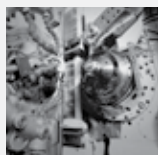


Components & Systems

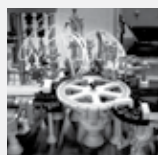
Low backlash
planetary gearheads
Servo right-angle gearheads
Mechanical systems





Machine tools and manufacturing systems

Maximum precision, process reliability and productivity thanks to durable, virtually backlash-free and torsionally-rigid mechanical system solutions used in feed, swivel and auxiliary axes, for example.



Food and packaging machines

A range of gearheads designed for all types of axes used in packaging technology – including washdown models – for maximum operating efficiency, machine flexibility and cycle speeds.



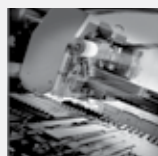
Wood processing machines

Mechanical systems such as gearheads with rack and pinion combined with on-site consultation and a comprehensive knowledge of engineering, form an impressive package that guarantees a high-quality end product with maximum efficiency.



Printing and paper machines

Innovative gearhead products that offer high constant speeds, seamless synchronization and permanent precision – the perfect solution for high-quality printing processes and other continuous applications. Available as an option:
Integrated sensors for monitoring web tension and similar parameters.



Robotics, automation and handling technology

A wide range of servo gearheads and mechanical drive systems, from low-cost to high-end products for all types of robot and auxiliary axes such as drive axes and tool manipulators.

Servo right-angle gearheads

New generation SP⁺/TP⁺

Linear systems

New Generation LP⁺



2006
alpha®



2007
TPK⁺/SPK⁺/
HG⁺/SK⁺/TK⁺



2008
LK⁺/LPK⁺



2009
SP⁺/TP⁺



2011
High Performance Linear System



2012
LP⁺/LPB⁺
Generation 3

- Technological advantage
- Set standards
- 12 % of the employees work in research & development
- 10% invested in research & development



WITTENSTEIN alpha

Renamed as
WITTENSTEIN alpha GmbH

25 years
WITTENSTEIN alpha

The revolution
in linear technology

WITTENSTEIN alpha is setting benchmarks worldwide in the fields of mechanical engineering and drive technology

3 x 1 = one or

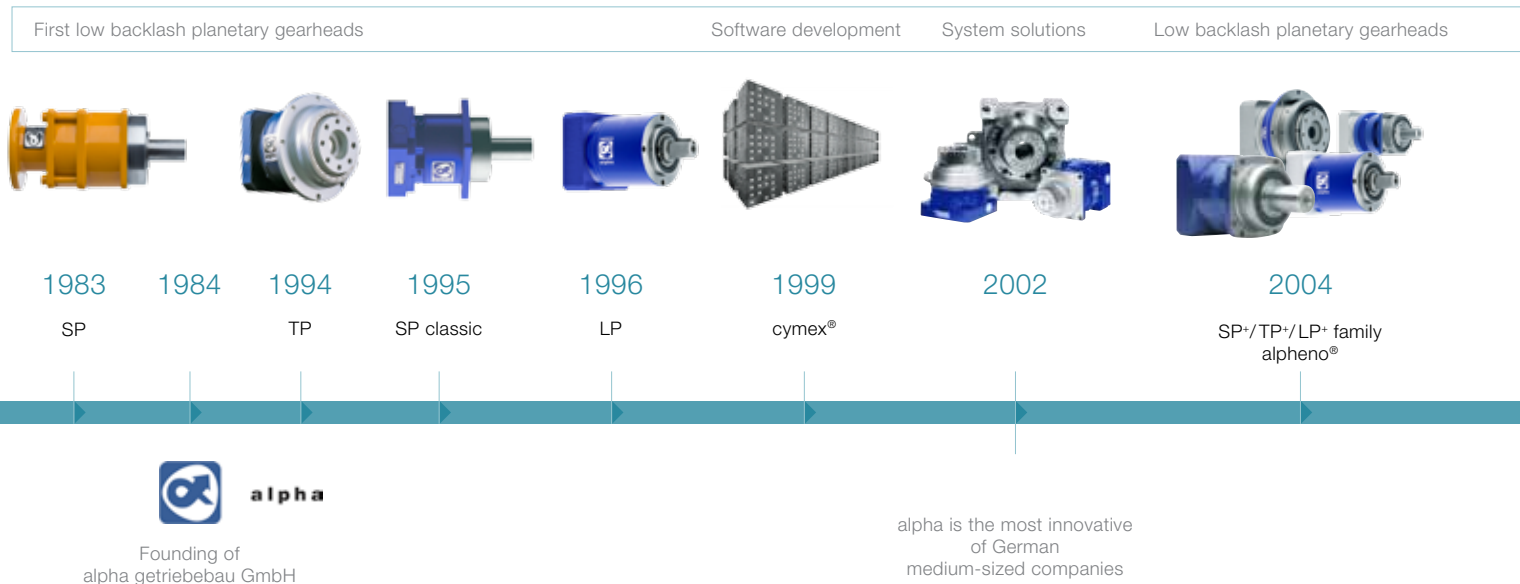
“The whole is more
than the sum of its parts!”

Listening, understanding, calculating,
optimizing and implementing tailored
solutions for our customers – for
WITTENSTEIN alpha, engineering begins
at an early stage and continues far be-
yond successful implementation.

As one of the few manufacturers of
mechatronic drive systems worldwide,
we unite all core competencies, that are
a prerequisite for stringent as well as
integrated engineering, under one roof.

Research &
Development, Production
and Sales ...

... from a single source!



Low backlash planetary gearheads

alpheno®

Perfection in a new dimension

Looking for a solution that is tailored to your needs? Your requirements are our challenge.

More performance in less space!
alpheno® – The sure way to success.

RP+

The new high-performance planetary gearhead

The RP+ sets standards in terms of power density, modularity and easy installation.

The highly rigid gearhead design ensures maximum positioning accuracy.

TP+ / TP+ HIGH TORQUE

Compact precision

Compact top performers with drive flange. The standard version is ideally suited for high positioning accuracy and highly dynamic cyclic operation.

The TP+ HIGH TORQUE is particularly well suited for high-precision applications where high torsional rigidity is required.

alpheno®



RP+



TP+



TP+ HIGH TORQUE



SP+



LP+ Generation 3



LPB+ Generation 3



alphira®



SP+ / SP+ HIGH SPEED

The classic all-rounder among planetary gearheads

The standard version is ideally suited for high positioning accuracy and highly dynamic cyclic operation.

The SP+ HIGH SPEED is particularly well suited for applications with maximum speeds during continuous operation.

LP+ / LPB+ Generation 3

Innovation sets standards

Low backlash planetary gearheads with an output shaft (LP+ Generation 3) or output flange (LPB+ Generation 3). Optionally available with a timing belt pulley.

The LP+ Generation 3 is optimized for economical servo applications in cyclic or continuous duty. The LPB+ Generation 3 is particularly suited for dynamic timing belt applications.

alphira®

Simple precision

The alphira® gearhead combines proven gearing technology with the cost-effectiveness requirements in the economy servo sector.

Ideal for simple servo applications. Available from our online shop **www.shop.wittenstein.de** in Germany, Austria and Switzerland.

Key benefits of WITTENSTEIN alpha products:

Servo right-angle gearheads

RPK⁺/TPK⁺/TPK⁺ HIGH TORQUE/SPK⁺

Right-angle gearheads for maximum precision and power density

Servo right-angle gearheads with a planetary stage at the output.

Output geometry:

RPK⁺: System output with pinion

TPK⁺ / TPK⁺ HIGH TORQUE: Output flange

SPK⁺: Smooth, slotted or involute output shaft

RPK⁺



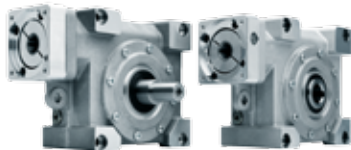
TPK⁺



SPK⁺



V-Drive⁺



V-Drive⁺ economy

HG⁺/SK⁺/TK⁺

Right-angle gearheads for maximum precision and compactness

Servo right-angle gearheads with bevelled teeth.

Output geometry:

HG⁺: Hollow shaft on one or both sides

SK⁺: Smooth, slotted or involute output shaft

TK⁺: Flange hollow shaft

HG⁺



SK⁺



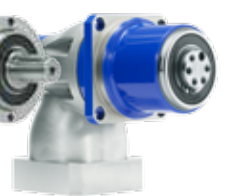
TK⁺



LK⁺



LPK⁺



LPBK⁺

V-Drive⁺ / V-Drive economy

The new generation of servo worm gearheads

V-Drive⁺: The plus stands for torque

V-Drive economy: Premium quality and maximum economy

Output type:

VDH⁺ / VDHe: hollow shaft, smooth or keyed

VDT⁺: Output flange, flanged hollow shaft

VDS⁺ / VDS^e: Output shaft, smooth, keywayed, involute

LK⁺ / LPK⁺ / LPBK⁺

Economical right-angle precision

The LK⁺ / LPK⁺ / LPBK⁺ are versatile all-rounders.

Offering unbeatable value for money, they are ideal for all applications demanding medium precision.

Output geometry:

LK⁺: Slotted output shaft

LPK⁺: Smooth or slotted output shaft

LPBK⁺: Output flange, optionally available with a timing belt pulley

- Maximum quality and reliability
- Very low operating noise
- High precision and synchronous running

- Very simple motor mounting
- Any installation position
- Suitable for cyclic or continuous operation

- High torque density
- Long life expectancy
- Lubricated for life

System solutions

Linear systems

High-precision rack-and-pinion systems that fit your application exactly

You acquire an optimized system solution comprised of a gearhead, pinion and rack tailored to your individual requirements.

Three components, one system – all from one source!

High Performance Linear System with planetary gearhead RP+, pinion and rack



alpha IQ®



torqXis®

alpha IQ®

Achieving compatibility.
Utilizing intelligence.
Increasing efficiency.

WITTENSTEIN alpha gearheads with integrated sensors – helping you better understand your processes.

torqXis®-sensors:

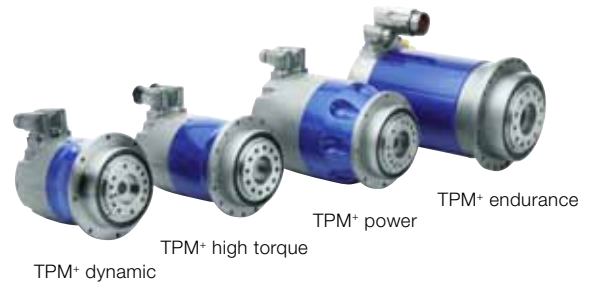
Modular sensor systems

Modular sensor solution for measuring mechanical parameters in the drive train.

Couplings – BC/BCT/EC/TL/EL

High-tech components for the harmonious transmission of power and movement. – In all applications where improved performance means progress.

Patented, backlash-free, compact and torsionally rigid metal bellows or elastomer couplings and torque limiters.

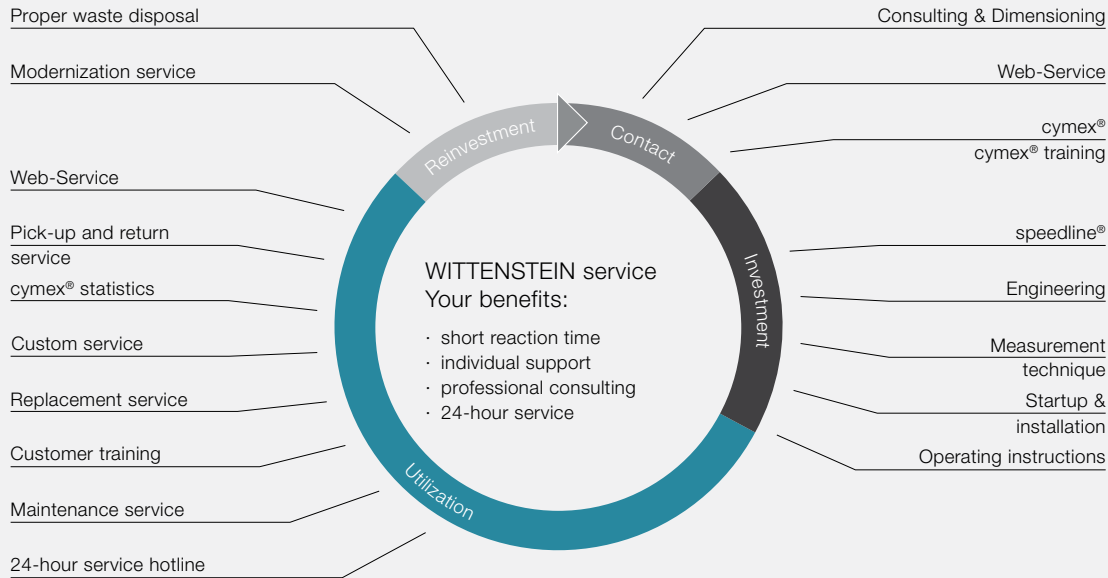


TPM+ family

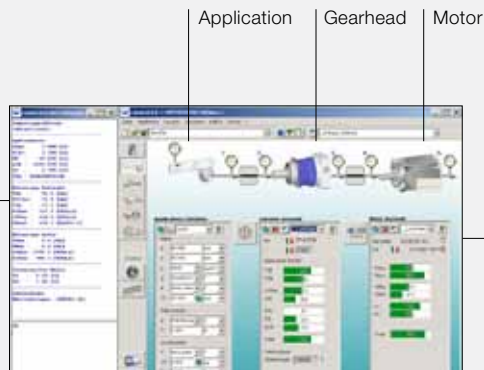
Rotary servo actuators

Ultra-compact and highly precise servo actuators providing high dynamics, high torsional rigidity and easy integration. Up to 50% shorter than conventional models.

WITTENSTEIN service



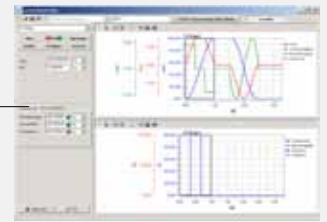
cymex® – (cyber motion explorer) the software for designing the entire drive train



You can download the cymex® software at
www.wittenstein-alpha.com

Your benefits:

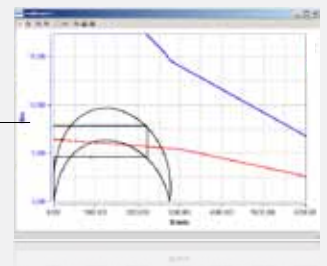
- reliable design tool for the quick and simple execution of complex designs
- Takes all products and application-specific details into account
- discovering hidden potential



cymex® Profiler



CAD generator:
Generation 3D models



Motor characteristic:
Representation of motor load

cymex® enables the simple dimensioning and design of the entire drive train (application + gearhead + motor).

WITTENSTEIN speedline®

Saves time! We offer you delivery of the standard SP+, TP+ and LP+ Generation 3 series at attractive conditions within 24 or 48 hours ex works.*

Our speedline®-team can be contacted under:

Tel.: +49 7931 493-10333 oder -10444

*non-binding delivery time depending upon part availability

24h-Service-Hotline

You can reach our Customer

Service team 24 hours a day:

Telefon +49 7931 493-12900



alpha

WITTENSTEIN alpha GmbH · Walter-Wittenstein-Straße 1 · 97999 Igersheim · Telefon +49 7931 493-0 · info-alpha@wittenstein.de

WITTENSTEIN alpha – intelligent drive systems

www.wittenstein-alpha.com

