



Robot Dynamic 150L

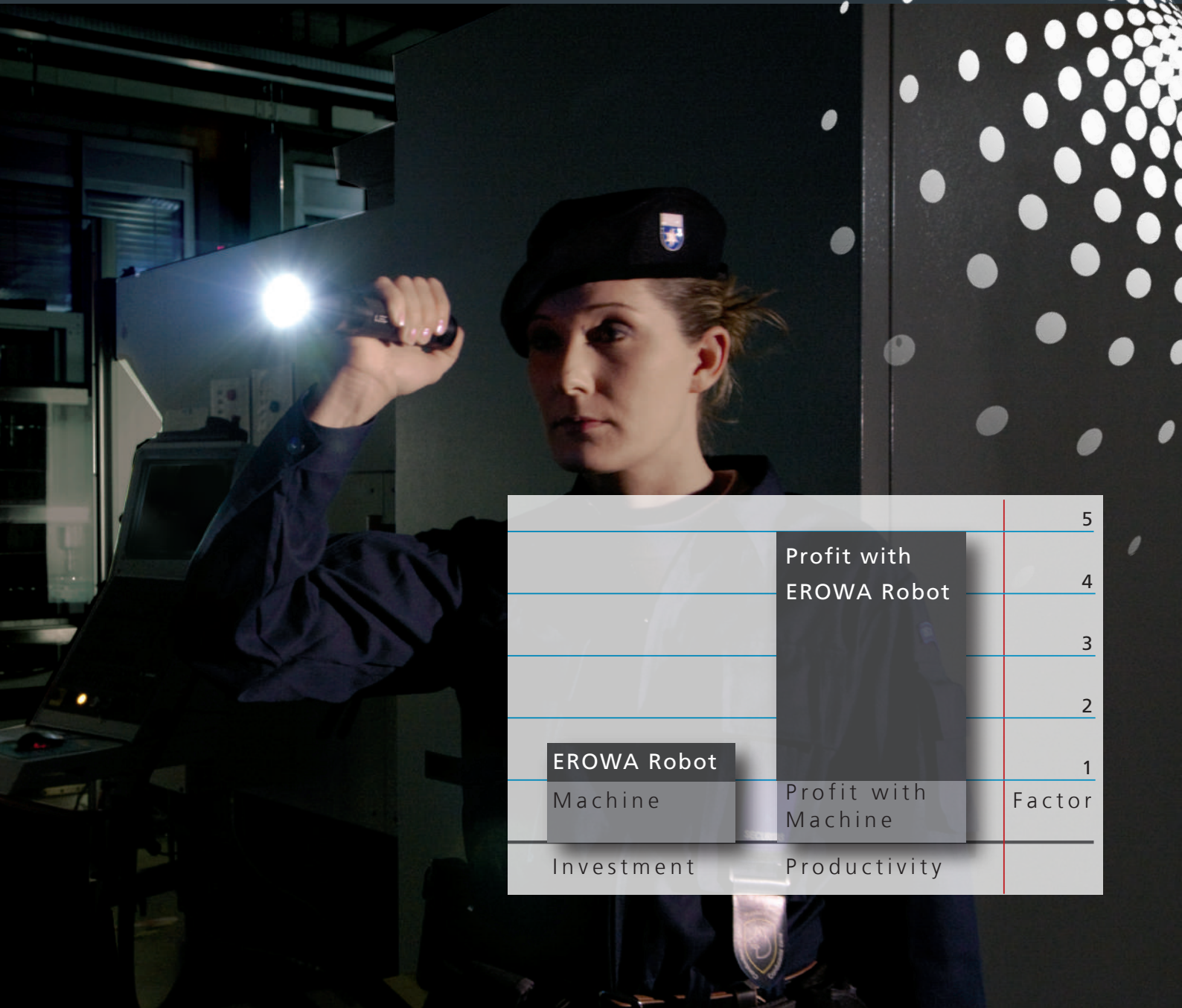
More for less



Is your Production asleep?

Your machines are profitable when they are producing. They should run during the day, in off-peak hours and at night, even on weekends. Achieving this goal means combining all production requirements in a plan.

The plan is called "Flexible Manufacturing Concept – FMC". It is implemented in carefully measured steps.



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EROWA Robot		1
Machine	Profit with Machine	Factor
Investment	Productivity	



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 Long experience – short start-up

Automation according to your needs.

As much as necessary. This is the concept of EROWA Robot Dynamic 150L. You buy only as much automation as currently makes sense. When the requirements for your production capacity change, you can extend the modular robot system at any time.



01 | Process control system
Control center for manufacturing cell.

02 | Control cabinet
Handling of pneumatic / electric and media connections.

03 | Rack magazines
Flexibly configurable levels and pallet positions for pallets, electrode holders, and palletized fixtures.

04 | GripperDock
The right gripper for each tooling system size. They are stored in the appropriate GripperDock and automatically employed when needed.

05 | Loading station
for input and output of palletized workpieces in the production cell or for conversion operations.

06 | Safety / access protection No outbreak protection is necessary thanks to integrated safety software in the robot's control system. The barriers serve as access protection.

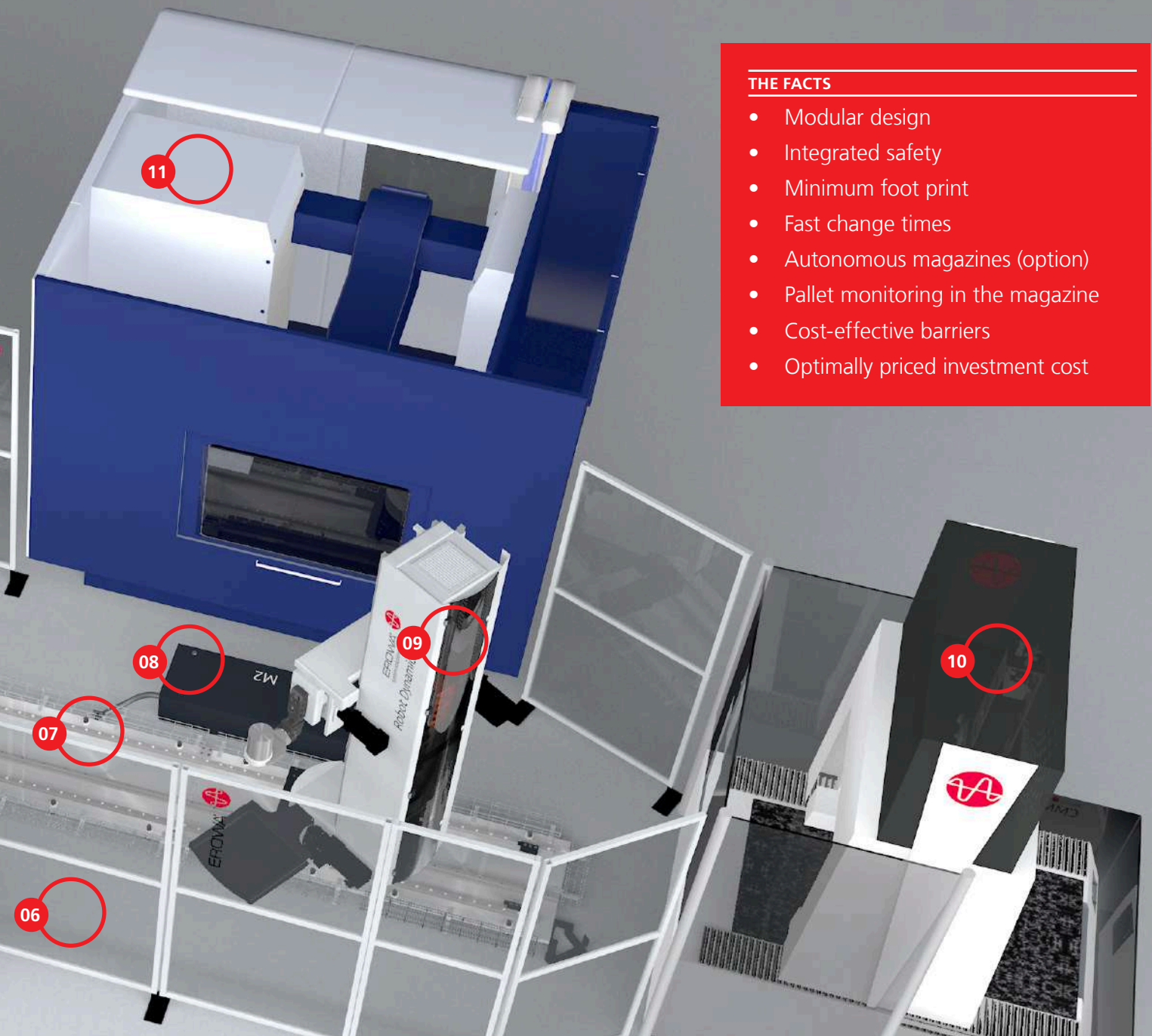
07 | Linear rail
The slim linear rail is modularly extended to the required length in segments.

08 | Machine interface
Pneumatic and electrical interface between the robot and the respective machine.

09 | EROWA Robot Dynamic 150L
Flexible loading unit for transfer weights up to 150 kg.

10 | Integrated quality control.
Integrating an EROWA CMM Qi measuring machine in your process line will also take care of this requirement.

11 | Different technologies in a line:
milling, sink/wire EDM, drilling, grinding ...



THE FACTS

- Modular design
- Integrated safety
- Minimum foot print
- Fast change times
- Autonomous magazines (option)
- Pallet monitoring in the magazine
- Cost-effective barriers
- Optimally priced investment cost

More features for Industry 4.0

The Robot Dynamic 150L was designed uncompromisingly for the requirements of Industry 4.0 High function density at simplest ease of use. Let us mention right at the beginning: the ingenious extendable loading station is only one of the many notable innovations.





More ergonomics

User friendly operation – The rack magazines feature sliding doors and pull-out magazine levels.



More autonomy

Autonomously loadable rack magazines – While the operator loads a magazine, the robot continues to operate without interruption, serving all other magazines and machines.



More control

The whole system can be monitored at a glance on the large touch screen with the innovative user concept. This shows you quickly which jobs have already been completed or how much production time still remains.

More modularity

We create the production cell that exactly matches your needs. When your requirements change, features and magazine locations can be extended accordingly. Existing investments continue to be used. The costs of investment thus remain perfectly predictable.



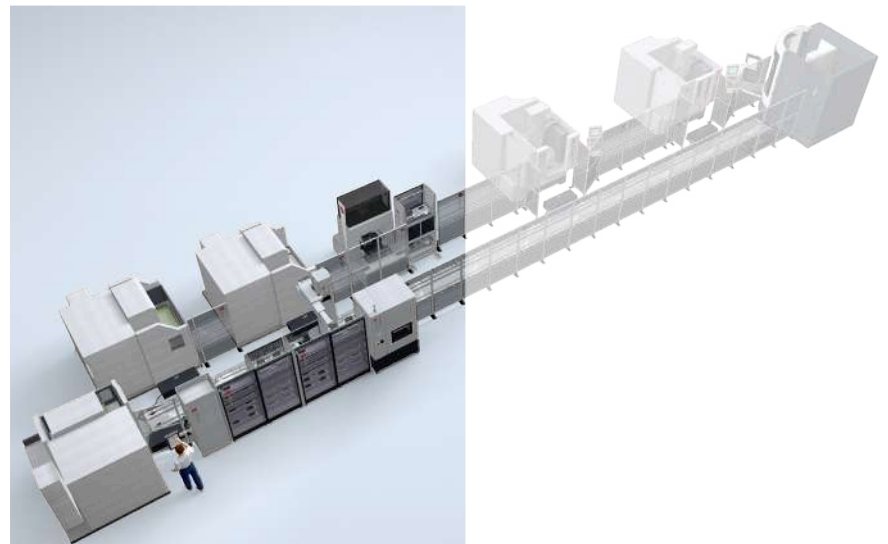


The modular system

The slim linear rail is extended with individual segments to the required length. The magazine levels can be configured specifically for the particular task.

Options

Discover the virtually infinite possibilities to increase your productivity and ergonomics. Using our product configurator, we compose your EROWA Robot Dynamic 150L in no time, from the basic unit through the LED magazine lighting to the area scanner.

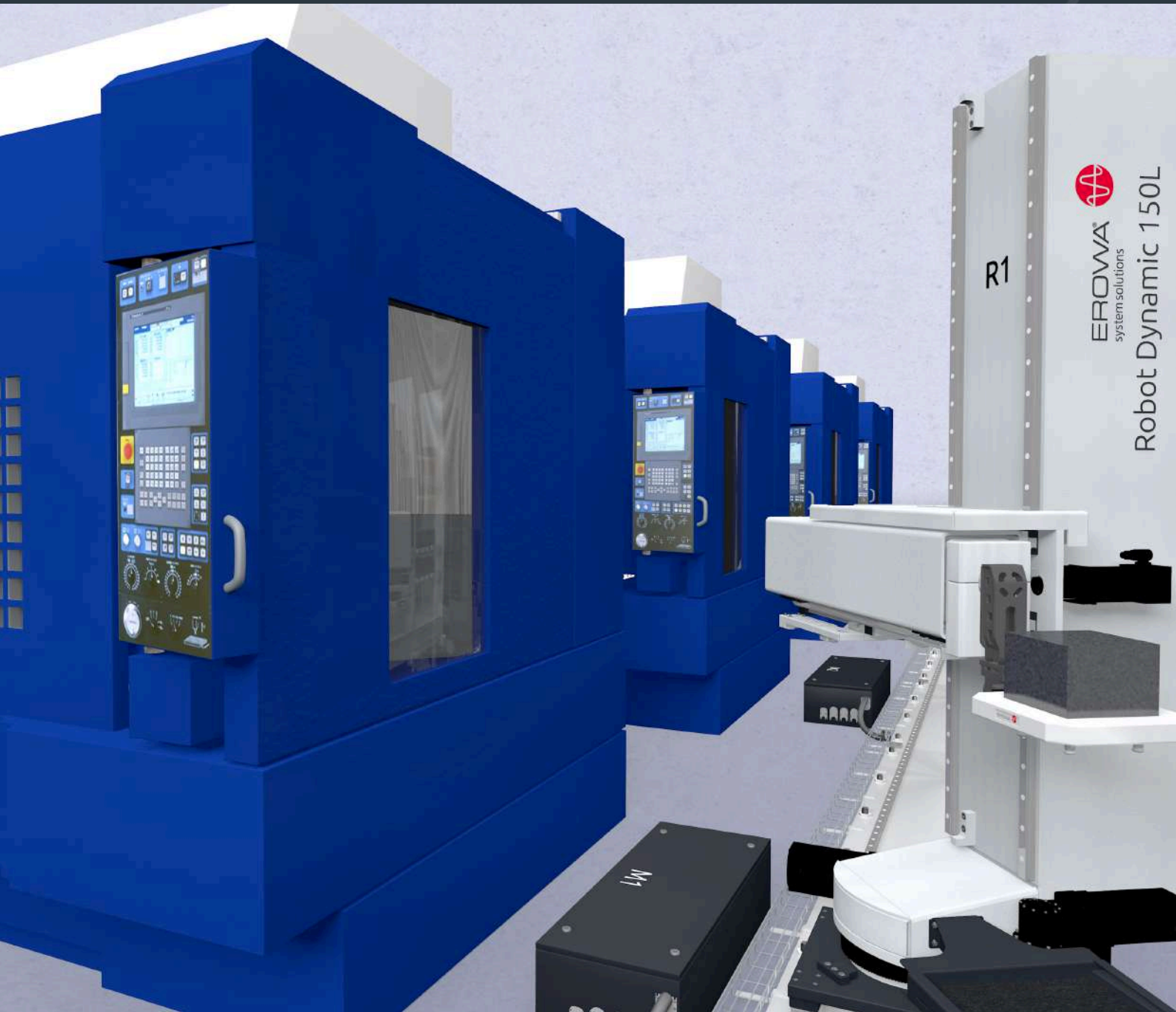


Retrofittable at any time

Already installed systems can be extended at any time with new modules or interfaces. The basic investment is preserved, reducing the cost for the extension. The modular concept of the EROWA Robot Dynamic 150L is a lucrative choice in any case.

More machines

Your production becomes ready for Industry 4.0: The EROWA Robot Dynamic 150L allows you to combine up to 12 machines of different manufacturers and machining technologies to a manufacturing cell. You can profitably automate jobs from batch size 1 with the easy-to-use process control system.





Highest compatibility to machines

The standardized interfaces and the close cooperation with various machine manufacturers leave no questions when connecting different machines.

Record-breaking change-over times thanks to Machine PreLoad

The process control system recognizes the end of the machining program and waits for the next pallet in front of the machine door. Workpiece change in Formula 1 style.



Minimum foot print

Thanks to the slim design, machine tools and magazines can be placed as closely as possible to the Robot Dynamic 150L. This saves valuable space.

THE FACTS

- Machine PreLoad functions for shortest change-over times
- Standardized interfaces to machines
- Fast response times

More magazines

The configuration options of the magazines cover any needs in terms of memory size and ease of use. In addition, they can always be customized and upgraded.





Pull-out magazine levels

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

Pass-through magazine locations

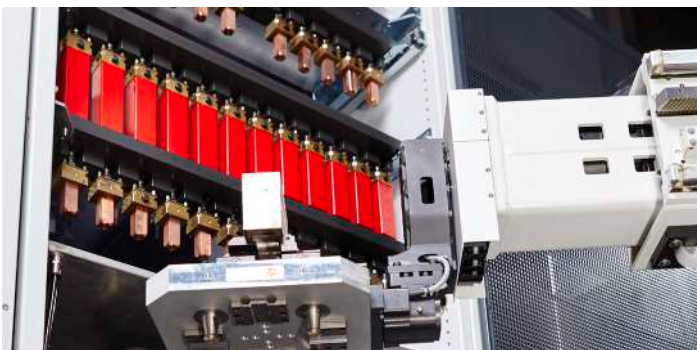
The pass-through; the new and ingenious solution for magazine loading with electrode holders. The holders are loaded and replaced from the operator's side of the magazine.



Integrated loading station

The integrated autonomous loading station (optional) with 2 locations allows changeover and set-up operations on workpieces while the robot is working.

The rotary frame with 4x 90-degree indexing and the pallet locking allow the set-up of various pallet types at an ergonomic height.



Virtually unlimited number of magazine locations

The technology of the Robot Dynamic 150L allows up to 10,000 magazine locations for pallets, electrodes and palletized fixtures. The limit is only the available space conditions.



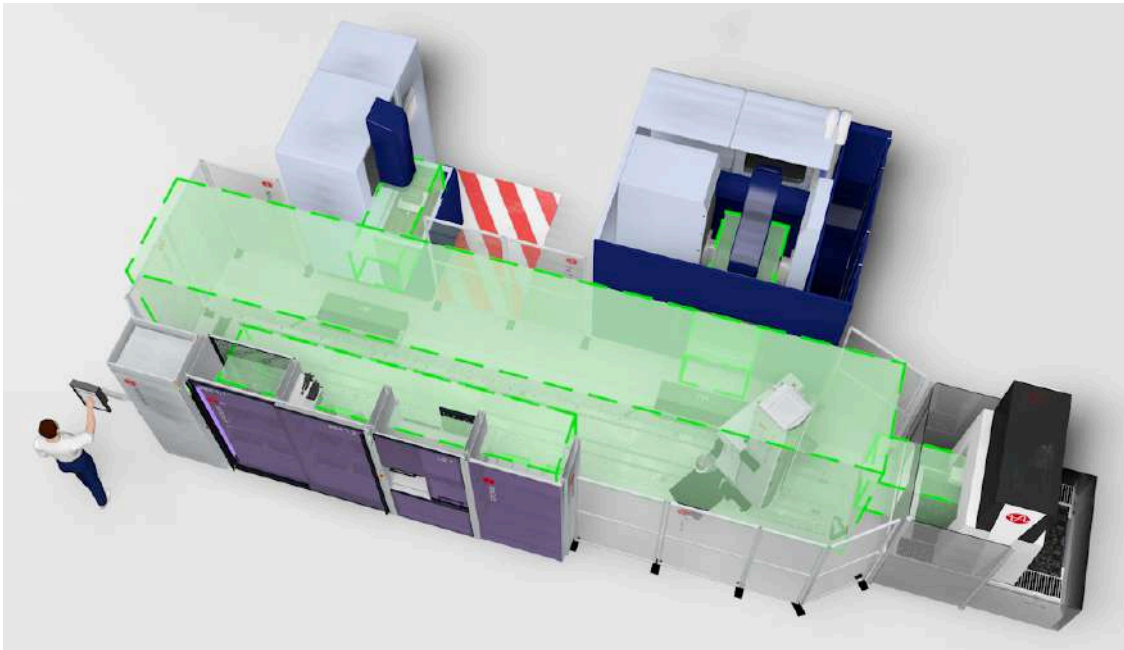
Clever gripper station

The GripperDock is integrated in the rack magazine. The close proximity to the pallets ensures short changeover times and saves space as well.

More safety

Maximum safety thanks to the latest robot control generation.





Intelligent safety system

Intelligent safety concept – Thanks to the “Integrated Safety” software, the manufacturing cell only requires access protection. The barriers are modularly expandable at an inexpensive price.

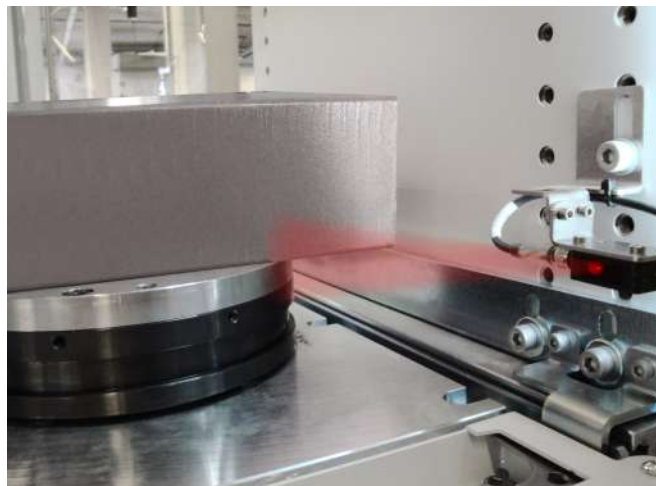


Area scanner

Optimum monitoring of the operator area. This nonetheless allows manual operation of automated machines. If the area scanner detects a person, an automatic change will be prohibited.

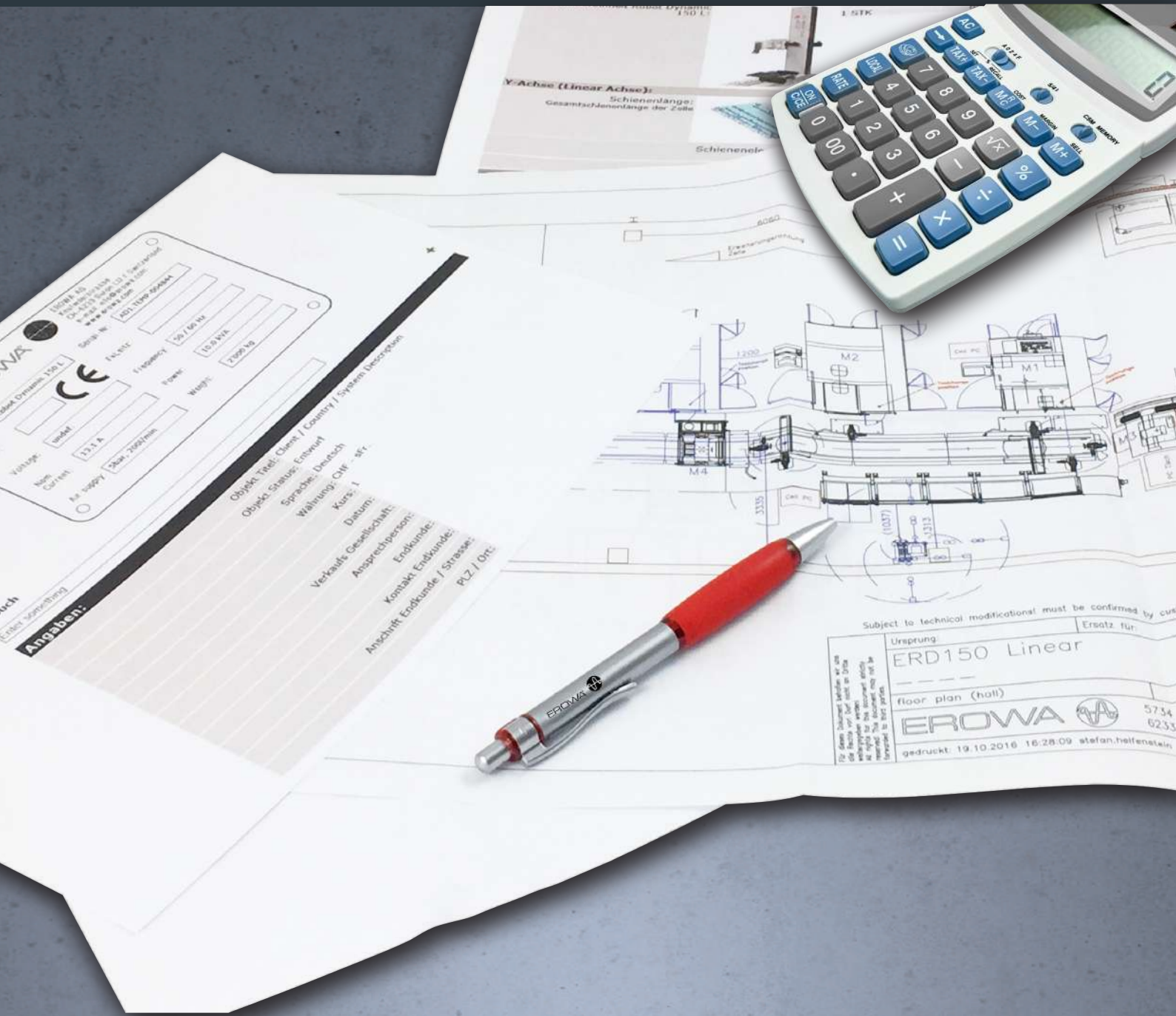
Process reliability

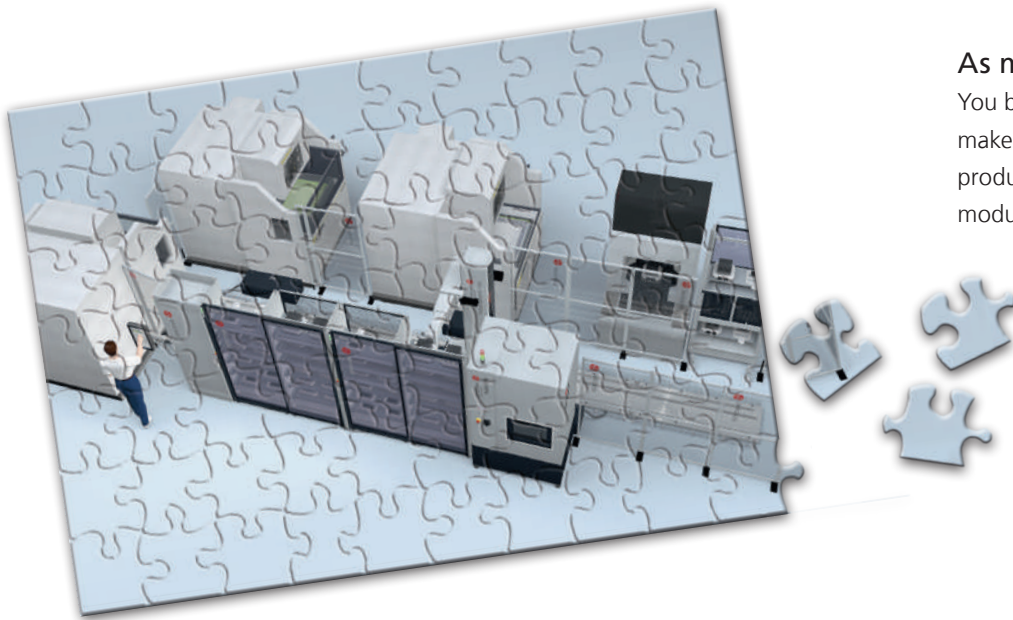
Loading and unloading monitoring in the magazine levels with sensors – Does the robot need to recheck the level?



Cost-effective

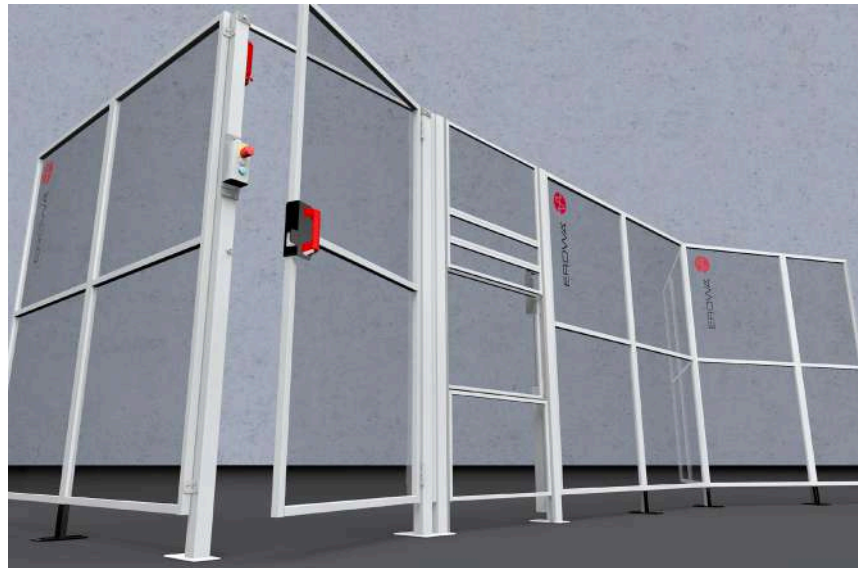
More benefits for less investment. This is what the developers of the EROWA Robot Dynamic 150L had written on their banner.





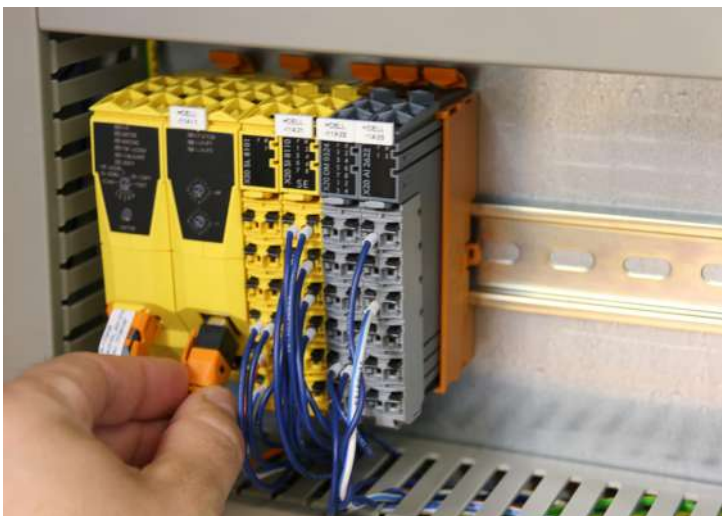
As much as you need

You buy only as much automation as currently makes sense. When the requirements for your production capacity change, you can extend the modular robot system at any time.



Inexpensive barriers

The requirements for the barriers are confined only to protecting access by people, because the Robot Dynamic 150L is escape-proof thanks to its safety concept. In plain language this means leaner and cheaper.



Fast start-up

The pre-assembled modules are equipped with convenient plug & play interfaces: place, align, connect, get started.

30 years of experience

Long experience – short start-up.

EROWA robots consist of sophisticated, standardized components.

This allows short set-up times.

Your major benefits

- Everything from one single source
- Independent partner
- Perfect service with world-wide presence
- Experience with over 3000 robots
- Standardized interfaces
- Long-life systems

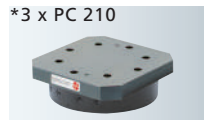
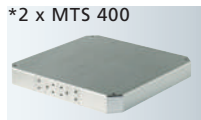
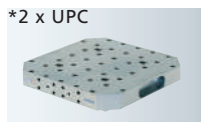
The Facts

- Highly modular design
- Integrated safety system
- Minimum foot print
- Fast change times
- Autonomous magazines
- Pallet monitoring in the magazine
- Cost-effective barriers
- Optimally priced investment cost

The extension options

- Extension of linear rails up to 30 meters and 12 machines
- Loading station for large and heavy workpieces
- Sliding doors for magazines
- Swivel axis for gripper arm
- Gripper station for automatic gripper change
- Automatic pallet identification by a chip

ERD 150L Rack Magazine



* Number of possible magazine positions per level.

TECHNICAL DETAILS

Transfer weight	150 kg
Workpiece size max.	400 x 400 x 400 mm
Swivel arm	optional
Gripper change	Yes
DIMENSIONS	
X-axis travel	1375 mm
Z-axis travel	1750 mm
Y (linear axis) gripper movement	30 m
Number of machines	12
System height with linear axis	2640 mm
Space height min.	2800 mm

	MAGAZINE	NUMBER OF LEVELS	LOAD PER LEVEL / MAGAZINE
Rack	max. 20		300 kg / 2000 kg

ELECTRONICS

Automatic pallet recognition	Yes / EWIST™
Process control system interface	Yes

SYSTEM GRIPPERS



RCS 5 grippers for MTS, UPC and PalletSet W. At the same time interface for all other exchange grippers. Load capacity max. horizontal/vertical 130 kg.



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



ITS 148 gripper for ITS 148 pallets. Load capacity max. horizontal 40 kg, vertical 30 kg.



ITS 115 gripper for ITS 115 pallets. Load capacity max. horizontal 40 kg, vertical 30 kg.



PM 56 gripper for PM tooling. Load capacity max. horizontal/vertical 5 kg.



PM 85 and PM 130 gripper for PM tooling. Load capacity max. horizontal 20 kg, vertical 10 kg.



Gripper for ITS holder 72. Load capacity max. horizontal 20 kg, vertical 10 kg.



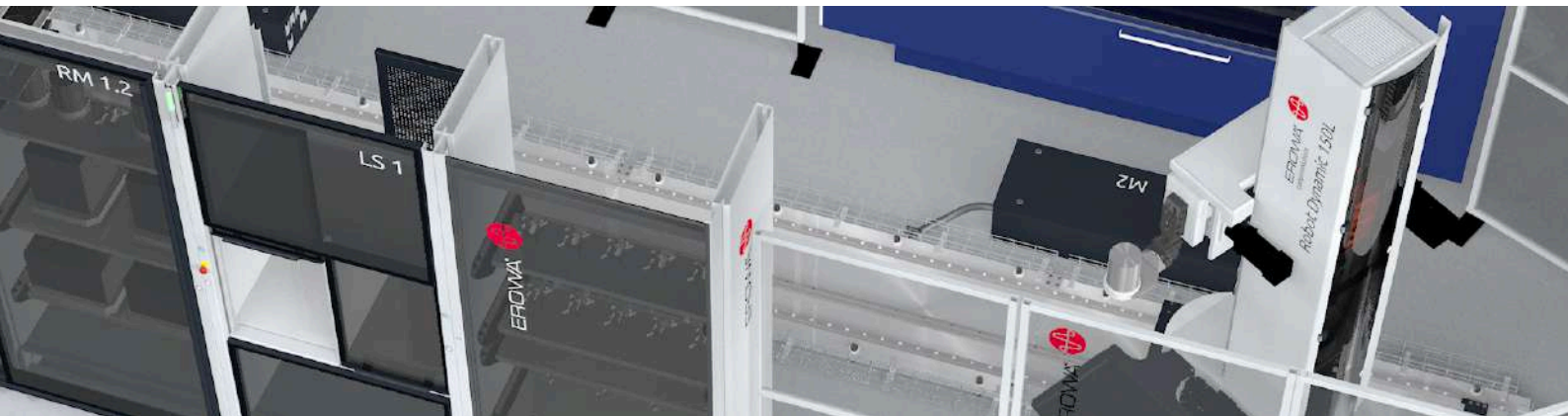
S gripper for ITS holder. Load capacity max. horizontally 20 kg, vertically 10 kg.



Combo gripper for ITS and Compact tooling. Load capacity max. horizontal 8 kg, vertical 5 kg.

The next step

Important things need to be planned. And your next step is certainly among the important things. For it is your start into a new, efficient era. We are pleased to be with you on the way. As consultants, in practice. For you to know at all times what you're engaging in. The next EROWA branch office is not far – **take the step.**



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