GÜDEL

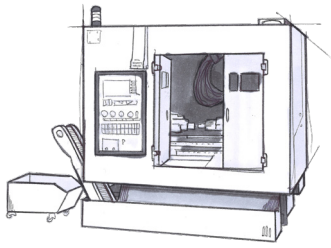
RACKS NEXT GEN



High-End Performance Basic

Güdel racks and pinions engage perfectly – for maximum performance, repeatability and long service life. Our portfolio brings structure to your selection process with three clearly defined product lines, perfectly tailored to your application needs.

High-End



Maximum performance and lifetime

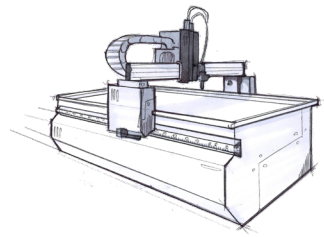
For the highest demands in linear drive systems of all types of modern machine tools, process equipment and automation systems with the highest quality requirements.

Ultra-high load capacity and maximum feed force in given installation spaces enable downsizing through outstanding power density, thanks to hardened tooth roots.



Quality	Q6
Machining	
Heat treatment	
Toothing	
Shaft pinion	

Performance



Maximum precision and smooth operation

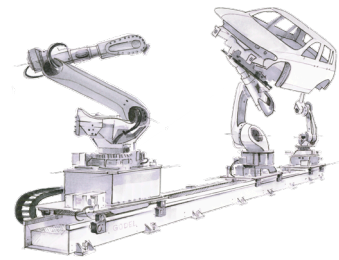
Precision-ground and hardened tooth flanks ensure highly accurate positioning. Ideal for applications requiring the highest precision.

These racks are particularly suited for applications with medium dynamics and precision demands, such as laser cutting machines, plasma and waterjet cutting systems as well as tube bending machines.



Quality	Q6
Machining	
Heat treatment	
Toothing	
Shaft pinion	

Basic



Reliable and robust design

Milled and hardened racks for solid power transmission. Perfect for applications with lower precision requirements.

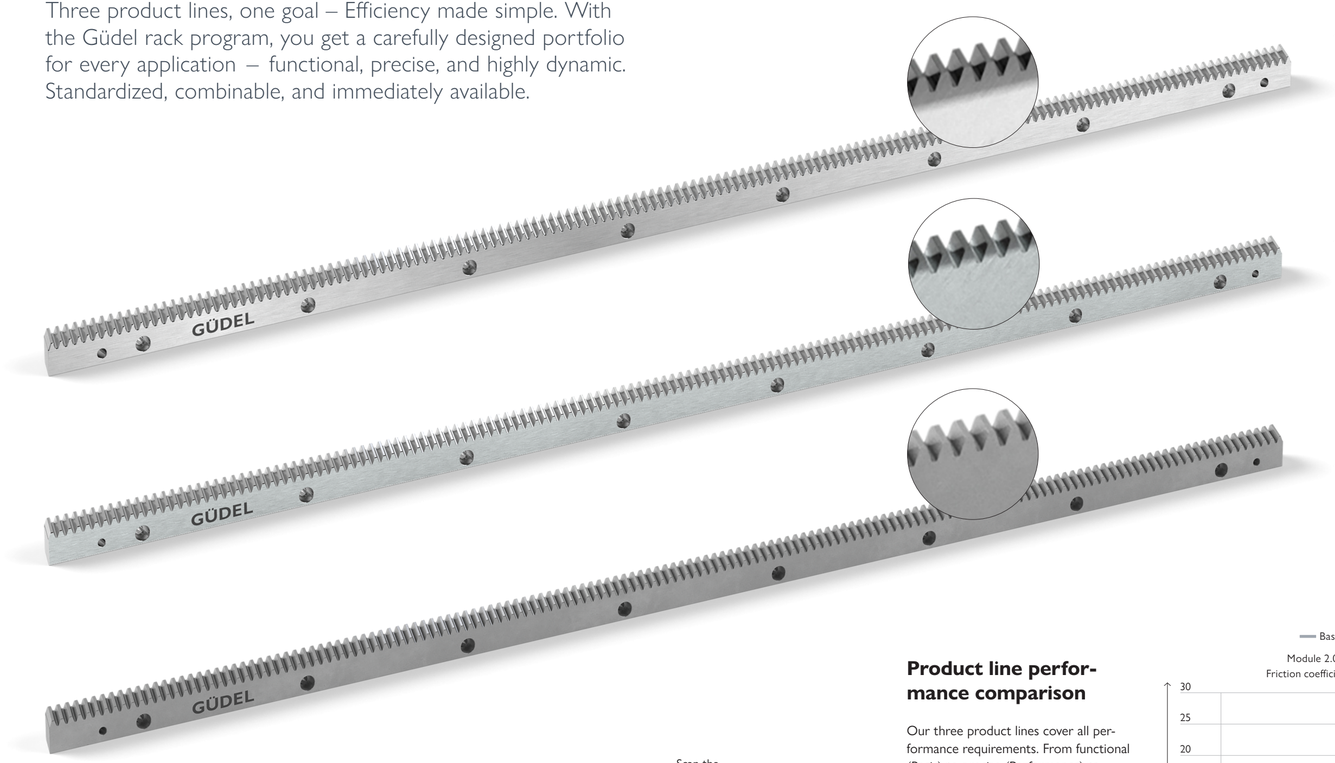
Increased feed force requirements combined with standard precision – for example in automation gantries, pick-and-place applications and robot travel axes.



Quality	Q9
Machining	
Heat treatment	
Toothing	
Shaft pinion	

The right rack for every application

Three product lines, one goal – Efficiency made simple. With the Güdel rack program, you get a carefully designed portfolio for every application – functional, precise, and highly dynamic. Standardized, combinable, and immediately available.



With the Güdel Product Finder, you have direct access to our complete rack portfolio – organized into High-End, Performance, and Basic product lines. Easily filter by application, module, length, quality or tooth profile and find the right rack in just a few clicks. Our web application displays all available versions including technical data, CAD files and datasheets. Matching pinions are shown automatically. Scan the QR code or visit gudel.com to get started – simple, precise, and efficient.

Scan the QR code and find the perfect rack.

High-End

Hardened & ground rack, hard tooth root

The rack for maximum feed force at minimal installation space – delivering superior power density, precise pitch-accuracy, and a ground surface finish. Perfect for compact, highly dynamic high-end systems. Machine-made chamfering ensures optimized handling and reduces injury risk.

Performance

Hardened & ground rack, hardened tooth flank

The all-rounder for precise assembly and high load capacity. Length-cut with exact pitch, wear-resistant thanks to hardened C45E carbon steel. Optional coating available for humid environments.

Basic

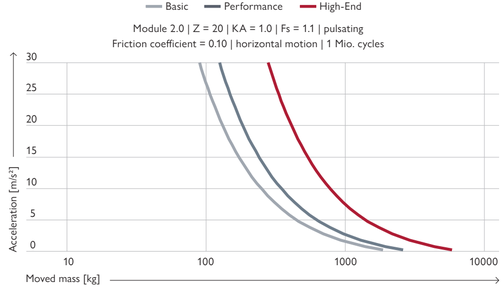
Gear rack milled & hardened

The solution for simple automation tasks – pitch-accurate length cutting, cost-efficient, and ideal for long axes, lightweight robots, and pick-and-place systems with moderate demands. Surface in cold-drawn profile.

Product line performance comparison

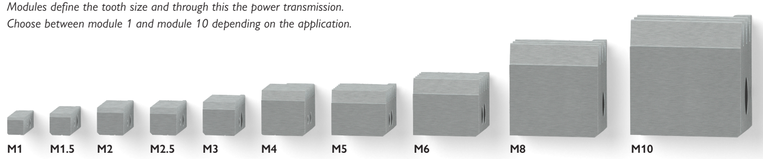
Our three product lines cover all performance requirements. From functional (Basic) to precise (Performance) to highly dynamic (High-End) – each line is designed for typical applications and immediately available.

The diagram illustrates how High-End racks enable significantly higher feed forces – ideal for compact machine concepts with high dynamics and precision.



10 modules

Modules define the tooth size and through this the power transmission.
Choose between module 1 and module 10 depending on the application.



3 Lengths

All standard racks pitch accurate cut to lenth;
suitable for continuous and precise installations.



Toothing

Helical toothed for smoother operation in dynamic systems.
Straight toothed for simple, direct applications.



Mounting Holes

Racks with mounting holes for precise assembly.
Racks without mounting holes for maximum flexibility.



Application-specific designes

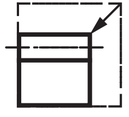
Our semi-finished products enable economical and efficient implementation of customized rack solutions. Based on our proven standard components, we precisely adapt each product to your specific requirements – for example in length, hole pattern, or other geometries.

Thanks to our flexible manufacturing system, small batch sizes are also possible – with short lead times. You receive exactly the component that is optimally tailored to your application – precise, powerful, and economical.

Qualities

From quality class 6 to 9 – our standard range offers the right tolerance class for every application.

Downsizing



Less weight, smaller module – full power
A High-End rack module 2 (4 kg/m) replaces a Performance rack module 3 (5.6 kg/m) with the same performance – saving approx. 48 kg over 30 m, reducing drive load, installation effort and costs.

GÜDEL

Swiss automation since 1954

Engineered and made in Switzerland
We have stood for the highest quality and reliability for over 70 years.

Intelligent and complete solutions
From individual components to complete automation solutions – everything from one single source.

Highest precision and maximum accuracy
In-house manufactured racks, pinions and gearboxes for maximum precision – that is in our DNA.

Transporting heavy loads over long distances
Market leader in moving loads of up to 3 tons over 100 meters.

Future-oriented with tradition
Durable products for sustainable efficiency – proven and tested over many years.

Global presence, local expertise
Approximately at over 20 locations with around 1000 employees – working for you worldwide.



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