

Variocell SYSTEM: Gantry Bot

Güdel Automation meets CHIRON Machining Excellence



The highly flexible “Gantry Bot” portal automation system enables efficient interlinking of multiple CHIRON Group machining centers. Compared to conventional robot solutions, it provides an extended working range – particularly in the vertical axis – while maintaining optimal access to the machines.

The system has a modular design and can be scaled from a single-machine setup to a fully networked solution. Direct integration into the machining center control system results in an efficient and cost-effective automation solution for industrial series production.

L1 stroke (extendable)

4,350 mm

L2 stroke

3,160 mm

Payload

74 kg

R1 and R2 rotation range

±180°



Gantry Bot demonstrator



Manipulator in focus



Triple gripper

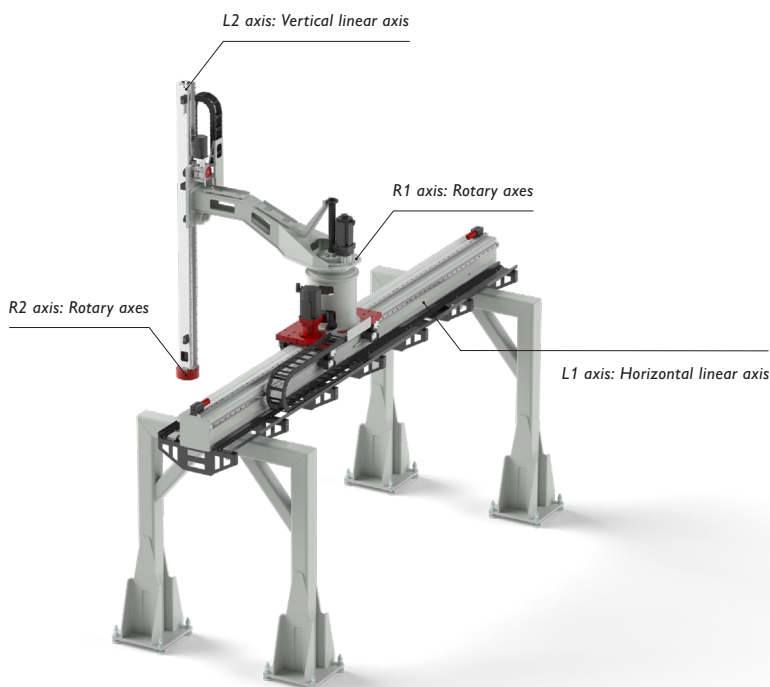
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Highly flexible portal automation as a Variocell SYSTEM, suitable for CHIRON Group series 15 to 25 and MILL

Easy operation and programming via the machining center HMI

Scalable configuration to meet customer-specific requirements:

- Extendable L1 axis in 1-meter increments
- Freely configurable number of manipulators
- Efficient use of available floor space
- Support columns as the only structural obstacle
- Access to CHIRON Group systems from both sides of the axis
- Additional automation options at both ends of the Gantry Bot



Gantry Bot in standard configuration with two linear and two rotary axes.

Technical Data

Axis systems	L1 axis TMO-2, stroke 4,350 mm L2 axis CP-4, stroke 3,160 mm R1 axis, rotation range $\pm 180^\circ$ R2 axis, rotation range $\pm 180^\circ$
Drives	L1 axis: Siemens 1FK2210 + NGHP 140 i5 Acceleration 3 m/s², speed 3 m/s
	L2 axis: Siemens 1FK2106 + HPG60 i6 Acceleration 4 m/s², speed 1.65 m/s
	R1 axis: Siemens 1FK7084 + Nabtesco i106 Acceleration 3.5 rad/s², speed 1.9 rad/s
Payload	74 kg consisting of a 50 kg gripper and 2 x 12 kg workpiece



Variocell SYSTEM

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automation on track

Güdel is an internationally active Swiss industrial company founded in 1954. As one of the world's leading suppliers of industrial automation solutions, Güdel offers its customers everything from a single source: from high-precision machine components to customized automation solutions for use in markets such as automotive, aerospace, railway, logistics, composites and machine tools.

Güdel technology is characterized by innovation, modularity, and quality. Worldwide, Güdel employs around 1,000 people at over 20 locations. Since its foundation, the company group has been owned by the founding family.