

FP-5-HP

Area gantry with long stroke, high dynamics and high payload



The high-performance area gantry FP-5-HP features a powerful Y-axis for automating extremely large working areas with high dynamics. The rigid bridge design with an exceptionally long stroke of up to 14 m enables short cycle times even under heavy payloads and increases overall system performance. Configurable X-axes and modular supports extend the three-dimensional workspace and allow flexible adaptation to different system layouts. The FP-5-HP is suitable for tire and wheel handling, crate handling, wooden components handling and large parts handling, as well as for layer picking, pick-and-place and process applications.

The Y-axis carriage serves as the central interface for grippers and Z-axes and is designed for a total load of up to 1 100 kg including the workpiece. The drive system, based on hardened Güdel rack-and-pinion systems combined with high-stiffness Güdel planetary gearboxes, ensures precise movements, high feed forces and a long service life. The compact anchoring system allows floor mounting with a minimum concrete thickness of 220 mm.

Performance data – Y-axis bridge

14 m

Max. payload Y-axis carriage up to

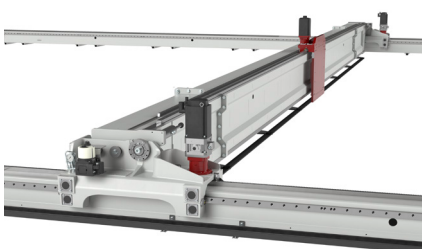
1 100 kg

Y-axis speed

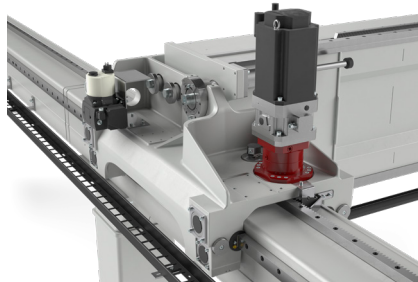
3.75 m/s

Y-axis acceleration

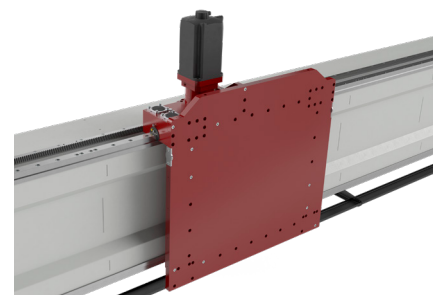
5 m/s²



Y-axis (bridge)



X-carriage unit



Y-carriage unit

Compatibility / options

Configurable X-axes

Z-axes and customer-specific grippers

Extendable supports and gantry lengths

Integration into Güdel control systems

Application areas

Tire and wheel handling

Layer picking

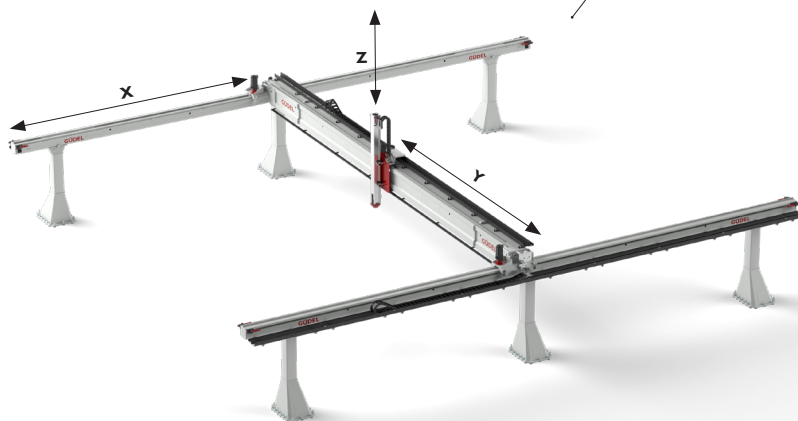
Handling of large components

Pick-and-place applications

Process applications

Intralogistics

FP-5-HP area gantry with rigid bridge, modular design and flexible interface for grippers and Z-axis



Find the FP-5-HP

Technical data

Load capacity Y-axis carriage	1 100 kg
Payload Z-axis	500 kg (vertical axis)
Dynamics X-axis	Speed up to 3 m/s, acceleration up to 3.5 m/s²
Dynamics Y-axis	Speed up to 3.75 m/s, acceleration up to 5 m/s²
Dynamics Z-axis	Speed up to 3 m/s, acceleration up to 6 m/s²
Y-axis stroke	up to 14 m (bridge)
Z-axis stroke	Standard stroke up to 2 m or application-specific (vertical axis)
Leveling	Vertical leveling via floor leveling kit on support legs, lateral leveling via beam leveling kit
Drive system	Rack-and-pinion drive with hardened helical gearing, Güdel planetary gearbox NGHP140
Noise emission	≤ 75 dB(A)

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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.