

JIS

JAPANESE INDUSTRIAL STANDARD

Steel Straightedges

JIS B 7514 –1977

Translated and Published

by

Japanese Standards Association

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

JAPANESE INDUSTRIAL STANDARD

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Steel Straightedges

B 7514-1977
(Reaffirmed: 1993)1. Scope

This Japanese Industrial Standard specifies the steel straightedges of rectangular section and I section, hereinafter referred to as the "straightedges".

2. Definitions

The principal terms used in this standard shall be defined as given in Fig. 1.

Applicable Standards:

JIS B 7502-Micrometer Callipers for External Measurement

JIS B 7503-Dial Gauges Reading in 0.01 mm

JIS G 4401-Carbon Tool Steels

Reference Standards:

JIS B 7506-Gauge Block

JIS B 7511-Precision Levels

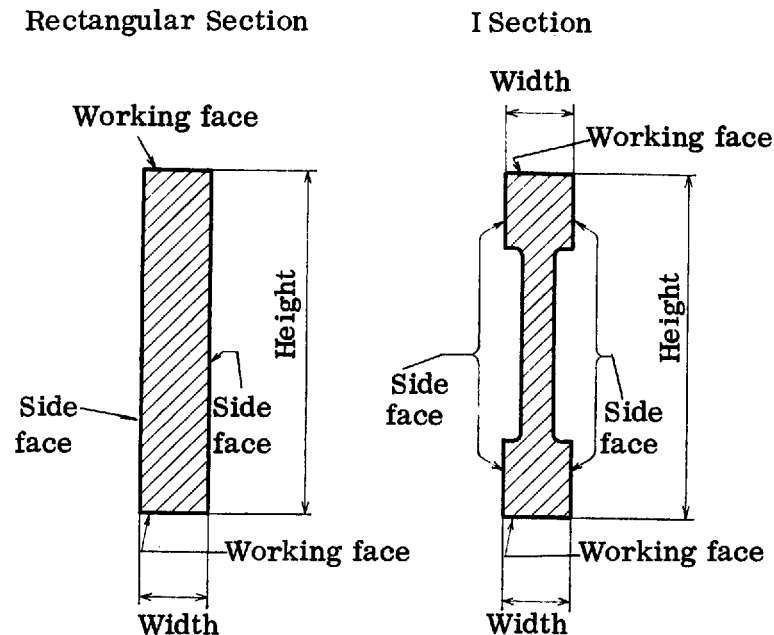
JIS B 7519-Microindicators

JIS B 7520-Indicating Micrometers

JIS B 7523-Sine Bars

JIS B 7538-Autocollimators

Fig. 1



3. Grades

The straightedges shall be, according to sectional dimensions and dimensional accuracy, classified into two: Grade A and Grade B.

4. Dimensional Accuracy

4.1 Straightness and Height Unevenness of Working Face The tolerances on the straightness and on the height unevenness of working face of the straightedge shall conform to Table 1.

Table 1. Straightness and Height Unevenness
of Working Face

Unit: μm

Effective length (mm)			300	500	1000	1500	2000	3000
Grade	A	Straightness	3	4	6	8	10	14
		Height unevenness						
	B	Straightness	10	14	24	34	44	64
		Height unevenness						
Special Grade (For refer- ence) (1)	Straightness		1.6	2	3	4	5	7
	Height unevenness							

Note ⁽¹⁾ The Special Grade shall be such as to have the accurate plane to be used for measuring the accuracy of Grade A or Grade B and to have the dimensional accuracy equivalent to that of reference straightedge, and the above requirements for that grade are given for reference.
The dimensions in Table 3 are not applied to the straightedge of Special Grade.