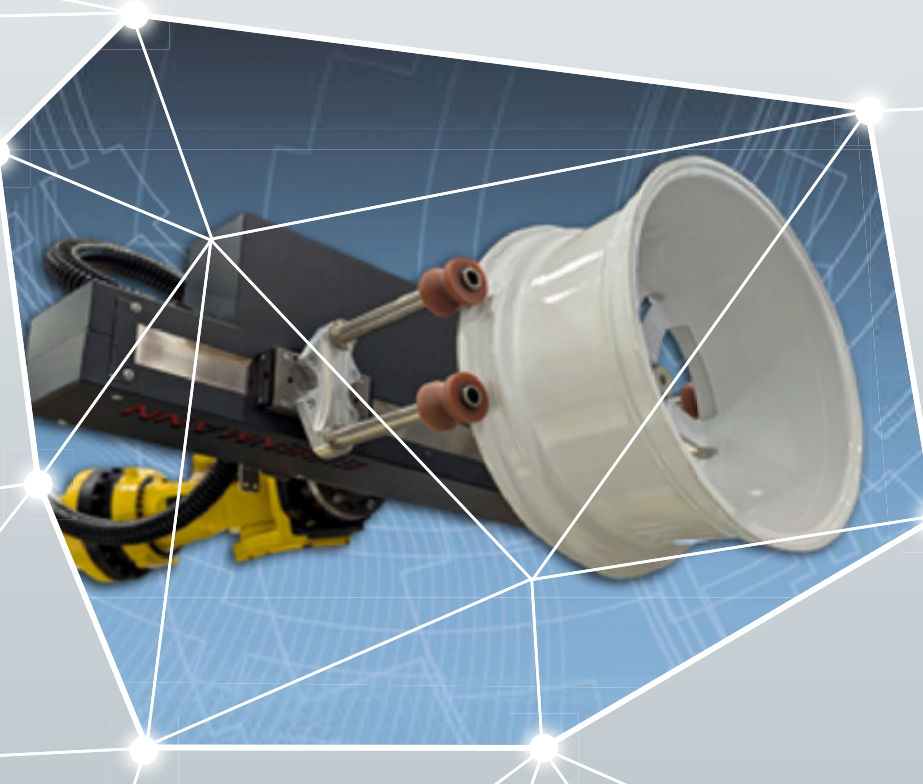


EISENMANN

MODULAR, LEIGHTWEIGHT, SUSTAINABLE

SmartHandling with Wheel Gripper for high Efficiency & Precision



www.eisenmann.com

SmartHandling

Wheel gripper with an axial and radial structure
and with a modular design for 14“ to 24“ wheels.

Wheel Gripper Module: Pneumatic or Electric Design

Our goal is to enhance automation in modern production facilities. We develop intelligent, AI-supported robotic solutions that increase and secure the long-term efficiency of our customers' production. The new Eisenmann hybrid gripper system offers a flexible and energy-efficient solution for effective material handling.



Changes in wheel production requirements make modernization measures necessary.

Our expertise and experience with over 200 installations worldwide provide a solid foundation for developing our new generation of wheel grippers. With our compact, modular hybrid gripper modules, we are expanding our product portfolio in robotics and retrofitting.

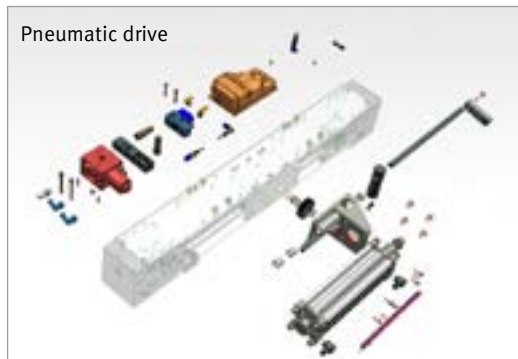
The new gripper modules are designed for gently handling all common wheel sizes in the passenger and commercial vehicle industries. They feature low-maintenance linear guides. The new drive technology can be implemented using either a pneumatic or a purely electrical servo drive. Conversion is possible at any time according to individual capacity and production output. The completely enclosed housing, which integrates all moving parts, ensures a high level of process reliability in the powder coating sector. Due to its low weight, it is compatible with standard robot models from leading manufacturers.



Servo-electric drive



Pneumatic drive



Design in Comparison:

Electric drive with
servo technology: 11 pieces

Weight: approx. 9 kg

Pneumatic drive with
proportional technology:
52 pieces

Weight: approx. 17 kg

Leightweight design for maximum compatibility

Our wheel gripper has just a few moving parts, which saves up to 30% of its own weight compared to competitor models. Due to its low weight, Eisenmanns hybrid gripper system is compatible with standard robot models from leading manufacturers and allows simple retrofitting in existing systems.

Breakthrough for Servo Electric Control

In the pneumatic version, any intermediate position of the gripper fingers is achieved through the use of proven proportional technology. The electric version uses frequency-controlled servo drives to enable optimum gripper positions.

Thanks to sophisticated control technology, the modules approach gently, enabling gentle treatment of the wheel surfaces.



Gently, precise-handling.



Customized design

Standard modules can be combined to create single- to five-finger grippers. The components that come into contact with the wheel are easily interchangeable and selected according to the application.

Safety

Z compensation, which checks each element with wheel contact, is used as collision protection.



Modular construction for individual applications



Quality

The predominantly internal routing of the media lines and the nearly fully enclosed housing ensure smooth operation. Each gripper goes through a test on the robot before delivery to ensure quality and functionality. The intelligent sensor holder also allows for easy replacement of the sensor at any time.

Advantages at a glance

- Large application range for 14" to 24" wheels, axial as well as radial grippers
- Flexibility thanks to compact, modular design
- Simple conversion of the drive technology possible
- Smaller footprint due to a shorter design
- Positioning accuracy of up to 1 mm
- High degree of safety through Z compensation and gripping force protection
- Interfaces to all types of robot
- Reduced weight enables the compatibility with standard robot models from leading manufacturers
- Special solutions can be realized and adapted at any time
- Long service life with low maintenance, global service and short delivery times

Technical Details

Wheel sizes	14" to 24"
Weight per Module	up to 35 kg/wheel
Gripping force electric drive Drive	150 - 250 kg at 6 bar to be configured either pneumatically or servo-electrically with the same module. Conversions are possible at any time
Control technology	Profinet, Profibus, Ethernet freely selectable
Spindle spacing for multiple grippers	free selectable
Design	ATEX-certified version possible



More information on the wheel gripper?

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