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

GB/T 15825.4-2008

Replacing GB/T 15825.4-1995

**Sheet metal formability and test methods - Part 4: Method of
hole expanding test**

金属薄板成形性能与试验方法 第4部分：扩孔试验

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Foreword

GB/T 15825 "Performance and test methods for sheet metal forming" is divided into eight sections.

--- Part 1. formability and indicators;

--- Part 2. General test procedures;

--- Part 3. drawing and drawing load test;

--- Part 4. reaming test;

--- Part 5. bending test;

--- Part 6. Cone cup test;

--- Part 7. Test lug;

--- Part 8. Forming Limit Diagram (FLD) Determination Guide. This section is GB/T Part of 415,825. This Part replaces GB/T 15825.4-1995 "Sheet metal formability and test methods reaming test." This portion of the reference ISO /T S16630.2003 "Test methods for metallic materials reaming '(in English). Section compared with the GB/T 15825.4-1995, major changes in the following.

--- Added "foreword";

--- Original standard technical regulations as part of this Appendix A; Name of the appropriate changes;

--- With respect to the original standard, in Appendix A, an increase of A. 6.4. This section of Appendix A normative appendix. This part is proposed by China Machinery Industry Federation. This part of the National Standardization Technical Committee centralized forging. This section is drafted. Zhengzhou University, Wuhan University of Technology,

Dongfeng Motor Co., Ltd. Die stamping, Huazhong University of Science and Technology, Beijing University of Aeronautics Aerospace University, Baoshan Iron & Steel Co., Ltd. The main drafters of this section. Cao deep, Jiang Kuihua, Waring, Huang Shangyu, Mao Huajie, Li Jianhua, Li Zhigang, Li Xing, Chen Xinping. This part of the standard replaces the previous editions are.

--- GB/T 15825.4-1995. Performance and test methods for metal sheet forming Part 4. Test reaming

1 Scope

GB/T 15825.4-2008 is the Chinese national standard on sheet metal formability and test methods - part 4: method of hole expanding test, in the field of metallurgy. 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 23 December 2008 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 June 2009. Classification: ICS 77.040.10, CCS J32. 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.

GB/T 15825 provisions of this part of the rate indicators to reaming reaming of sheet metal forming performance test method for thickness 1.2mm ~ 6.0mm metal plate, coil, used a sample width is generally not less than 90mm.

Note. The hole expansion rate can be tapered punch, punch and other cylindrical reaming test measurement, using a cylindrical punch hole expansion test method in Appendix A.

2 Normative references

The following documents contain provisions which, through reference

GB/T 15825 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section. However, under this part are encouraged to reach Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 19764 priority number and priority number of the entire value range of Selection Guide (GB/T 19764-2005, ISO 497. 1973, IDT)

GB/T 15825.2-2008 sheet metal formability and test methods - Part 2. General test

procedures

3 Terms and Definitions

The following terms and definitions apply to this section.

3.1 Use hole punch for punching the sample on the reaming tests and measurements and calculations at the hole edge (vertical edge) cracking reaming change Shaped volume.

3.2 The hole punched specimen and specimen thickness ratio gap punch and die between use. 4 symbols, names and units Symbols, names and units are shown in Table 1. Table

1 Symbol Name Unit Ba opposing unilateral gap% Dd mm inner diameter reaming die Hole diameter mm Dh hole edge (vertical edge) of cracking Punched hole on D0 original specimen diameter mm