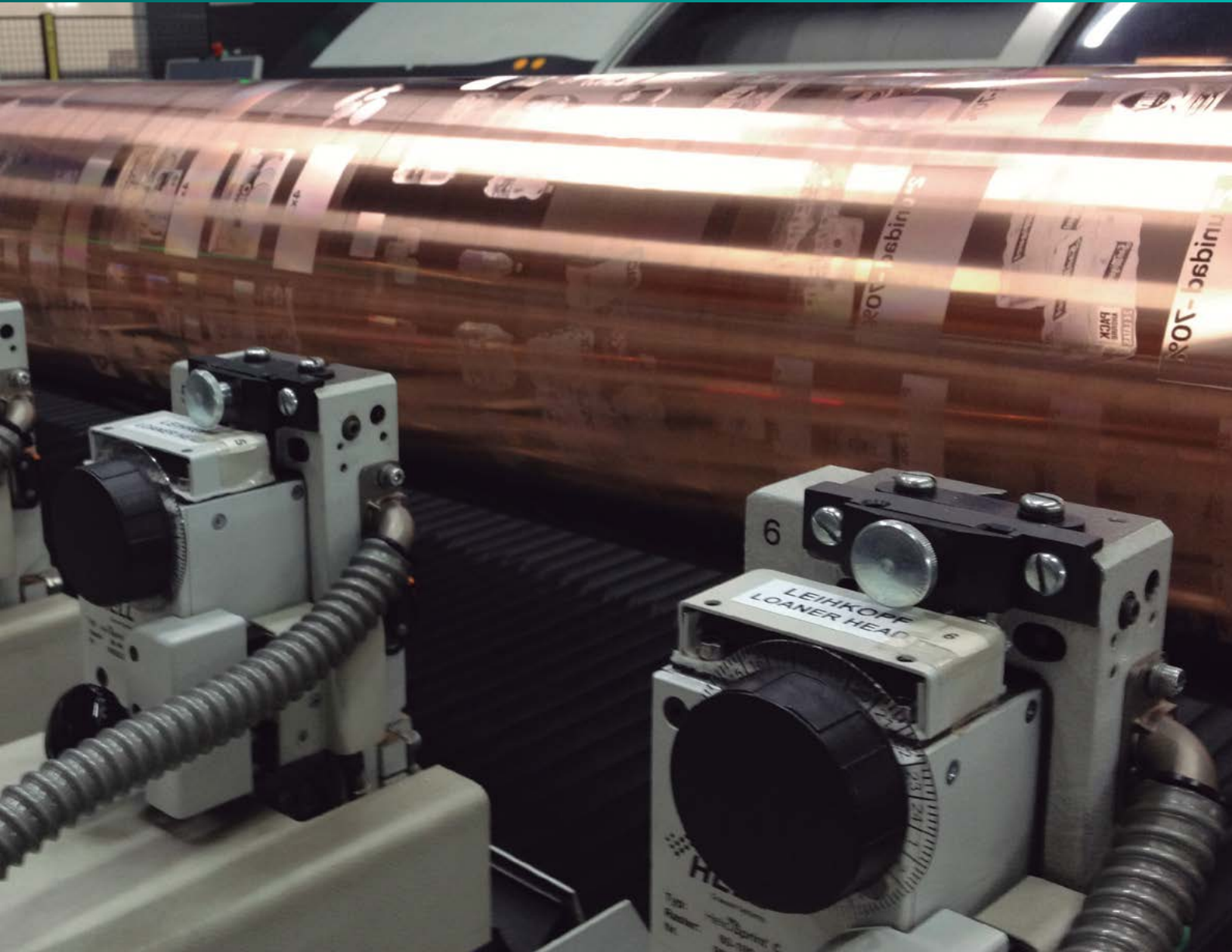


# Diamond tools for Rotogravure



# Diamond tools for Rotogravure

Technodiamant is one of the largest suppliers of natural and synthetic diamond tools used in rotogravure. The product range includes tools for the HelioKlischograph, MDC/Ohio Engravers and PCD tools for the Polishmaster, Kaspar Walter CFM machine, the Flying Scot and other milling machines.



# Diamond styli

## Engraving styli

The engraving styli for both HELL and MDC/Ohio machines are produced on sophisticated in-house built polishing benches. During polishing, we monitor edge quality by interference microscopy in order to assure the highest level of polish on the cutting edge.

The angles of each individual stylus are measured with an in-house developed 3D laser measuring device. Strict quality control ensures that Technodiamant products are manufactured to meet or exceed the required specifications. Technodiamant is an OEM supplier.

A specific development within Technodiamant is the so-called ONE-WAY stylus. These styli are developed for all types of Helioklischograph as well as for Ohio 700 series and also the Vision 1 (Vista) and Vision 3 (Vista short) machines. The quality of our One-Way styli is the same as that of repairable styli, but they can simply be disposed of after they show signs of wear. We use a smaller diamond than we use on a repairable tool, but still thick enough to assure tool integrity. ONE-WAY styli are available ex-stock, eliminating waiting time for repair, reducing shipping costs and duties. In order to improve the engraving quality and to serve our customers better, Technodiamant constantly develops new ideas in close cooperation with their customers & machine manufacturers.

Technodiamant also produces the Helioklischograph K500 G3 12Khz styli.



## Honeycomb styli

For certain projects we produce also a tiny facet on the tip of the diamond. This facet can vary to the wishes of the customer from 10 to 75 microns in width. In comparison with the standard stylus, the Honeycomb-stylus provides an important decrease of ink consumption and better release of ink while the cell geometry remains the same.

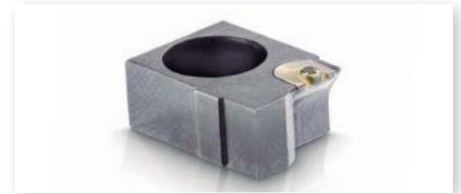


# Sliding shoes / Spindles

Both the sliding shoes for the Ohio machines and the sliding spindles for the Helioklischograph are produced to very tight tolerances. Our laser equipment, combined with our ability to braze diamond directly to the shank material, enables us to manufacture highly accurate shoes and spindles.

HELL sliding spindles have a precise polished radius and a second smaller radius on the outside of the diamond in order to prevent the copper cylinder being scratched.

To assure that this radius is concentric and according to the specifications of the machine manufacturers, special interference microscopes are used to document all new and repaired tools. We also produce flat shoes if preferred.



# Burr-Cutters

Burr-Cutters normally run for a long time before needing repair. Therefore, it is very important that the diamonds are manufactured with the proper radius or exact flatness (depending on the type of machine). If the Burr-Cutter is not produced within strict dimensional tolerances, it may scratch the cylinder, even after many hours of seemingly acceptable use.

Technodiamant also manufactures the housing for the Helioklischograph Burr-Cutter. If requested, Technodiamant will mount and adjust the Burr-Cutter in the housing and supply the full assembly for either new or repaired tools.

Technodiamant also produces the Helioklischograph K500 G3 12Khz Spindle and Burr-Cutter.



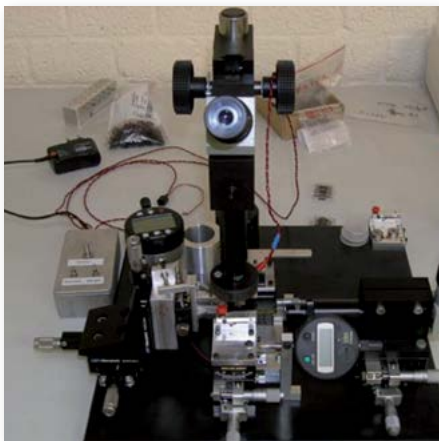
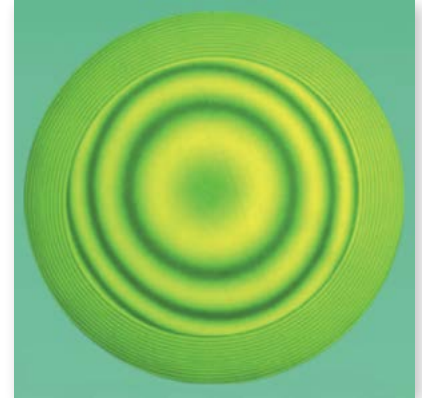
# Accuracy/Measuring

In order to produce the finest diamond tools for the gravure industry it is very important to choose the right diamonds. Technodiamant selects only the highest quality of so-called cape diamond. The next step is to make sure that the tools are produced in the best possible orientation of the diamond in order to assure longest lifetime from each tool.

Premature breakage of the diamond can be caused by many factors such as impurities in the copper due to sludge or oxide in the copper bath, copper hardness or consistency, extreme high or low temperatures of the gravure cylinder. Technodiamant ensures with interference microscopy that the surface of the diamond is as smooth as possible.

All angles of the Hell as well as the MDC/Ohio styli are measured during production with our in house developed 3D-measuring system. Each individual tool is measured again in our quality control department after mounting diamond in holder. This sophisticated measuring equipment is unique in the world and gives Technodiamant a lead over our competitors.

For the spindles, shoes and burr-cutters Technodiamant uses a combination of interference-microscopy and special designed equipment for the measuring of the spherical shape and the radii of these products. This is necessary in order to avoid scratches on the copper cylinder. To mount the diamonds on the shanks Technodiamant uses vacuum brazing boxes to achieve maximum strength between diamond and shank.



# PCD cutters

Technodiamant manufactures Pre-Cutters for the Polishmaster and tools for the Kaspar Walter-CFM machines.

The cutting edge on these tools is made of a special type of PCD (polycrystalline diamond). This material has outstanding wear-resistance, and is more resistant to shock as compared to natural and synthetic single crystal diamond.

Because Technodiamant uses advanced grinding machinery and highly skilled craftsmen, the tools for the Polishmaster, Kaspar Walter-CFM and a range of other diamond tools are produced with cutting edges of outstanding quality, consistency, and durability. Besides the standard range of repairable cutting tools, ONE-WAY tools are available for the complete range of PCD tools as well. Technodiamant is willing to work with customers on developing non-standard products.

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