Standard and Special Solutions

The perfect solution for every requirement
Our range of services

The Güdel Group is a manufacturer of high-precision machine components and provider of sophisticated automation solutions. Its spectrum of products ranges from linear guideways, racks, pinions, and gearboxes right through to linear axes and gantry robots. With intelligent technologies for movement, Güdel ensures the „flow“ in industrial automation. Güdel has long-standing expertise in linear and drive technology.

Since 1960 Güdel has been developing drive technology for versatile applications in completely different sectors. This expertise ensures maximum quality and durability. The precision of Swiss production with high-strength materials and state-of-the-art hardening technology is impressive. Güdel produces standard components and special solutions at the Swiss headquarters in Langenthal and the Altenstadt location in Germany.

Overview of our components
Gearbox, linear and drive technology with standard and special solutions

Gearbox technology
Standard solutions with simple drive technology

The components are reliable modules of your construction due to them being self-manufactured and the high demands they place on quality control. Special productions according to drawings are possible.

High-performance miter gear

- Type series with five sizes
- Translations from 2:1 to 60:1
- Two precision classes PS and PR
- Different input and output variants
- Min. adjustable backlash of 3 arcmin, readjustable
- Maximum dynamics and reliability
- Standardized design

PV miter gear

- Perfectly suitable for small loads and cycling mode
- Six sizes > PV 10 to PV 35
- Gear teeth in steel, stainless steel or plastic possible
- Bevel gears of plastic polyacetal, injected
- Bearing body of die-cast zinc with self-lubricating bearing
- Modules 1.0 to 3.5
- Maintenance free
Expertise and high degree of in-house production
Everything from a single source

Güdel has had a unique high degree of in-house production from the beginning of the history of the company until this day. The extremely wide range and the overall expertise as solution provider is impressive. This knowledge and our experience are incorporated permanently in the development and production of the individual assemblies.

Online product overview

For the gearbox design, we have set up an online configurator under "HPG ordering code for CAD STEP model."

degudel.com/produkte/getriebe

Gearbox technology
Standard solutions with servo-controlled drive technology

We guarantee a long service life and high backlash stability. Dynamic cycling mode is a matter of course for our components. Also with operation 24 hours a day. This enables precise production with high-strength materials and state-of-the-art hardening technology.

Servo planetary gear

- Five sizes 080 / 100 / 140 / 180 / 240
- Three power levels depending on the requirement
- Four precision classes 1 / 3 / 5 / 12 arcmin – 0.5 arcmin upon request
- Translation ratio from 3 to 1,000
- High rigidity
- Compact, standardized design

Low-backlash positioning and rotary drives

- Four sizes
- Modular system
- Two translations 30:1 and 60:1
- Backlash < 1 arcmin, adjustable

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Linear technology
Standard solutions and guide systems with servo-controlled drive technology

Medium loads
- For maximum dynamics
- Loads of up to 10,000 N
- Sensitive to dirt

Heavy loads
- For long service life
- Loads of up to 60,000 N
- Sensitive to dirt

Ideal drive train
- Flexibility thanks to modular principle
- Beams of aluminum and steel
- Racks / pinions / gearboxes

Drive technology
Standard solutions with servo-controlled drive technology

Racks and pinions
- Standard program with hardened and ground precision racks
- Straight toothed and helical
- Quality 5 and 6
- Up to module 10

Pinion with keyway
- Quality 6
- Up to module 10
- Straight toothed and helical
- Available with clamping set

Palloid spiral toothing
- Hardened and lapped versions
- Translations 1:1 and 2:1
- Modules 1 to 4
- Quality 7
Drive technology
Standard solutions with simple drive technology

Bevel gear sets
- K / KE / KK / KM / KD / KH / SR
- Modules 1.5 to 5

Worm gear sets
- Modules 1 to 4
- Seven sizes, each with eight translation ratios

Spur wheels
- Material: steel and stainless steel
- SN / SNB / ST / SNE
- Straight gear teeth
- Modules 1 to 8
- Quality 8 to 9

Drive technology
Special solutions with simple drive technology

Toothed segments

Our service
Güdel globally and locally on site

Our service team is available worldwide to our customers. We can act quickly and reliably due to our decentralized spare parts storage. We care about smooth production processes in order to satisfy you as our customers.

Each Güdel service employee is committed with passion to this goal. Worldwide. We are available worldwide free of charge in the event of malfunctions. You can find the contact details and service numbers for your region and country under gudel.com/service.
Drive technology
Special solutions with simple drive technology

Racks

Material:
Hardened and ground steel, stainless steel, plastic

Straight and helical

With metric pitch and modular pitch

Cross section, angular or round

Worms and worm gears

Modules 1 to 4
Bevel gears

Material: Hardened steel, stainless steel, plastic

Modules 1 to 5

Straight and helical

Translations 1:1 to 1:4

Different versions of materials, payloads and qualities as required

Spur wheels

Material: Hardened and ground steel, stainless steel, brass, plastic

Modules 1 to 8

Straight and helical
We can provide the right solution for you. With intelligent technologies for movement, we ensure efficiency and flexibility.

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Let’s take the next steps together.