



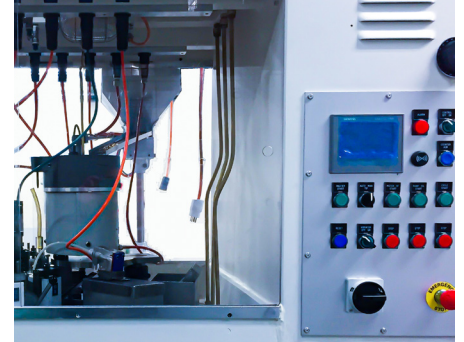
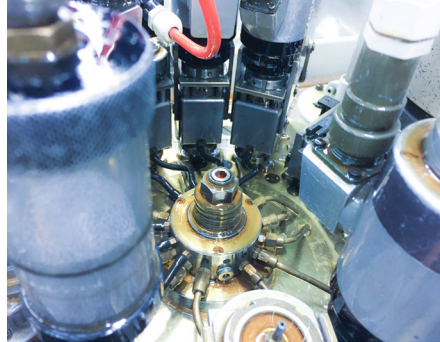
## Machine Overhaul & Retooling

Regain complete control of your production process & increase machine performance



# Machine Overhaul & Retooling

By our top specialists - Regain complete control of your production process & increase machine performance



## Do you want to produce a new or modified part or increase the machine performance?

Plan an application change and add flexibility to handle new workpieces. Reuse the existing basic machine and save a substantial portion of the cost for a new installation.

Mikron prepares your machine for the production of a new part. Mikron's team expertly provides the necessary engineering and experienced service engineers perform the retooling work at your facility.

You may also select to combine the retooling with a partial or complete machine overhaul as well as a machine retrofit / upgrade.

### OUR SERVICES

- **Inspection and analysis** of actual machine/s conditions done by our specialists to provide you a detailed assessment for defining further revision or repairing tasks
- **Our experts guarantee** the complete or partial machine overhaul according to the result of the inspection (on site or at Mikron's facility)
- **Electrical retrofit with PLC** – to gain complete control of the machine and your production process
- **Mechanical upgrade**
  - New table kit** – to increase machine precision and efficiency
  - Innovative** new cam concept – for fastest machine setup to produce a new part
  - New filtration group** – plug and play - easiest to be installed
- **New warranty** period on replaced parts
- **Engineering and manufacturing** of spare parts and cutting tools, pre-assembly of working groups or kits, retooling / installation and testing of the new application on site

### YOUR BENEFITS

- **Save** a substantial portion of the cost for a new installation and reuse the existing production equipment
- **Re-establish** or increase the original productivity
- **Increased part quality** and reduced scrap
- **Increase in precision** and machining efficiency
- **Perfect machine** conditions lead to increased tool life
- **Controlled and planned** maintenance costs
- **Increased machine life** span and maintaining value of your installation

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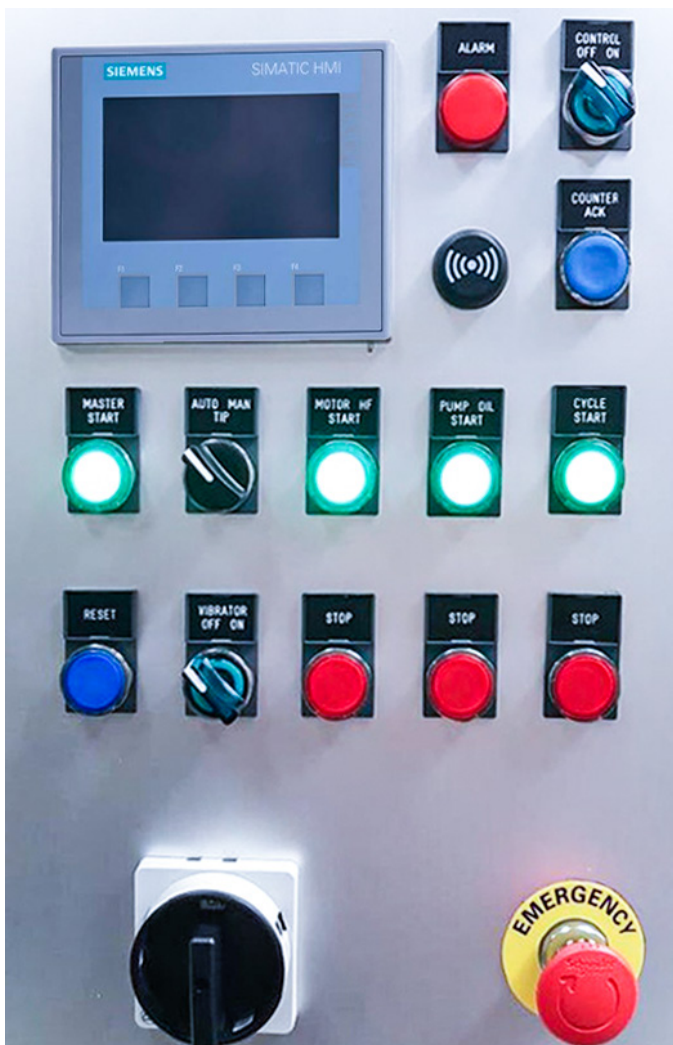
# Mechanical and electrical retrofits

According to your choice

## ELECTRICAL RETROFIT WITH PLC

Gain complete control of the machine and your production process with a Siemens PLC and a new control-panel inserted and adapted to your production equipment.

- Control the positioning of the workpiece table with higher precision using a brake system
- Control of the spindles using the inverters. By consequence this will improve your flexibility on cutting conditions / parameters and increase drastically tool life and productivity.



**AUTO: NOT READY FOR START**  
Machine is not ready for automatic start  
Spindle and pump must be on

**AUTO: READY FOR START**  
Machine is ready for automatic start  
Spindle and pump are on

**AUTO: CYCLE ON**  
Automatic cycle is on

**TIP: NOT READY FOR START**  
Machine is not ready for jog Spindle and pump must be on

**TIP: READY FOR START**  
Machine is ready for jog Spindle and pump are on

**TIP: MOTOR ON**  
Main motor is on

**MANUAL: BRAKE OFF**  
In manual mode brake is released

**COUNTER DONE:**  
Partial counter has reached the value set in display

Sample information from the control panel

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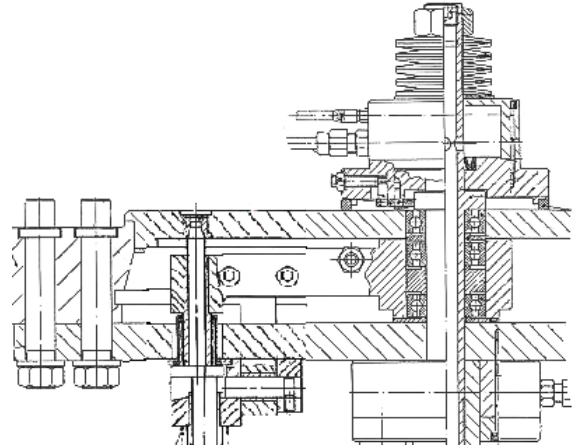
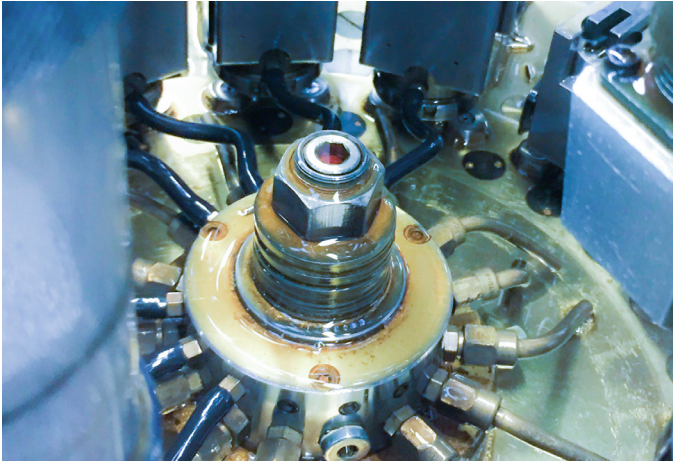
# Mechanical and electrical retrofits

According to your choice

## MECHANICAL UPGRADE

### New table kit - Increase machine precision and efficiency

The kit is assembled and tested by Mikron experts and immediately ready to be installed into your production equipment. Based on the machine condition, the installation can be done by you or, in case of adjustment needed, by a Mikron service technician.



Kit consisting of

- New table unit
- Piece holder disc
- Pieces clamping groups
- New oil distributor - With the new oil distributor concept, the nebulizer is not needed anymore reducing the oil quantity needed in the working area.



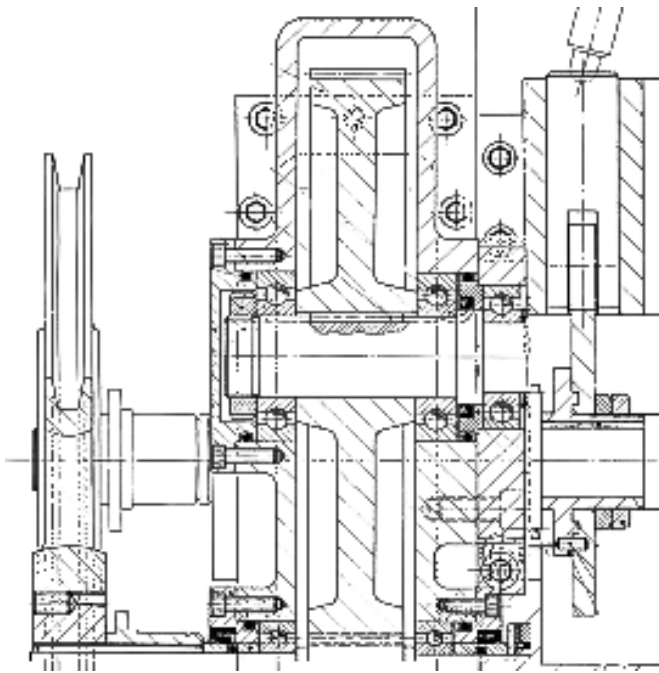
# Mechanical and electrical retrofits

According to your choice

## MECHANICAL UPGRADE

### Fastest machine setup to produce a new part

Mikron experts redesigned an innovative new cam support – The result: Fastest machine set up for the production of a new part. The cams are specially designed so that the cam holder shaft does not need to be disassembled for the replacement.



On wish: Our Mikron engineering department will study special shapes of cams to increase productivity and lifespan of your production equipment.

Mikron Service technicians will check and reset the synchronism between the shafts revising a few parts of the group.



# Mechanical and electrical retrofits

According to your choice

## MECHANICAL UPGRADE

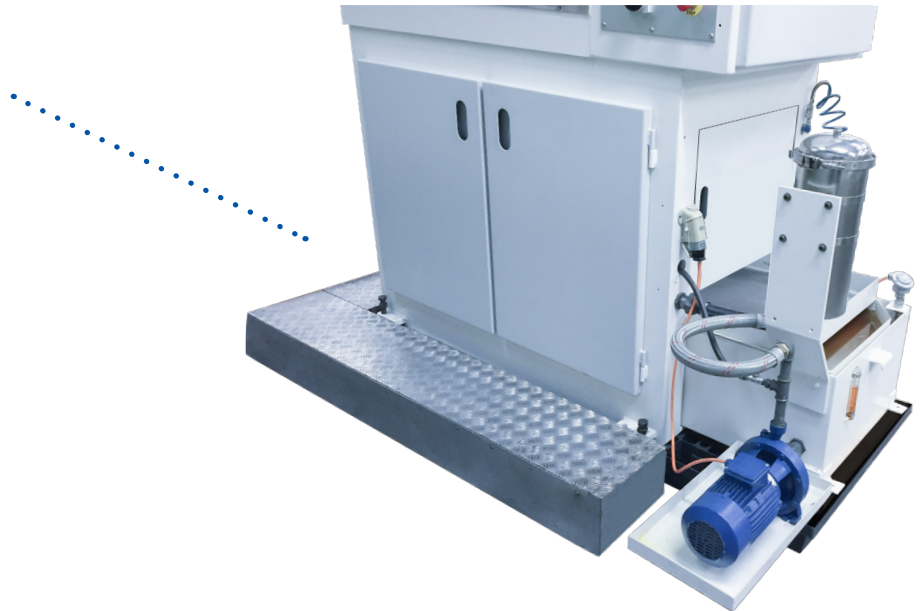
### New filtration group - plug and play - easy to be installed

Mikron supplies a new "plug & play" filtration kit (pump, filter and piping) to be assembled directly by the customer, according to our instructions.



Filtration kit - 3D project

New filtration group - installed



## We are here for you!

For spare part services - to replace worn - with new parts, to overhaul and restore motors and spindles to regain original precision and productivity.

Contact your local Service Centre today. We gladly be of assistance!

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# Mikron Service Solutions

Flexible and modular



We ensure quick, competent and uncomplicated service and support for our customers. We work together with you to design a service solution profile tailored to your individual needs.



REACTIVE

## Technical Support – repair your machine

- Helpdesk
- Remote Diagnostics
- Augmented Connection
- Service Assignment



PROACTIVE

## Business Support – keep & improve machine productivity

- Process Monitoring (OEE Improvement)
- Training
- Energy Consumption
- New Applications & Simulations
- Engineering
- Interactive Troubleshooting
- Startup & Production Support
- Service Level Agreements



PREVENTIVE

## Service & Maintenance – prevent machine stops

- Technical Evaluation
- Preventive Maintenance
- Spindles & Groups Overhaul
- Extended Warranty
- Software Backups



SPARE PARTS

## Spare Parts – reliable supply of original Mikron spare parts

- Original Mikron spare parts
- Xchange Modules



PREDICTIVE

## miS4.0 – predict your machine maintenance

- Production Monitoring
- Condition Monitoring
- Failure Analysis
- Mikron cloud and IoT platform (SAP Leonardo)



SECOND LIFE

## 2nd life – guarantee continuous use of your investment

- Machine Overhaul
- Retooling
- Safety & Environments
- Updates & Upgrades
- Retrofitting

Typical parts - PM machines



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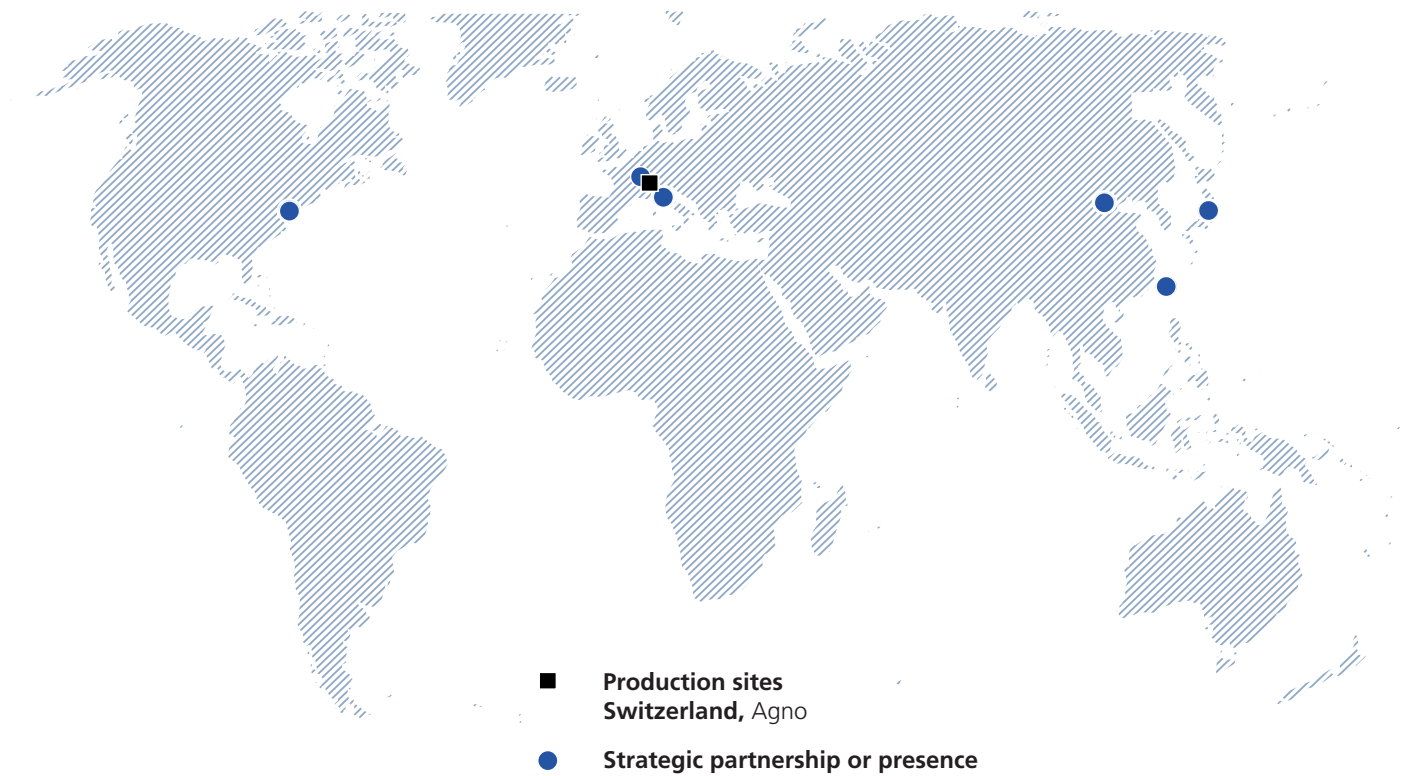
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# Global Support

Ready for you



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