

The Robot Dynamic Family

Solutions for all applications



Overview

Modular system for optimum machine loading.

01 | Transfer unit

ERD 250 and ERD 500 on a rail or as a standalone fixed unit on the floor. Up to 500 kg transfer weight possible.

02 | Rotary magazine

Magazine for many small workpieces and electrodes.

03 | Rack magazine 1475

Magazine for medium-sized workpieces up to 250 kg.

04 | Rack magazine 1000

Magazine for large workpieces up to 500 kg.

05 | Rack magazine 530 (gripper dock)

Narrow layout, saves valuable pallet space in the magazines.

06 | Space-saving telescopic axis

Large range for reaching into the machining range of the machine. Up to 2 m lift.

07 | Gripper coupling

For automatic changing of various gripper sizes.

08 | Single rack with integrated loading station

The pull-out loading station with locking and turntable. For small to medium workpieces.

09 | Loading and setup station

For medium to large workpieces.

10 | Touch panel

For controlling the entire system.

11 | Machine interface box

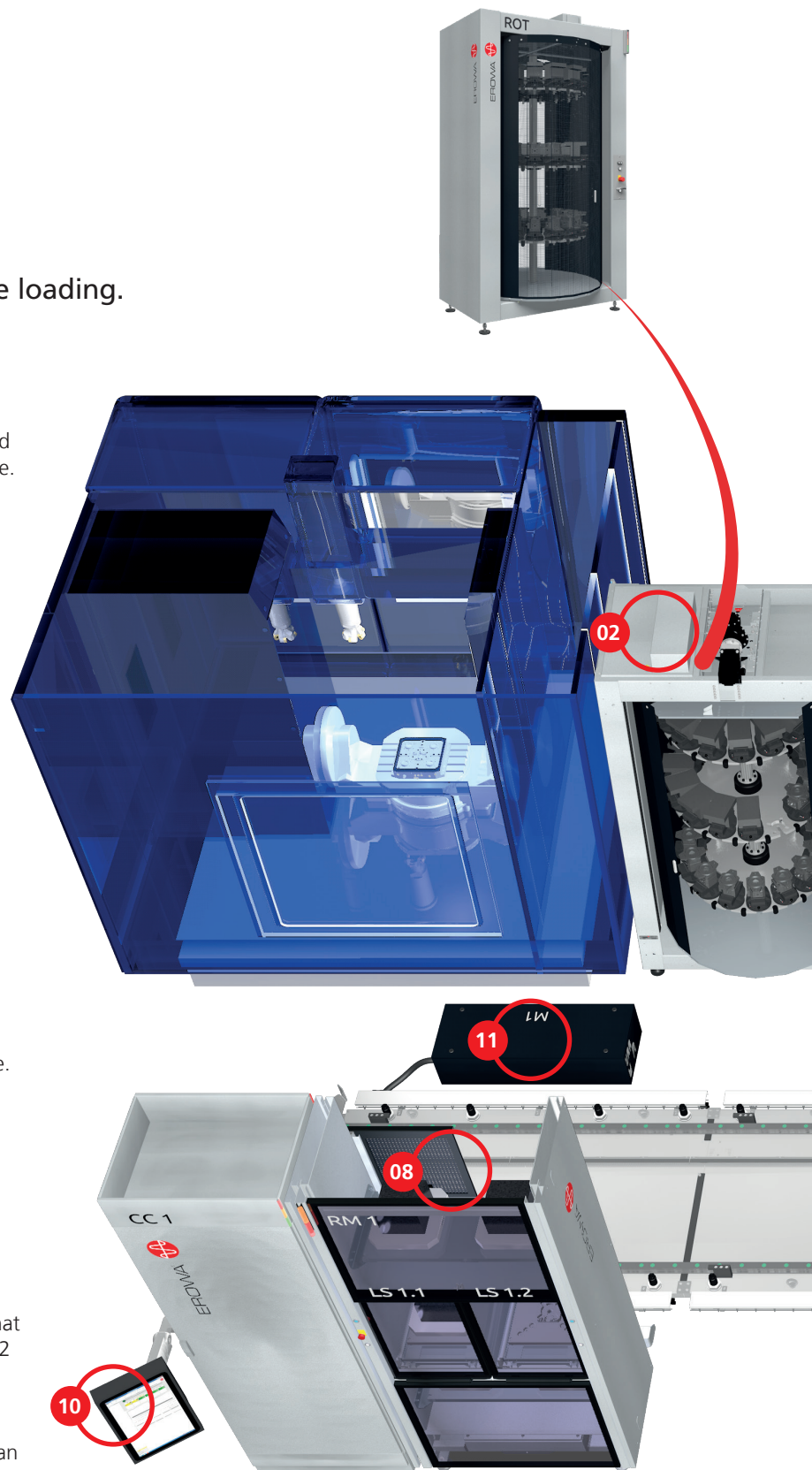
Components adapted precisely to the system. Only what is required for the machine. Flexible expansion up to 12 possible. "Plug and Play".

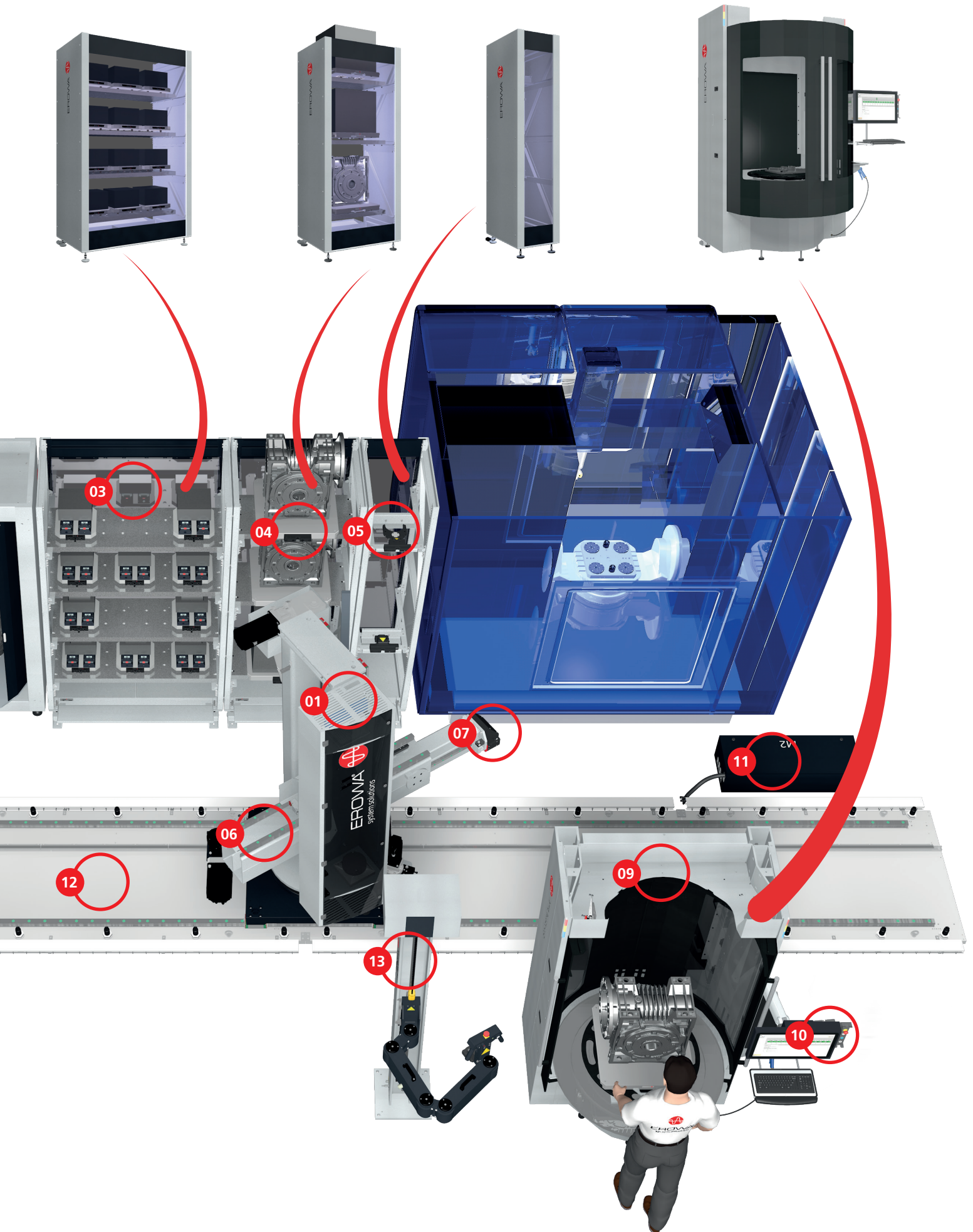
12 | Rail

Up to 30 m long. Sturdy; 1 m, 2 m or 3 m segments can be removed, even after initial installation.

13 | EROWA Lift

For ergonomic loading of the setup station.





A direct comparison

In the weight class from 150 to 500 kg transfer capacity, the Robot Dynamic Family impresses with its compact design and many configuration options. This turns a CNC machine into an automated manufacturing cell at a reasonable cost.



Technical specifications

EROWA Robot Dynamic 150 Linear

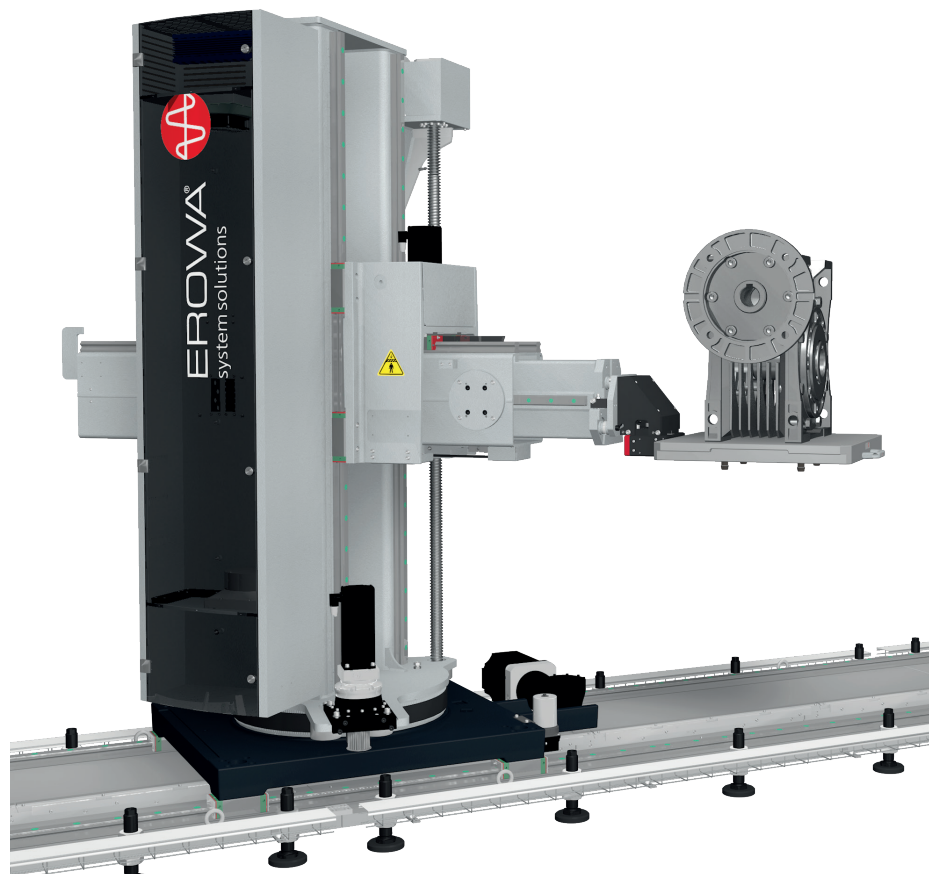
Transfer weight	150 kg
Part size l x w x h	400 x 400 x 400 mm
Rail length max.	30 m
System height with rail	2602 mm
Min. room height	2800 mm
Voltage (V+PE)	3x400
Workpiece identification	EWIS™ RFID
Process control system	JMS 4.0



Technical specifications

EROWA Robot Dynamic 250 Star

Transfer weight	
Part size l x w x h	
Rail length max.	
System height with rail	
Min. room height	
Voltage (V+PE)	
Workpiece identification	
Process control system	



Technical specifications

EROWA Robot Dynamic 500 Standalone or Linear

250 kg

800 x 800 x 800 mm

30 m

3090 mm

3200 mm

3x400

EWIS™ RFID

JMS 4.0

Transfer weight

Part size l x w x h

Rail length max.

System height with rail

Min. room height

Voltage (V+PE)

Workpiece identification

Process control system

500 kg

800 x 800 x 800 mm

30 m

3090 mm

3200 mm

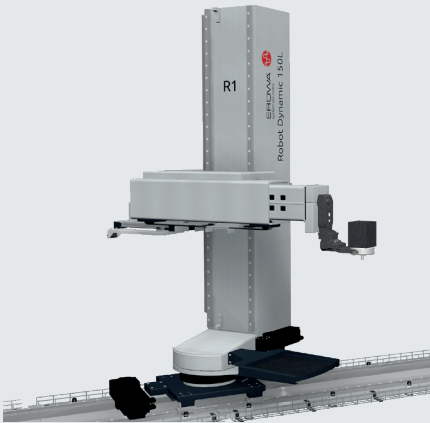
3x400

EWIS™ RFID

JMS 4.0

The modular system

1 Transfer units



EROWA Robot Dynamic 150
Linear



EROWA Robot Dynamic 250
Standalone



EROWA Robot Dynamic 250
Linear

2 System components



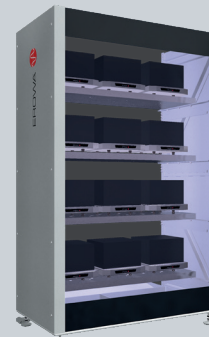
Single rack with
integrated
loading station



Single rack
Magazine



Double rack
Magazine



Rack magazine
1475



Rack magazine 530
(gripper dock)

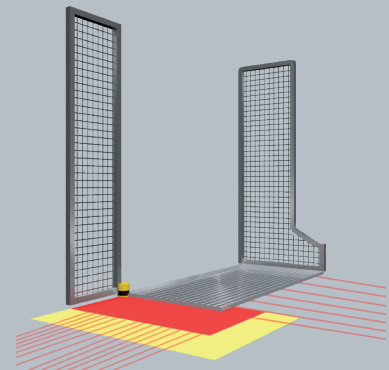
3 Accessories



Process control
system JMS 4.0



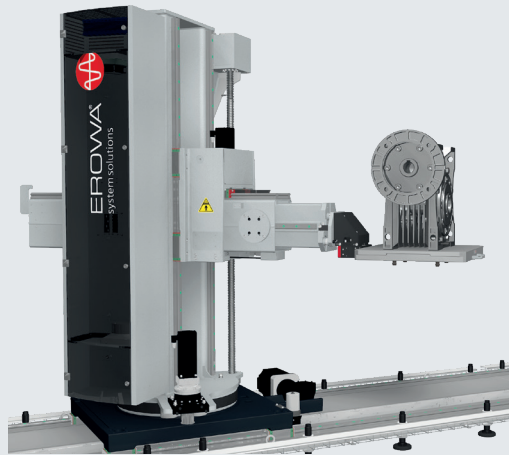
AGVs can be integrated for de-
livering/returning tools
and workpieces



Area scanner for safe
co-working spaces



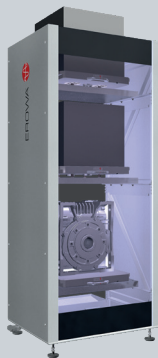
EROWA Robot Dynamic 500 Standalone



EROWA Robot Dynamic 500 Linear



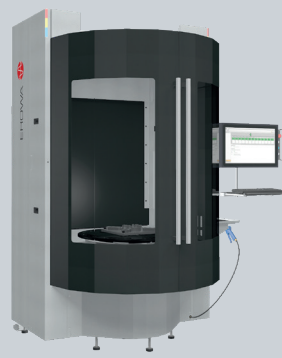
EROWA CC70 Mx Machine interface



Rack magazine 1000



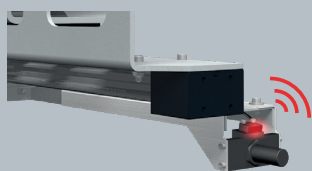
Rotary magazine



Loading and setup station



Gripper



RFID reading unit (EWIS)

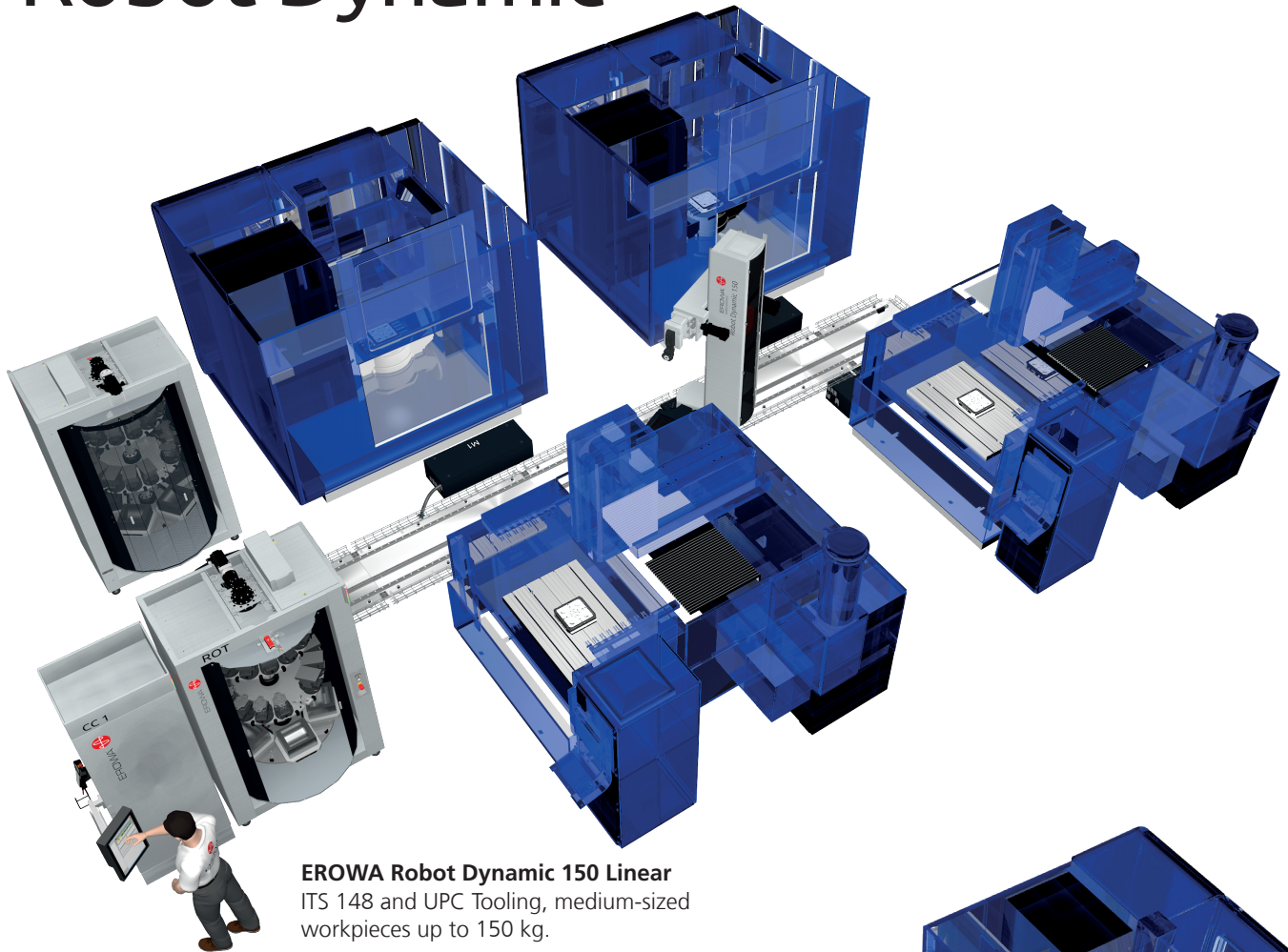


Drip pan



EROWA Lift

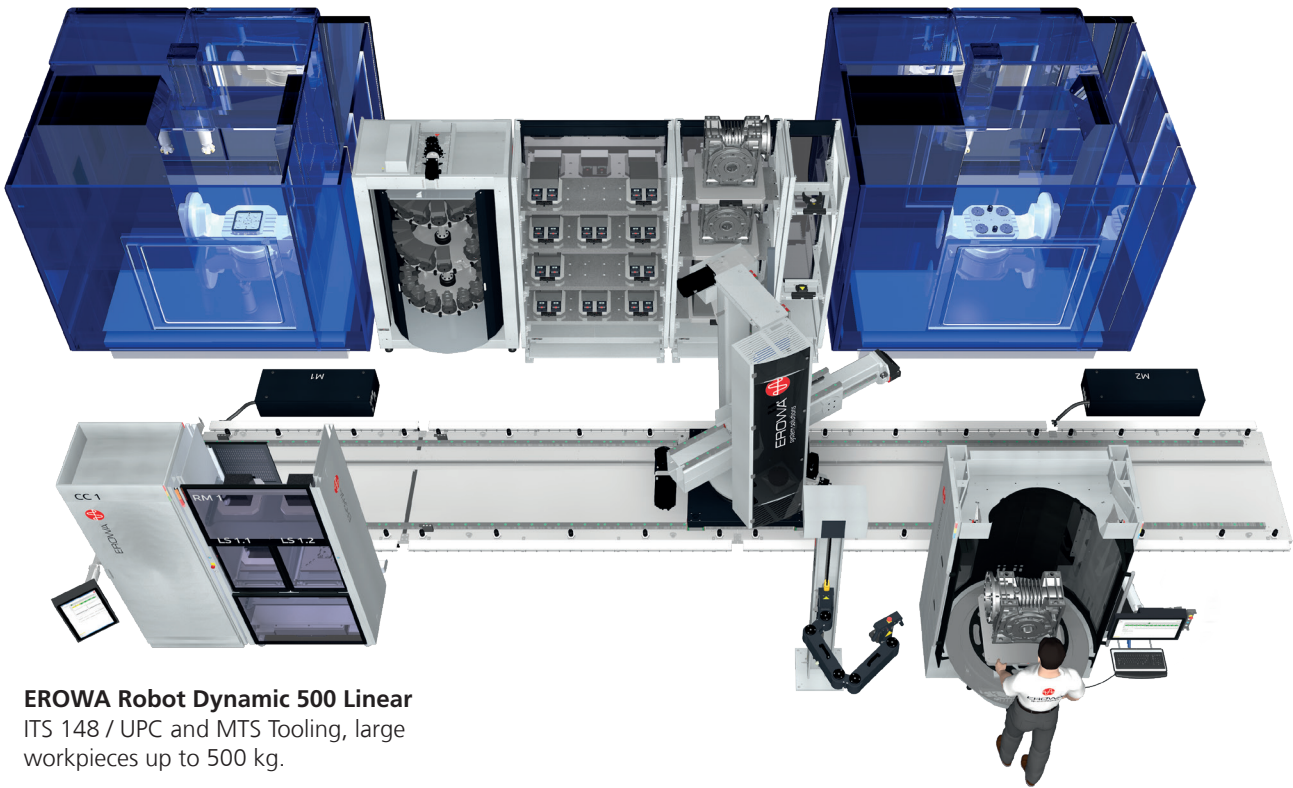
Solutions with EROWA Robot Dynamic



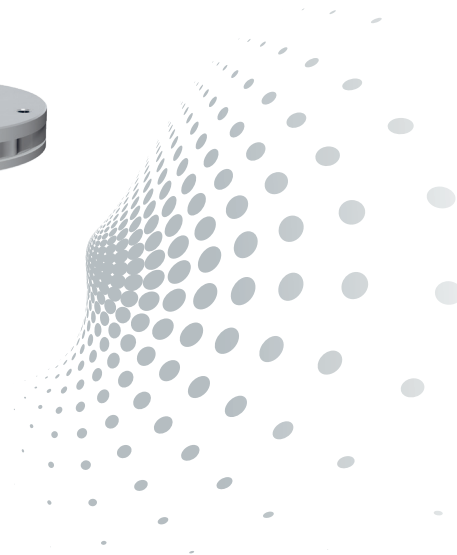
EROWA Robot Dynamic 150 Linear
ITS 148 and UPC Tooling, medium-sized
workpieces up to 150 kg.



EROWA Robot Dynamic 250 Standalone
MTS Tooling, large workpieces up to 250 kg.



EROWA Robot Dynamic 500 Linear
ITS 148 / UPC and MTS Tooling, large
workpieces up to 500 kg.



Adapter pallets
For flexible and automatic
changes between different
pallet types for mixed pallet sizes.

Plenty of ergonomics

01 | Single rack with integrated loading station

The pull-out loading station with locking and turntable makes loading and unloading easy for the operator.

02 | Loading and setup station Door D900

With small operator door D900 mm. Standard design.
With optional version: tool storage, blow-out gun and touch panel.

03 | Loading and setup station Door D1150

With large operator door D1150 mm. With optional version: tool storage, blow-out gun and touch panel.

04 | Turntable 250 kg

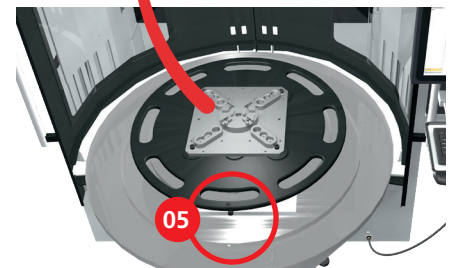
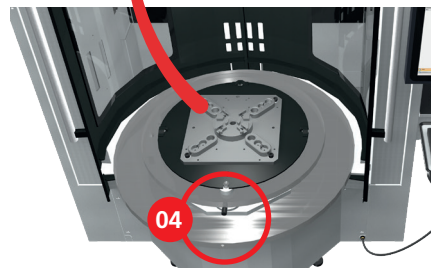
90° indexing for perfect access.

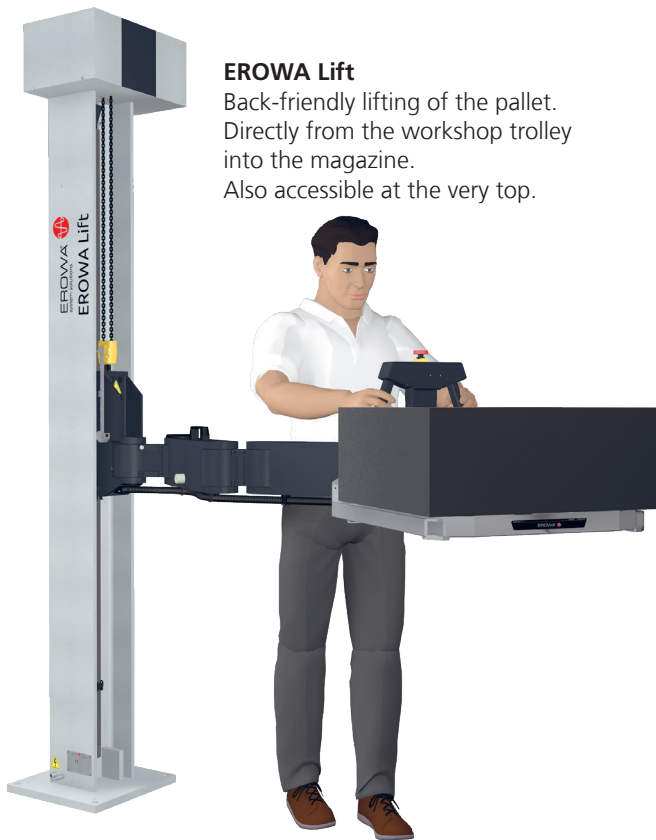
05 | Turntable 500 kg

90° indexing for perfect access.

06 | Status light

LED lights make the condition of the loading station and the workpiece visible from a distance.

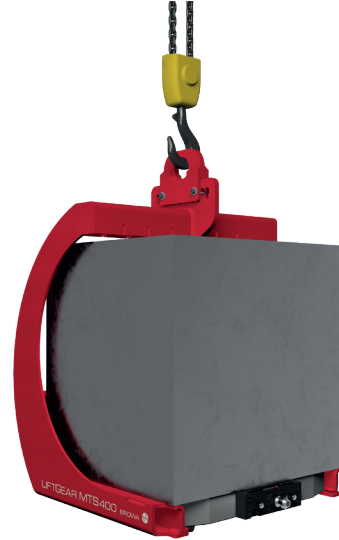


**EROWA Lift**

Back-friendly lifting of the pallet.
Directly from the workshop trolley
into the magazine.
Also accessible at the very top.

EROWA LiftGear

Heavy pallets have to be accurately positioned in the chucks on setup stations or in robot magazines. LiftGear MTS 400 and an overhead crane make this process easy and safe.



Open to the future

One of the most important communication standards for Industry 4.0. OPC-Unified Architecture standardizes access to machines, devices and other systems in industrial environments and makes homogeneous and manufacturer-independent data exchange possible.



Perfect fit for the Smart Factory

We identified the enormous potential offered by automation solutions more than 50 years ago. Ever since, we have been striving for better solutions for the specific requirements in the production of small series and individual parts. As an independent partner, we entertain best connections with all machine manufacturers. This collaboration results in direct benefits to our customers in the form of complete automation packages.

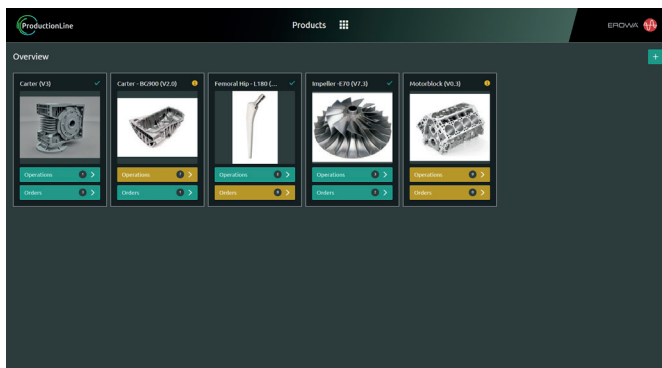
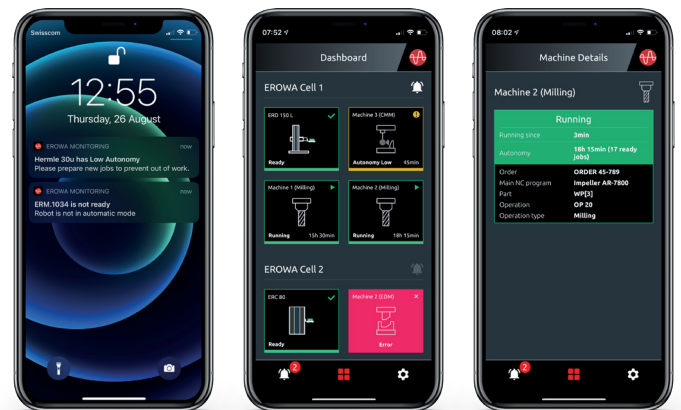


The process control system

EROWA robots open up previously unused production hours. In the third shift and on weekends production runs autonomously. This requires exact, but still flexible, planning. JMS® 4.0 offers a clear overview. The job list, priorities, CNC programs, tool management and current status messages show you what is going on at a glance.

Mobility is key! With the mobile app from EROWA, you and your employees can have an eye on the situation in production at all times.

The next task on the system is selected based on facts!



Many diagrams are used during the planning phase already, because a picture is worth a thousand words.



The unforeseen is the enemy of automation. If a job is interrupted for any reason, the JMS® 4.0 ProductionLine runs the cell with the job that has the next lower priority. This ensures that productivity is kept high.



Fifty years of experience

Longstanding experience – short project implementation. EROWA robots consist of sophisticated, standardized components. This allows us to offer you short production, delivery and installation periods.

Your key benefits

- Everything from a single source
- Independent partner
- Perfect service and worldwide availability
- Experience with over 5000 robots
- Standardized interfaces to machines
- Durable systems
- Functional safety
- Maximum possibilities on a minimum footprint

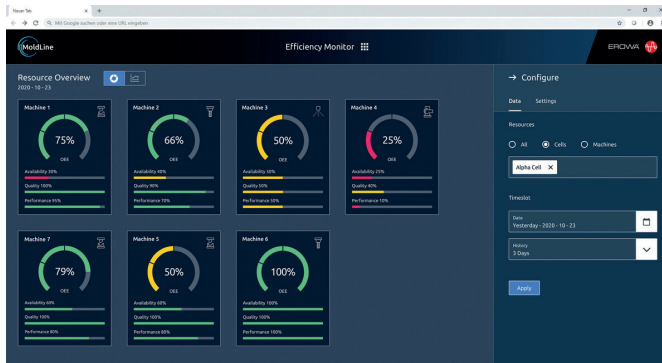
The facts

- Up to 30 m rail length
- Transfer weight of up to 500 kg
- Up to 12 machines can be positioned on all four sides
- Transfer axis with large range
- Automatic gripper change depending on pallet size
- Swiveling axis H/V with up to 400 kg load capacity

The expansion options

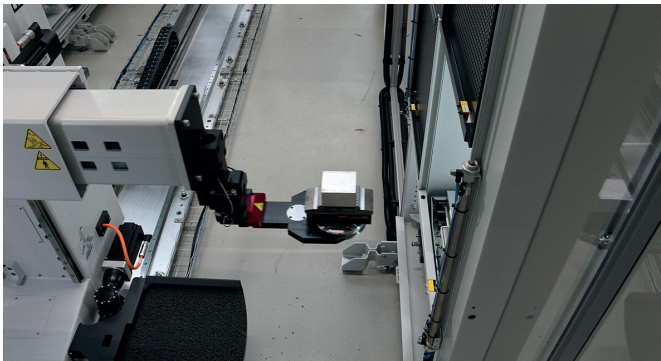
- More machines
- More magazines
- Cleaning or loading stations
- Operator-guided setup stations
- Tool management
- Link to CAD/CAM and production planning and control systems
- Fixture management
- Alarm and reporting functions
- OEE Dashboard
- Supervision module

The OEE factors



The OEE factor is probably the best way to indicate the benefit of a system. In the calculation, the available manufacturing time are linked with the quality of the manufactured products and the adherence to delivery dates.

Any result of 60 % or above is rated as very good. The OEE target value can certainly be achieved with the EROWA FMC concept.



Automatic loading of the machines is an essential aspect for achieving the OEE factor. The systems have to run in production in the second and third shift as well, but without a machine operator.



The use of EROWA tooling systems ensures reliable processes. The tooling system constitutes the standardized interface for all machines in the manufacturing process and always provides the same conditions. This is precisely what makes automated loading of small parts and small series viable in the first place.



Return on investment: If the productivity of a system is improved 5-fold through automation, the amortization period is reduced substantially.

In a mixed calculation, the effective hourly rate can be reduced, which in turn supports competitiveness.

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
international