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**High tensile strength steels for  
tower structure**

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In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

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## **Foreword**

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Iron and Steel Federation (JISF) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS G 3129:2005** is replaced with this Standard.

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# High tensile strength steels for tower structure

## 1 Scope

This Japanese Industrial Standard specifies requirements for hot-rolled steel products used mainly for transmission steel towers (hereafter referred to as steel products).

## 2 Normative reference

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS G 0320 *Standard test method for heat analysis of steel products*

JIS G 0404 *Steel and steel products—General technical delivery requirements*

JIS G 0415 *Steel and steel products—Inspection documents*

JIS G 0416 *Steel and steel products—Location and preparation of samples and test pieces for mechanical testing*

JIS G 3192 *Dimensions, mass and permissible variations of hot rolled steel sections*

JIS G 3193 *Dimensions, mass and permissible variations of hot rolled steel plates, sheets and strips*

JIS Z 2241 *Metallic materials—Tensile testing—Method of test at room temperature*

JIS Z 2242 *Method for Charpy pendulum impact test of metallic materials*

## 3 Symbol of grade, shape, and applicable thickness

Steel products are classified into two grades. Their symbols of grade, and shapes and applicable thicknesses are shown in Table 1.

**Table 1 Symbols of grade, shapes and applicable thicknesses**

| Symbol of grade | Shape       | Applicable thickness               |
|-----------------|-------------|------------------------------------|
| SH590P          | Steel plate | 6 mm or over up to and incl. 25 mm |
| SH590S          | Angle       | 35 mm or under                     |

## 4 Chemical composition

When tested in accordance with 11.1, the steel products shall satisfy the limit values of heat analysis given in Table 2.