

## Handling Formwork Elements

Automated formwork processing with gantry robot



### Industry

Precast concrete parts production



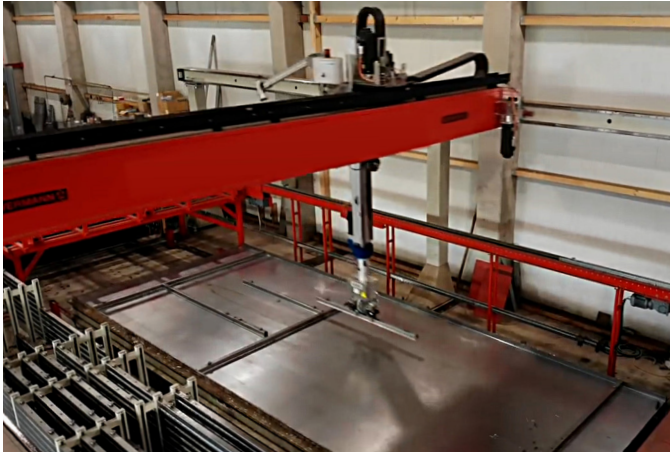
### Processes

Placing and removing formwork elements for precast concrete parts production

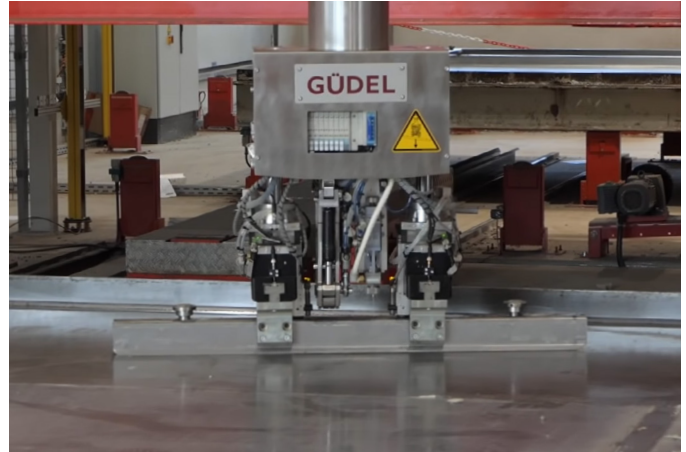


### Key Data

- Workpiece: Formwork elements of diverse dimensions with up to 35 kg
- Total payload 300 kg
- Güdel key technology:
  - 1 × 3-axis gantry FP-5-HP with two autarkic wide-span bridges
  - 2 × Pneumatic double gripper unit with setting and releasing mechanism
  - Assembly at end-user plant



Güdel gantry places a formwork element onto the base plate



Güdel double gripper unit sets and releases a formwork element



## Kurzbeschreibung

### 3-axis gantry FP-5-HP as shuttering robot

One of the crucial steps during the production of precast concrete parts is the setting of formwork elements, which is a critical factor for the efficiency of the production. The formwork elements are automatically picked from the magazines. The elements are then placed onto the base plate with high dynamics and high precision by a customized gripper with integrated set mechanism. After the removal of the precast concrete part and the cleaning of the plate, the formwork elements will be identified and transferred back into the magazines. With this special gripper, the entire process of settling, releasing and transporting of the formwork elements can be done fully automatically.

### From customized solution to innovative product

Through close cooperation with our customer, we successfully automated the formwork processing with up to 12 meter width. Up to now, this automation solution, with slight modifications, has already been successfully implemented multiple times at various end-users all over the world.

### Customer value

Based on the gantry, Güdel realizes a faster and more flexible formwork processing with high precision and efficiency with a small footprint.

## Güdel Technologie

- Automation in production of precast concrete parts
- Gripper with set and release mechanism for latching and unlatching
- Industry-specific process know-how
- Worldwide production, assembly and customer services



## Güdel Germany GmbH

We, Güdel Germany, a subsidiary of Güdel Group AG with headquarter in Langenthal, Switzerland, are a solution provider for industrial automation. We are specialized in robotics applications, automation solutions and prime care. We support our customers along the complete journey from sales over design, assembly, commissioning to after-sales. With high speed, high precision, heavy payload, maximal availability and reliability all in one, Güdel is your global partner for your individual automation solutions.

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