



WITTENSTEIN alpha: Riding the success trail with integrated drive solutions

Drive systems with individually tailored accessories combine optimized performance with maximum future security and efficient administrative processes.

Every detail matters – particularly to planners, designers, implementers and users of high-performance drive systems. WITTENSTEIN alpha GmbH has successfully mastered all the relevant details of servo drive technology. Thanks to powerful sizing software for intelligent dimensioning, application know-how coupled with rich consulting expertise and customized accessories such as torque limiters and shrink discs, your drive solution becomes an integrated drive system. With shipment, order processing, documentation and interface responsibility all in the hands of a single supplier, the added value for customers extends well beyond mere technical performance.

For the past thirty years, WITTENSTEIN has been setting benchmarks in the field of servo drive technology. The world's first low-backlash planetary gearhead was unveiled at the Hanover Fair back in 1983, laying the foundation for the establishment shortly afterwards of alpha getriebbau GmbH – the company known today as WITTENSTEIN alpha. Those three decades have seen a continuous evolution away from single products towards optimally interacting systems and solutions. Holistic powertrain concepts combining maximum performance with intelligent characteristics and the greatest possible efficiency when it comes to customer processes generate added value that excites users and helps the company set itself apart from rival suppliers in the market.

System philosophy generates added value

An ability to think and act in terms of system solutions is something more and more customers nowadays take for granted when purchasing servo drives, and it's an expectation WITTENSTEIN alpha does its utmost to fulfil. Although high-quality gearheads remain its core competency, the portfolio also includes a wide range of related accessories for specific applications as well as services to facilitate drive solutions with a reputation for maximum performance, availability and future security. By bundling all key aspects of drive technology in

February 5, 2013

High-tech products made by **WITTENSTEIN** fly into space and win Formula One races. Intelligent drive systems – from the world's smallest high-performance servo drive to the latest state of the art in medical technology – are developed, produced and marketed by a team of around 1.400 employees. With a blend of dedication and enthusiasm, we set benchmarks – every day – worldwide.



WITTENSTEIN alpha GmbH offers a modular portfolio of gearheads and optimally interacting accessories.

WITTENSTEIN AG

Walter-Wittenstein-Straße 1
97999 Igersheim · Germany

Contact: Sabine Maier
Press Officer
Tel. +49 7931 493-10399
Fax +49 7931 493-10301
E-Mail: sabine.maier@wittenstein.de
www.wittenstein.de

the hands of WITTENSTEIN alpha, customers also derive tangible cost benefits with regard to administrative processes – from purchase through logistics and materials management to accounts – compared to independently developed drive solutions comprised of individual components from multiple suppliers.

Top quality gearheads form the backbone of future-proof drive systems

Low-backlash precision planetary gearheads like the SP⁺ and LP⁺ series, servo right-angle gearheads such as the TPK⁺ and mechanical rack-and-pinion systems form the backbone of all drive solutions made by WITTENSTEIN alpha. Each of these products – regardless of its specific design and type of construction – unites the very highest standards of innovation and quality: compact housing, maximum travel speed and positioning accuracy as well as very high power density. Users profit from high reliability, convincing efficiency and a long lifetime.

Accessories add up to perfect performance

WITTENSTEIN alpha offers a broad spectrum of connection and transmission elements that can be attached as intelligent accessories in order to align a gearhead to individual applications and round off the complete powertrain. With the technology and geometry optimally adapted to the gearhead interface, couplings and shrink discs to the customer interface enable the full power of each gearhead to be unleashed with no losses and the powertrain fine-tuned. Torque limiters, for example, protect the powertrain and drive components against overload. In addition to limiting the torque precisely after the overload has dropped, an intelligent, all-mechanical, TÜV certified switching mechanism permits fast re-engagement of the coupling, so that the machine is up and running again in the shortest possible time. Backlash-free, torsionally rigid metal bellows couplings compensate shaft misalignment in operation while simultaneously ensuring dynamic, precise power transmission. The lifetime of all components is thus extended beyond traditional limits. With their quality workmanship, elastomer couplings for dampening torque surges and vibration provide excellent concentricity and smooth running throughout the powertrain, even at high speeds. At the same time, the comprehensive coupling portfolio gives users unprecedented degrees of design freedom. Various bore holes, lengths and connection options can be selected for maximum flexibility. Shrink discs – which like the metal bellows couplings are also available in a corrosion resistant version – are effective as space-saving, maintenance-free connection elements with

WITTENSTEIN AG

Walter-Wittenstein-Straße 1
97999 Igersheim · Germany

Contact: Sabine Maier
Press Officer
Tel. +49 7931 493-10399
Fax +49 7931 493-10301
E-Mail: sabine.maier@wittenstein.de
www.wittenstein.de

optimally matched technology for ultra-compact hollow or mounted shaft gearheads. Protect, compensate, dampen, connect – fine-tuning of each individual gearhead with zero-maintenance accessories adapted to the customer application adds up to perfect performance: all components are designed to fit to one another exactly in a harmonious drive solution.

Intelligent sizing software assures individual optimum

The application know-how accumulated by WITTENSTEIN alpha over thirty years of specialization in servo drives is reflected in the functionality of its cymex® sizing software. This software optimizes the complete drive system solution early on during the project planning phase by ensuring that the entire powertrain and all its components interact optimally both with one another and with the customer's application. Starting with the customer specification, it calculates the ideal dimensions for each drive solution and tailors them to individual requirements. The fact that various other components such as couplings, pinions and racks are also integrated in the sizing software makes it incredibly easy for the user to match the drive dimensions perfectly to technology and geometry considerations. Ideal sizing of the complete powertrain guarantees the customer maximum performance coupled with optimal efficiency because the individual product sizes are always based on the specification – and oversizing is thus ruled out. In addition, the "Info & CAD-Finder" provides online access to 3D data for gearheads and accessories at any time. If further information is needed, local sales representatives can be contacted directly. With their longstanding experience and expertise, they are excellently qualified to deliver a final assessment of the drive concept.

Bundled processes – more added value for the customer with less administrative effort

Reduced complexity, increased efficiency, lower costs, higher customer satisfaction – WITTENSTEIN alpha's clients trust in system solutions from a single supplier. That's a wise choice, not only from the technology perspective. Accessory items and C parts for powertrains tend to give rise to disproportionately high costs for internal processes compared to the actual value of the goods. In contrast to drive components procured from several different manufacturers, single-source systems are an effective way to optimize the supply chain. Turnkey delivery of the gearhead and accessories means comprehensive consulting, only one purchase order, full documentation – and only one work order, one delivery note and one invoice. By integrating internal activities according to the "everything from one

WITTENSTEIN AG

Walter-Wittenstein-Straße 1
97999 Igersheim · Germany

Contact: Sabine Maier
Press Officer
Tel. +49 7931 493-10399
Fax +49 7931 493-10301
E-Mail: sabine.maier@wittenstein.de
www.wittenstein.de

source" principle, business processes such as design, purchase, logistics and accounts can be significantly streamlined. Sample calculations prove that the time and effort saved can total as much as 80% of the administrative costs for the accessories concerned. This is not simply a one-off economy for the customer – on the contrary, it's a recurring benefit that pays dividends every time a new order is placed!

In the world of servo drives holistic solutions are comprised of many different details; it's these details that ultimately determine the quality – and the optimal choice for the customer.

Photo: WITTENSTEIN alpha GmbH offers a modular portfolio of gearheads and optimally interacting accessories.

Texts and photographs in printable quality can be downloaded from <http://www.wittenstein.de/presse.html>.

WITTENSTEIN AG – being one with the future

With around 1600 employees worldwide and sales of €233 million in 2011/12, WITTENSTEIN AG enjoys an impeccable reputation for innovation, precision and excellence in the field of mechatronic drive technology – not just in Germany but internationally. The group comprises eight pacesetting Business Units with separate subsidiaries for servo gearheads, servo actuator systems, medical technology, miniature servo units, innovative gearing technology, rotary and linear actuator systems, nano technology and electronic and software components for drive technologies. Through its 60 or so subsidiaries and agents in approximately 40 countries, WITTENSTEIN (www.wittenstein.de) is additionally represented in all the world's major technology and sales markets.

WITTENSTEIN AG

Walter-Wittenstein-Straße 1
97999 Igersheim · Germany

Contact: Sabine Maier
Press Officer
Tel. +49 7931 493-10399
Fax +49 7931 493-10301
E-Mail: sabine.maier@wittenstein.de
www.wittenstein.de