

Robot Compact 150

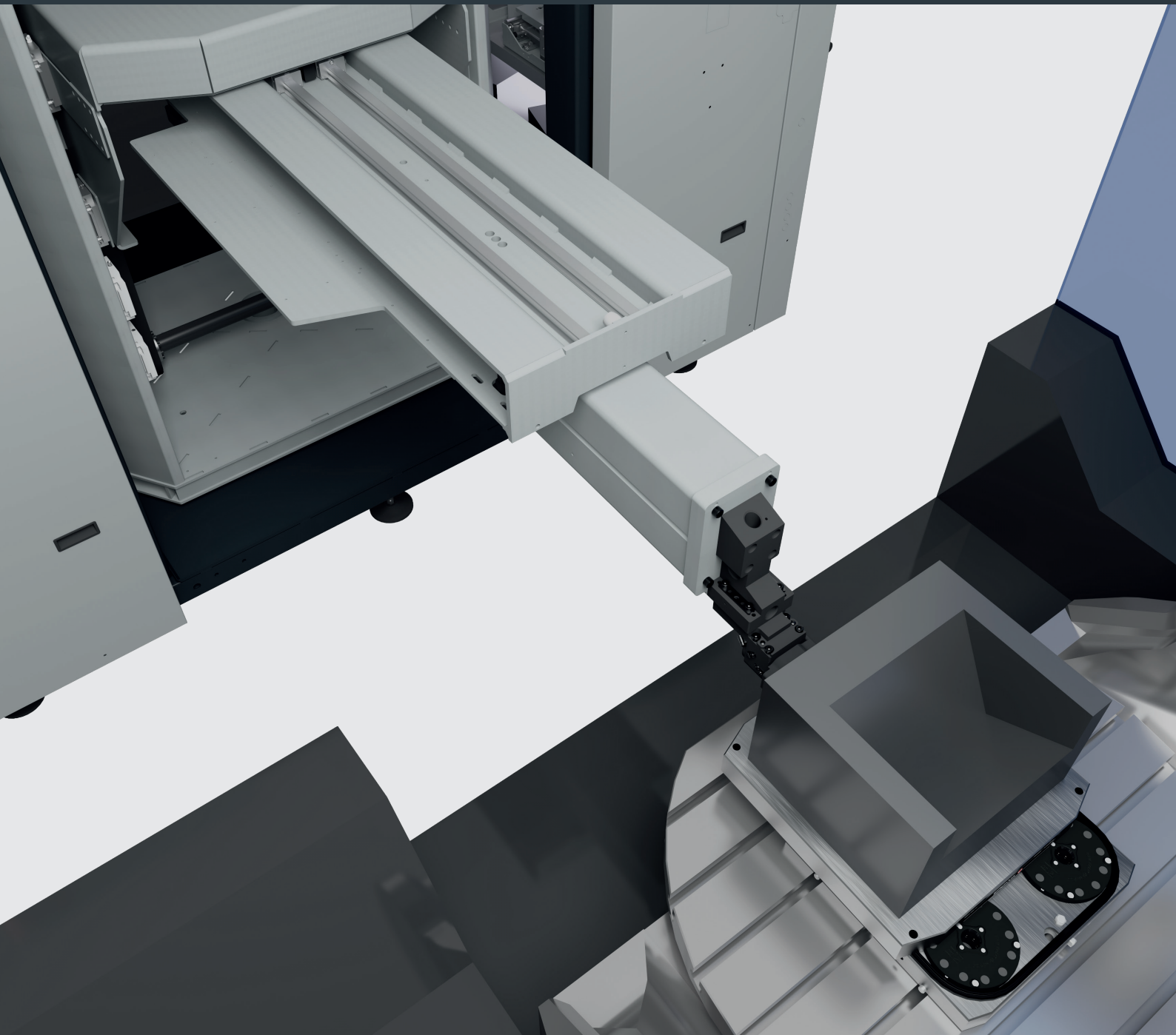
Smart automation for all
manufacturing technologies

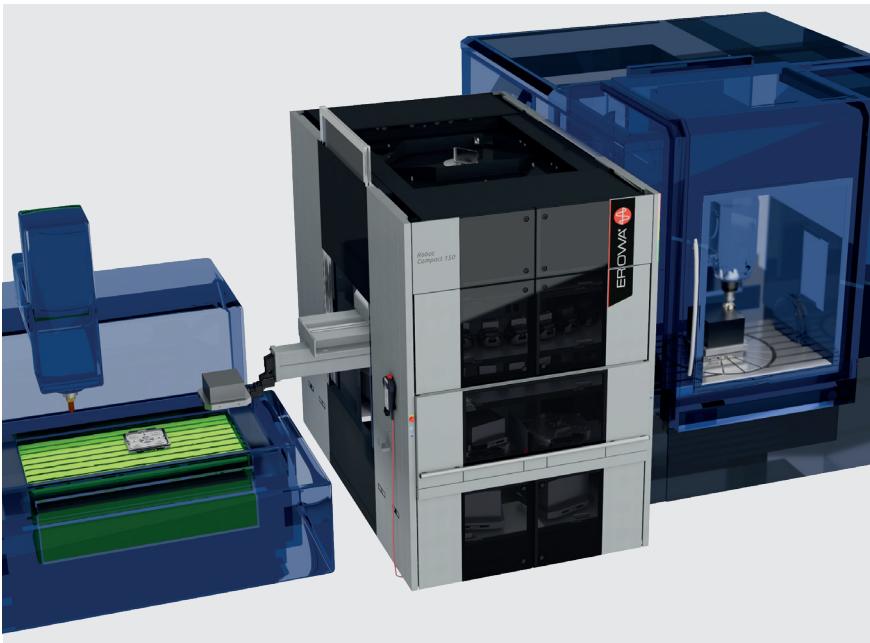
up to 150 kg
transfer
weight



The perfect solution for autonomous and productive automation!

Discover the new EROWA Robot Compact 150, the perfect automation solution for flexible loading of up to two production machines of all processing technologies - from milling to EDMing. Due to its compact monobloc design, the Robot can be positioned next to the machine and ready for operation within a very short time.





EROWA Robot Compact 150 between a milling center and a die-sinking EDM machine. Machines without an automatic door can be retrofitted with the "EROWA RoboDoor" (option).



EROWA Robot Compact 150 loads a wire EDM machine from the side.

THE ADVANTAGES

- Only 4.7 m² of floor space
- 150 kg transfer weight
- Extra long reach of the X-axis
- X-axis with 2 independent drives
- State-of-the-Art Robot control
- Serves up to two machines
- Large and flexible magazine capacity, from small ITS holders to large MTS400 pallets (max. part height 400 mm)
- Significant expansion of the magazine capacity
- Automatic mixed operation with different pallet sizes
- Integrated ergonomic loading station (optional) for heavy workpieces

Space for many workpieces

As a result of innovative design, the Robot Compact 150 offers an amazing magazine capacity while maintaining a small footprint. The magazine levels can be individually adjusted depending on the workpiece size and enable flexible and efficient use of the available magazine space.

NUMBER OF PALLET POSITIONS IN THE ROBOT COMPACT 150*

	EROWA Tooling	Part height in mm	Part size LxW (Ø) in mm	Max. Tooling per level	Max. levels per unit	Max. Tooling per unit	Max. weight per level fix (kg)	Max. weight per level pull-out (kg)
	ITS 50 / ITS 50 C	100	70x70 (Ø72)	17	16	272	170	170
		150	70x70 (Ø72)	17	14	238	170	170
	ITS holder Ø 72	100	70x70 (Ø72)	17	16	272	170	170
		150	70x70 (Ø72)	17	14	238	170	170
	Blank vise 72 U	50	156 x 87	7	16	112	280	280
		75	156 x 87	7	14	98	280	280
	Blank vise 148 U	80	156 x 165	7	12	84	280	280
		120	156 x 165	7	10	70	280	280
	ITS 115 / 148	140	150x150 (Ø180)	7	14	98	280	280
		250	150x150 (Ø180)	7	10	70	280	280
	PC 210	150	210x210 (Ø245)	5	12	60	400	300
		250	210x210 (Ø245)	5	10	50	400	300
	UPC	150	320x320 (Ø350)	3	12	36	450	300
		250	320x320 (Ø350)	3	8	24	450	300
		400	320x320 (Ø350)	3	6	18	450	300
	MTS 400	140	400x400	2	12	24	300	300
		250	400x400	2	8	16	300	300
		400	400x400	2	6	12	300	300
	PalletSet W	100	190x220	4	14	56	120	120
		200	190x220	4	10	40	120	120

* Standard configuration with two integrated magazines and without optional loading station.
For further information, please contact your EROWA specialist dealer.

50% more magazine capacity: With an optional third magazine, the workpiece supply can be significantly increased.

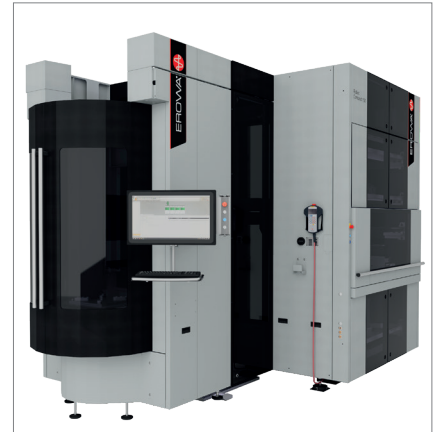


Extension with optional rotary magazine: For many small workpieces and electrodes.



Extension with optional rack magazine: In a slim design and for large workpieces.

Set-up and loading station



The optional LS 500 Comfort set-up and loading station enables the operator to load, unload and thoroughly clean the palletized workpieces ergonomically and conveniently.



Over 500 EROWA pallets with different system sizes can be stored in the magazines.



The Robot Compact 150 reliably moves pallets with a total weight of 150 kg and workpiece sizes of up to 400x400x400mm onto the machine.

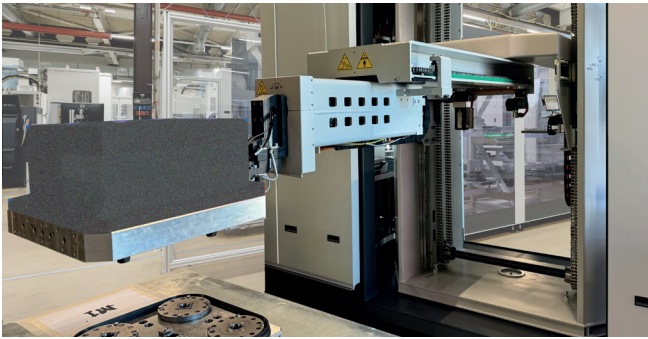


The hinged/folding door (option) requires little space to open and offers easy accessibility to the magazine compartment with maximum operator convenience.

Highest functionality, simple operation

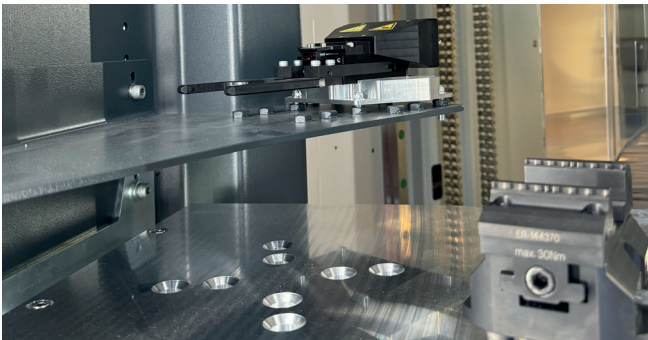
Flexibility and a high degree of automation are two decisive factors that contribute significantly to increasing efficiency and competitiveness in a constantly changing and challenging production environment. The EROWA Robot Compact 150 is equipped with many technical innovations and can be adapted to suit any production environment.





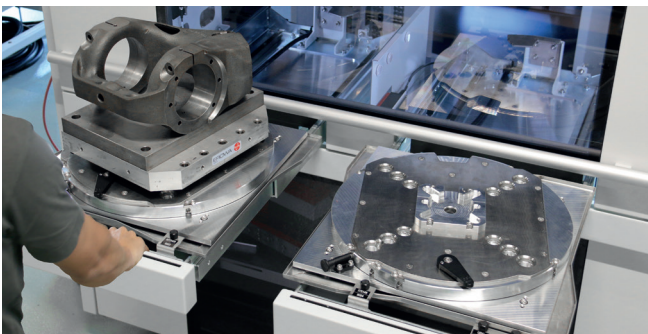
X-axis with maximum reach |

The two independent drives of the X-axis enable compact magazine handling and high magazine capacity. This also enables a long reach and a minimal interfering contour to the machine.



Space-saving gripper shelves |

The gripper shelves can be attached to the magazine side walls to save space. Only individual magazine slots are blocked so that no entire shelf is used as a gripper shelf.



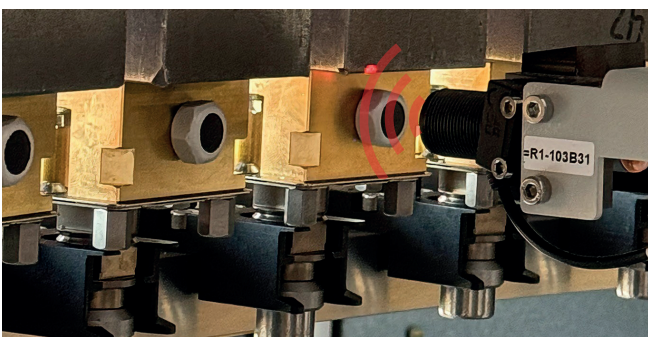
Ergonomic loading station for heavy workpieces |

The optional loading station can be integrated to save space. It enables large and heavy workpieces (UPC and MTS pallets) to be set up at an ergonomic height while the robot is working. An indexing system (4x90°) prevents the pallet from engaging in the wrong position and locks it automatically when it engages.



Pull-out magazine levels |

Easy loading and unloading by pull-out magazine levels. The pull-out is triggered by the integrated handle positions.



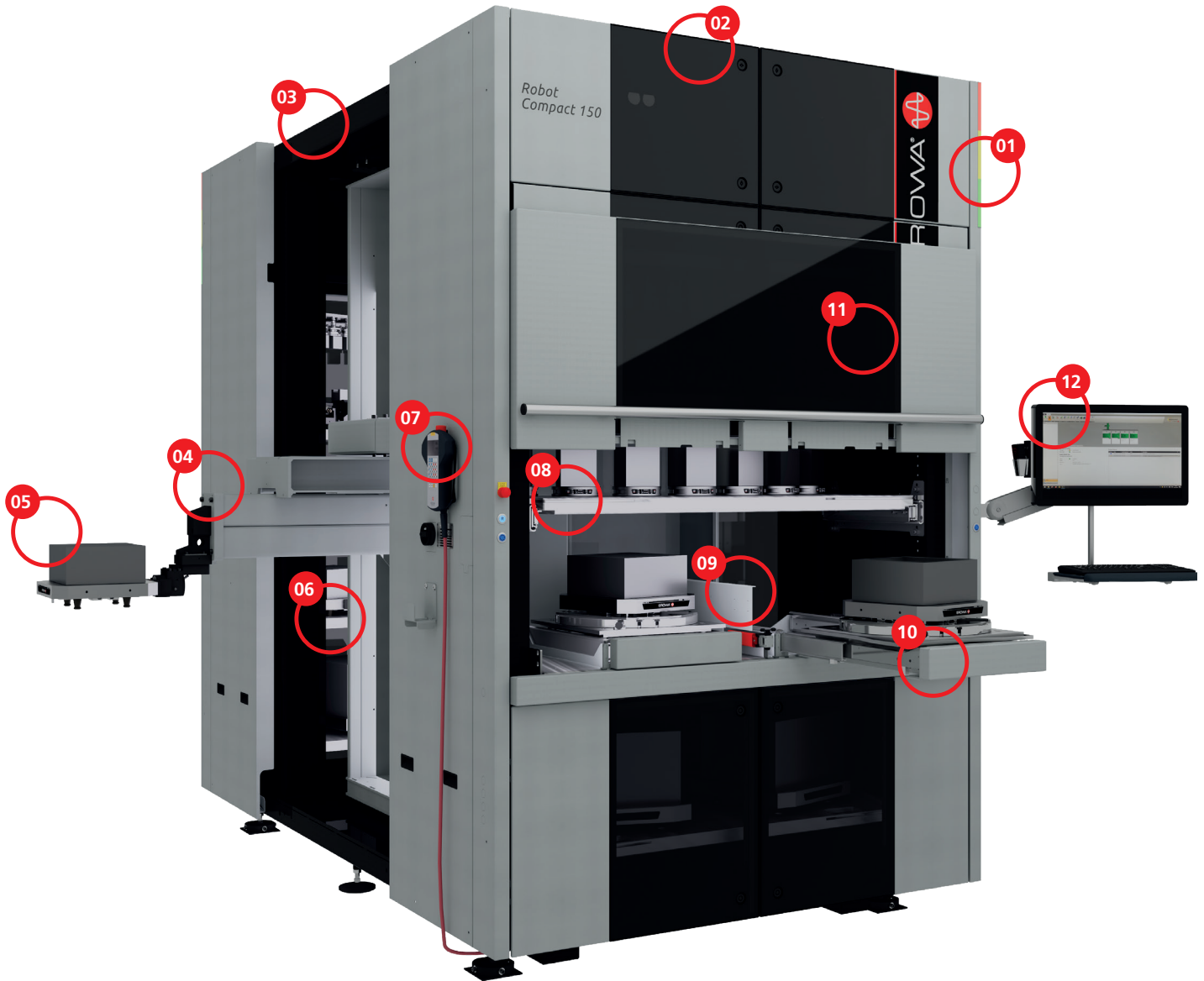
Quick overview of all magazine positions |

The EROWA EWIST™ chip identification system (option) is based on RFID technology. It enables the unique identification of pallets and electrode holders fitted with EWIS chips in the robot magazine. The read-head is mounted directly on the axis. Due to the EROWA process control system, all process data is visible at all times.

All data at a glance



more information:
Robot Compact 150



01 | Integrated status light display

02 | Control cabinet

03 | Symmetrical design. Left, right or between two machines

04 | Long stroke for accessibility to machine tables

05 | Automatic gripper change for up to 11 EROWA tooling systems

06 | Rack magazine 2 with configurable magazine levels

07 | Handheld control unit

08 | Rack magazine 1 with configurable magazine levels

09 | Loading station (optional) at the ergonomically correct height

10 | Pull-out drawers (optional)

11 | Lifting door loading station

12 | Control panel (optional)

TECHNICAL DETAILS

Floor space	4.7 m ²
System size (LxWxH)	2,772x1,700x2,655mm
System weight	4,000 kg
Transfer weight	150 kg
Transfer weight with swivel axis	130 kg
Swivel axis	0° / 45°
Gripper change	Yes
Double gripper	Yes
Two-machines operation	Yes

TRANSFER AXIS

X-axis travel (from casing to RCS coupling flange)	1,458 mm
Z-axis travel	1,520 mm
Swivel range	341°

MAGAZINE

Two integrated magazines	max. 12 levels per magazine
Weight per level (fix)	max. 450 kg
Weight per level pull-out	max. 300 kg
Weight per rack magazine	1,700 kg
Pass-through magazine for ITS Compact/50/72 hanging	Yes

ELECTRONIC

Process control system interface	Yes
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SYSTEM GRIPPER WITH GRIPPER SENSORS (GRIPPER+)



RCS 5 Gripper for UPC/MTS/PalletSet W. At the same time, interface for all other exchange grippers. Load capacity max. 150 kg.



PC210 gripper for PC210 pallets with ring groove. Load capacity max. 130 kg.



ITS 148 gripper+ for ITS 148 pallets. Load capacity horizontally max. 40 kg, vertically max. 30 kg.



ITS 115 gripper+ for ITS 115 pallets. Load capacity horizontally max. 40 kg, vertically max. 30 kg.



Gripper+ for ITS holder 72. Load capacity horizontally max. 20 kg, vertically max. 10 kg.



S gripper+ for ITS 50 holder. Load capacity horizontally max. 20 kg, vertically max. 10 kg.



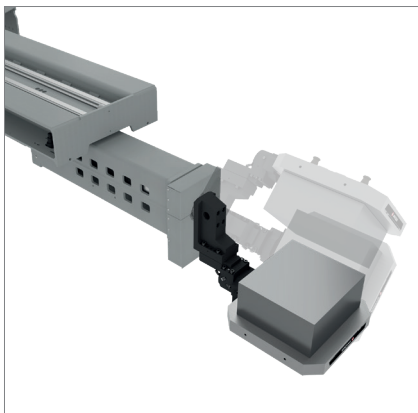
C gripper+ for ITS 50 holder C. Load capacity horizontally max. 20 kg, vertically max. 10 kg.



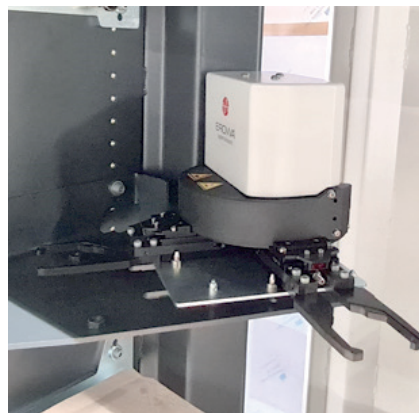
Combi gripper for ITS and Compact Tooling. Load capacity horizontally max. 8 kg, vertically max. 5 kg.



Gripper RTS 80 for Blank Vise 80. Load capacity max. 40 kg.



Swivel axis with 0° / 45° position. Position 0° for loading quill chucks on EDM machines. 45° position for loading the table chucks of WEDM machines.



The double gripper (optional) has two independent gripper units. This significantly reduces workpiece changes.



EROWA Gripper+ with gripper sensor technology: High process reliability thanks to pallet presence and open/closed control.

OPTION

Set-up and loading station LS 500 Comfort

For convenient loading and unloading and thorough cleaning of the palletized workpieces.

**Rotary Magazine**

For small workpieces and electrodes.

**Rack Magazine**

For large workpieces

**Revolving- / folding door**

User-friendly handling for manual loading of the workpiece carriers in the magazine. Requires little space.

**Service- / maintenance door**

Cost-effective solution in combination with loading station.



OPTION

RoboDoor

Automatic door for retrofitting.

**Automatic Pallet Identification EWIS Scanner**

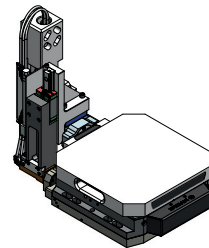
With the EWIS™ identification system, all magazine positions are recorded and reported to the cell computer.

**Automatic pallet detection with presence sensor**

The optical sensor can be mounted on the EWIS™ read head.

**Air Dock**

Air Dock offers the solution if there is no pneumatic system available on the machine tool table to operate the chuck.

**Process control system EROWA JMS 4.0**

The process control system

EROWA robots open up previously unused production hours. Production is autonomous in the third shift and on the weekends. This requires precise, yet flexible planning.

The EROWA process control system, JMS® 4.0, provides a clear overview. It combines all data and controls the entire production process. The order list, the priorities, the CNC programs, the tool management and the current status messages show what is going on at a glance.



more information:
EROWA Prozess control
system JMS 4.0



Autonomous production cell

- Control and monitoring of the manufacturing process
 - Robot Jobs
 - Magazine management
 - Set-up stations
 - Clamping devices
 - Oversized workpieces
- Intuitive operator guidance
- Flexibility and process reliability

Data transfer and control of the connected machine

- Connection of all common production machines
- Higher-level order management
- Predictive tool monitoring
- Data exchange with CAD/CAM, ERP
- Parts offset data import

Continuous identification of workpieces and electrodes

- Identification via RFID chips or Data Matrix codes
- Automatic reading of the magazine load



Transparency regarding productivity

- Dashboard and supervision applications show the efficiency key figures in real time and the current status of the production cells
- 24/7 live machine status via monitoring app



Milling



EDM



Wire EDM



Quality
Measuring



Grinding



Turning



Additive
Manufacturing



Washing



Mill-/Turning

EROWA - Manufacturing automation at its best

EROWA AG, founded in Switzerland in 1971, is now a globally operating organization specializing in the development, production, consulting, and distribution of state-of-the-art manufacturing technology for tool and mold making, as well as for production and precision engineering. With their headquarters located in central Switzerland, EROWA ranks among the world's leading companies in clamping technology and automation. Having 13 subsidiaries and 22 representatives, EROWA offers international points of contact and worldwide customer service.



Empowering Your Production

The next step towards greater efficiency, precision and productivity starts now. With EROWA, you have a partner who will optimize your production holistically - from clamping technology to automation and process control. Our innovative solutions adapt flexibly to your requirements and grow with you - for production that is ready for tomorrow.

Get in touch with us - we will be happy to assist you.



EROWA - Contacts
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