



Chipless cutting machine RS25

The chipless cutting machine RS25 is used for:

- chipless cutting of pipe sections
- chipless cutting of plastic
- chipless cutting of steel or non-ferrous metals

A typical implementation of the cutting machine is the chipless cutting of pressure sensors from their carrier material or the cutting of flexible hoses to length. Wall thicknesses of 0.1 mm up to approx. 1.0 mm with a diameter of 3 – 25 mm are possible.

Machine setup

The handling of the chipless cutting machine is very simple. The pipe is inserted into the feed axis, usually positioned with the help of a gripper, and moved stepwise towards the appointed cutting position.

The pipe stands still while the radially closing cutting parts are turning around the pipe axis.

The corresponding working parameters can be stored and managed in the machine control system. The user interface allows easy and logical operation. All essential processes are electronically monitored and the data is stored in the control system. This ensures high process safety and reproducibility.

[for more information on the machine setup of chipless cutting machine RS25, see here](#)

Basic machine

- basic module for the reception of all functional components consists of: main base plate with carrier for 2 servomotors, recirculating ball screw and main ball screw
- cutting head available in 2 versions
- option 1: 3 cutting part holders, $W > 0.5$ mm, $\varnothing > 8$ mm
- option 2: 1 cutting part holder and 1 counter roll holder with counter roller, $W < 0.5$ mm, $\varnothing < 8$ mm

Positioning unit

- automatic infeed of pipe (section length) with servo axis and gripper

Protection measures

- protection cover for driving mechanism
- forming head protected on both sides by cover or protection pipe
- front protection also available with light grid
- emergency stop immediately stops all movements

Control system

- VIPA Speed7 SPS with user panel Siemens TP700 comfort; S7 and TIA portal V13
- data sets selectable via user panel (by means of bar code scanner if desired)
- data bank for product specific parameters
- three access levels for machine control (user, service and administrator)
- language can be chosen as requested (default German and English, other languages with extra charge)
- control cabinet installed into frame

Frame

- holds all machine components
- welded and coated steel frame with 4 rotatable wheels, 2 with locking brake
- aluminium section optional

Machine documents

- documentation, hazard analysis, CE mark

Optional components – additions

The standard cutting machine RS25 can be equipped with different optional additions and functions to upgrade it, for example, to a semiautomatic cutting machine.

[for more information on components and additions to cutting machine RS25, see here](#)

Height adjustable frame

- desktop mounted on height adjustable legs
- height adjustable up to 300 mm
- 4 rotatable wheels, 2 with locking brake



Light curtain

- protection of free access for loading of cutting machine
- obstacle recognition
- initial inspection

Nonstandard models

- machine can be adjusted according to requirements
- integration of machine into entire machine complex possible
- further alternatives possible

Technical data

Chipless cutting machine RS25

Abmessungen	Standard	1.000 x 1.000 x 1.400 mm (length x width x height)
Die data	number of cutting rolls	1 / 3
	cutting rolls	hardened
	possible cut diameter	3 – 25 mm
	possible wall thickness	0,2 - 1 mm
Power supply	net 3 x L / PE 400V / 50Hz	
Output	3 kVA	
Current	8,2 A	
Pre-fuse	Max. 16 A	
Cable cross section	5 x 2,5mm ²	
Compressed air	not required	
Weight	Ca. 350 kg	
Cycle time	ca. 4 – 6 sec	depending on diameter

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