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Technology News  
 September 2008

Perfect surfaces through

## Patented technology – sheer genius!

The new ECO 9 and 18 range of disc finishing machines from OTEC are a real hit.

Disc finishing machines are used for the deburring, grinding and polishing of workpieces such as items of jewellery. They work as follows: The bottom of an open drum-like container consists of a turntable. The walls of the container itself are stationary. If the container is now filled with a grinding or polishing medium and the turntable is set in motion, this creates a toroidal vortex in the media. If workpieces are then added to the medium the difference in density and size between the workpieces and the medium result in a grinding or polishing action. This process gives a gentle finishing effect.



In spite of the considerable benefits offered by the disc finishing process, many customers are reluctant to take advantage of this technology. This is largely due to the high purchase price and cost of spare parts as well the somewhat complicated care and handling of the machine (e.g. resetting the gap between the disc and the container). OTEC's ECO range features easy handling combined with low-cost spare parts and maintenance, but previously had weaknesses in the design of the disc (a flat disc results in greater impact and consequently rougher surfaces as a result of the poorer circulation). Similarly, there was no gap adjustment and media with a grain size of less than 2 mm could not be used.



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The new ECO range is a different matter. This new machine type features the following highlights:

- Central set screw for easy gap adjustment (patented)



- Sophisticated gap geometry for excellent reliability
- Flow-optimised disc design - produces high-quality surfaces through homogeneous circulation
- Inexpensive wear parts
- Display indicates preset and elapsed process time, speed etc.
- Empties directly onto screen beneath the process container

These technical improvements make the ECO range of machines from OTEC ideal for the

- deburring
- smoothing
- polishing to a mirror finish

of workpieces from 0.7 - 100 mm in size.

Because of the low purchase price, they are also ideal for finishing single items, e.g. from CNC production. The process is often complete in a matter of minutes. Ra values of 0.02 can be obtained by using suitable media.

