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☞ JIS B 4651 : 1998

Combination wrenches

ICS 25.140.30

Descriptors : wrenches, hand tools, spanners

Reference number : JIS B 4651 : 1998 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently JIS B 4651:1995 is replaced with JIS B 4651:1998.

In this revision, Annex to this Standard has been prepared based on corresponding International Standards without any modification of technical contents to conform between JIS and ISOs. Further, to make difference between them minimize, a partial content of JIS B 4651:1995 has been amended in the body of this Standard.

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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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Combination wrenches

Introduction : This Standard is Japanese Industrial Standard prepared based on the International Standards shown in the Remarks, providing the classification and grade specified conventionally in Japanese Industrial Standard and their shape and dimensions, quality, inspection, designation of products and marking in the body, and without modifying their technical contents in Annex, while supplements the provisions not specified in the corresponding International Standards (appearance, inspection, designation and marking) as a part of Japanese Industrial Standard.

The provisions or phrases underlined with dots in Annex are the matters not specified in the corresponding International Standards.

Remarks : The International Standards corresponding to this Standard are as follows :

ISO/DIS 691: 1996	<i>Assembly tools for screws and nuts—Wrench and socket openings—Tolerances for general use</i>
ISO 1703 : 1983	<i>Assembly tools for screws and nuts—Nomenclature</i>
ISO 1711 : 1975	<i>Hand operated wrenches and sockets—Technical specifications</i>
ISO 3318 : 1990	<i>Assembly tools for screws and nuts—Double-headed open-ended wrenches, double-headed ring wrenches and combination wrenches—Maximum widths of heads</i>
ISO 7738 : 1990	<i>Spanners and wrenches—Combination wrenches—Minimum length and thickness of heads</i>

1 Scope This Japanese Industrial Standard specifies wrenches combined with wrench and offset wrench to be used mainly for attaching and detaching of bolts and nuts.

2 Normative reference The following standard contains provisions which, through reference in this Standard, constitutes provision of this Standard. If the indication of the year of coming into effect (or the year of publication) is given to the referred standard, only the edition of indicated year constitutes the provision of this Standard but the revision and amendments made thereafter are not applied.

JIS B 1002 : 1985 *Dimensions of widths across flats*

3 Shape and dimensions The shape of combination wrenches shall be preferably in accordance with Fig. 1. The dimensions shall be in accordance with Tables 1 and 2.

Further, the inclination of box end, depending upon agreement between the purchaser and manufacturer, may be reversed to Fig. 1.

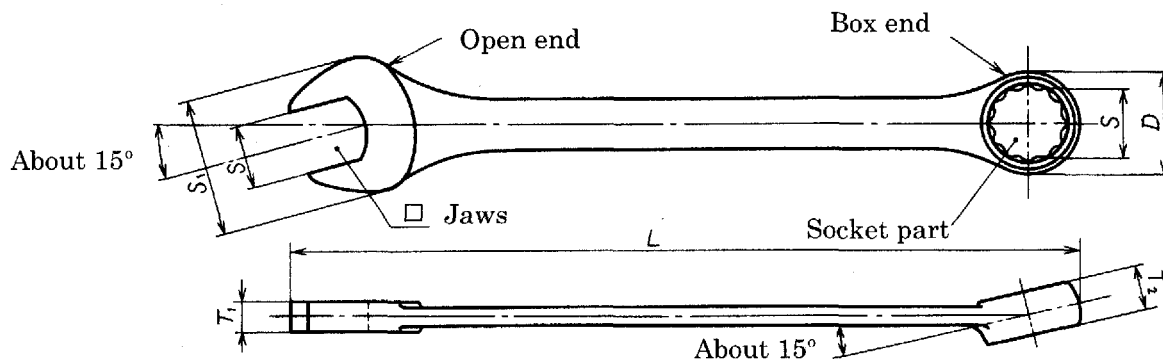


Fig. 1 Shape

Table 1 Tolerance of width across flats

Unit : mm

Designation	Tolerance	
	Min.	Max.
5.5	+ 0.02	+ 0.12
6, 7, 8, 9	+ 0.03	+ 0.15
10, 11	+ 0.04	+ 0.19
12, 13	+ 0.04	+ 0.24
14, 15, 16	+ 0.05	+ 0.27
17, 18	+ 0.05	+ 0.30
19, 21, 22, 23, 24	+ 0.06	+ 0.36
26, 27, 29, 30, 32	+ 0.08	+ 0.48
35, 36, 38, 41, 46, 50	+ 0.10	+ 0.60
54, 55	+ 0.12	+ 0.72