Dry Grind vs. Wet Grind
For Sharpening Lathe Tools

During my research on this topic I found there are plusses and minuses of each type. I will try to list what others folks have been saying about both systems.

I have a high speed (3750 rpm) grinder inherited from my father. He was mostly a metal worker. Anyway the price was right. I also purchased the Wolverine system. So as not to burn the lathe tools I turn the grinder on wait for full speed then turn it off wait for it to slow a bit then do the grinding. It works reasonable well for me because I am slow to spend money and am not a production turner. When the time is right for me I probably go for a better system.

Here is what I have found out so far about grinding and wet vs. dry:

Dry:

Plus:

1. The learning curve is relatively quick.
2. Relatively low cost low speed (1750 rpm) grinders available.
3. Reasonable cost jigs available especially for grinding gouges.
4. I put indicators on my jigs for each gouge so the set-up is quick and consistent.
5. Regrinding is relatively quick except for the speed control for my high speed grinder.
6. I made plywood jigs for my skew chisels and squared off scraper so I get relatively consistent quick grinding results.

Minus:

1. I need to sharpen more frequently then my friends with wet grinders.
2. The woods surface finish is not always as clean.
3. I have to be careful not to burn the sharp edge which greatly shortens tool sharpness life.
4. The grinding dust can contaminate the air and surrounding surfaces.
5. I keep mine well away from the lathe and other critical equipment.

Wet:

Plus:

1. No problem with burning the tools sharp edges.
2. The tools stay sharper longer wit both grinding and honing.
3. The woods surface finish is often much cleaner requiring less sanding.
4. Less time spent sharpening tools.
5. More consistent repeatable edge configuration. Going back to the lathe with a resharpened tool with the same edge configuration means one doesn't need to relearn the tools turning characteristics.
6. The tools edges are actually sharper after honing. All grinding leaves a saw tooth edge, with the wet grinder followed with honing the saw tooth edge is much finer hence sharper and stronger. This leads to longer tool life and a cleaner wood surface.
7. No grinding dust in the air or on other nearby surfaces. It's all in the wet tank.
8. The jigs are very repeatable one set up. There is less chance for error as the contact points are closer to the grinding wheel.

Minus:

1. It does take some time to learn the system.
2. The BIG minus for me is the high cost for a wet grinding/honing system and the high cost of all the required jigs.
3. One friend spent around $800 for everything. I am not sure his wife knows yet but he says she sure loves all the very sharp kitchen knives and scissors.

Other comments:

Yes, I probably will get a wet grinding system someday. But in the meantime I am not a production turner and am willing to spend the extra time required to sharpen the tools and in the extra sanding often required. I do occasionally hand hone some tools.

I am aware of three dry grinding systems, The Wolverine, Woodcut Tru-Grind, and a Penn State system. There are probably more. The Wolverine system has worked will for me especially with my home made jigs.

I believe the Tormek is the Cadillac of the wet grinders. Jet and Grisley also make them and there are probably others. I am unsure of the cost/quality relationships of them.

Have fun turning.