

# OTEC EF-PERFORMANCE HIGH-QUALITY POLISHING AND SMOOTHING FOR COMPLEX GEOMETRIES



**ELECTRO FINISHING TECHNOLOGY FOR A NEW DIMENSION OF HIGH-GLOSS**

The innovative combination of Electro Finishing Technology with established mass finishing technology from OTEC delivers high-gloss perfection for workpieces with complex geometries in diverse sectors. This enables maximum gloss even in the smallest of corners and surface polishing without micro-scratches for large parts as well. Reliable, precise and efficient, this technology sets new standards for surface quality and cost-effectiveness.

## Application areas

Sectors: jewellery, dental, medicine, industry, tools

Materials: gold, silver, copper, brass, cobalt chromium, tool steel, stainless steel, Inconel, aluminium

## Highlights

- High-gloss polishing with maximum gloss and no micro-scratches
- Precise processing in hard-to-reach areas such as inner contours
- Intricate geometries are maintained and are smoothed and polished gently
- Short, reproducible process times less than 30 min.
- Minimal media jamming thanks to tiny, spherical particles
- Cyanide-free particles in special developed conductive liquids, which are safe for users

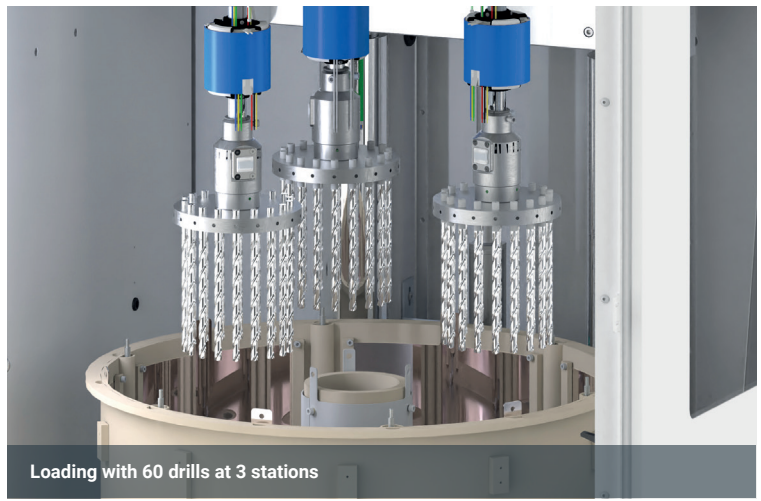
## Properties

- Capacity of 3 stations, each with a working space measuring 180 x 180 mm (diameter x height) for 27 workpieces with a component size up to 60 x 40 mm (diameter x height)
- Manual loading with a simple clamping system
- Easy, ergonomic machine handling
- One-handed loading by simply suspending the holders
- Abrasive temperature and conductivity monitoring ensures process stability
- Intuitive touch panel control and recipe database with workpiece-specific standard programs
- Industry 4.0 with remote control, remote maintenance and OPC UA interface





Loading with 27 knee joints at 3 stations



Loading with 60 drills at 3 stations

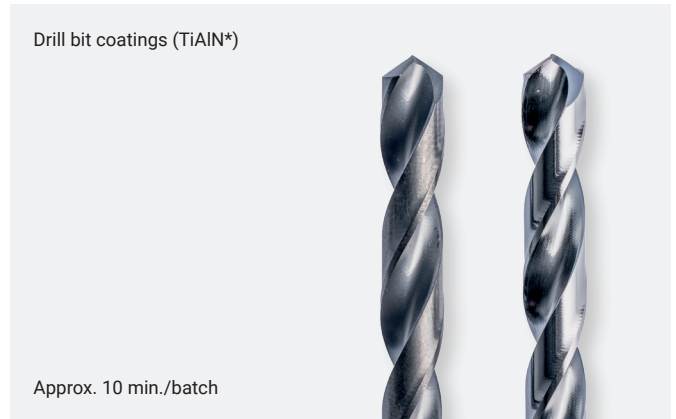
## High-gloss examples

Knee joint (cobalt chromium)



Approx. 30 min./batch

Drill bit coatings (TiAlN\*)



Approx. 10 min./batch

Bone plates (titanium\*)



Approx. 20 min./batch

Valve balls (stainless steel)



Approx. 60 min./batch

\* Processing in specially equipped EF-Performance

**See the OTEC high-gloss results for yourself!**

**We develop custom solutions to suit your specific requirements in our Finishing Center.**



As a trusted global partner for perfect surfaces, OTEC builds innovative finishing machines which set high standards and achieve perfect process reliability. Revolutionising manual processing applications results in precise and consistent quality in the shortest possible process time.

Smooth surfaces every time, defined rounding results, the removal of burrs and a perfect sheen are decisive competitive advantages in almost all industrial sectors. In particular that means saving energy as well as extending the service life and increasing the durability of parts.

**OTEC machines with the "Made in Germany" seal of quality stand for dependable technology, high-quality workmanship, reliable operation and a long service life.**



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