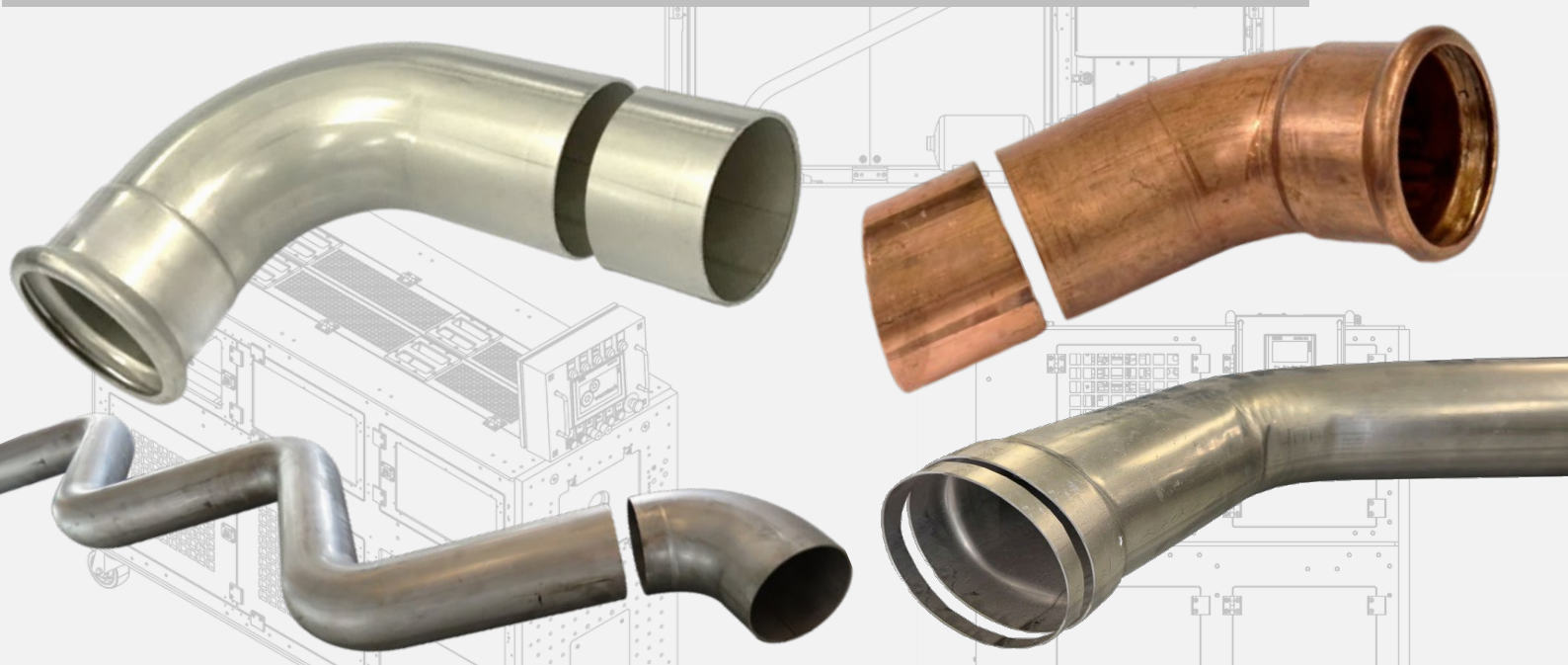




Tube End Cutting Machines

cut & brush

machines developed for **cutting and brushing** of oval and round tubes after bending operation



www.wecotech.ch

+41 71 932 70 40

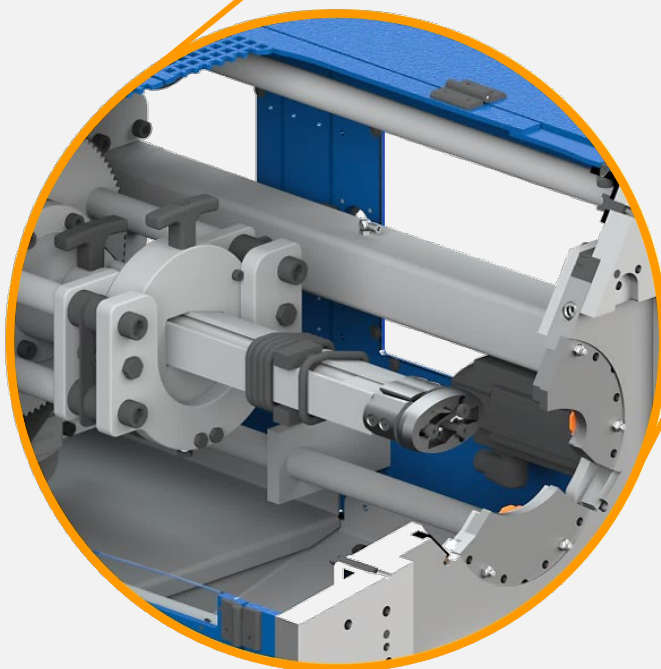
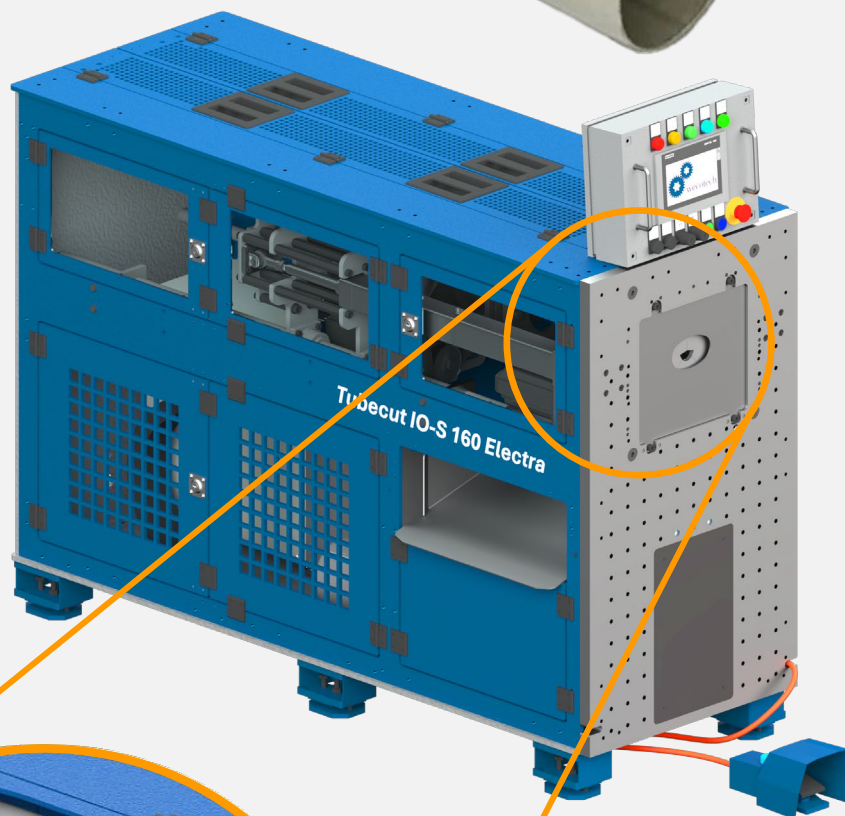
info@wecotech.ch

TubeCut IO-S 160 Electra

diameter range from Ø35 mm up to Ø160 mm

used for:

- oval and round tubes
- cut-off length 200 mm or 400 mm



check the video



IO-cutting concept

cutting process

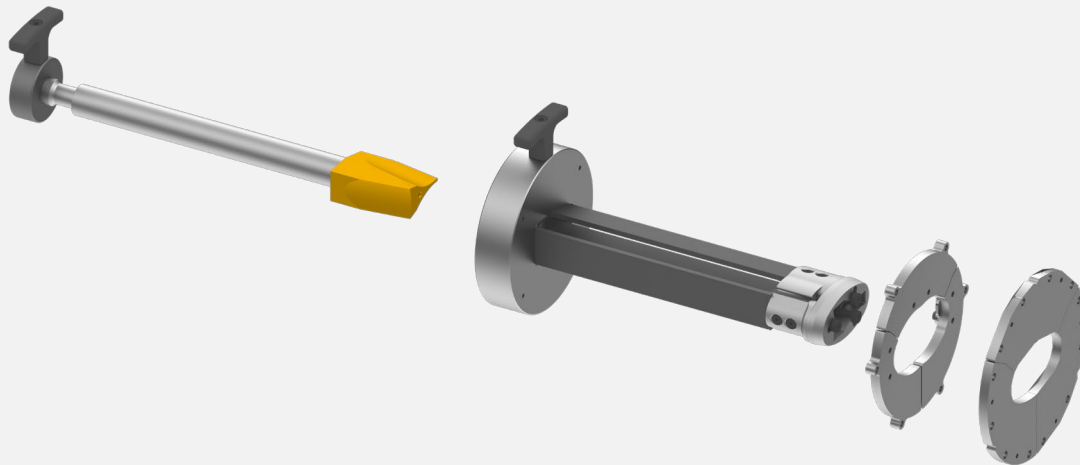
The outer tool is clamping the tube. The inner tool moves forward to cutting position and the cone is spreading the inner segments.

The tube is getting sheared between inner and outer tool, then the inner tool close and rotate $30^\circ/180^\circ$ to shear the tube over the circumference.

The inner tool moves back to home position and the outer tool release the waste part, that will fall through the waste exit.

benefits

- no coolant
- no chips
- high lifetime of cutting inserts: up to 50'000 cutting processes



composed of:

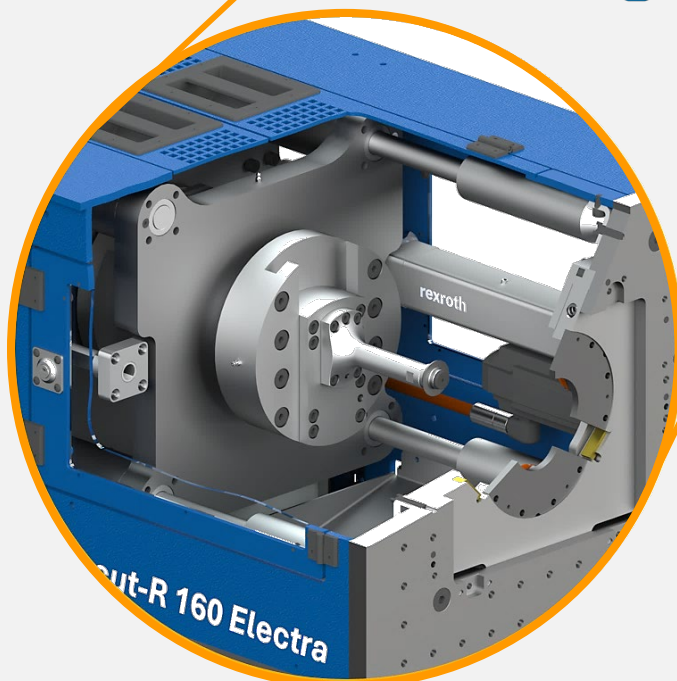
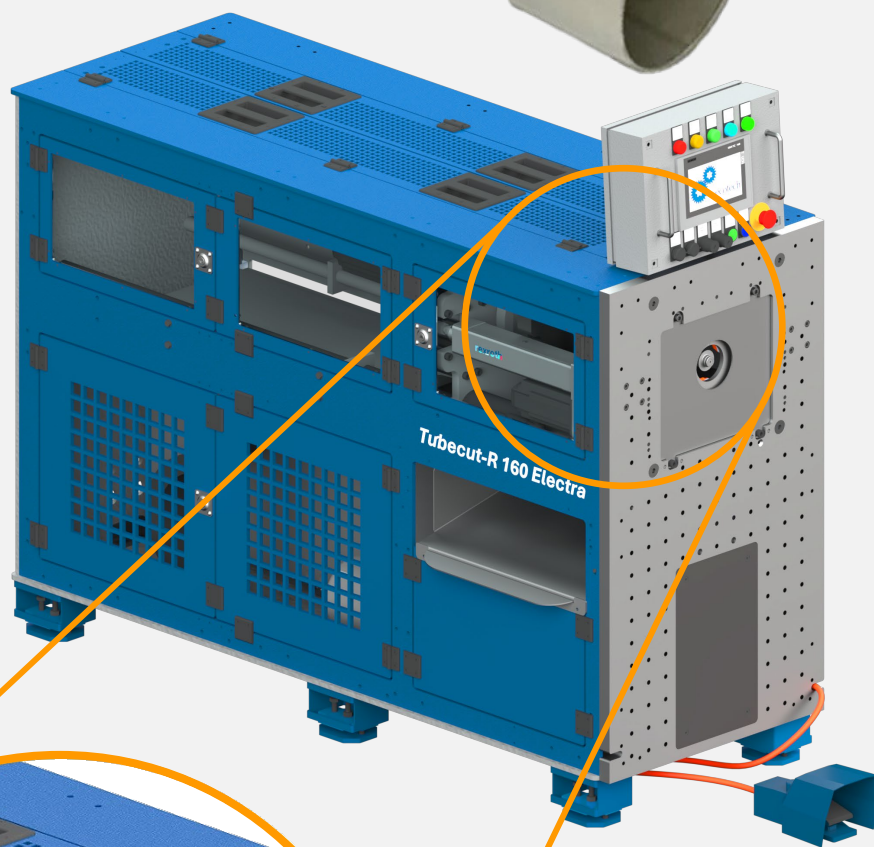
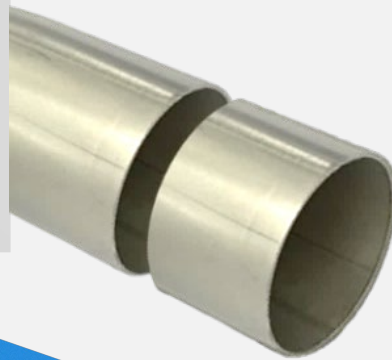
- cone
- inner tool with cutting inserts
- outer cutting tool

TubeCut-R 160 Electra

diameter range from Ø30 mm up to Ø160 mm

used for:

- round tubes
- cut-off length up to 200 mm



check the video



R-cutting concept

cutting process

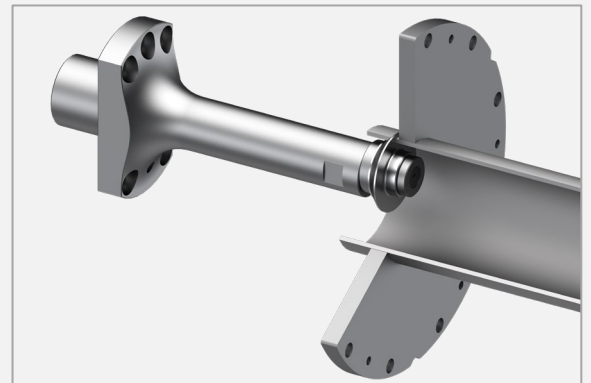
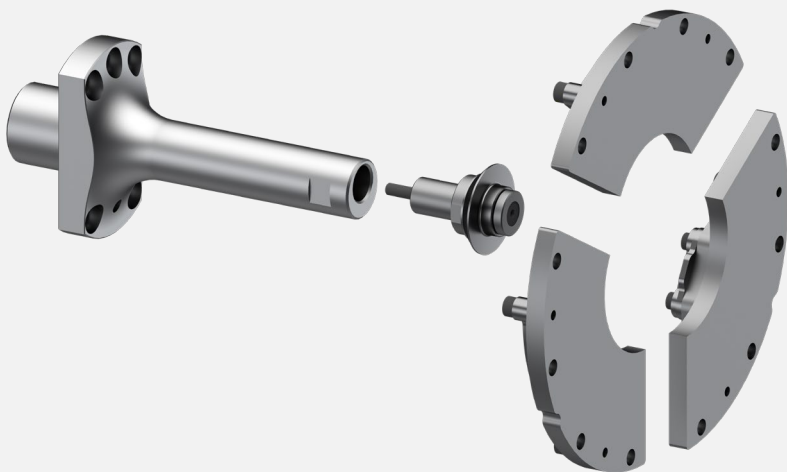
The outer tool is clamping the tube. The inner tool moves forward to cutting position.

The tube is getting sheared by eccentric rolling of the inner tool.

The inner tool moves back to home position and the outer tool release the waste part, that will fall through the waste exit.

benefits

- no coolant
- no chips
- high lifetime of cutting inserts: up to 50'000 cutting processes
- fast cutting process
- low tooling costs

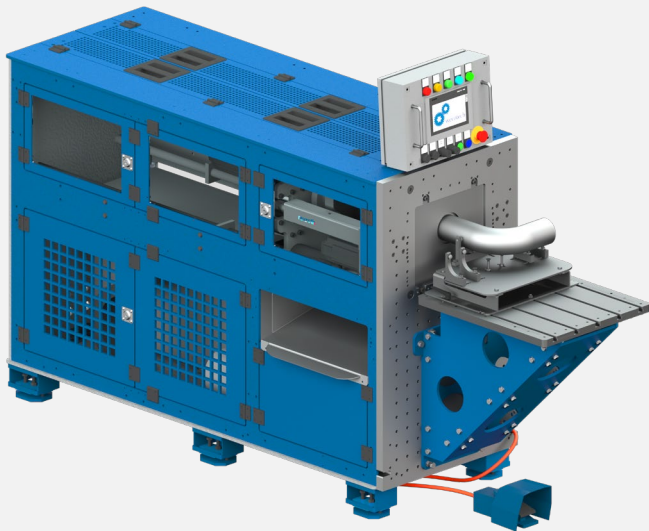


composed of:

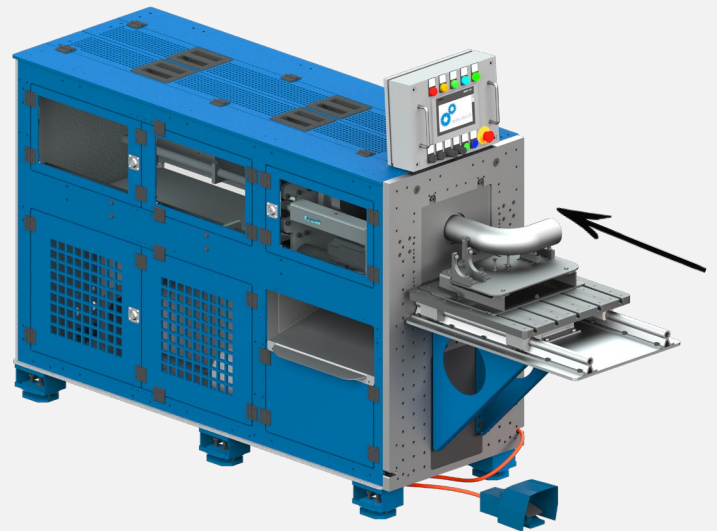
- inner cutting roll
- holder inner cutting tool
- outer cutting tool

TubeCut options

tube support table

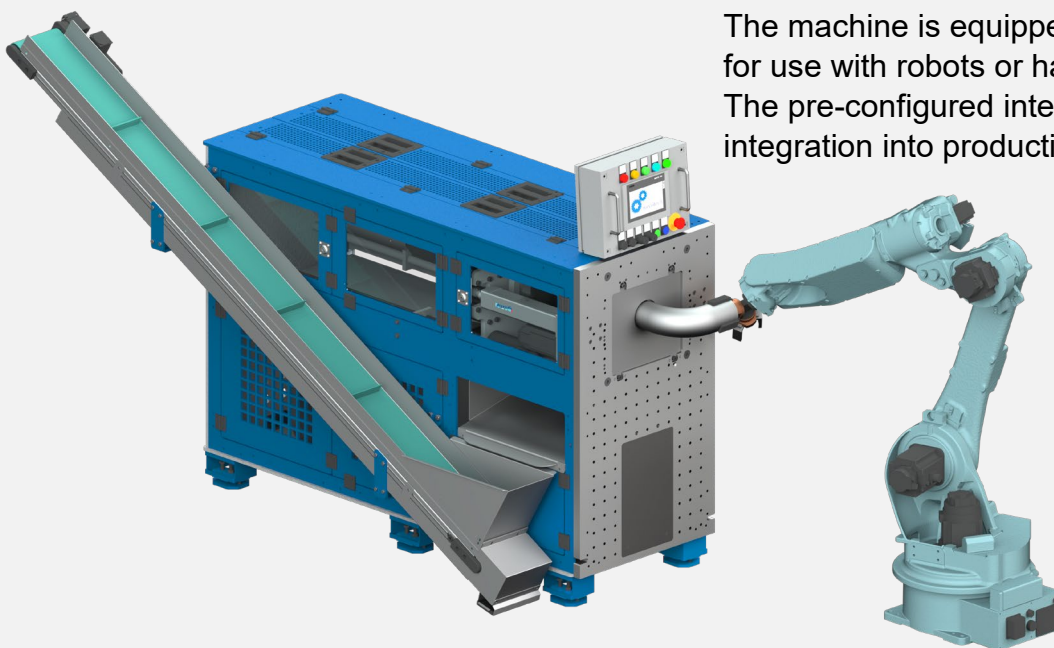


Support for easy loading and precise positioning of tubes, ensuring stable handling and accurate alignment during operation.



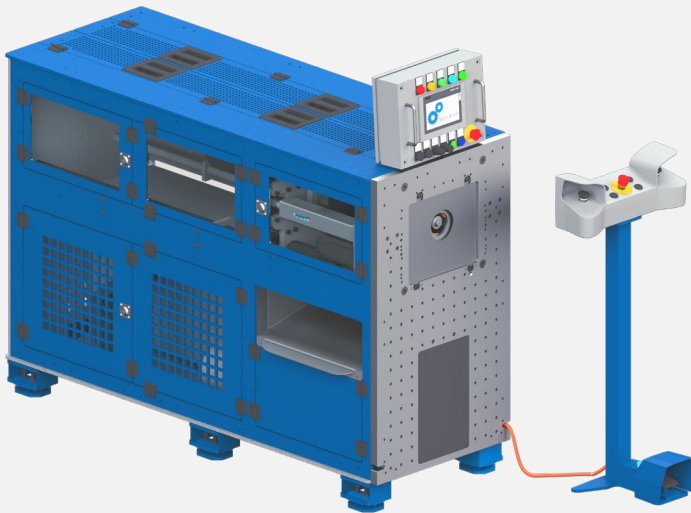
Insertion slide device (servo-electric driven) with forward and backward movement and automatic clamping device for secure tube positioning and perfect alignment during cutting operations.

robot interface



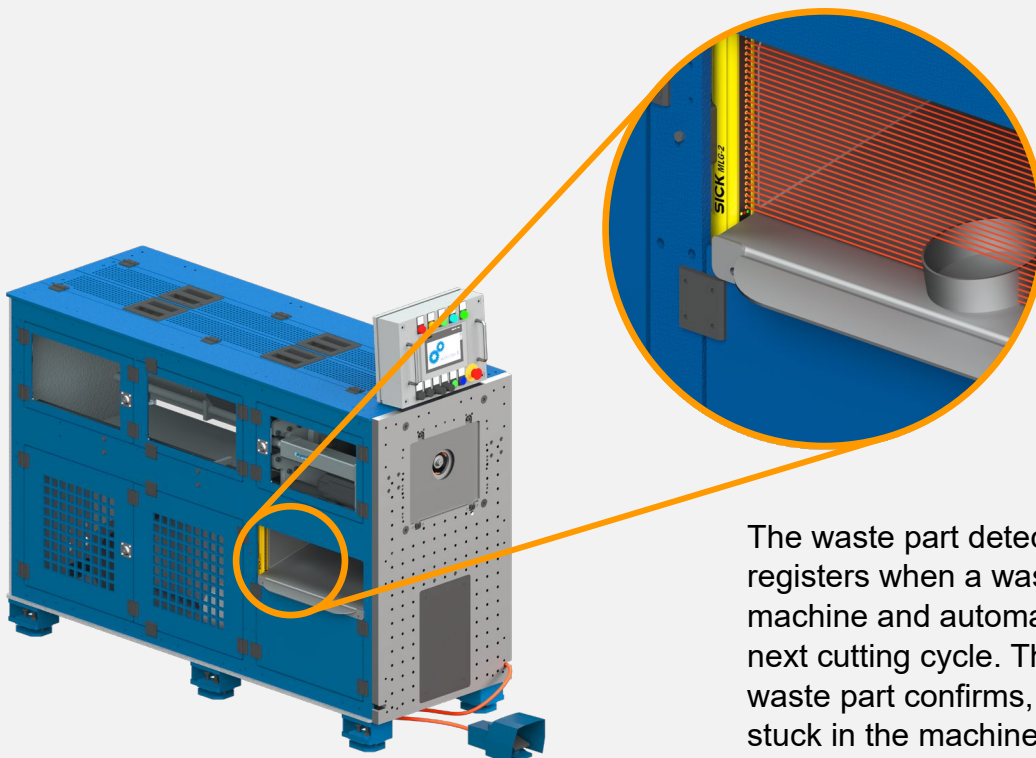
The machine is equipped with an interface for use with robots or handling systems. The pre-configured interface allows smooth integration into production cells.

two hand control



Maximum operator safety through intelligent two-hand control. The machine cycle starts only when both buttons are pressed at the same time. This reliably prevents injuries and ensures the highest level of workplace safety.

waste part detection with light curtain



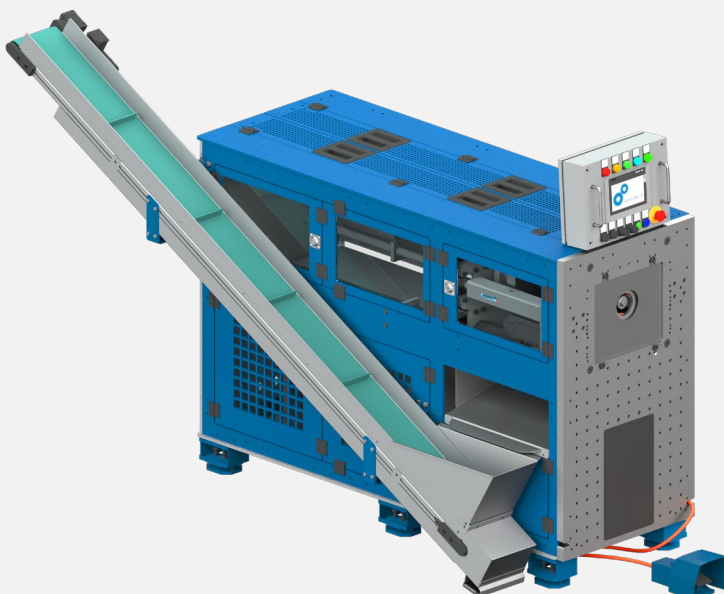
The waste part detection sensor registers when a waste part exits the machine and automatically releases the next cutting cycle. The drop-out of the waste part confirms, that the part is not stuck in the machine, preventing collisions and mechanical damage.

tray for waste part



The tray for waste part collects the waste parts which are falling out of the machine. Ensuring a clean and safe working area.

conveyor belt



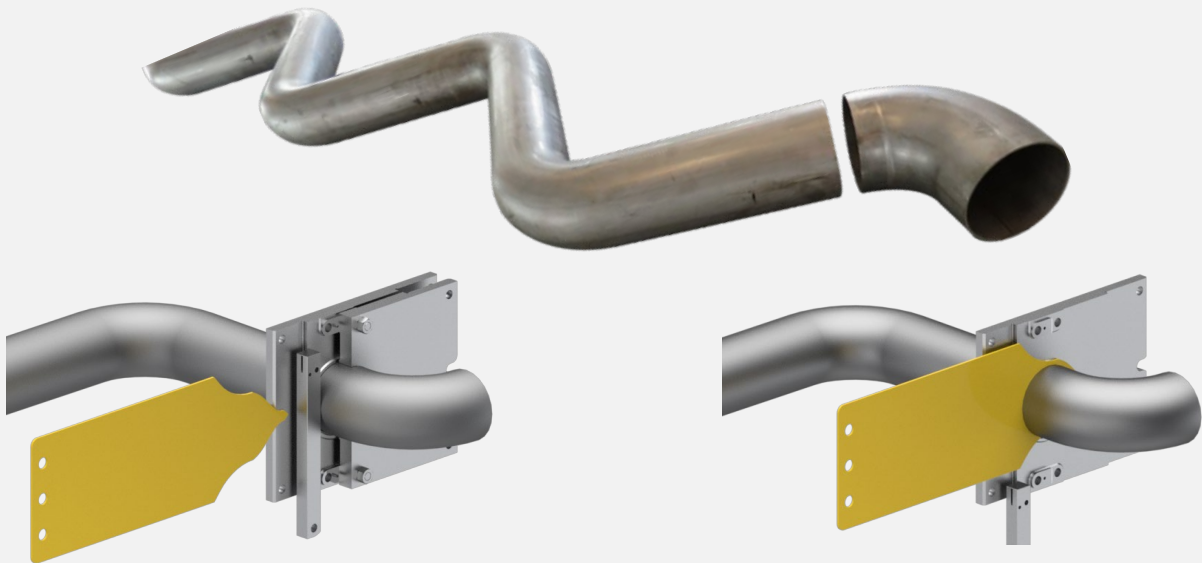
The conveyor belt ensures reliable removal of the waste part from the production area. It supports a clean material flow and contributes to an efficient, automated production process.

Tubeshear

diameter range from Ø20 mm up to Ø160 mm

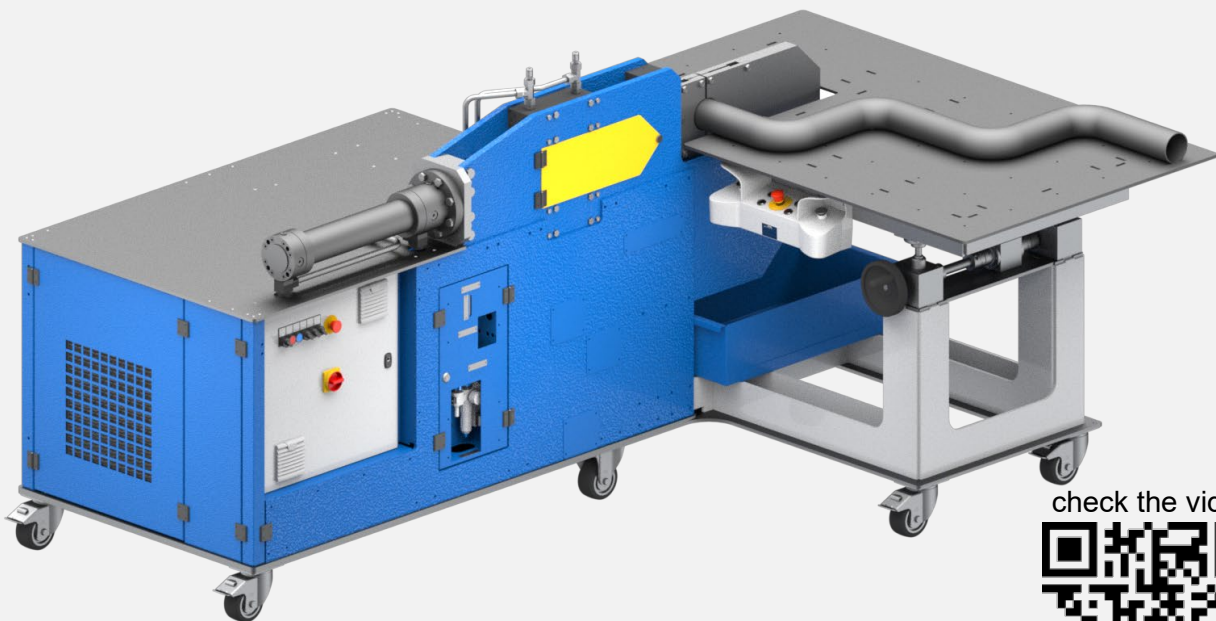
shearing process

The machine clamps the tube and a knife is scratching the tube. Afterwards the tube will be cutted in a guillotine process.



knife is scratching the tube

guillotine process



check the video

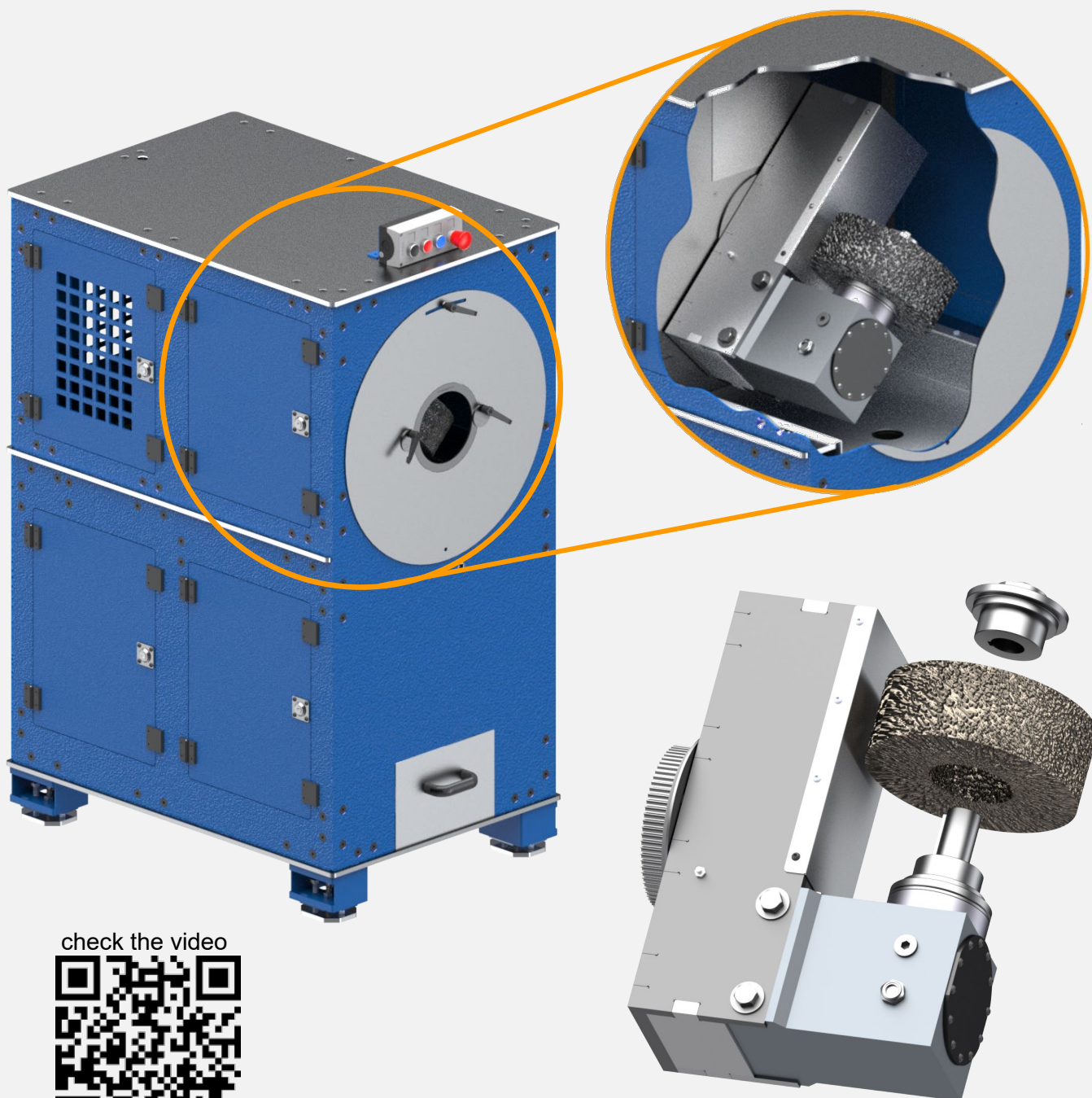


Rotobrush

brushing after cutting

diameter range from Ø20 mm up to Ø160 mm

the machine is available for manual process or automatic process; suitable for a production cell



check the video



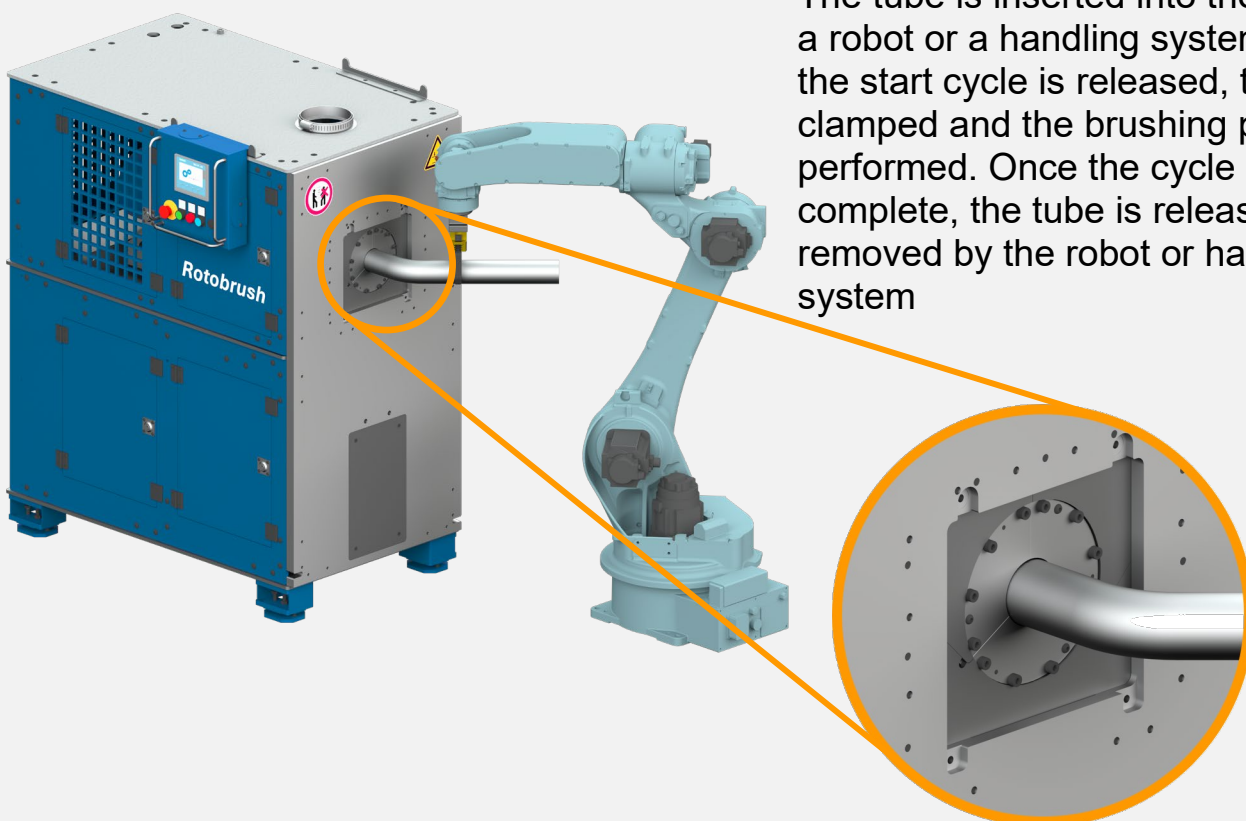
machine configuration for production cell

positioning device



The tube is inserted into the device manually, by a robot, or by a handling system. After the start cycle is released, the tube is clamped and fixed in the device and the brushing process is performed. Once the cycle is completed, the tube is released and can be removed.

clamping jaws



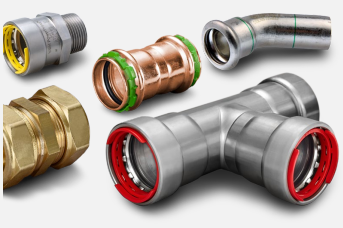
The tube is inserted into the jaws by a robot or a handling system. After the start cycle is released, the tube is clamped and the brushing process is performed. Once the cycle is complete, the tube is released and removed by the robot or handling system

technical data

	Tubecut IO-S 160	Tubecut-R 160	Tubeshear
PRODUCT RANGE			
diameter	Ø35-160 mm	Ø30-160 mm	Ø20-160 mm
cut-off length	up to 400 mm	up to 200 mm	min. 20 mm
wall thickness	up to 3 mm	up to 3 mm	up to 3 mm
range of cut-off length and diameter can vary product specific			
HYDRAULIC UNIT			
tank volume	N/A	N/A	100 l
flow rate	N/A	N/A	5 – 60 l/min
pressure	N/A	N/A	300 bar
motor	N/A	N/A	11 kW
ELECTRIC UNIT			
connection 400V / 50Hz / 3L + PE	32 A	32 A	32 A
PLC Siemens (fail safe)	✓	✓	✓
touchscreen 7"	✓	✓	optional
cutting program settings	CNC-programming	CNC-programming	manual
MACHINE FEATURES			
axis movement	servo-electric pneumatic	servo-electric pneumatic	hydraulic
working position	horizontal	horizontal	horizontal
dimension	1800x700x1800 mm	1800x700x1800 mm	3000x2300x1500 mm

	Rotobrush (manual)	Rotobrush (automatic)
BRUSHING UNIT		
diameter	Ø20-160 mm	Ø20-160 mm
axis movement	electric	electric
linear movement	0 – 75 mm	0 – 75 mm
tube center point eccentrically movable	±6°	±6°
brush dimension	Ø250x100x100 mm	Ø250x100x100 mm
ELECTRIC UNIT		
connection 400V / 50Hz / 3L + PE	16 A	16 A
control	control Siemens	PLC Siemens (fail safe)
touchscreen	N/A	4"
brushing program settings	N/A	CNC-programming
MACHINE FEATURES		
working position	horizontal	horizontal
dimension	1100x700x1500 mm	1140x800x1500 mm

Tube-End-Forming For World's Leading Industries





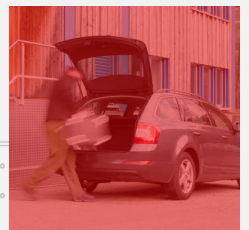
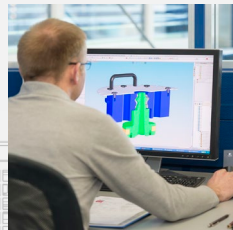
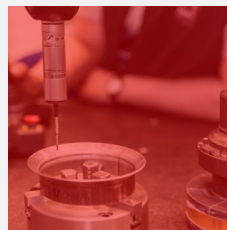
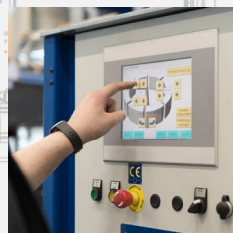
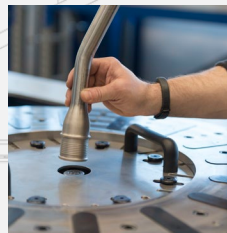
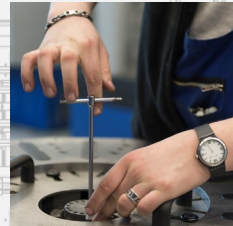
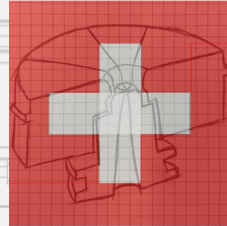
Wecotech AG

Silberwisstrasse 14
9534 Gaehwil
Switzerland

Your trust inspires us to develop and provide solutions that meets the highest requirements. At Wecotech, we are more than a company – a partner which focus on forming your ideas.

Together we realize challenges efficiently by simplicity and clarity, the customer benefit in sight.

Your goals guide our work, and your success measures ours.



www.wecotech.ch

+41 71 932 70 40

info@wecotech.ch