

escomatic D3/D6 CNC

3 TURNING TOOLS FOR MORE PRODUCTIVITY AND FLEXIBILITY



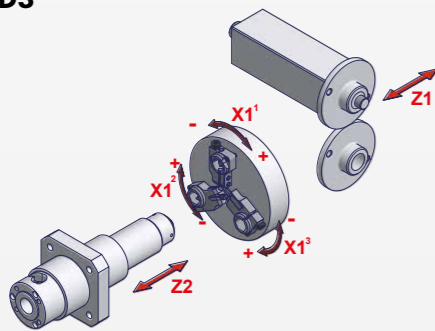
The escomatic concept

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.

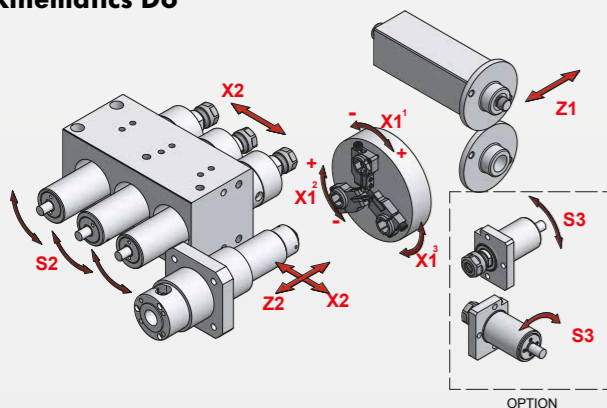
Very high profitability thanks to:

- Unrivaled productivity of the escomatic principle
- Very short turning times thanks to the proximity of tools
- 24 hours production facilitated by coil feeding
- No lost time due to bar loading
- Man-hour gain in material feeding
- Limited waist of material ends
- Low maintenance costs

Kinematics D3



Kinematics D6



TECHNICAL DATA

Turning

Maximum part diameter	4	mm
Standard workpiece length	80	mm
Number of cutting tools	3	
Max. tool head speed	12'000	min ⁻¹
Material feed rate	8	m/min

Redressage

Straightening unit		
Maximum straightening length	80	mm
Rotation speed of straightening unit	600-3'400	min ⁻¹

D3 CNC

Counter collet unit

Over gripping counter collet	yes	
Counter collet unit mobile	option	

D6 CNC

Front machining unit DUF

Axial powered spindle	3	
Radial powered spindle	option	
Max. drilling speed	18'000	t/min
Max. drilling diameter	3	mm
Max. drilling length	20	mm
Max. tapping/threading diameter	M3	
Max. tapping/threading speed	6'000	t/min

Back machining unit DUAL

Axial powered spindle	1	
Max. drilling speed	18'000	t/min
Max. drilling diameter	3.5	mm
Max. drilling length	20	mm
Max. tapping/threading diameter	M3	
Radial powered spindle	1	
Max. speed	18'000	t/min
Max. drilling diameter	3.5	mm

Technical features

Coolant/cutting fluid	oil	
Tank capacity	70	l
Flow rate of the pump	11	l/min
Max. system pressure	10	bar
Chips container capacity	20	l
Installed Power	4	kVA
Compressed air consumption	7	m ³ /h
Compressed air pressure	5	bar

Dimensions & weight

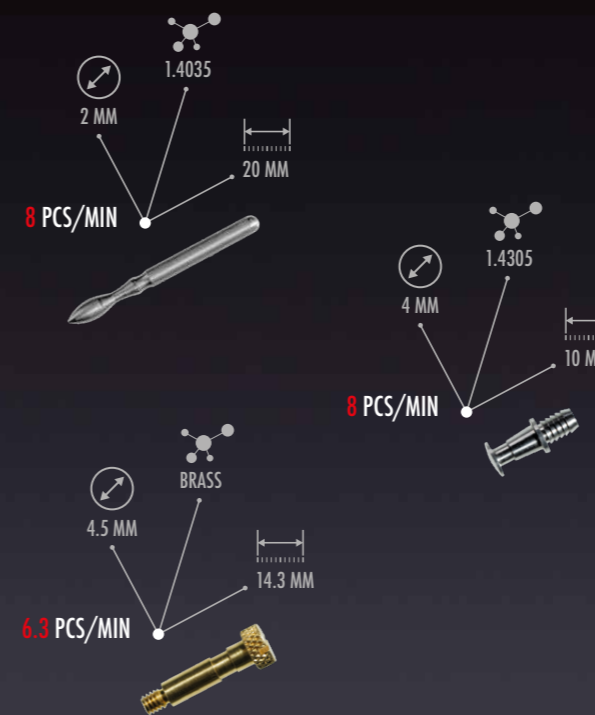
Length x Width x Height	1'360 x 750 x 1'560	mm
L x W x H with coil reel	2'400 x 1'000 x 1'560	mm
Net weight	850	kg
Gross weight	1'050	kg

Modifications reserved



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D3/D6 CNC



PRODUCTIVITY

OF THE CAMS

AND FLEXIBILITY

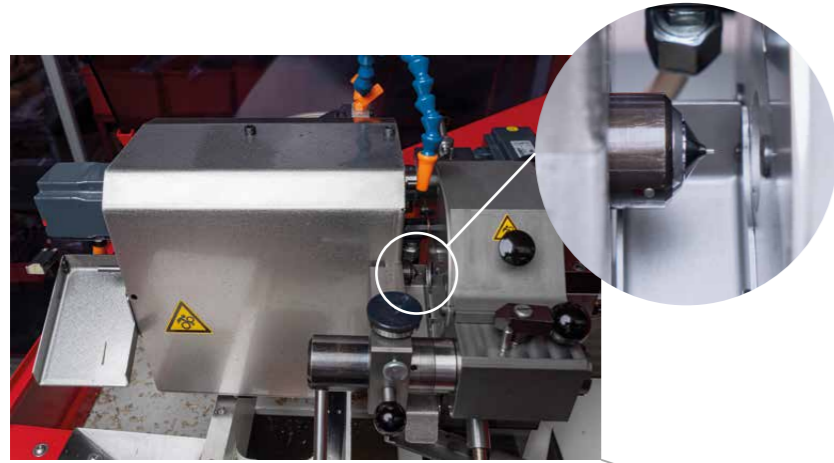
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D3 CNC MOBILE COUNTER COLLET

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.



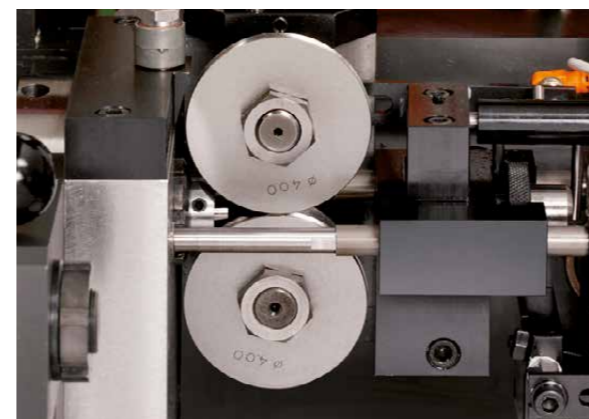
D6 CNC DEVICE OF FRONTAL MACHINING (DUF)

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, 1 threading / tapping spindle and 1 counter collet with programmable positioning.



D6 CNC DEVICE OF BACK MACHINING (OPTION DUAL)

For the back machining unit, in counter operations, 1 axial spindle and 1 cross spindle are standard. Optionally, a vertically mounted spindle could be mounted for milling.



MATERIAL FEEDING

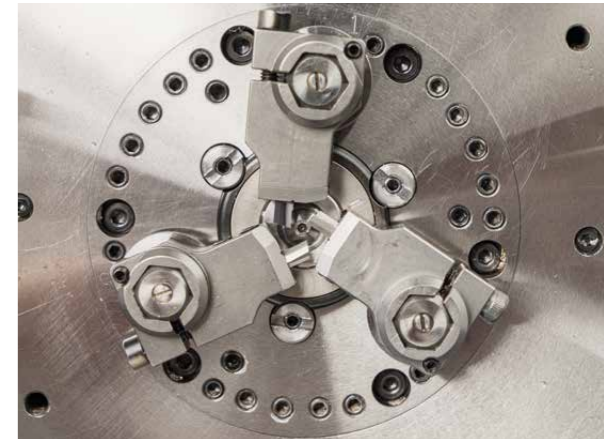
The material is clamped between a set of grooved rollers and their rotation controls the feeding. The clamping pressure is adjustable and the grooves have the shape of the wire. With this principle and the closeness of the guide bush, very small wire can be machined without bending or whipping (down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

The new tool head 3 is extended reliability. The tools can be controlled individually. Different types of guide bushes can be mounted, the tool holders remain identical for the all-D machine series.



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. It saves you a lot of money, time, and space compared to bar work.



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.