



Using the DARKSIDE™

Be stingy with the polish! For use with diamond polish, you can use a tiny bit of spray compound, or a THIN SPARSE amount of the regular compound, or, with a tissue wipe on a thin film of WD40 or any common oil type extender, then wipe dry. Wipe on a THIN film of diamond powder. Wipe clean occasionally to remove stone dust buildup, and repeat as needed to maintain polishing speed. Slower speeds are used than with a BATT™. Try 200-400 RPM until you get the feel of the lap.

For oxide use, either use it right out of the box with a THIN, dilute slurry of the oxide polish, or, if changing from diamond to oxide for that pesky quartz, wash the lap with a little detergent, rinse, and begin polishing. After oxide use, if you want to go back to diamond, rinse the lap, and prepare as above with the oily tissue to "polarize" the lap for diamond.

You are going to find from the following entries that Cerium Oxide on a Darkside™ Lap is the Magic Bullet for the quartzes. Some of the work presented by Professional cutters was done on a CeO/Darkside™ DIRECTLY from a #600 lap. Yes, a two-lap stone. This was done by experienced people who learned how to "listen to the lap". When changing polishes from diamond to oxides or back, this **does NOT mean you can break the rules about grit sizes.** This is a polishing lap, designed for submicron particles in the typical polishing grit sizes: Any oxides, or diamond in the usual polishing sizes from 50-200K.

WHAT IT IS:

The DARKSIDE™ is a lightweight lap, made of the specially developed material coated onto an aluminum base plate, then machined both sides for flatness. For its thickness, it is surprisingly rigid.

Because of the two-ply construction, these laps require twice the labor operations to manufacture, but it least it finally gets away from those horrible tin prices.

The Darkside™ is a RESURFACABLE LAP. Within reason, if a lap jam does not destroy the lap, you get another chance or two. If a stone fractures and chips embed, the Darkside can be resurfaced. Once production started, I increased the thicknesses of both the metal backing and the polymer composite layer to allow this, as well as to give the lap a stiffer "feel" and quieter running. I can resurface your Darkside, or any local machine shop can. Carbide tooling is required. Single point or PCD diamond is strongly suggested for best finish.

WHAT IT ISN'T:

It is not an off-the-shelf commercial material. Like BATT™ and BA5T™, it was **designed for this specific application**, Made Here, and has no other readily apparent commercial uses.

It contains no reactive species, nor is its precursors listed carcinogens.(I want to survive making the stuff! Just as with my metal alloys, since I have to make and handle thousands of them, you can BET I watch toxicity issues! Any such issues will get me first.)

Why it works:

Like all Gearloose laps, the polishing mechanism relies on surface complexity for polish retention, and lubricity for reduced heating and higher polishing efficiency. Some users have gotten three pavilions done before needing to add more diamond. Because the composite contains carbon, it has a natural affinity for diamond, but the hydrophilic domains GREEDILY accept oxide polishes-Use them SPARINGLY.