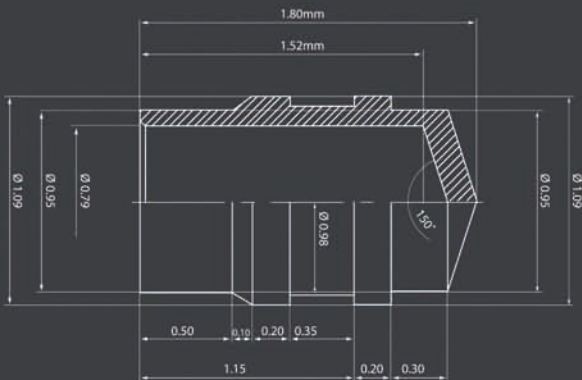




escomatic **D2/D5** CNC

22,5PCS/MIN

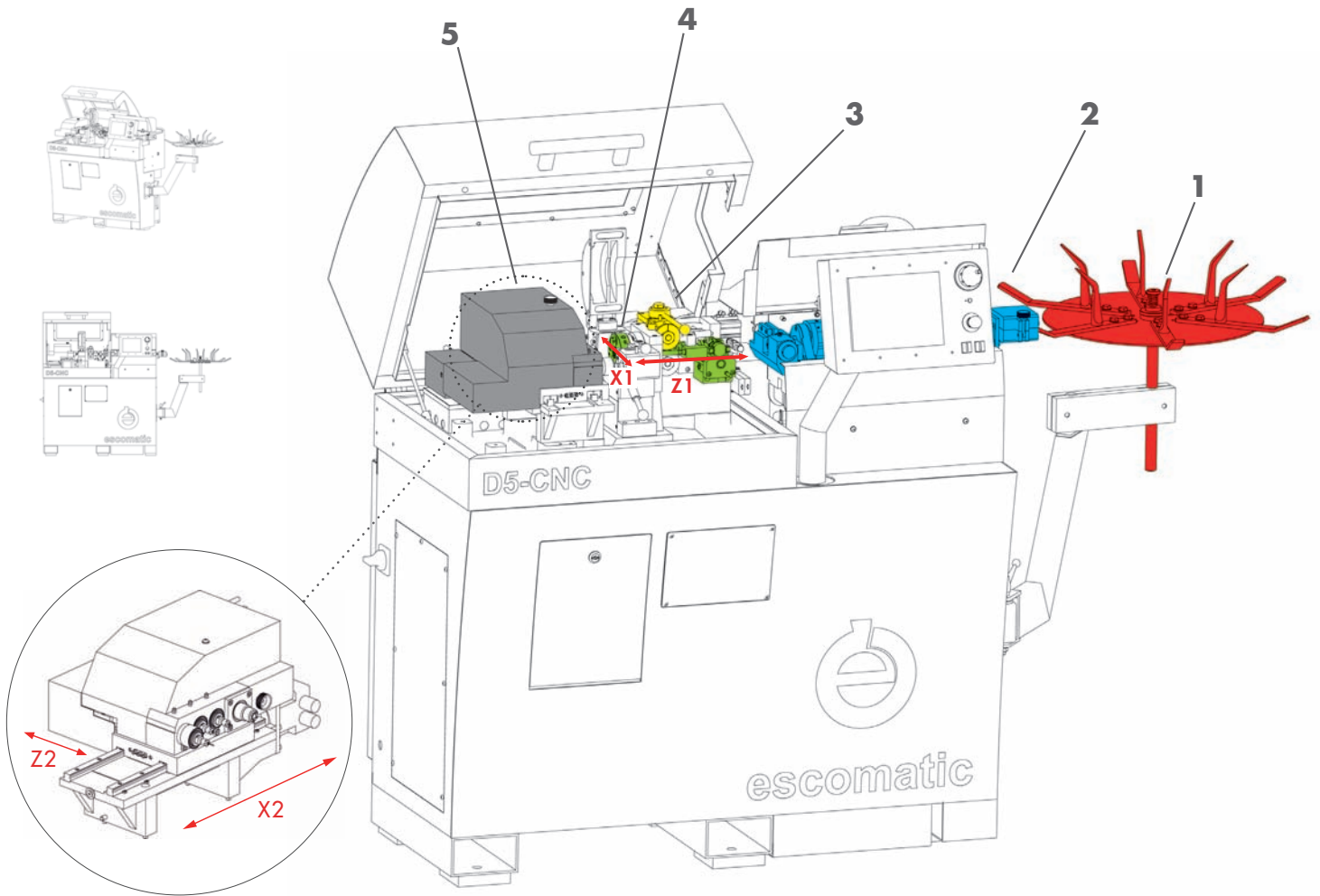


PRODUCTIVITY OF THE CAMS
AND FLEXIBILITY OF THE CNC

escomatic CONCEPT

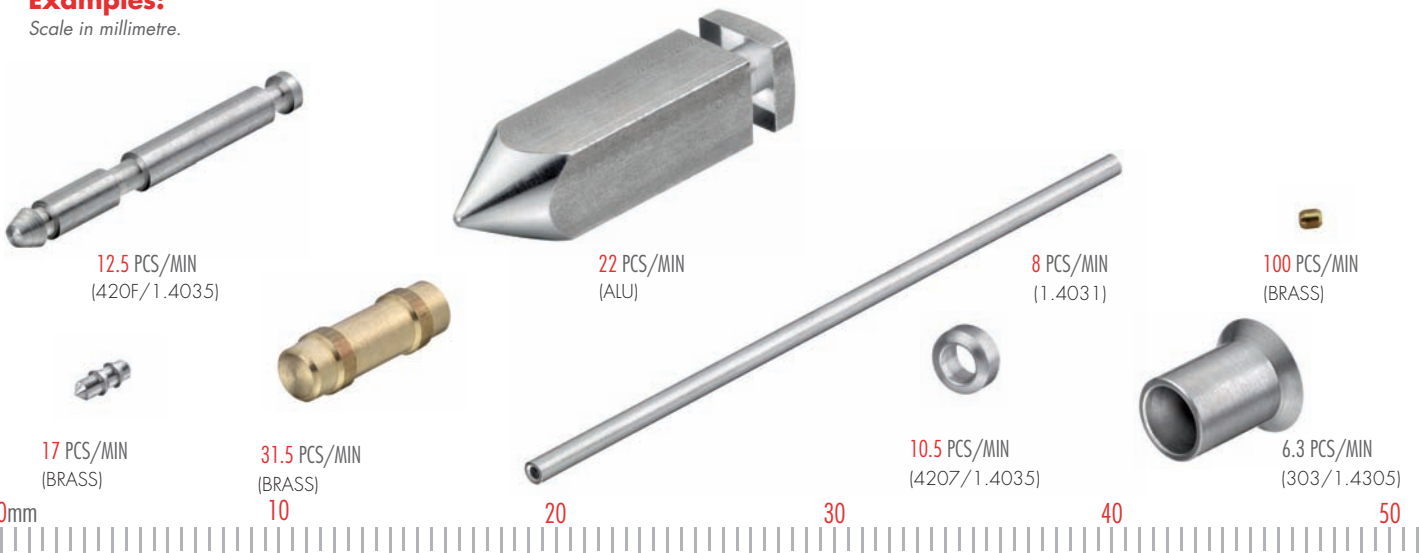
escomatic.ch

Unlike conventional lathes, escomatic lathes are based on a unique concept. The material, which is coil stock or bar, does not rotate. The cutting tools mounted onto the spinning tool head rotate around the material. This concept equally qualified for the manufacturing of small, medium and large lot size parts, contributes to the extremely high performance and cost savings achieved with escomatic machines.



Examples:

Scale in millimetre.



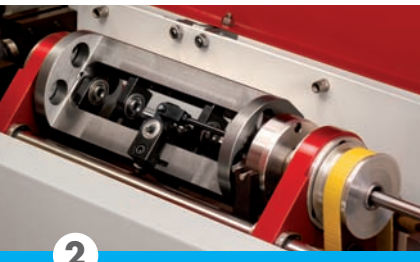
escomatic D2/D5 CNC:

PRODUCTIVITY OF THE CAMS AND FLEXIBILITY OF THE CNC



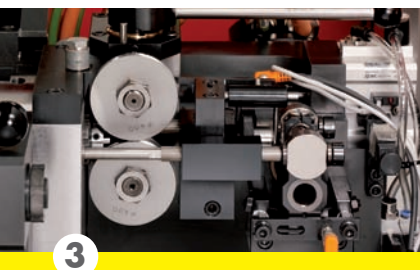
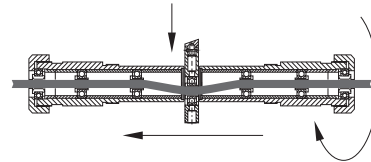
MATERIAL FEED

The material is supplied into the machine from coil. A coil, depending on the type of material, usually has 30 to 50 kg and is unrolled from a reel supported by the machine. The material is pulled across the machine by the material feed system.



MATERIAL STRAIGHTENING

The material is fed into the machine from a coil which becomes bar stock after the straightening process. It produces a bar with a straightness quality equivalent to standard bar stock.



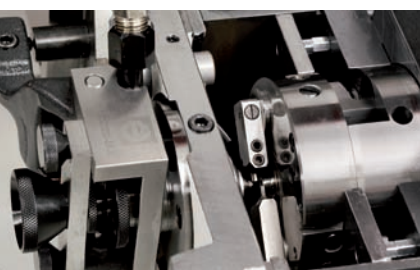
MATERIAL FEEDING

The material is clamped between a set of grooved rollers and their rotation controls the feeding. The clamping pressure is adjustable and the grooves have the shape of the wire. With this principle and the closeness of the guide bush, very small wire can be machined without bending or whipping (down to 0.30 mm).



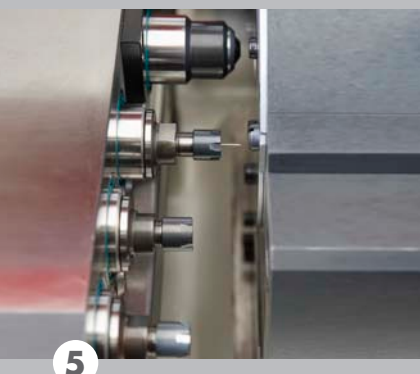
TURNING

While the material is held by a guide bush, the turning and chip removal is performed by the unique escomatic principle. This consists of having the cutting tools rotating around the material with a speed up to 12'000 rpm. When cutting off, the counter collet holds the machined part for a perfect flatness and a cut-off tip free end.



COUNTER COLLET (D2)

Before cutting off of the finished part from the stock material, the work piece is clamped by the counter collet. After cut-off the part is pushed by the following work piece across the counter collet and ejected into a container.



DEVICE OF FRONTAL MACHINING (D5/DUF)

The counter collet of the machine D2 has been replaced by a system for the front machining which consists of a cross table with 2 axes supporting: 2 drilling spindles, one threading/tapping spindle and one counter collet with programmable positioning.

escomatic D2/D5 CNC:

PRODUCTIVITY AND FLEXIBILITY



The **escomatic D2 CNC** is the revolutionary and innovative evolution of the fastest automatic turning machine for precise and economic manufacturing of simple parts up to 4.0 mm diameter in large and small lot sizes.

The basis of the **escomatic D5 CNC** is identical with the one of the escomatic D2 CNC. Machine base, straightening unit, feed system and rotating tool head are absolutely identical with the D2. On the escomatic D5 CNC the counter collet of the D2 has been replaced by a system for the front machining which consists of a cross table with 2 axes supporting 2 drilling spindles, one threading/tapping spindle and one counter collet with programmable positioning.

The CNC control allows for flexible and optimized manufacturing of turned parts without cycle time loss. The advantages of cam driven machines are maintained. The very simple programming system which is based on the experience of operators allows all operators to learn to operate and program the machine within a few hours.

Application Profile:

- Parts with very high production and small batches
- Turning operations with two cutting tools
- Material diameter from 0.3 up to 4.0mm
- Simple, precise parts
- Machining from coil for 24 hours production

Features:

- Proven escomatic technology with menu guided CNC control system
- Menu guided programming / set-up and quick process adaption
- escomatic standard turning tools can be used
- Tool head speed up to 12'000 RPM
- Fast cycles and short machining times enhanced precision
- Best price / performance ratio for the production of parts with small diameters
- Improved parts quality, both in meeting tolerances and in surface finish
- Reduction of labour costs due to fewer machine stops by using material from coil, real 24h operation
- Economy of floor space due to compact design of the unit
- Easy and simple set up and operation due to the absence of cams
- Turning speeds, feed rates and cutting speeds are freely programmable
- Turning without form tools is possible

TECHNICAL DATA

Turning:

Maximum part diameter	4	mm
Maximum workpiece length	80	mm
Number of cutting tools	2	
Max. tool head speed	12'000	min-1
Material feed rate (Z1)	8	m/min

Straightening:

D2 Straightening unit		
Straightening length	80	mm
Straightening speed	35	min-1
Rotation speed of straightening unit	600 - 3400	min-1

Device of frontal machining (D5/DUF)

Drilling diameter	3	mm
Maximum drilling speed	18'000	min-1
Drilling length	20	mm
Tapping/threading diameter	M3	
Tapping/threading speed	6'000	min-1
Rigid tapping	yes	

Options:

Speed of the back milling/drilling spindle	20'000	min-1
Axial travel	5	mm

Technical features:

Coolant / cutting fluid	Oil	
Tank capacity	70	liter
Flow rate of the pump	7	l/min
Max. system pressure	4,5	bar
Chips container capacity	15	liter
Installed power	4	kVA
Compressed air consumption	7	m ³ /h
Compressed air pressure	5	bar

Dimensions & weight:

Length x Width x Height	1350 x 770 x 1380	mm
L x W x H with coil reel	2200 x 770 x 1380	mm
Net weight	850	kg
Gross weight	1050	kg

Modifications reserved

Representation:

