compared with GB/T 23280-2009, except for structural adjustments and...

Aside from editorial changes, the main technical changes are as follows.

---The tolerances and inspection methods for G1 have been changed (see Table 1, 2009 version);

---The tolerances and inspection methods for G2 have been changed (see Table 1, Table 1 in the 2009 edition);

---The tolerance requirements for G4 have been changed (see Table 1, Table 1 in the 2009 version);

---The tolerances for G6 have been changed (see Table 1, Table 1 in the 2009 version);

---The accuracy verification requirements have been changed (see Appendix A, Appendix A of the 2009 edition).

This document is modified to adopt ISO 6899:1984 "Acceptance conditions for open mechanical presses - Accuracy inspection".

The structural adjustments in this document compared to ISO 6899:1984 are as follows.

---Chapter 2 has been changed to Chapter 4, and subsequent chapters will follow accordingly;

---Add Chapter 3, "Terminology and Definitions".

The main technical differences between this document and ISO 6899:1984, and the reasons therefor, are as follows.

---Added normative references to GB/T 8170 (see Chapter 4) to adapt to my country's technical conditions and increase operability;

---Replace ISO/R230 with the normatively referenced GB/T 10923-2009 (see Chapters 4 and 5, Appendix A), and a one-way link between the two documents.

The degree of conformity is non-equivalent adoption, in order to adapt to my country's technical conditions and increase operability;

---Replace ISO 6896 with the normatively referenced GB/T 23482 (see Chapter 3), and the degree of consistency between the two documents is [not specified in the original text].

To adapt to my country's technological conditions and increase operability;

---The maximum nominal force in the application range has been increased to 5000kN to broaden the applicable scope;

---Due to improvements in processing technology and the application of new measurement technologies, the allowable tolerances and inspection methods for items G1 and G2 have been changed;

---Due to improvements in processing technology, the tolerance requirements for G4 have been changed;

---Added item G6 to meet machining and assembly requirements;

---Appendix A has been added to improve the operability of accuracy verification.

The following editorial changes have been made to this document.

---Rename the file to "Accuracy of Open Press".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Forging and Pressing Machinery (SAC/TC220).

1 Scope

This document specifies the geometric accuracy tolerances and inspection methods for open presses.

This document applies to the accuracy inspection of open presses with a nominal force not exceeding 5000kN.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 8170 Rules for rounding off numerical values and the representation and determination of limiting values GB/T 10923-2009 General Rules for Precision Inspection of Forging Machinery (ISO 230-1:1996, NEQ) GB/T 23482 Terminology for Open Presses (GB/T 23482-2009, ISO 8540:1993, MOD)

3 Terms and Definitions

The terms and definitions defined in GB/T 23482 apply to this document.

4 General Requirements

4.1

Accuracy verification shall be carried out in accordance with the provisions of Appendix A and GB/T 10923, including the installation of open presses, temperature rise of moving parts, measurement methods, and...

The accuracy of the inspection tools shall comply with the requirements of GB/T 10923.

4.2

The geometric accuracy order in Table 1 is not necessarily the actual inspection order. For ease of instrument or fixture installation, geometric accuracy inspection can be carried out according to any...

What is the order in which they are performed?

4.3

If the user has special requirements, the inspection may not be carried out according to all the items specified in this document.

4.4

Before inspection, the open press should be leveled; if a slide block balancing device is installed, it should be installed and adjusted according to the instruction manual, and the measurement should be ensured.

The precision of the tool; p is the nominal force value of the open press (in kN).

4.5

When the actual measured length differs from the measured length specified in this document, the tolerance shall be calculated based on the actual measured length, and the calculation result shall be...

Rounded to μm according to GB/T 8170, the minimum tolerance is 0.010 mm.

5 Geometric accuracy inspection

The geometric accuracy inspection of open presses is shown in Table 1.