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

GB/T 13306-2011

Replacing GB/T 13306-1991

Plates

标牌

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Foreword

This Standard is drafted according to the rules given in GB/T 1.1-2009 "Directives for Standardization-Part

1. Structure and Drafting of Standards". This Standard replaces GB/T 13306-1991 "Plates". Compared with GB/T 13306-1991, the main technical changes of this Standard are as follows: - Adjust the structure and contents of this Standard; - Add the marking method of plates; - Modify the material requirements and surface treatment requirements in the technical requirements. This Standard was proposed by and shall be under the jurisdiction of China Machinery Industry Federation. Drafting organizations of this Standard. China Productivity Center for Machinery, and Hefei Anlian Trading Co., Ltd. Chief drafting staffs of this Standard. Li Weirong, Feng Feng, Tang Dong, and Dou Zhi. The previous edition replaced by this Standard is. - GB/T 13306-1991. Plates

1 Scope

GB/T 13306-2011 is the Chinese national standard on plates, in the field of mechanical systems and components. The /T suffix marks it as a recommended standard: it is not

compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 12 May 2011 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2011. Classification: ICS 21.010, CCS J29. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard specifies the PLATES' types and dimensions, marking, technical requirements, inspection methods, inspection rules, packing, storage and transportation. This Standard is applicable to the nameplates, operational sign plates, illustration plates, line schematic diagram plates, design data chart plates, safety sign plates and others (generally referred to as "plates") of various electromechanical equipment, instruments and apparatuses, and various components. The Chapter "Types and Dimensions" in this Standard is not applicable to the panels, dial plates, trademarks and artistic decoration plates of instruments, apparatuses and household electrical appliances. However, the technical requirements (see Chapter 5) in this Standard may be acted as a reference for the above products.

2 Normative References

The following documents are essential for the application of this Standard. For the dated references, only the dated editions are applicable to this document. For undated references, the latest edition of the normative document (including all amendments) referred to applies.

GB/T 191 "Packaging - Pictorial Marking for Handling of Goods"

GB/T 730 "Textiles - Tests for Colour Fastness - Quality Control of Blue Wool Reference Materials 1 to 7"

GB/T 827 "Rivets for Name Plate"

GB/T 1720 "Method of Test for Adhesion of Paint Films"

GB/T 1804 "General Tolerances - Tolerances for Linear and Angular Dimensions without Individual Tolerance Indications"

GB/T 2423.3 "Environmental Testing for Electric and Electronic Products - Part

3 Types and Dimensions

3.1 The shape and shape-codes of the plates are as follows:

3.2 The characteristics of the characters, symbols and lines on the plates are as follows:

3.3 Types and dimensions of plates

3.3.1 The types and dimensions of rectangular plates shall meet those specified in Figure 1 and Table

1. For the rectangular plates with two holes, both ends may be made into round-heads; the types are shown in Figure 1e) and Figure 1f).

4 Marking

4.1 Marking method The plates shall be marked with the following contents and methods. In the mark, the "name" and "number of fastening holes" may be omitted. If the allowed number of fastening holes as given in notes in Table 1 ~ Table 5 is selected, then this number of holes shall be marked out.

4.2 Marking Examples Example

1. Rectangular plates made of commercial purity aluminium 1060, with BxL=16x25 mm.

5.1 Dimension and Tolerance of Plates

5.1.1 The plate may be fixed on the product by adopting feasible methods such as sticking, rivets for name plate (GB/T 827), tapping screw, or screw.

5.1.2 The distance between fastening holes (b and l), the diameter of the hole core circle (d1), the diameter of fastening hole (d), the outline dimensions (B, L and R) and the angle (phi) of fastening holes; and the limit deviations of the 4 right-angles of rectangular plate shall be in accordance with those specified in Table 7.

5.2 Contents, characters and symbols on the plate

5.2.1 The contents, arrangement mode and colour of the plate shall be determined according to the relevant provisions or by the plate designer.

5.2.2 The Chinese characters on the plate generally shall adopt the simplified

5.3 Materials

5.3.1 It is recommended to select the following materials to made plates.

5.3.2 The bonding materials for sticking the plates shall select those that are able to firmly stick the plate onto flat, smooth, clean and oil-stain-free metallic or non-metallic surface, under the condition that without adopting activation (such as using solvent or heating).

5.4 Appearance requirements

5.4.1 For the plates with frame, the frame line around the fastening holes is allowed to be

made into arc shape.

5.4.2 The plates stuck by gum are not required to have fastening holes.

5.4.3 The perimeter of plate shall be free from obvious burrs, tooth form and waveform. The front face shall be flat, smooth and clean. The frame lines shall be symmetrical, smooth and continuous, and shall be without fracture.

5.4.8 According to the requirements of product, the plate surface may be treated with dull finish and be made into unglazed or matt.

5.5 Performance requirements

5.5.1 The adhesion of coating shall not be less than Grade 4 as specified in GB/T 1720.

5.5.2 The colour fastness to sunlight shall meet those specified in GB/T 730. It shall not be less than Grade 4 for indoor purpose; and shall not be less than Grade 6 for outdoor purpose.

5.5.3 For the anodized aluminium plates, the thickness of oxide film in dark colour on the front face shall not be less than 10µm; and that of the oxide film in light colour shall not be less than 5µm.

5.5.4 The sealing quality of the oxide film of anodized aluminium plate shall meet those specified in 4.4 "hole sealing quality" of GB/T 8013.1-2007.

6 Inspection Methods

6.1 The dimensions of the plate shall be inspected by using measurement gauges and limit gauges.

6.2 The plate shall be placed on a panel and be inspected by using a ruler or a feeler gauge. During the inspection, any external force that will cause the plate deforming shall not be applied.

6.3 Under the conditions that the illuminance is 500lx and the sight distance is not less than 250mm, the plate shall be inspected visually.

6.8 The abrasion resistance of anodic oxide film shall be inspected by selecting the methods specified in GB/T 12967.1 or GB/T 12967.2 according to the evaluation method specified in 5.5.5.

6.9 The salt spray resistance shall be inspected according to the method specified in GB/T 2423.17.

6.10 The damp heat resistance shall be inspected according to the method specified in GB/T 2423.3.

6.11 The fungus resistance shall be inspected according to the method specified in GB/T