ICS 25.120.40
CCS J 59

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 25635-2026

Replacing GB/T 25635.1-2010

Electrochemical deburring machines - Testing of accuracy

电解去毛刺机床 精度检验

Issued on: April 30, 2026 **Implemented on: November 1, 2026**

Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC

Table of Contents

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 supersedes GB/T 25635.1-2010 "Electrolytic Deburring Machines - Part

1.Precision Inspection" and GB/T 25635.2- The.2010 standard "Electrolytic Deburring Machine Tools - Part

2.Parameters" differs from GB/T 25635.1-2010 and GB/T 25635.2-2010 except for structural... Aside from adjustments and editorial changes, the main technical changes are as follows:

a) A new chapter on "Types and Parameters" has been added (see Chapter 4);

b) The sections on "Naming of Terms and Axes" and "Parameters" have been removed (see Chapter 3 of GB/T 25635.1-2010 and GB/T 25635.2-). Chapter 4 (2010)

c) The "Instructions" section has been changed to "General Rules," modifying the general requirements for units of measurement, referenced standards, minimum tolerances, and working accuracy (see 5.1). 5.2,

5.8 and 5.9; 4.1, 4.2,

4.7 of GB/T 25635.1-2010);

d) General requirements for machine tool leveling, graphical representation, and software compensation have been added (see 5.3, 5.6, and 5.7);

e) The tolerance values for geometric accuracy have been changed (see Chapter 6, Chapter 5 of GB/T 25635.1-2010). 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 Special Processing Machine Tools (SAC/TC161). This document was drafted by: Suzhou Electrical Discharge Machining Research Institute Co., Ltd., Shenzhen

Xinghong Precision Electrolysis Technology Co., Ltd., and Shandong Shengmu. Deburring Technology Equipment Co., Ltd., Haining Xinyi Electromechanical Co., Ltd., Hefei University of Technology, Nanjing University of Aeronautics and Astronautics, Capital Aerospace Machinery Limited Liability Company, China Aviation Manufacturing Technology Research Institute, China Machine Tool & Tool Builders' Association, Xianyang Lanbo Machinery Co., Ltd. The main drafters of this document are. Wang Ying, Li Tingbo, Li Yan, Wu Qiang, Dai Liqiang, Chen Yuanlong, Qu Ningsong, Zhang Kun, Huang Mingtao, and Lu Zhiliang. Dong Lijun. The release history of this document and the document it replaces is as follows:

---First published in.2010 as GB/T 25635.1-2010 and GB/T 25635.2-2010;

---This is the first revision, integrating GB/T 25635.1-2010 and GB/T 25635.2-2010. Electrolytic deburring machine tool precision inspection

1.Scope This document specifies the types and parameters, geometric accuracy and working accuracy of electrolytic deburring machines, as well as the corresponding accuracy tests. Tolerance value. This document applies to the accuracy testing of electrolytic deburring machines, but not to machine tool operation tests (vibration, abnormal noise, component creep). The inspection of the parameters (such as speed, feed rate, etc.) and their performance parameters is usually carried out before the accuracy test.

4 Types and Parameters

4.1 The structural form of the electrolytic deburring machine (hereinafter referred to as "the machine tool") is shown in Figure

1.The coordinate system and the naming of the main motion axes of the machine tool should conform to... The provisions of GB/T 19660.

4.2 The main parameters of the machine tool include.

---Workbench surface width;

---Workbench surface length;

---Z-axis travel;

---Maximum distance from the cathode mounting plate to the workbench surface.

4.3 When designing machine tools, the preferred number system should be used for the main parameters listed in

4.2 in accordance with the provisions of GB/T 19764, and the selection should be based on a common ratio of 1.25. Take the integer value.

5 General Rules

5.1 Units of Measurement In this document, all linear dimensions, deviations, and

corresponding tolerances without specified units are expressed in millimeters (mm).

5.2 Referenced Standards This document should be used in accordance with GB/T 17421.1-2023, especially regarding the installation before machine tool testing and the preheating of other moving parts. Description of measurement methods and recommended accuracy of testing equipment.

5.3 Machine tool leveling Before inspecting the machine tool, it should be leveled according to the manufacturer's/supplier's recommended values.

5.4 Detection Sequence The order of the accuracy testing items given in this document does not limit the actual testing order. For ease of instrument or gauge installation, the accuracy testing... The tests can be performed in any order.

5.5 Measuring Instruments The measuring instruments specified for the accuracy testing items given in this document are merely examples; instruments with the same measurement range and similar characteristics can also be used. Other instruments with the same or higher precision. Linear displacement sensors should have a resolution of

0.002 mm or higher.

5.6 Diagram For the sake of simplicity, the illustrations provided in this document are only partial structural diagrams of the machine tool.

5.7 Software Compensation When using built-in software to compensate for geometric, positioning profile, and/or thermal deformation deviations, the manufacturer/supplier should consult with the machine tool manufacturer/supplier based on the machine tool's intended use. The user and the organization should agree on whether to use compensation, and the usage should be noted in the test report. When using software compensation, the coordinates at the test objective should be... The axis should not be locked.

5.8 Minimum tolerances In geometric accuracy inspection, when the measured length differs from the length given in this document, the tolerance can be determined using the proportionality law (see...). According to GB/T 17421.1-2023, 4.1.2), the minimum tolerance should be calculated to

0.01 mm.

5.9 Working accuracy For the work accuracy testing items given in Chapter 7, other workpiece shapes may be used if the supplier/manufacturer and the user reach an agreement. Conduct testing.

6 Geometric accuracy

The geometric accuracy testing items for machine tools are shown in Table 1.

7.Working accuracy The inspection items for the cross-hole area of the workpiece are

shown in Table 2.