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

JG/T 161-2016

Replacing JG 161-2004

**Unbonded prestressing steel strand
(English Translation)**

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- 3.1 Terms and definitions

Foreword

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

This standard replaces JG/T 161-2004 "unbonded prestressing strand", compared with JG 161-2004, the main technical content changes as follows.

- Modify the terms and definitions, symbols (see 3, 2004 edition of 3);
- Added "General Requirements" (see 5);
- Removed "material" (see 2004 version 5.1);
- Modify the requirements of anti-corrosion lubricant coating (see 6.4, 2004 version 5.1.2);
- Modified jacket performance and test methods (see 6.5 and 7.4, 2004 version 5.1.3 and 6.3);
- Modify the value of friction coefficient and test methods (see 6.6 and Appendix B, 2004 version 5.2 and 6.4);
- Modify the test classification (see 8.1, 2004 version 7.1);
- Modify the inspection items (see 8.2, 2004 version 7.2);
- Remove the raw materials group batch, sampling and determination rules (see 2004 version 7.3);
- Modify the group approval, sampling and determination rules (see 8.3, 2004 version 7.4);
- Modify the storage (see 10.2, 2004 version 8.4);
- Removed the appendix "acceptance of acceptance and application instructions" (see the 2004 edition of Appendix A);
- Added Appendix "sheath tensile properties test method" (see Appendix A).

This standard proposed by the Ministry of Housing and Urban Standard and Design Institute.

This standard by the Ministry of Housing and Urban Construction Building Standardization Technical Committee centralized.

This standard was drafted. China Academy of Building Research, Tianjin Metallurgical Group Zhongxing Shengda Steel Co., Ltd., Liuzhou Olivier Machinery Unit Co., Ltd., Beijing Institute of Construction Engineering Co., Ltd., Qiu Mu Liuqiu Prestressed Machinery Co., Ltd., Jiangsu new prestressed building Engineering Co., Ltd., Hangzhou, Zhejiang anchor prestressed Co., Ltd., Tianjin Shengwen Prestressed Machinery Co., Ltd., Kaifeng strong anchor technology group Co., Ltd., Building Research (Beijing) Structural Engineering Co., Ltd., Tianjin Jin crown Grease Co., Ltd., Anhui Venus Prestressed Engineering Limited Company, Henan Hongqiao Windlass Co., Ltd., China Railway Electrification Bureau Group Beijing Construction Engineering Co., Ltd., Kaiyuan Municipal Gardens in Fujian Province limited Division, Fujian Mori Building Co., Ltd.

1 Scope

This standard specifies the terms and definitions of unbonded prestressing strand, symbols, markings, general requirements,, test methods, inspection rules Then, signs, packaging and quality documents, transport and storage.

This standard applies to post-tensioned prestressed concrete structures used in non-bonded prestressed steel wire.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 5224 strand for prestressed concrete GB/T 11115 polyethylene (PE) resin GB/T 17200 rubber plastic tensile, pressure and bending test machine (constant speed drive) Technical Specifications JG/T 430 non-bonded prestressed tendons with anti-corrosion grease

3 Terms and definitions, symbols

The following terms and definitions, symbols apply to this document.

3.1 Terms and definitions

3.1.1

Unbonded prestress strand unbondedprestressingsteelstrand the surface is coated with

anti-corrosion lubricant coating, sheathing, and prestressing strand with permanent sliding relative to sheathing.

3.1.2

Prestressing strand prestressingsteelstrand Strand twisted from cold drawn round wire.

3.1.3

Anticorrosion lubrication coating anticorrosionlubricatingcoating Applied to the surface of prestressed steel strand to prevent corrosion and reduce the friction between the strand and the sheath coating.

3.1.4

Sheathing

Wrapped in prestressed steel wire and anti-corrosion coating, to protect the prestressed steel strand from corrosion, and to prevent it from surrounding concrete Binding occurs between the sleeve.

3.1.5

Tensile yield stress tensilestressatyield During the stretching process, the initial stress of the specimen does not increase but the strain increases.

3.1.6

Tensile fracture nominal strain nominaltensilestrainatbreak Stretching process, the specimen fracture yield, the distance between the two units of the original length of the increment, expressed as a percentage (%).