

Individual drive solutions

From gears to gearboxes

Individual
Innovative
Fast
Reliable



Our engineering team makes your drives highly efficient

Long years of experience and know-how in the development of gears and gearboxes make us proven experts in the development, dimensioning and implementation of mechanical drive systems.

Our strengths are optimization of the gear design for:



HIGH-TORQUE-requirements:
for high power density application



HIGH-SPEED-requirements:
for up to 120,000 revolutions/minute



LOW-NOISE-requirements:
to achieve significant noise reduction

Our fields of expertise:

- Mechanical and plant engineering
- Automotive/racing
- Standard and high-performance tools
- Agricultural technology
- Robotic systems
- Shipbuilding



At WITTENSTEIN, our engineers use the following software tools to design gears and gearboxes:

- FVA-Workbench
- KIMOS/ CAGE
- Bearinx
- KissSoft
- In-house development software

Continuous development processes are ensured (CAD/CAM/CAQ).



In-house production

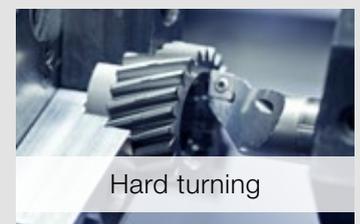
Production of customized gearboxes and gears at the production plant in Fellbach – the „Future Urban Production“.

Every year, approx. 14 million gears are produced.

From prototypes to series production, we are your competent and reliable partner.

Special highlights of our production processes:

- In-house heat treatment
- 5-axis milling
- Electrical discharge machining
- Gear shaping
- Profile grinding of external and internal toothing
- Hard turning/cylindrical grinding
- Quality assurance in a Class 2 precision measuring room



Perfection tooth by tooth



...at our gears

Spur gear

Toothing type:	straight, helical, conical
Module:	0.3 - 8 mm
Diameter:	up to 400 mm
Quality:	DIN 3
Quantities:	5 - 30,000 pcs/year

Internal toothing

Toothing type:	straight, helical, conical
Module:	0,4 - 6 mm
Diameter:	up to 400 mm
Quality:	DIN 6
Quantities:	5 - 1,400 pcs/year

Bevel gear

Toothing type:	Gleason circular arc
Module:	0,9 - 8 mm
Diameter:	up to 275 mm
Quality:	DIN 1
Quantities:	5 - 500 pcs/year

Special gearboxes

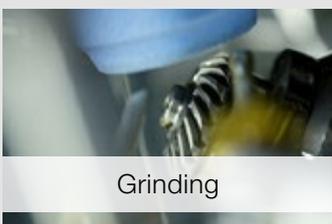


...tailored to meet your needs

There are no standards for unusual ideas. For this reason, the special gearboxes from WITTENSTEIN alpha cannot be found in any catalog. As system manufacturer, we offer individual drive solutions always focusing on comprehensive applications. All gearboxes are available with fixed transmission ratio.

Gearbox types:	<ul style="list-style-type: none">· Spur gearbox· Bevel gearbox· Planetary gearbox· Worm gearbox
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Quantities:	5 - 1,000 pcs/year
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WITTENSTEIN alpha – **Intelligent** drive systems

www.wittenstein-alpha.com

The entire world of drive technology – Catalogs available on request or online at www.wittenstein-alpha.com/catalogs



alpha Premium Line. Unique, individual solutions that offer unparalleled power density.



alpha Advanced Line. Maximum power density and outstanding positioning accuracy for complex applications.



alpha Basic Line & alpha Value Line. Reliable, flexible and economical solutions for a wide range of applications.



alpha Linear Systems. Precise, dynamic system solutions for every requirement.



alpha Mechatronic Systems. Energy-efficient, versatile and flexible mechatronic drive systems.



alpha Accessories. Optimally designed and adapted for gearboxes and actuators.