

| PRODUCTS

| INDUSTRIAL AUTOMATION

Components

Robotics

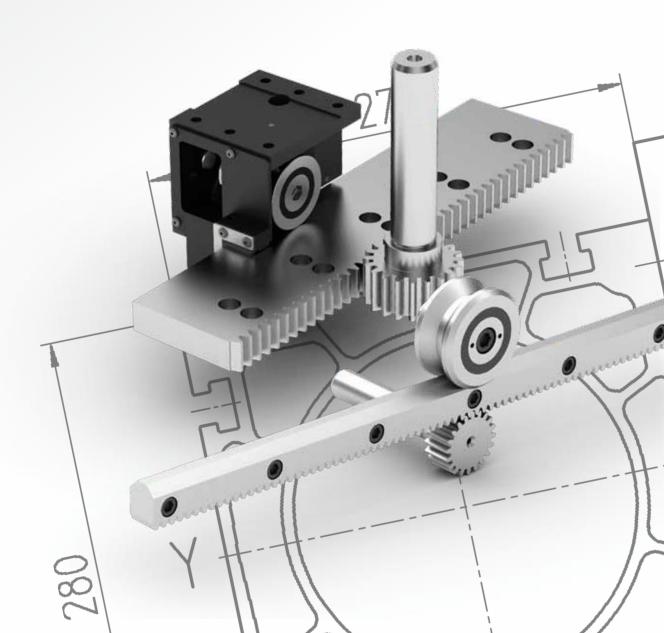
Factory Automation

Press Automation

Renewable Energies

Intralogistics

Linear systems from GÜDEL – competence in movement



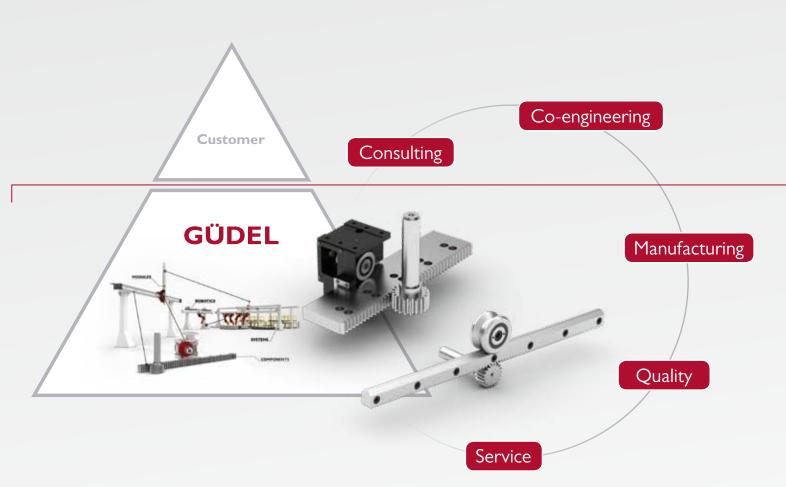
We design linear systems for medium and heavy payloads

Our solutions are as varied as your requirments

## GÜDEL's competence is in the development and manufacture of linear drive components, and in the associated engineering consultancy services.

GÜDEL's linear systems, with its longitudinal precision guides and drivetrain components, provides high speed and acceleration and enables a moving mass – weighing anywhere between ten kilos and several tons – to be positioned with the utmost accuracy.

The modular system comprises the following basic elements: guide rollers, tracks (with or without in-built racks), pinions and beams. The assembly can be employed anywhere and has several advantages over traditional recirculating ball systems. Because of its compactness and the integrated racks for the drive, it is an excellent solution in premises where space is at a premium.



#### Modular system

The GÜDEL linear system comprises two different series, each of which are available in various sizes. The sizes in the heavy-duty series are matched to the diameter of the track rollers and their load-carrying capacity. Within the frame size, the elements can be combined and swapped as required.

Depending on the client's needs and the load requirements, the racks are available in quality levels Q5 to Q9. The hardness of the guide tracks (60-62 HRC) guarantees a high maximum working load and a long service life.

#### Advantages of the linear systems from GÜDEL

Characteristic	GÜDEL's linear systems	Ball screw	Recirculating ball bearing	Linear plain bearing
Speed				
Temperature				
Dirty environment				
Ease of assembly				
Noise				
Long strokes				
Compliance				
Cost				
Excellent Good	Fair	Poor		

#### Linear axis for medium-duty series

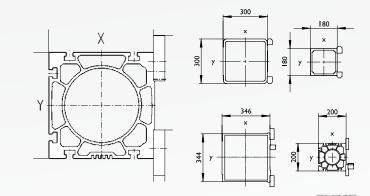
The linear axis for the medium-duty series comprises guide rollers and vee rails as the basic elements. They are particularly suitable where high speeds, low friction, accurate positioning and quiet operation are required. Proven for dirty and extreme environmental conditions.

#### Linear axis for heavy-duty series

The linear axis for the heavy-duty series comprises roller carriers with three side-mounted track rollers, flat guide tracks with or without toothing, drive modules and beams as the basic elements. They are suitable for use in situations where high radial and axial loads, large torque, excellent rigidity, integrated drives and quiet operation are required.

#### Steel and aluminium beams with guide rails

Steel or aluminium beams, fully finished and fitted with rails, are available on request and are manufactured in accordance with the customer's specifications. The steel beams are abrasive-blasted and primed ex works and can be supplied in any colour. The aluminium beams can be anodised on request. Using the relevant joints, the beams can be coupled together to form a total length of 100 metres or longer.



For full technical specifications, drawings, design tools and selection tables, visit our website: http://www.gudel.com/components/linear-guideway-systems/guideway-system-for-medium-duty-applications/medium-duty-overview/

## Proven GÜDEL concept solutions

GÜDEL's modular linear systems enables the implement some of technically sophisticated solutions with regard to general machine construction and the integrated system automation (industrial automation). The low friction inherent in these systems enable a wide range of machines and installations to be operated very efficiently in terms of energy usage.

#### Machine tools

Milling, Drilling, Lathing, Grinding

#### Typical applications

- Customised machine construction
- Paint finishing
- Chemical
- Medicinal
- Clean rooms
- Arms and defence
- Welding
- Clinching
- Foundry & casting

#### Industrial handling applications

- Tending system for machine tools
- Tending system for timber-processing machines
   Robot track motion (as 7<sup>th</sup> axes) for robots
- Storage and retrieval systems
- Logistics
- Renewable energies
- Press automation
- Tire industry
- Aerospace- Automotive

#### Clean-room application

Stainless-steel linear system adapted to the particular needs of the application. Powder-coated steel parts; lubrication system suitable for clean-room applications. GÜDEL Components: guideway system from the medium-duty series, stainless-steel vee rails and rollers.



#### Applications for cutting equipment

Linear systems and racks for use with plasma, laser and water-jet cutters. We provide individual solutions for extreme environmental conditions. Reliability is excellent, maintenance and servicing are kept to a minimum, and downtimes are rare. GÜDEL Components: guideway system from the medium-duty series, with guide tracks, rollers, gears and racks.



## Quality due to a high level of internal production

In order to satisfy our own high quality standards, we invest continuously in the future. GÜDEL carries out the

engineering and the development itself and manufactures of components in our own factories.



## Swiss quality - made locally

On every project, GÜDEL specialists, as part of our worldwide network of technical staff, always work in close collaboration with our customers. This enables us to achieve our objectives much more quickly, to draw up comprehensive plans and to fulfil the client's exact requirements.



## GÜDEL's advantages:

## How you benefit:

1.	Advisory services, development and manufacture in its own factories	► One contact partner
2.	Enlarge the working range, improve the margins	► Reduces costs
3.	Very dynamic, large payloads, excellent precision	► Wide range of potential uses
4.	Products that are modularly extendable	<ul> <li>Can be easily matched to your production needs</li> </ul>
5.	Customised solutions based on proven, standardised components	► Reliable solutions
6.	Wide range of options and versions	► Optimum solution for all industries
7.	Fifty years of experience in linear and drive systems	► Proven technology
8.	Swiss quality, worldwide manufacture	► Quality and precision
9.	Global presence in the key markets	► Local expertise
10.	Maintain productivity and reduce system downtimes	► GÜDEL service 24/7

# GÜDEL

# we move you



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