What Are Wood Screws Used For?

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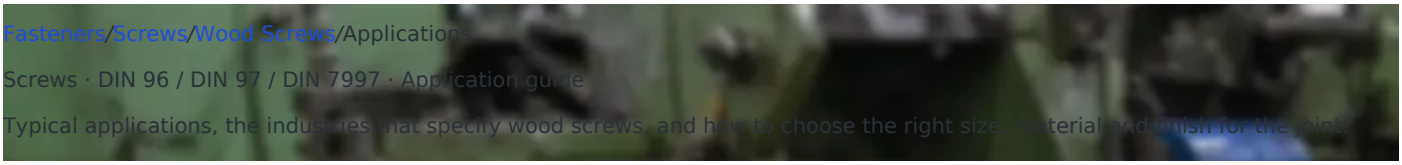

Wood Screws are used for fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. They are manufactured to DIN 96 / DIN 97 / DIN 7997, and selection is driven by the screw size, the fit and tolerance the assembly requires, and the service environment.

Primary duty
: Fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole

Governing standard
: DIN 96 / DIN 97 / DIN 7997

Screw size range
: 2 to 8

Category
: Screws

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.

Wood Screws are selected when an assembly calls for fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. This application guide to the DIN 96 / DIN 97 / DIN 7997 type covers concrete end-uses, the specification checklist, correct installation, and where an alternative fastener performs better. Stocked across roughly 2 to 8, they cover general to heavy-duty work.

Typical Applications for Wood Screws

The most common settings where these are specified:

- **Appliances & consumer goods:** high-volume assembly with power tools and consistent seating.
- **Machine guarding & panels:** removable access covers that are opened for service.
- **Joinery & fit-out:** hinges, brackets, handles and hardware into timber.
- **Furniture assembly:** fixing into solid wood and wood-based board.
- **General machine building:** fastening covers, brackets, motors and sub-assemblies on production equipment.

How to Specify Wood Screws for Your Application

- **Size:** Match the nominal size to the mating thread or hole. This product spans 2–8; check the full table below for the exact dimensions of each size.

- **Drive & head:** Pick the drive (socket, cross, slot) and head style for the tool access and seating surface; a recessed drive resists cam-out under power tools.
- **Environment:** For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.
- **Standard:** This product is supplied to DIN 96 / DIN 97 / DIN 7997. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Installation & Assembly Practice

- Match the driver exactly to the recess (PH ≠ PZ; hex key sizes per ISO 2936) and keep the tool axial — side load is the main cause of stripped drives.
- In tapped holes, engage a thread length of at least 1× the nominal diameter in steel, 2× in aluminum.
- Set power tools to a torque that seats the head without embedding it into the mating surface.

Common Selection Mistakes with Wood Screws

- Under-sizing the drive for the installation torque — a small recess at high torque strips before the screw is seated.
- Using a countersunk head in thin sheet where the countersink removes most of the load-bearing material.
- Specifying stainless in high-strength duty: A2-70 is roughly class 7 steel, not a 10.9 substitute.

Where Wood Screws Are Not the Right Choice

Not for high-preload structural joints (use a property-class bolt and nut), and not in thin sheet where a self-drilling or self-tapping type suits better.

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (DIN 96 / DIN 97 / DIN 7997)

Nominal diameter (mm)	Head diameter dk (mm)	Head height k (mm)	Head type	Pilot hole (mm)	Common length range (mm)	Reference standard	Notes
2.0	3.8	1.2	Countersunk	1.2	10~25	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
2.5	4.7	1.5	Countersunk	1.5	12~30	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
3.0	5.6	1.65	Countersunk	1.8	12~40	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
3.5	6.5	1.93	Countersunk	2.0	16~50	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
4.0	7.5	2.2	Countersunk	2.3	16~70	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
4.5	8.5	2.5	Countersunk	2.5	20~80	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
5.0	9.2	2.5	Countersunk	3.0	20~100	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
6.0	11.0	3.0	Countersunk	3.5	30~120	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point
8.0	14.5	4.0	Countersunk	5.0	40~160	DIN 97 / DIN 7997	Slotted/cross wood screw, gimlet point

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.

1. 

01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.

2. 

02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.

3. 

03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.

4. 

04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What material should Wood Screws be for outdoor use?
For damp, coastal or chemical environments specify A4 (316) stainless or a suitably coated steel. For indoor or dry use, A2 (304) stainless or zinc-plated steel is normally adequate.

Are Wood Screws made to a recognized standard?
Yes — they are manufactured to DIN 96 / DIN 97 / DIN 7997, so dimensions are interchangeable between suppliers when you quote the standard on your order.

What are Wood Screws used for?
Fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. They are supplied to DIN 96 / DIN 97 / DIN 7997.

Which industries use Wood Screws?

They are commonly specified in fabrication & metalwork, electronics & enclosures and appliances & consumer goods, among other sectors.

Can I get a quote for Wood Screws in the size and material I need?

Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: Wood Screws — specifications & sizes

Wood Screws Specification Guides

- A4 stainless Wood Screws

Related Fastener Applications

- Button Head Socket Screws applications
- Cheese Head Screws applications
- Countersunk Socket Screws applications
- Fine Adjustment Set Screws applications
- Heavy Hex Socket Head Cap Screw — GB/T 1228 / ASTM A325 (Series 046) applications
- Hex Socket Cone Point Set Screw — GB/T 77 / ISO 4026 (Series 022) applications