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**JIS G 3192** : 2014  
(JISF)

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

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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 3192:2010** is replaced with this Standard.

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Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Ministers and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Dimensions, mass and permissible variations of hot rolled steel sections

## Introduction

This Japanese Industrial Standard has been prepared based on the first editions of **ISO 657-1** and **ISO 657-2** published in 1989, the first edition of **ISO 657-5** published in 1976, the first editions of **ISO 657-11**, **ISO 657-15**, **ISO 657-16**, **ISO 657-18** and **ISO 657-19** published in 1980, and the first edition of **ISO 657-21** published in 1983 with some modifications of the technical contents.

The portions with continuous sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JA.

## 1 Scope

This Standard specifies the appearance, shapes and permissible variations thereof, and the dimensions, mass and their tolerances of hot rolled steel sections (hereafter, referred to as “steel sections”).

The application of this Standard is specified in respective product standards.

NOTE : The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 657-1:1989 *Hot-rolled steel sections—Part 1: Equal-leg angles—Dimensions*

ISO 657-2:1989 *Hot-rolled steel sections—Part 2: Unequal-leg angles—Dimensions*

ISO 657-5:1976 *Hot-rolled steel sections—Part 5: Equal-leg angles and unequal-leg angles—Tolerances for metric and inch series*

ISO 657-11:1980 *Hot-rolled steel sections—Part 11: Sloping flange channel sections (Metric series)—Dimensions and sectional properties*

ISO 657-15:1980 *Hot-rolled steel sections—Part 15: Sloping flange beam sections (Metric series)—Dimensions and sectional properties*

ISO 657-16:1980 *Hot-rolled steel sections—Part 16: Sloping flange column sections (metric series)—Dimensions and sectional properties*

ISO 657-18:1980 *Hot-rolled steel sections—Part 18: L sections for ship-building (metric series)—Dimensions, sectional properties and tolerances*

ISO 657-19:1980 *Hot-rolled steel sections—Part 19: Bulb flats (metric series)—Dimensions, sectional properties and tolerances*

ISO 657-21:1983 *Hot-rolled steel sections—Part 21: T-sections with equal depth and flange width—Dimensions* (overall evaluation: MOD)

The symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

## 2 Normative reference

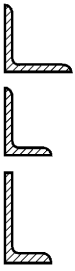





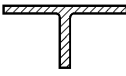
The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

*JIS Z 8401 Guide to the rounding of numbers*

## 3 Classification and sectional shape

The classification and sectional shapes of steel sections shall be as given in table 1.

**Table 1 Classification and sectional shapes of steel sections**

Classification		Sectional shape diagram
Angles	Equal-legs	
	Unequal-legs	
	Unequal-legs and unequal thickness	
I-sections		
Channels		
Bulb flats		
T-sections		
H-sections <sup>a)</sup>		
CT-sections <sup>b)</sup>		
<p>Notes <sup>a)</sup> Equal outer dimension H-sections are included in H-sections. An equal outer dimension H-section means the H-section whose depth is constant irrespective of the thickness of the flange.</p> <p><sup>b)</sup> A CT-section is an H-section whose web is cut out. Equal outer dimension CT-sections are included in CT-sections.</p>		

## 4 Expression of dimensions and marking

The dimensions of steel sections shall be expressed by each sectional dimension in millimetre and the length in metre. However, the length may be expressed in millimetre upon the agreement between the purchaser and the manufacturer.