



The IO S cutting concept revolutionises cutting of round and shaped tubes

The shearing process between the inner and outer tool is extremely quick, functions cleanly without the addition of emulsion or oil and produces a burr-free cut

Cutting inserts can be resharpened with a minimum of effort

The concept is ideal for cutting tube to length from stock and trimming after upstream processes

Technical data

Forming unit

- Tube diameter 20 – 200 mm *
- Maximum cut-off length 400 mm *
- Tube wall thickness max. 3 mm *
- Axial stroke \varnothing 100 x 150 mm – 24 t
- Radial stroke 8x – \varnothing 70 x 60 mm – 12 t
- Pivoting inner and outer tool 22.5°
- Mean cycle duration: ~3 s

Hydraulic equipment

- Tank capacity 63 L
- Delivery capacity 16 L/min
- Pressure 300 bar
- Motor 5.5 kW – connection 400 V / 16 A
- Valves 24 V Bosch Rexroth

Machine structure

- Universal housing HW-Flex
- Electrical unit with adequate reserve
- Hydraulic unit with screwed housing
- IO S cutting unit for horizontal applications
- Quick-change system for inner cutting tools and expansion mandrel
- Quick-change interface for outer cutting tools
- Pneumatic ejection of cut tube section
- Interface for tube support (trimming of bent tubes)
- Inner cutting tool forward and return stroke via hand wheel and scale
- Dimension L = 1200; W = 830; H = 1450 mm
- Emission sound pressure level: 75 dB (A)
- Colour of housing – Ral 5010 gentian blue
- Colour of electrical unit – Ral 7035 light grey
- Color of IO S unit – burnished black und polished
- Weight approx. 750 kg

Electrical equipment

- PLC Möller easy control
- Cutting software
- Motor circuit breaker and emergency STOP
- „Pneumatic ejection“ rotary switch
- Foot pedal

Options

- Choice of colour
- Siemens electrical equipment
- Connection without neutral conductor
- Special voltage
- Connection for robot handling via RS232
- Profibus interface
- Single piece counter
- Oil cooler
- Oil sump
- Central lubricating sys. for sliding surfaces (Pico)
- Central lubricating sys. for sliding surfaces (Vogel)
- Lubricant level monitoring
- Oil level and oil temperature monitoring
- Filter dirt monitoring
- Analogue absolute position sensor system on inner and outer tool with 5.7" touchscreen (Microinnovation); Möller
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- Dataset for tooling and program
- Two-handed operation
- Axial stroke 150 mm – 12 t (up to -50% cycle duration)
- Axial stroke 150 mm – 34 t (up to +50% cycle duration)
- Axial stroke 150 mm – 100 t (up to +300% cycle duration)
- Axial stroke 150 mm – 150 t (up to +500% cycle duration)
- Output boost 7.5 kW – 20 L/min
- Output boost 11 kW – 25 L/min

