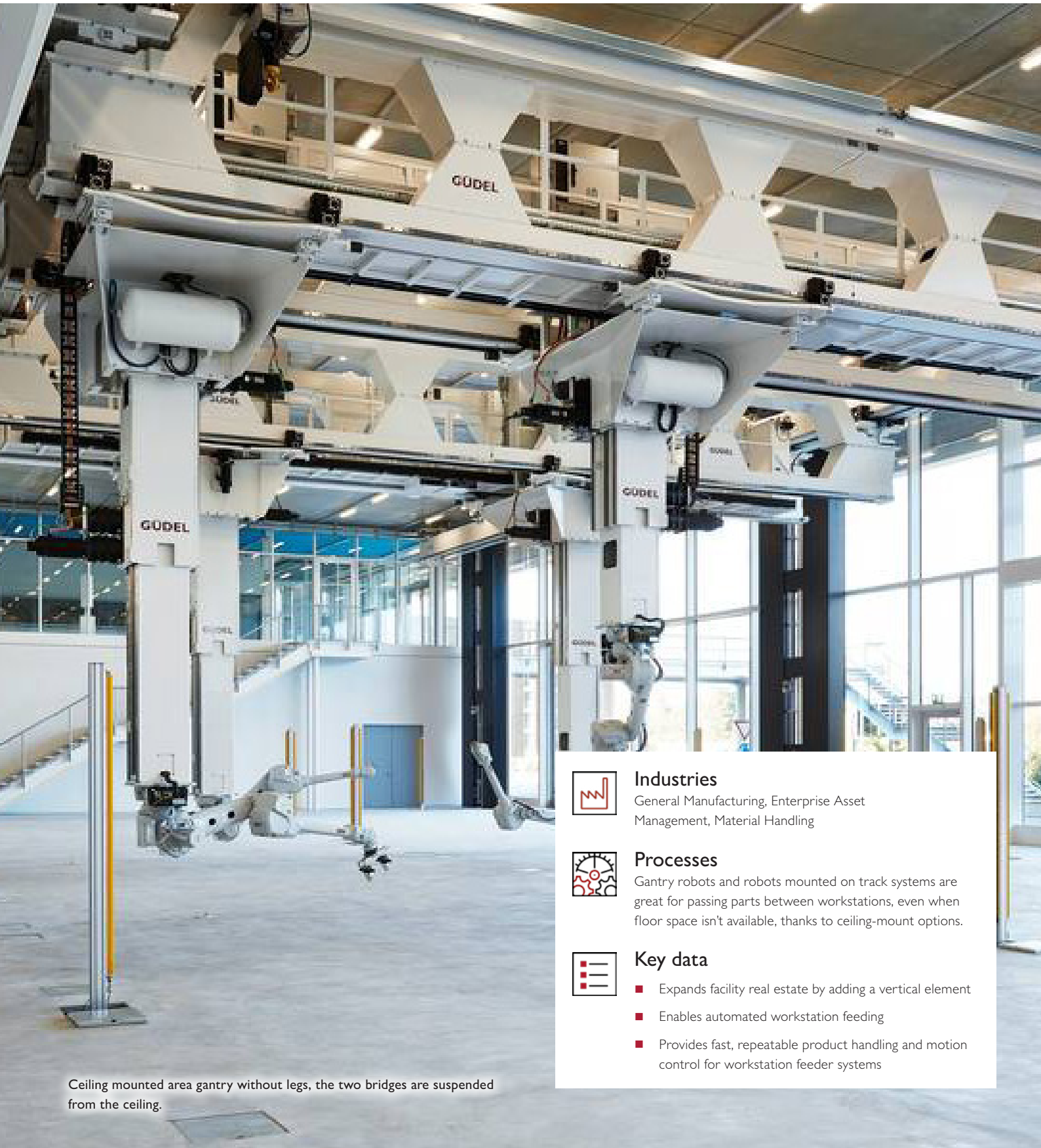


Technology case study

No legroom for robots? No problem!



Ceiling mounted area gantry without legs, the two bridges are suspended from the ceiling.



Industries

General Manufacturing, Enterprise Asset Management, Material Handling



Processes

Gantry robots and robots mounted on track systems are great for passing parts between workstations, even when floor space isn't available, thanks to ceiling-mount options.



Key data

- Expands facility real estate by adding a vertical element
- Enables automated workstation feeding
- Provides fast, repeatable product handling and motion control for workstation feeder systems



No legroom for robots? No problem!

A Güdel customer had an application that required transporting extremely fragile parts quickly between workstations. Due to the delicate nature of the parts and the speed and repeatability with which they needed to be moved, Güdel's ZP-3 double-axis linear module would have been the ideal solution, except for one thing: Floor space in the factory was very limited, and there was no way to mount the gantry using our standard legs without interfering with the workflow between the cells.

The Idea

The sales team recognized a solution immediately — if there's no room on the floor, then use the ceiling. Güdel's applications engineers went to work to turn this unconventional idea into reality.

The Challenges

When equipment is mounted to the floor, movement is not an issue. But that changes when equipment is hanging from the ceiling. There are several aspects that need to be considered when mounting an estimated two-ton piece of equipment to something whose original purpose was to conceal the supports for the floor above it. The ceiling supports and trusses needed to be reinforced to support the

weight of the equipment. Because the equipment is moving, vibration presented another challenge. Repeatability was also a big concern, as the highly automated manufacturing process required picking up and dropping off very fragile parts.

The Solution

Güdel engineers worked directly with architects and civil engineers to create a solution that would not only support the heavy equipment but also provide the stability required for repeatability in the manufacturing process. Güdel used a standard ZP-3 double-axis linear module, along with standard legs modified to mount the gantry in the opposite direction.

Is that really practical?

Even with all of the professionals and customization required to complete this project, costs remained low, thanks to the right expertise. For applications where floor space is limited or those that require high gantries, mounting from the ceiling could be the best — and most cost-effective — option. Güdel's linear modules are versatile, and our applications engineers can help determine the best solution for your unique requirements — without breaking the bank. Get in touch with a Güdel expert today at info@us.gudel.com.



Güdel engineers modified the legs on a standard ZP-3 double-axis linear module so that it could be mounted to the ceiling to save factory floor space.

About Güdel Inc.

Güdel Inc. is the US subsidiary of Güdel Group, a global manufacturer of robotic automation products, systems and services. Güdel supplies linear-motion modules, robot track motion units, gantry robots and components to OEMs, systems integrators and machine builders serving the automotive, aerospace, logistics, heavy industrial and power-generation industries. Güdel Inc. is located in Ann Arbor, Michigan, in a dedicated 45,000-square-foot facility, providing North American customers with engineering, design, production and customer service support.

Güdel Group was founded in 1954. Headquartered in Langenthal, Switzerland, today Güdel operates in more than 30 locations worldwide.

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