

AUTOMATIC EFFICIENCY.

#### NEW OTEC SOLUTIONS FOR THE TOOL INDUSTRY.

Leading manufacturers of forming and machining tools from around the world rely on processes and machinery from OTEC to improve tool performance and quality. Other companies that rely on OTEC products include those specialising in tool re-grinding and re-sharpening. In production, the focus has always been on factors such as cost savings, durability, productivity, quality and corrosion protection. Precise and reliably reproducible results are essential here.

As a technological pioneer, OTEC has constantly pushed the boundaries of what is possible in mass finishing. Its products allow companies to efficiently process the surfaces of increasingly complex geometries in unprecedented quality. OTEC machinery is suitable for a variety of processes, from smoothing, polishing and rounding to deburring and removing droplets following PVD or DLC coatings. It can more than triple the service lives of machining tools, reduce friction forces and wear on coated tools, and achieve Ra values of up to 0.02 µm on forming tools. Re-grinding and re-sharpening specialists particularly value the fast and efficient reproduction of precise cutting geometries. OTEC offers high-performance machines for drag and stream finishing, specially tailored to the needs of the tool industry. Combined with customised OTEC process parameters, these machines can process cutting, forming and injection moulding tools at low cost.



## **OTEC** precision for large series

The DF Tools series of drag finishing machines, including the DF-3 and DF-5 models, are perfect for flexible manual fitting and small to medium quantities. The machines are loaded, unloaded and retooled manually. As required output quantities rise, however, automated solutions can help significantly reduce costs. With its automated stream finishing machines, OTEC sets new benchmarks here for industrial production with medium to large quantities.



DF-5 HD drag finishing machine

### Non-stop quality

The SF1 ILS with chain loader is the new standard in automated precision finishing. It is the compact OTEC base model for tool processing with automatic loading. The machine requires no expertise in robotics and is designed for maximum user-friendliness. It features a chain loader with 64 positions and can process different workpieces measuring between 3 and 18 mm in diameter and up to 150 mm in length in a single batch (further diameters are planned, other lengths available upon request).





SF1 ILS with chain loader

Workpieces and collets can be changed automatically as required. This takes around 14.5 seconds. Processing times range from 30 to 300 seconds, depending on the process and workpiece geometry. With a processing time of 60 seconds per workpiece, the machine processes around 40 workpieces per hour. The SF1 ILS features a lifting unit for the workpiece holder and is suitable for both stream and pulse finishing in wet or dry processing. All these features make the SF1 ILS an extraordinarily effective and flexible machine. Ideal for processing small batch sizes and frequently changing series, it even comes at an attractive price.

## Intelligent robotics for higher output

The OTEC SF2 RLS features a modern tooling robot that performs all loading and tooling tasks. The machine also has a lifting unit and two workpiece holders. It can process workpieces measuring between 3 and 18 mm in diameter and up to 150 mm in length (other diameters planned, additional lengths available upon request). The OTEC SF2 RLS can process around 75 workpieces per hour, assuming typical edge rounding values of 6–30  $\mu$ m and a resulting average processing time of 60 seconds per workpiece. This makes the machine especially well suited to medium quantities.





SF2 RLS

### The top model for high quantities and flexible production

With three independent lifting units, workpiece holders and a tooling robot, the OTEC SF3 RLS is perfect for processing high quantities.

Its intelligent control system ensures that a workpiece can be changed on one station while the other two are in processing. This leads to a further reduction in changeover times and an extremely high output. The machine can process workpieces measuring between 3 and 26 mm in diameter and up to 250 mm in length (further diameters planned). With an average processing time of 45 seconds per workpiece with edge rounding values of 6–30  $\mu$ m, the OTEC SF3 RLS can process around 100 workpieces per hour. This makes it the ideal choice for handling even the highest quantities. The machine can also be delivered with an automation system for retrofitting if



#### required.



#### SF3 RLS

### The company

OTEC GmbH offers precise technology for perfect surface finish. OTEC machines for deburring, grinding, smoothing and polishing guarantee an efficient and perfect surface finish of tools and products. Operating a worldwide distribution network comprising over 60 agencies, OTEC is represented locally for international customers from various industries. Thousands of customers benefit from the extensive know-how of the technology leader OTEC in the development of a perfected interplay of machine and process media.

#### Press contact

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