

JIS

JAPANESE INDUSTRIAL STANDARD

Slotted head wood screws

 **JIS B 1135**—1995

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



1. **Scope** This Japanese Industrial Standard specifies the slotted head wood screws (hereafter referred to as "wood screws") made of steel, stainless steel and brass for general use.

Remarks: The standards cited in this Standard are given in the following:

JIS G 3505 Low carbon steel wire rods

JIS G 4315 Stainless steel wires for cold heading and cold forging

JIS H 3260 Copper and copper alloy wires

2. **Classification** The wood screws are classified into three types of round head wood screws, countersunk head wood screws and raised countersunk head wood screws.

3. **Strengths**

3.1 **Torsional strength** The wood screws, when tested in accordance with the specifications of 7.1, shall not be broken at the neck between the head and the body before the threaded portion is broken.

3.2 **Tensile strength** The wood screws, when tested in accordance with the specifications of 7.2, shall not be broken at the neck between the head and the body before the threaded portion is broken, and the tensile strength ⁽¹⁾ shall be 392 N/mm² or over for the steel wood screws, 441 N/mm² or over for the stainless steel wood screws and 343 N/mm² or over for the brass wood screws.

Note ⁽¹⁾ The tensile strength shall be obtained as

$$\frac{\text{Tensile load (N)}}{3.1416 \times \left(\frac{\text{nominal diameter} \times 0.65}{2} \right)^2 (\text{mm}^2)}$$

4. **Shapes and dimensions** The shapes and dimensions of the wood screws shall be in accordance with Table 1.

Table 1. Shapes and dimensions

Type	Shapes and dimensions
Round head wood screws	Attached Table 1
Countersunk head wood screws	Attached Table 2
Raised countersunk head wood screws	Attached Table 3

5. **Appearance** The surface of the wood screws shall be smooth, and be free from harmful defects in use such as cracks, flaws, burrs and flashes.

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6. **Materials** The materials of the wood screws shall generally be in accordance with Table 2.

Table 2. Materials

Division	Material
Steel wood screws	SWRM8, SWRM10, SWRM12 and SWRM15 of JIS G 3505
Stainless steel wood screws	JIS G 4315
Brass wood screws	C2700W of JIS H 3260

7. Tests

7.1 **Torsion test** The torsion test shall be performed by clamping the threaded portion of wood screw so that at least two complete threads may be left on the head side of the screw, and by turning the head with a screw driver.

7.2 **Tension test** The tension test shall be performed by applying the tension load in axial direction, attaching an appropriate jig so that two or more of complete threads are left on the head side of the wood screw.

8. **Inspection** The inspection of the wood screw shall be in accordance with the following. However, the sampling inspection system in the lot inspection shall be as agreed between the purchaser and supplier.

- (1) **Torsion inspection** The torsion inspection shall be carried out in accordance with the method specified in 7.1, and the results shall conform to the requirements of 3.1. However, this inspection may be omitted as agreed between the purchaser and supplier.
- (2) **Tension inspection** The tension inspection shall be carried out in accordance with the method specified in 7.2, and the results shall conform to the requirements of 3.2. However, this inspection may be omitted as agreed between the purchaser and supplier.

Further, when this inspection can not be carried out on account of dimensional reasons, the tensile strength of the material used for the products is to be examined, as required, and it may be considered as acceptable if the values have passed the requirements of 3.2.

- (3) **Shapes and dimensions inspection** The shapes and dimensions inspection shall be carried out by the direct measurements, limit gauges and other method, and the results shall conform to the requirements of 4.
- (4) **Appearance inspection** The appearance inspection shall be carried out visually, and the results shall conform to the requirements of 5.

9. **Designation** The wood screws shall be designated by the No. of this Standard ⁽²⁾, type ⁽³⁾, nominal diameter × length (*l*) and material.

Notes ⁽²⁾ The No. of this Standard may be omitted, unless particularly required.