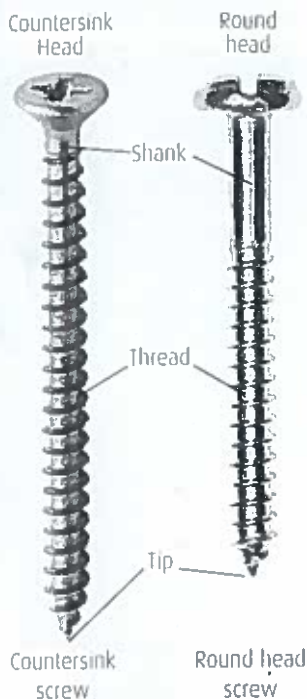


SCREWS AND SCREWDRIVERS



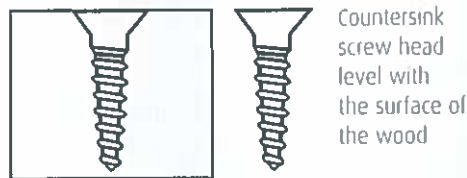
SCREWS

Screws are an effective way of joining two or more pieces of wood together on either a temporary or permanent basis – they are only joined permanently when glue is applied. Screws are stronger, neater and more accurate than nails and can be easily withdrawn, meaning the parts can be separated without damage.

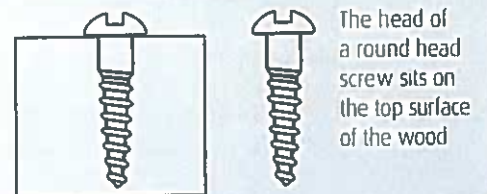
The two most common types are **Countersink** and **Round head** screws which are shown below. You will notice that the two wood screws are the same basic shape, with the main difference being the shape of the head of the screw.

SCREW HEADS

Countersink Screw



Round head Screw



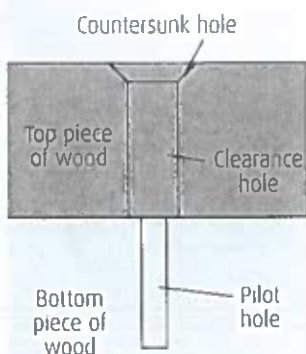
The countersink screw is the most commonly used general purpose screw in the workshop. A countersink rose creates a chamfer in the entrance to a drilled hole, allowing a countersink screw head to go level or slightly below the surface of the material. As a result, countersink heads are commonly used in situations where the screw must be partially or fully concealed or where a flat surface must be maintained.

The round head screw is also known as the domed head screw. The round head sits on the surface of the material unlike the countersink head (as shown). A common use for a round head screw is for attaching fittings to wood, for example, a tee hinge on a shed door or a latch on a garden gate. Round head screws can look quite decorative, especially if they are made from brass.



Procedure for driving in a Wood Screw

When driving a screw into a piece of wood, care should be taken not to split the wood. The following procedure is recommended when joining two pieces of wood. This makes it easier to drive in the screw and prevents the wood from splitting.



Stage one
A **clearance hole**, which is larger than the thread of the screw, is drilled into the top piece of wood.

Stage two
Next, a **pilot hole**, which is smaller than the diameter of the thread of the screw, should then be drilled into the bottom piece of wood.

Stage three
If the screw is required to lie flat with the surface of the wood, the top of the clearance hole should be countersunk using a countersink rose.

DON'T FORGET



When selecting the length of screw required for the job, you should always consider the thicknesses of the two pieces of wood, so that the screw does not penetrate through the underside.

DRIVE AND SCREWDRIVER TYPES

If you look closely at the head of a screw, be it a round head or a countersink, you will see it has a straight slot or a cross shape. This is known as the type of **drive**. The end of a screwdriver is made to fit the type of drive. Screwdrivers come in many shapes and sizes depending on their intended use, in terms of length of screw and type of drive. The two main types of screwdrivers we are going to look at in this chapter are the **straight head** and **cross head**.

contd