

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

JG/T 398-2012

**The grouting coupler for rebars splicing
(English Translation)**

Issued on: October 29, 2012

Implemented on: January 1, 2013

**Issued by: Ministry of Housing and Urban-Rural Development of the
People's Republic of China**

Table of Contents

Foreword...	3
1 Scope...	4
2 Normative references...	4
3 Terms and definitions...	5
4 Classification and types...	6
5 Requirements...	9
6 Test method...	11
7 Inspection rules...	13
8 Marking, packaging, transportation and storage...	14
Annex A (Informative) The grouting coupler - Product quality certificate...	17

Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard was proposed by the Institute of Standards and Quotas of the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

This Standard shall be under the jurisdiction of the Standardization Technical Committee on Construction Structure of the Ministry of Housing and Urban-Rural Development.

The drafting organizations of this Standard. China Academy of Building Research, Guangxi Construction Group Second Construction Engineering Co., Ltd., Beijing Yugou Co., Ltd., Langfang CABR Construction Machinery Technology Co., Ltd., Central Research Institute of Building and Construction Co., Ltd., CABR Technology Co., Ltd., Zhongtai Construction Group Co., Ltd., Beijing Building Construction Research Institute Co., Ltd., Peifeng Construction Engineering (Shanghai) Co. Ltd., Zhejiang Construction Engineering Co., Ltd. and Baoye Group Zhejiang Construction Industry Institute Co., Ltd..

1 Scope

This Standard specifies the terms and definitions, classification and types, requirements, test method, inspection rules and marking, packaging, transportation and storage of the grouting coupler for rebars splicing (hereinafter referred to as the grouting coupler).

This Standard applies to the coupler for grouting and splicing hot-rolled ribbed or remained heat treatment rebars of the diameter 12 mm to 40 mm in reinforced concrete.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition dated applies to this document. For undated references, the latest edition of the referenced document (including any amendments) applies to this Standard.

GB/T 197 General Purpose Metric Screw Threads - Tolerances

GB/T 228.1 Metallic materials - Tensile testing - Part 1.Method of test at room temperature

GB/T 231.1 Metallic materials - Brinell hardness test - Part 1.Test method

GB/T 699 Quality carbon structural steels

GB/T 1348 Spheroidal graphite iron castings

GB/T 1499.2 Steel for the reinforcement of concrete - Part 2.Hot rolled ribbed bars

GB/T 1591 High strength low alloy structural steels

GB/T 2975 Steel and steel products - Location and preparation of test pieces for mechanical testing

GB/T 3077 Alloy structure steels

GB/T 8162 Seamless steel tubes for structural purposes

GB/T 9174 General specification for transport packages of general cargo

GB/T 9441 Metallographic test for spheroidal graphite cast iron

GB/T 13014 Remained heat treatment ribbed steel bars for the reinforcement of

concrete

GB/T 13298 Inspection methods of microstructure for metals

JGJ 107 Technical specification for mechanical splicing of steel reinforcing bars

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1

the grouting coupler

the metal coupler for splicing of rebars through the force transferring impact of cement-based grouting material, which is usually made by the casting process or mechanical process

3.2

the whole grouting coupler

the grouting coupler which splices rebars by grouting at both ends of the splice

3.3

the grouting coupler with half thread end

the grouting coupler with one end of the splice spliced by grouting and the other end spliced by non-grouting; the other end is usually spliced by thread

3.4

the grouting coupler with directly rolling thread end

the grouting coupler with half thread end with the non-grouting splicing end of the splice splicing rebars by directly rolling thread end

3.5

the grouting coupler with rolling thread end after stripping rib

the grouting coupler with half thread end with the non-grouting splicing end of the splice by rib-stripped rolling straight thread

3.6

the grouting coupler with thread end after upsetting

b) the first type change of the grouting coupler with rolling thread end after stripping

rib, which is made by mechanical processing and splices rebars of standard yield strength 500 MPa and diameter 36 for the grouting end or 32 mm for the non-grouting end, is expressed as. GTJB5 36/32A.

5.1.1 The production of the grouting coupler shall meet the requirements of product

design.

5.1.2 The design of yield bearing capacity and tensile bearing capacity, after reckoning in the maximum negative tolerances at the positions of the middle of the whole grouting coupler and the discharging hole of the grouting coupler with half threaded end, is specified in JGJ 107.

5.1.3 The length of the grouting coupler shall be decided by tests and the length of

the grouting splicing end is preferably not less than 8 times of the diameter of rebars; the length of installation and adjustment of rebars shall be reserved on both sides of the middle axial anchor point, not less than 10 mm for the prefabricated end and not less than 20 mm for the on-site assembly end.

5.1.4 The number of shear slots shall meet the specifications of Table 1; the axial thickness of the boss on both sides of shear slots shall not be less than 2 mm.

Table 1 Numbers of shear slots

Diameter of rebars spliced/mm 12 to 20 22 to 32 36 to 40

Number of shear slots/nos ≥ 3 ≥ 4 ≥ 5

5.1.5 The wall thickness of the grouting coupler mechanically processed shall not be

less than 3 mm; the wall thickness of the grouting coupler cast shall not be less than 4 mm.