
Subject: Another question on router gear
Posted by [lon](#) on Tue, 06 Jan 2004 05:26:13 GMT
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In the article below called Methods of work, Bill mentions an 'upcut' router bit. I also saw the term in the current issue of Workbench magazine. What is the significance of the term 'upcut' for router bits? thanks

Subject: Re: Another question on router gear
Posted by [Bill Martinelli](#) on Tue, 06 Jan 2004 15:35:48 GMT
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An upcutting tool bit refers to the angle of the grind on the side flute. The up cutting bit pulls the chip load out of the cut as it turns. This is particularly good when making deeper cuts as the chips are pulled out of the cut instead of being packed in like a straight flute cutter. This may not be the best choice of cutter if you are routing delicate veneer though. This bit will want to pull the top layer away from the substrate and cause chips and splinters. For this a straight cutter or down cut may work better. On the other side of the coin. If you use a router table. Choosing an upcutting tool bit now pulls the work down against the table. You can then work with the delicate veneer on the top side and the cutter will then have less tearout. It can get confusing but you just have to think in terms of what is the best direction for the cutter to be forcing the tearout. You can use standard 1/2" shank, two flute end mills as an upcutting router bit. available in high speed steel or solid carbide. Bill

Subject: Re: Don't listen to Martinelli, upshear means,.....
Posted by [Bill Epstein](#) on Tue, 06 Jan 2004 23:38:16 GMT
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....the pitch of the cutting flutes pulls the waste out of the cut. What's that? Ya say that's what he said? BUt what about that decalate veneer stuff? Okay. You only use an upshear for cutting grooves in wood that don't go all the way through the piece but travel the length. That's called a Dado. Unless the groove is for a tenon in which case it's called a mortise which is actually a stopped dado. But I digress..... These are cutting actions as opposed to the trimming action Bill was referring to. Then you definitely want the downshear which lets the substrate support the edge of the veneer as you cut and prevents tearing of the decalate veneer.

Subject: Word: [Re: Don't listen to Martinelli,]

Posted by [lon](#) on Wed, 07 Jan 2004 03:58:41 GMT

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This link talks about when to use upspirals and does mention problems with veneer unless the router is table mounted. So you are both right I guess. :-)

Veneer stuff. I love it.
Upspiral Info from Carbide Specialties

Subject: Re: waste not, ye have little time to do things twice

Posted by [Bill Martinelli](#) on Thu, 08 Jan 2004 00:35:08 GMT

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Hi Lon, Always lots of cat's to skin and as many ways to trim. I always cut holes in the baffle or anywhere for that matter after the veneer is on the substrate. (always) That my choice because the last thing I want to do is, cut a hole in a panel, and then cut another hole in the panel in the same spot as the last hole! The precious veneer is less apt to chip, flake or cause some other communicable disgrace to your project if the stuff is locked down too. So That the only reason I wouldn't use an upshear cutter on good veneer. Because there is too much time invested at this point to pull off a flake and make repairs. Even the best glue (urea resin) only glues the surface and if the veneer has enough figure you can lift a flake and still be glued down. If your routing pockets. deep dodo, rabbits or other furry creatures the upshear cutter pulls the waste out of the kerf like a good Hoover. wait... that's what he said. Bill
