

Pre-machining Equipments



Manufacturing of blanks on
Mikron wire processing machines.

Pre-machining Equipment

Manufacturing of blanks on Mikron wire processing machines.

Mikron machining systems are designed to produce precision workpieces directly from wire coil or bar stock. However, it is often expedient to manufacture small blanks on Mikron wire processing machines to achieve a higher output rate on the transfer machines in the downstream process.

Wire shearing machine

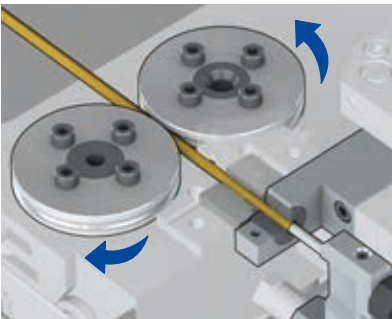
Mikron TR-42/2

Reliable accuracy, high production machine for straightening and shearing and shearing of wire material.

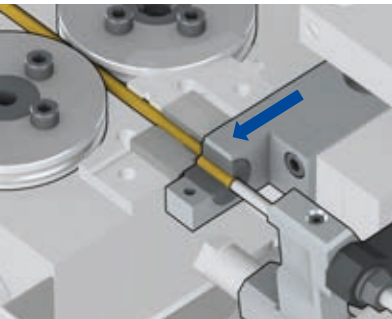
Technical data			
Motor Provided with a variable frequency drive	0.75 kW	240/400 V	50/60 Hz
Coil dimension Coil diameter	internal from 450 to 550 mm external from 650 to 750 mm		
Maximum coil weight 50 kg			

Production				
Output rate	150-800 pcs / min			
Capacity	Alu Ø3 mm	Brass Ø3 mm	Copper Ø3 mm	Steel Ø2.5 mm
Cutting lenght	from 1 mm to 35 mm (3 different types of cams needed)			
Cutting accuracy	±0.05 mm			

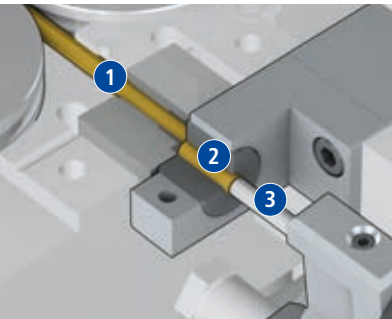
Advancement of the wire



Movement of the die



Cutting of the wire



Cutting mechanism detail

- 1. Tungsten carbide guiding die
- 2. Movable tungsten carbide cutting die
- 3. Movable stop for adjustment of lenght



Wire shearing machine

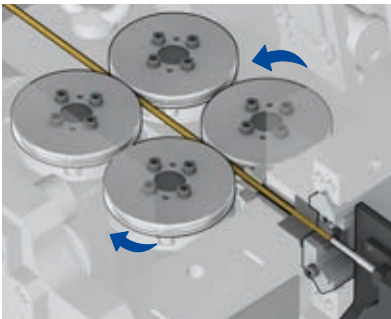
Mikron TR-42/4

Reliable accuracy, high production machine for straightening and shearing of wire material with automatic length check of cut-off pieces.

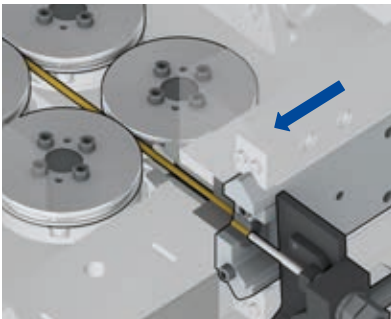
Technical data			
Motor Provided with a variable frequency drive	2.2 kW	240 / 400 V	50/60 Hz

Production				
Output rate	150-500 Pcs / min			
Capacity	Alu Ø6 mm	Brass Ø6 mm	Copper Ø6 mm	Steel Ø4.5 mm
Cutting lenght	from 1 mm to 45 mm (3 different types of cams needed), manually adjustable in a range of 19 mm			
Cutting accuracy	±0.05 mm			
Automatic cut-off length check measurement and ejection of out of tolerance pieces				

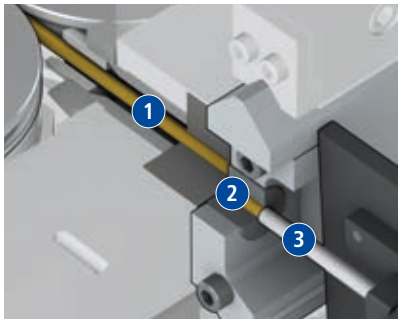
Advancement of the wire



Movement of the die



Cutting of the wire



Cutting mechanism detail

- 1. Tungsten carbide guiding die
- 2. Movable tungsten carbide cutting die
- 3. Movable stop for adjustment of lenght



Wire cutting machine

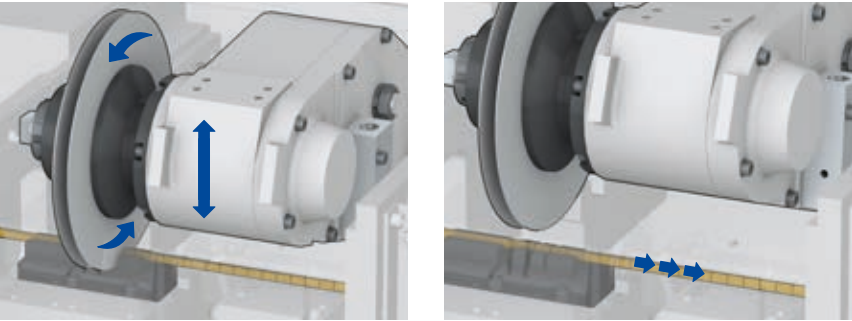
Mikron TF-120







Machine for straightening and sawing of wire material.







Technical data (mm)	Brass	Steel
Max Ø	11	7
Length, double cycle	10-40	10-40
Max length, single cycle	80	80

- » High productivity, up to 200 pieces/minute, according to material and size, by using 2 saws simultaneously
- » High cutting accuracy, repeatability ±0.05 mm
- » Possibility to cut up to 4 pieces simultaneously, depending on material and size
- » Direct piece loading from the TF-120 to the Multistar
- » Easy programmable machining cycles, such as:
 - cutting speed
 - output rate
- » Straightening and sawing of wire material

Example with 2 saws



Profile		Material	Length (mm)	Pieces/min
	5	Brass	10+10	100+100
	6		20+20	95+95
			30+30	90+90
	SW5		40+40	80+80
			80	80
	8	Brass	12+12	85+85
			25+25	80+80
	9		30+30	70+70
			40+40	60+60
	SW8		80	50

Profile	Material	Length (mm)	Pieces/min
 10	Brass	15+15	65+65
 11		25+25	60+60
 SW10		30+30	50+50
		40+40	40+40
		80	40
 6	Machining Steel	10+10	50+50
 7		20+20	40+40
		30+30	30+30
 SW6		40+40	25+25
		80	25

Wire cutting machine

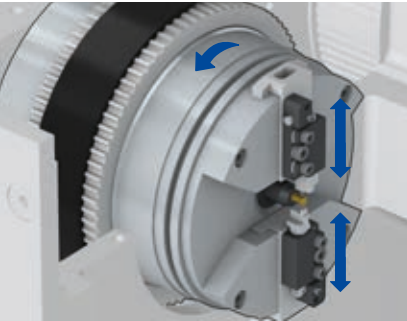
TF-120 + pre-turning unit

Pre-turning operation from wire with turning head.

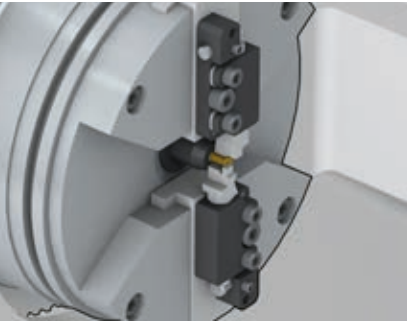
Technical data (mm)	Brass
Max Ø	6.5
Max length	80

- » High productivity, up to 50 pieces/minute, according to material, size and turning shape
- » High cutting accuracy, repeatability ± 0.05mm
- » Direct piece loading from the TF-120 to the Multistar
- » Straightening and turning + cutting of wire material

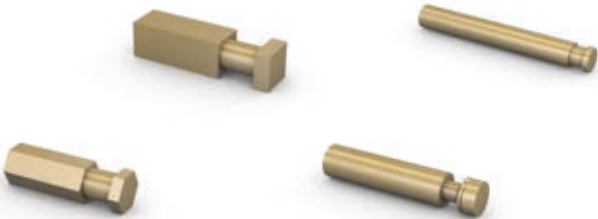
Open tuning head



Closed tuning head



Profile	Material	Length (mm)
□ 4	Brass	80
○ 6.5		
SW6		



Pre-machining Equipments

WIRE SHEARING MACHINE

Mikron TR-42/2

Mikron TR-42/4

Reliable accuracy, high production machine
for straightening and shearing of wire material.

LxWxH TR-42/2: 830x629x1250 mm

LxWxH TR-42/4: 1800x1000x1300 mm



WEIGHT TR-42/2 250 KG
WEIGHT TR-42/4 580 KG

WIRE CUTTING MACHINE

Mikron TF-120

Machine for straightening and sawing of wire material.

LxWxH: 2200x900x1950 mm



WEIGHT 650 KG

WIRE CUTTING MACHINE + PRE-TURNING UNIT

Mikron TF-120 + pre-turning unit

Pre-turning operation from wire with turning head.

LxWxH: 2200x900x1950 mm



WEIGHT 660 KG

Mikron Machining

Mikron Switzerland AG, Agno **Division Machining**

Headquarter
Via Ginnasio 17
6982 Agno
Switzerland
Tel. +41 91 610 61 11
Fax +41 91 610 66 80
mag@mikron.com

Mikron Germany GmbH

Berner Feld 71
D-78628 Rottweil
Tel. +49 741 5380 0
Fax +49 741 5380 580
mro@mikron.com

Mikron Corp. Monroe

200 Main Street
P.O. Box 268
Monroe, CT 06468 / USA
Tel. +1 203 261 31 00
Fax +1 203 268 47 52
mmo@mikron.com



Application examples



WRITING



CONNECTORS



GAS