

MATRIX™ Ceramic Polishing Laps

User's Instructions - Information from Gearloose



The Matrix™ is a microporous ceramic composite lap for polishing with Diamond/Oil, Oxide/Water, or other systems.

“The Ceramic Lap with good manners”

Ceramic laps have been known for sharp facets and good polishing properties...if someone can get one to work. Rather unforgiving, and relying on critical thin film effects, when operated by the right person under the right conditions, most agree they produce perfect finishes.

The rest of us would like these results with a more forgiving version of the lap, that being a wider band of operating parameters.

The "MATRIX™" Ceramic Composite lap has a self-renewing microtexture and surface complexity that allows better polish retention and a less critical fluid film thickness. The MATRIX™ surface was characterized by computer programs similar to those used in the design of all-weather tires.(FD is 1.8927).

The 8" MATRIX™ is made on a full-thickness master lap baseplate to emulate the heavy rigid feel of a ceramic lap.

The MATRIX™ concept was suggested by Adamas Instrument, as was the suggestion of the thicker base.

For use in those situations where you wanted a ceramic lap to work. Less compliant than Darkside or other polymeric laps, to provide flatter facets and sharper meets.

Lower speeds are suggested. Not recommended for pre-polish – this is a lap specifically for final polishing.

Wash well before switching from diamond to oxides or back. Some staining from chrome oxide is due to the microporosity but does not harm later polishing with other materials.



Example of CZ polished on the Matrix (source J.Rolfe) – works well on sapphire/ruby, topaz and is generally suited to a wide range of material.

Users's Review

This review was posted by Lisa Elser on Gemology Online – follow the link to see original review and subsequent discussion:

<http://gemologyonline.com/Forum/phpBB2/viewtopic.php?f=8&t=17447>

Jon Rolfe was kind enough to send me his Matrix ceramic lap to play with. I had a bunch of sapphire queued up, and went to town.

I hated my old ceramic with the burning passion that only ceramic laps and sociopathic mass-murdering dictators usually rate. I'd managed to get decent polishes on sapphire with my Darkside, even with the tin lap but not amazing and not all that fast.

The Matrix starts out feeling a bit rough. I decided to break it in with 60k Diastick and the piece of synthetic ruby I keep around for use such purposes. About 10 minutes and it was smoother and ready to rock.

It's fabulous. I got clean, flat, fast polishes coming off 3k prepolish. It used very little Diastick and even less Snake Oil. I polished nearly dry. It could move facets when I needed to, which was always a bit sketchy on the softer laps.

5 sapphires later it's my go-to for corundum. I haven't tried it with anything else - yet - but will.

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