

Drilling Wood Basics



Boring clean, crisp, accurate holes in solid wood and sheet goods is one of those things that seems simple until you try it. But experience often proves how elusive success can be. You need to be intentional to avoid splintered edges and ragged holes, and this comes down to two basics.

The first is equipment. You'll never drill clean holes in wood without a bit that imparts some kind of slicing action. Ordinary twist bits are fine for drilling metal, plastic and non-critical holes in wood, but they don't have the design features necessary to create crisp results, especially in veneered plywoods. For this you need a bit that acts like a rotating hand plane, removing shavings of wood instead of sawdust. Ideal bit design also depends on the size of hole you're boring and the situation involved.

For holes up to 3/8" in diameter, you can't beat the performance of brad-point bits. These have a spiral body like twist bits do, but include a sharp central spur to keep the bit from wandering side to side. Two, tiny knife-like cutters score the wood around the perimeter of the hole before the middle part of the bit augers out shavings. Since it's impractical to sharpen brad-point bits in a home workshop, it makes sense to pay more for high-speed steel versions rather than cheaper, high-carbon steel brad points. Besides lasting longer, HSS has sharper, cleaner cutting edges, even when new.

There are two reasons why Forstner bits are the best way to bore larger holes in wood. As with brad-point bits, they have a central spur and sharp cutting edges that create perfectly clean results. This design also means the bits are very stable. They don't wander from side to side, so they're

ideal when drilling a series of overlapping holes for making mortises or large pockets in wood.



Got European hinges to install? A specialized type of Forstner bit makes this job easier. The best are not only sized to create the diameter of holes required (typically 35mm), but the spurs and cutting edges are made of carbide

to last a long time, even when boring in abrasive materials like particleboard and plywood.

Sometimes it's essential to bore large holes with a very precise diameter and spade bits are unbeatable in this application, despite the widespread prejudice against them. By grinding the edges of the bit you can tailor the size of holes bored to perfectly match the diameter of dowels or decorative plugs you're using. A few seconds on a grinding wheel also renews cutting edges so even the dullest spade bit drills like new.

Even with the right drill bits on your side, you've still got to use a sacrificial backer board to support your workpiece to prevent splinters when boring all the way through wood. It's also essential to keep drill bits moving continuously through wood to avoid overheating the metal. Get these basics straight and great holes are virtually guaranteed.

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