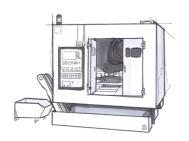


Güdel racks and pinions engage perfectly – for maximum performance, repeatability and long service life. Our portfolio brings structure to your selection process with three clearly defined product lines, perfectly tailored to your application needs.

High-End



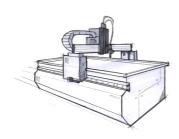
Maximum performance and lifetime

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.



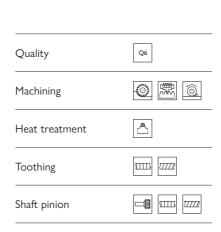
Performance



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.



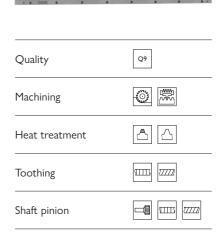
Basic



Reliable and robust design

Milled, hardened, or soft 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.



The right rack for every application

GÜDEL

started – simple, precise, and efficient.

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

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.



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

capacity. Length-cut with exact pitch, wear-resistant thanks to hardened C45E carbon steel. Optional coating available for humid environments.

Basic

ATTITUTE THE PARTY OF THE PARTY

Gear rack milled & hardened or soft

The solution for simple automation tasks – pitchlong axes, lightweight robots, and pick-and-place systems with moderate demands. Surface in colddrawn profile.

The all-rounder for precise assembly and high load

accurate length cutting, cost-efficient, and ideal for

Toothing

10 modules

3 Lengths

2 meters

1 meter

0.5 meter

All standard racks pitch accurate cut to lenth;

suitable for continuous and precise installations.

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

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



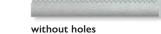
straight toothed

Mounting Holes

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



with mounting holes



Application-specific designes

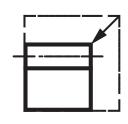
Our semi-finished products enable economical and efficient implementation of customized rack solutions. Based on our proven standard components, we precisely adapt each product to your specific requirements – for example in length, hole pattern, or other geometries.

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.

Oualities

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.

Scan the

and find the perfect rack.

QR code



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

Product line perfor-

Our three product lines cover all per-

(Basic) to precise (Performance) to

immediately available.

highly dynamic (High-End) - each line

is designed for typical applications and

formance requirements. From functional

mance comparison

- Basic - Performance - High-End Module 2.0 | Z = 20 | KA = 1.0 | Fs = 1.1 | pulsating Friction coefficient = 0.10 | horizontal motion | 1 Mio. cycles 100 1000 Moved mass [kg]

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.

Güdel Group AG Gaswerkstrasse 26 4900 Langenthal Switzerland +41 62 916 91 91 info@ch.gudel.com



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