



Mikron leader in
writing instruments machinery

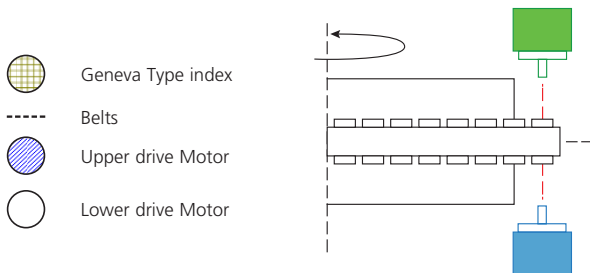
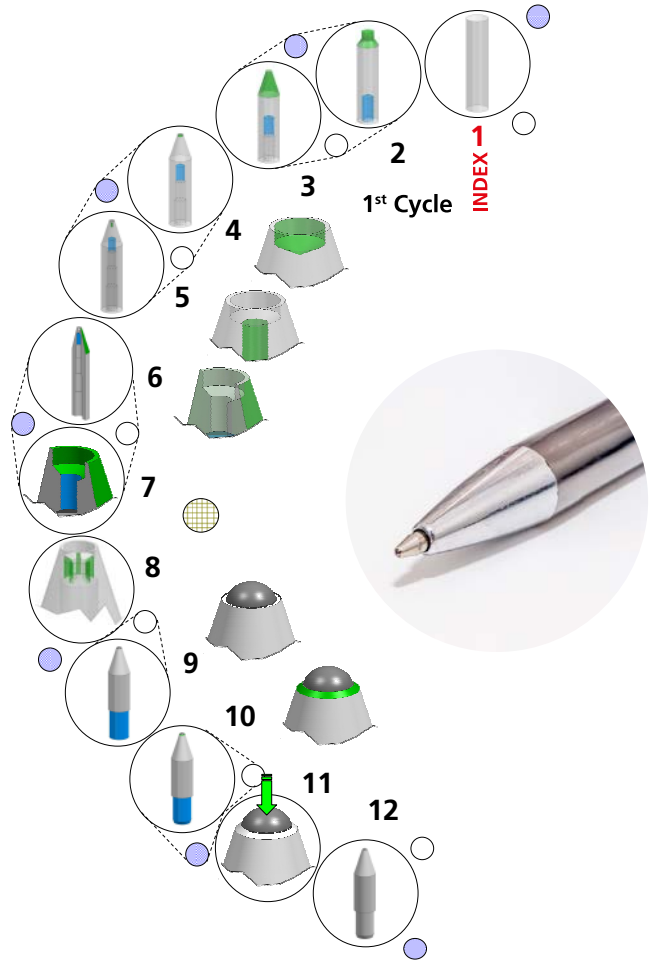
Cost efficient tip manufacturing equipment from Mikron

Tip manufacturing

Mikron Machining Technology's past is closely linked to the history of the ball point pen. Since the early stages of the ballpoint pen, Mikron has developed machinery to make writing tips and to assemble refills. As the cost of pens has been reduced over the years, Mikron has developed more and more productive machines.

Ballpen tips, whether made from brass, nickel-silver or stainless steel are efficiently produced on the Mikron Multistar LX-24 Writing machines. Tips can be made automatically from coldformed blanks or directly from wire stock. Production output ranges from 80 to 300 finished tips per minute.

Mikron Multistar machines work to the most demanding tolerances in the industry and are thus ideally suited to produce not only the ordinary ballpen tips but also close tolerance rollerball and jel ink tips. In fact, most of the leading ballpen brands use writing tips made on Mikron equipment.



VARIUS TIPS PRODUCED ON MIKRON MULTISTAR TRANSFER SYSTEMS



Ball pen tip
Stainless steel 160 pcs / min
on Mikron Multistar LX - 24



Ball pen tip
Stainless steel 160 pcs / min
on Mikron Multistar LX - 24



Ball pen tip
Brass Nickel plated 200 pcs / min
on Mikron Multistar LX - 24



Ball pen tip
Brass 240 pcs / min
on Mikron Multistar LX - 24



Ball pen tip
Brass 300 pcs / min
on Mikron Multistar LX - 24



Ball pen tip
Nickel silver 300 pcs / min
on Mikron Multistar LX - 24

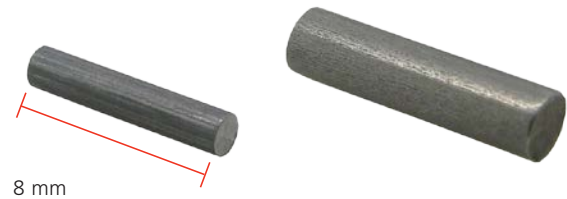


Needle tube tip
stainless steel 150 pcs / min
on Mikron Multistar LX - 24

Pre-machining

Manufacturing of blanks on Mikron wire processing machines

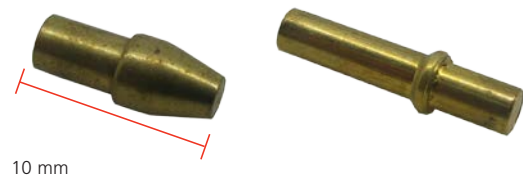
MIKRON TR-42 WRI



WIRE CUTTING MACHINE MIKRON TR-42 WRI

The Mikron TR-42 is a machine for the economical and straight shearing of wire metal. The machine for cost-effective straight shearing of wire with diameters up to 3 mm for steel, or 5 mm for aluminium and brass.

MIKRON RP-32 WRI



COLD HEADING PRESS MIKRON RP-32

As a single stroke cold header, the 6 steel transfer press RP-32/3 is best suited for small, simple parts. The die centering device ensures precise coaxial alignment of the various diameters. The maximum wire diameter is 3 mm for brass and 4 mm for aluminium.

Tip manufacturing

Multistar LX-24 Writing

The Multistar LX-24 with 24 work stations and up to 44 working units is the guarantor for a smooth mass production. With the Multistar LX-24 machining is possible from below and above. Other additional features are the 24 intermediate stations, which allow measuring, controlling and cleaning procedures during the same run.

That way you can quadruplicate your productivity

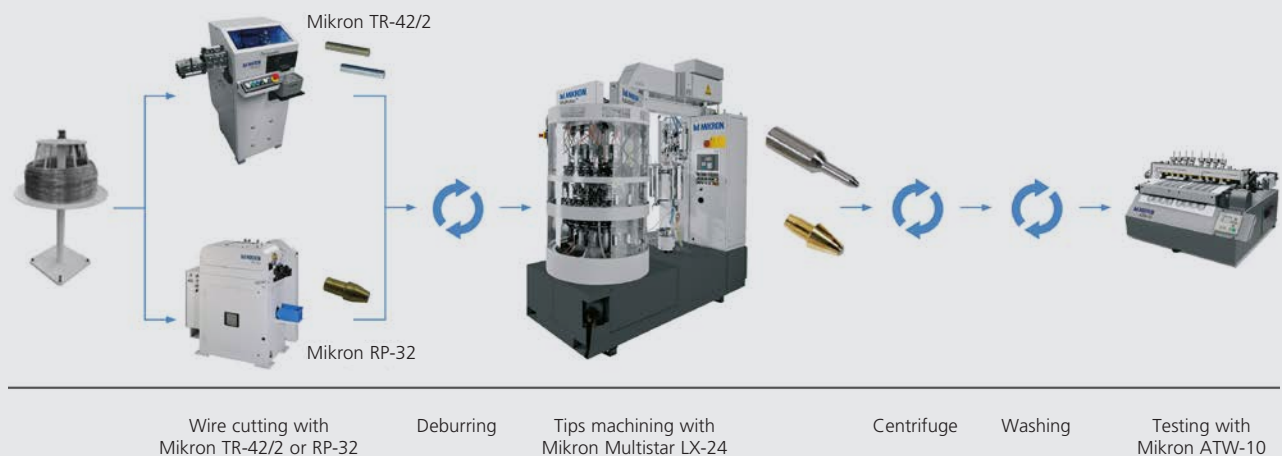
It is unique! A run produces up to 600 simple workpieces per minute. Separating the fields of work doubles, triples or quadruplicates the amount of production at the same high processing speed.

Factors of success at one glance

- Fastest rotary transfer machine worldwide
- High precision and repeatability
- Simultaneous machining at two sides at each station
- Multiple cycles for extremely high amounts
- Parallel production of two parts
- Load / unload time parallel to the machining process
- Quick and simple tool changes



WORKING PROCESS



Quality Control and Support Equipment

Mikron supplies equipment which meets the specific requirements of the writing instrument manufacturer and is renowned for planning and implementing cost-efficient manufacturing facilities for tips.

The automatic production machines made by Mikron cover the complete range of tip manufacturing.

- Coldforming machines RP-32 and cutting TR-42
- Rotary transfer machine Multistar LX-24
- Write test machine ATW-10

To guarantee a continuous, premium quality and outstanding productivity, the very best quality control and support equipment is a must.

Writing test machine type ATW-10

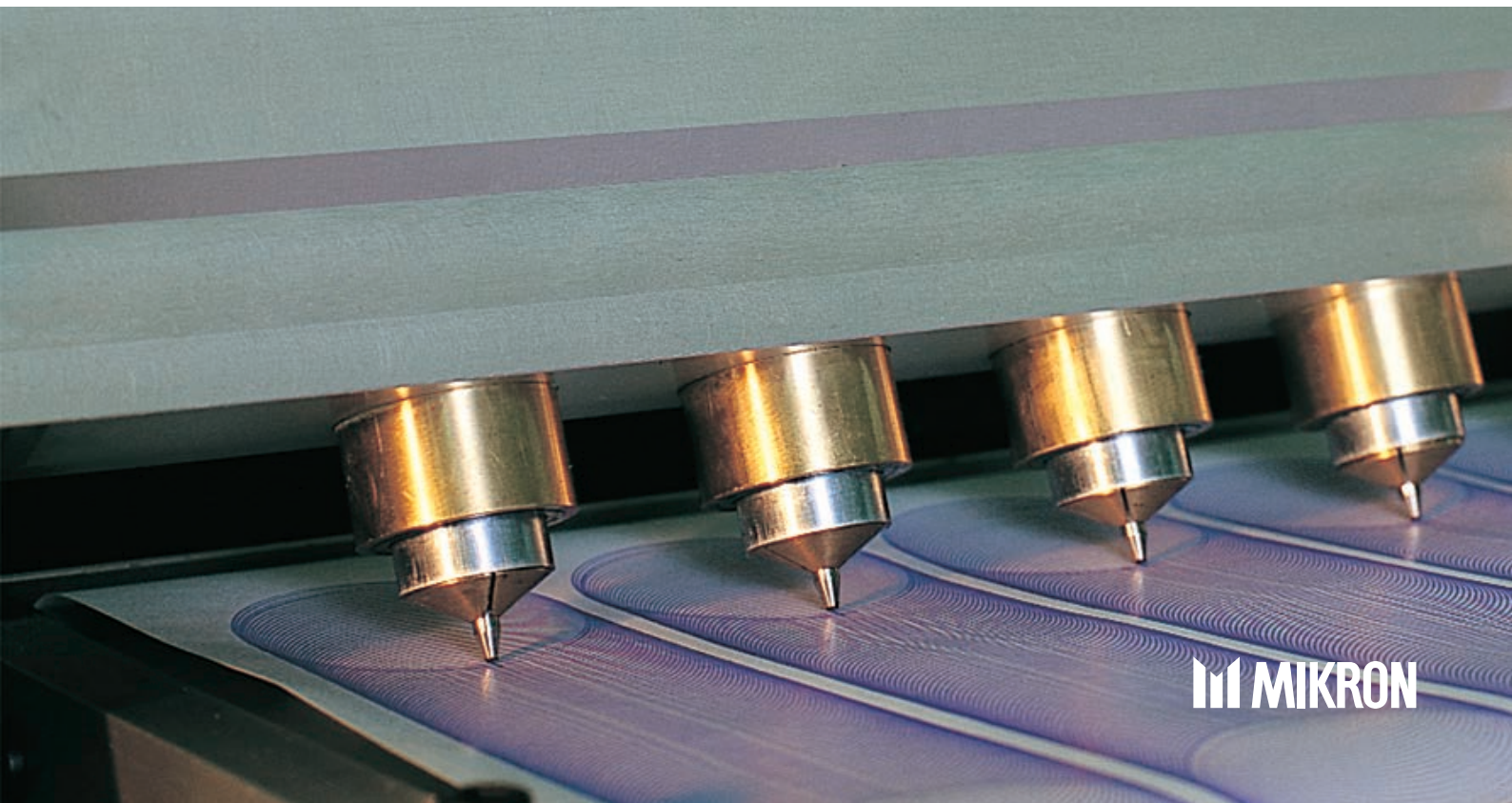
Machine for testing the writing quality of cartridges. This machine tests simultaneously ten refills in different writing angles between 60 degrees and 90 degrees. This registering mechanism allows the reading of the writing distance in "meters" by means of a device coupled directly with the paper feeding roll. The driving motor is not subject to current fluctuations so that an accurate speed is absolutely guaranteed.

Special features of ATW-10

- 10 rotating supports
- adjustable writing speed and paper feed
- writing angle variable from 60° to 90°
- automatic oscillation of $\pm 3,5^\circ$ to $\pm 7^\circ$
- total writing distance adjustable



Test of writing quality on a Mikron ATW-10





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.

Mikron's service palette



Service pièces de rechange

For a dependable supply of spare parts

Genuine Mikron spare parts are manufactured to the latest materials specifications and by the latest methods, resulting in reduced machine downtime and a longer life expectancy for your equipment.



Service Xchange

Minimizing downtime

Original Mikron Xchange Modules are ready for immediate installation. 100% reliability and 100% quality, but at up to 50% lower investment and without losing any time waiting for an overhaul. All you need to do is call us when you need to replace a defective module, and we'll immediately send a replacement module in perfect condition.



Assistance Product

Maintain your equipment

Service options from Product Support keep your Mikron system in top condition. Our highly skilled experts offer you a complete portfolio of comprehensive service options to keep your equipment up and running.

[Help Desk](#) / [Field Service](#) / [Overhaul](#) / [Preventive Maintenance](#) / [Teleservice](#)



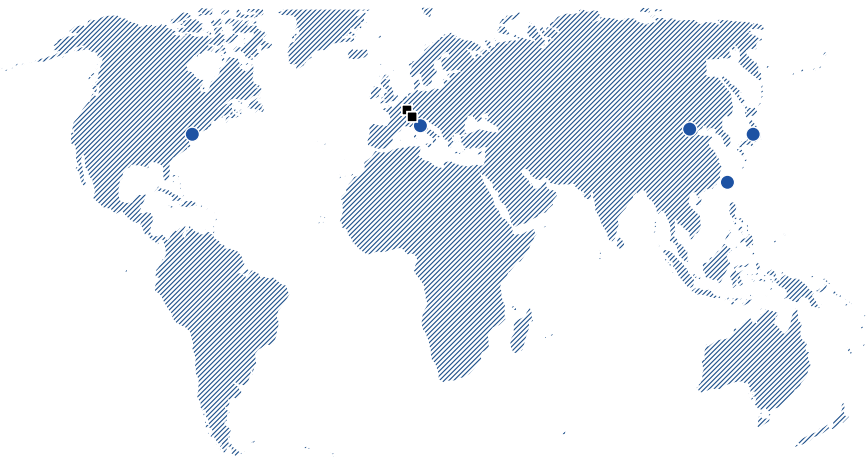
Assistance Business

Guarantee continuous use of your investment

Mikron offers professional services based on our experience and resources to help you successfully manage today's complex manufacturing processes...

[Training Services](#) / [Retooling](#)

GLOBAL SUPPORT Ready for you



- **Production sites**
Switzerland, Agno; Germany, Rottweil
- **Strategic partnership or presence**

24h Global Serviceline
+41 91 610 63 26
Outside office hours.
Problem notification 24h, 7 days a week.

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