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

**GB/T 245-2016**

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**Metallic materials -- Tube -- Flanging test**

金属材料 管 卷边试验方法

**(English Translation)**

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## Table of Contents

|                         |
|-------------------------|
| Preface                 |
| 1 Scope                 |
| 2 Symbol, name and unit |
| 3 Test principle        |
| 4 Test equipment        |
| 5 Sample                |
| 6 Test procedure        |
| 7 Test Report           |

### Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 245-2008 "metal pipe crimping test method", compared with GB/T 245-2008, the main technical changes as follows.

- modified the expression of "scope" (see chapter 1);
- Change the title of Chapter 3 to "Test Principle" (see Chapter 3);
- the test procedure is specified in more detail (see 6.3);
- delete the curl rate calculation formula (see 6.7, 2008 edition of 6.7 note).

This standard uses the translation method equivalent to ISO 8494.:2013 "metal pipe crimping test method".

This standard has made the following editorial changes.

- correct the international standard error, change the symbol "b" in Table 1 to "beta";

Figure 1 adds the title.

This standard is proposed by China Iron and Steel Industry Association.

This standard is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183).

The drafting unit of this standard. Changshu Entry-Exit Inspection and Quarantine Bureau, Metallurgical Industry Information Standards Institute.

## 1 Scope

This standard specifies the crimping test method for determining the plastic deformation capacity of circular cross-section metal pipes.

In addition to the relevant product standards, this standard applies to the diameter of not more than 150mm, wall thickness of not more than 10mm metal tube.

## 2 Symbols, names and units

The symbols, names and units used in this standard are specified in Table 1 and Figure 1.

Table 1 Symbols, names and units

Symbol name unit

aa wall thickness mm D metal pipe original diameter mm Du metal tube maximum curling diameter mm L The original length of the specimen mm R Crimping die fillet radius mm Beta top angle (°) a The symbol T is also used in the pipe standard to indicate this parameter.

a) flaring b) curling

Figure 1 Schematic diagram of crimping test