

# 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".

[de.gudel.com/produkte/getriebe](https://de.gudel.com/produkte/getriebe)

## Gearbox technology

Standard solutions with servo-controlled drive technology

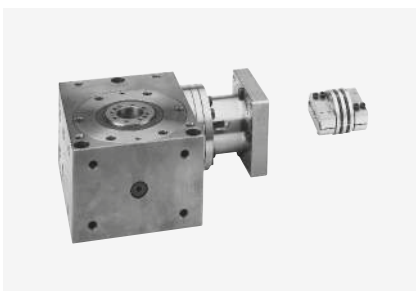
We guarantee a long service life and high backlash stability. Dynamic cycling mode is a matter of course for our components. Also with operation 24 hours a day. This enables precise production with high-strength materials and state-of-the-art hardening technology.

### 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

## 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](https://www.gudel.com/service).

## Drive technology

Special solutions with simple drive technology

### Racks



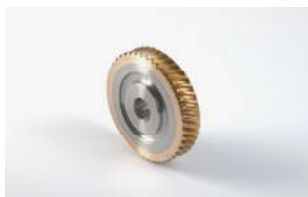
Material:  
Hardened and ground steel,  
stainless steel, plastic

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 materi-  
als, 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.

