

Cutting and Boring Tools For The Lathe

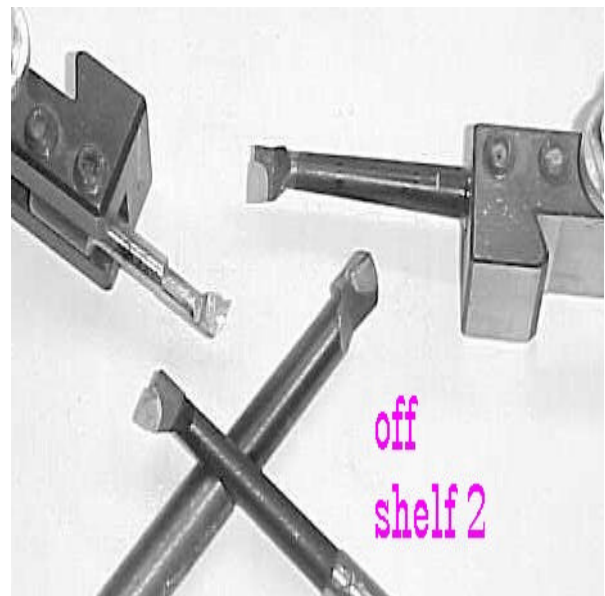
While you can buy most of these tools, some you must reconfigure for use in cue building. Some you must actually make yourself or have made for you.

TOOLS YOU CAN BUY AND USE OFF THE SHELF



Carbide tipped 1/4" square shank [or bigger] cutting tools can be bought from any supplier of metal working tooling. Spend \$5 to \$10 depending on shank size and quality. If these go dull, they can be resharpened. These tools will be used for facing or turn or turning work. Tool marked * is 60 degree tool reground to a more rounded point. Tools marked + are 1/4 inch shank left hand facing tools. The tool marked # is a 3/8 inch shank right hand facing tool.

Carbide tipped round shank boring bars can also be bought. You will need several of these in various sizes. Pay attention to the minimum bore size and depth of bore when you buy these. \$10 to \$20 each To hold this tool in your Aloris type tool post you need a special holder for boring bars. See next section for more information on the Aloris style tool post. These tools you will use to bore holes to an exact inside diameter.



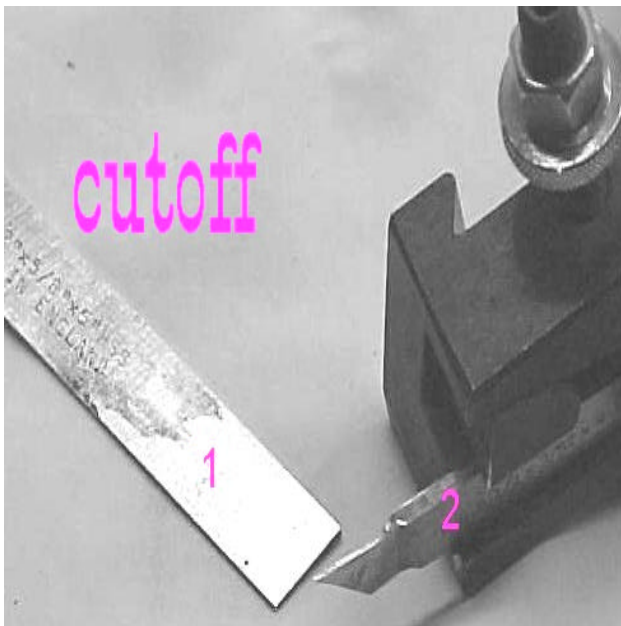


Five fluted solid carbide center lap [tool 2], 1/4" diameter with a 60 included angle at the tip which I use for cutting ALL male wood threads, regardless of number. Cost, about \$20. Also available in most hardware stores in a HSS two fluted 60 [tool 1] pointed cutting tool that you can use to cut the male wood threads. Cost, less than \$5 but unfortunately this tool in HSS dulls quite quickly so buy the solid carbide one. Tool 3 is also solid carbide and has twenty flutes but does not cut any better than the one with just 5 flutes.

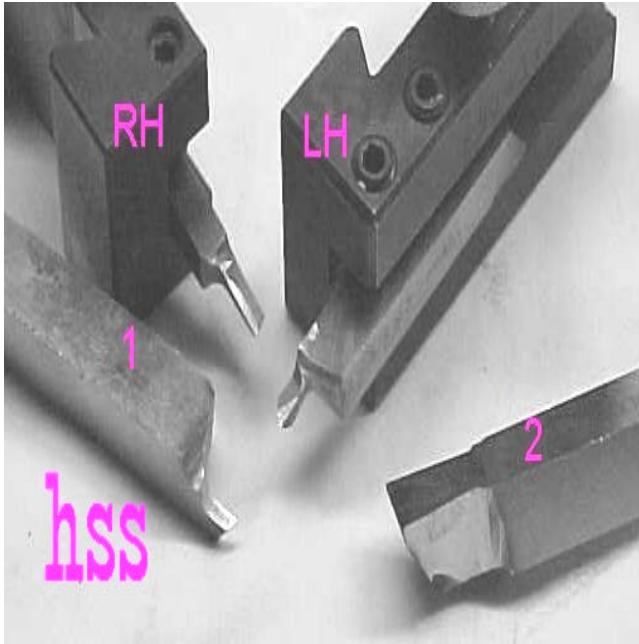
You will need some tools to do your turning with if you decide to use a laminate trimmer as I do. 1/4 inch shank, 1/2 inch diameter tools such as the ones in the photo are perfect.



TOOLS YOU CAN BUY BUT MUST ADAPT TO CUE BUILDING



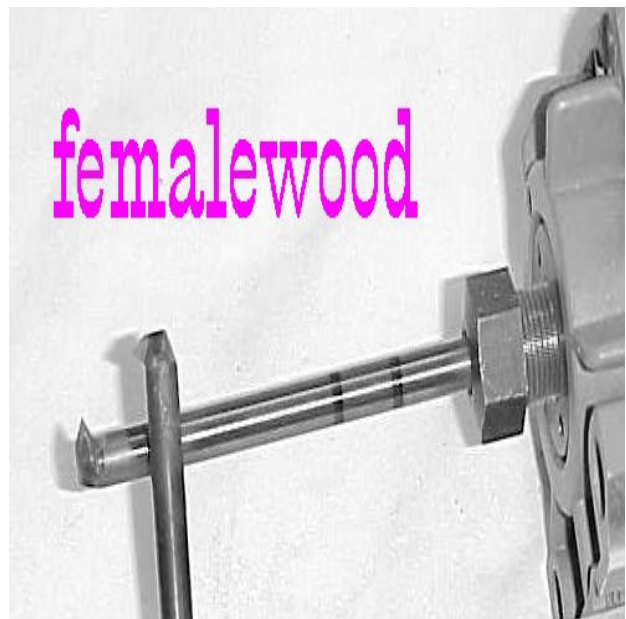
HSS [High Speed Steel] cut off blades which you must grind before you can use them. Again a special holder is needed for your Aloris style tool post. This tool is used to slice off ring work and other cut off operations. Tool 1 is what it looks like when I get it. Tool 2 is in the holder and as you see I have ground it thinner and to a definite shap.



1/2" square HSS tool blanks [or smaller] which I grind to become my universal wood cutting too. I cut all tenons with this tool. RH means the tool cuts left to right. LH means the tool cuts right to left. Tool 1 has had it. It started out looking, as did tool RH and tool LH looking just like tool 2. Tool 2 is still being ground down to its working size.

TOOLS THAT I HAVE HAD TO MAKE

FEMALE WOOD THREADING TOOL: Take a 4" by 1/4" piece of carbide [HSS is not stiff enough] and BRAZE a solid carbide blank [small rectangular pieces of carbide] to the end of it. Now a single [not two] 60 degree point is ground on it and it is ready to run in the laminate trimmer to cut the internal wood thread for my wooden jointed cues. The tool in the laminate trimmer has now cut 77 perfect females aspect of the wooden threaded joint in the butts of 77 cues and is still as good as ever. The tool leaning on it has never been used and is viewed from underneath. As you can see this is a single pointed too. Tried one with two points and it did not work as well as the single pointed variety. Don't know why, just reporting results.





BORING TOOL FOR METAL STUDS:
Again, take a 4" by 1/4" piece of carbide and braze a solid carbide blank to the end of it. Now grind it so that you have a good edge on one side for boring. The first 3/4" is cut to a diameter of 0.200". With this boring bar it is possible to bore a perfect hole in which to press fit a stud as small as 0.300". The tool leaning on it is a commercially bought one that I have not tried yet. As it comes the minimum diameter that you can bore with is seems to be around 0.325". With some re-grinding I think that it could be useable.