WITTENSTEIN at EMO 2019

Galaxie® – superior on principle

The Galaxie® Drive System will be at the center of the WITTENSTEIN SE exhibit at the upcoming EMO 2019 in Hannover. The claim “superior on principle” has been confirmed by several groundbreaking applications in the machine tool industry as well as by eminent scientists and researchers, who have praised Galaxie® as an independent gearbox generation. Smart gearboxes with “cynapse” functionality– in other words, integrated, industrial grade sensors and IO-Link connectivity – will be another highlight at the WITTENSTEIN stand. premo®, the fully scalable servo actuator platform, and linear rack-and-pinion systems with a wide range of gear ratios will round off the portfolio of technologies on show for demanding engineering applications.

EMO – the “Exposition Mondiale de la Machine Outil” – is the world’s premier trade fair for the metalworking industry. It provides an ideal platform for showcasing mechatronic drive technology made by WITTENSTEIN.

**Galaxie®: Nucleus of new machine generations**

The inherent superiority of the Galaxie® principle has been scientifically proven and is widely recognized in crucial industries such as high performance machine tools. Galaxie® performs exceptionally well in all key technical disciplines compared to the market standard – from freedom from backlash, synchronous running and stiffness to torque density and overload capacity. Dynamic teeth instead of a rigid gear ring, tangential and hydrodynamic tooth contact over the full surface when loaded and a new type of bearing with a segmented outer race ring are the decisive attributes of this radically redesigned gearbox. In most cases, Galaxie® is more than simply a component: innovative machine concepts and generations are developed around its performance features and Galaxie® forms the nucleus. Among the numerous different sizes and designs on show at EMO will be the compact Galaxie® D in size 085 for smaller cutting heads or handling axes where special requirements apply regarding torsional rigidity and freedom from backlash and the ultra-flat Galaxie® DF in sizes 110 and 135.

**Smart gearboxes with “cynapse”: Intelligent and communicative**

Smart gearboxes with “cynapse” functionality have attracted considerable attention since making their debut at the Hannover Messe 2019. This functionality – comprised of a fully integrated sensor module, the data output using IO-Link and the resulting I4.0 connectivity, – comes hand in hand with logic functions for monitoring the actual and threshold values of selected parameters. Gearboxes with “cynapse” are capable of recording and storing different influencing quantities in the process and the environment which impact on gearbox operation, and communicating them to automation systems as well as to all standard IIoT platforms. Gearboxes with “cynapse” are identical to the existing models, so that a drive solution which has already been designed needs no further modification – an important argument for designers.

**premo® servo actuators: Top performance from a modular system**

premo®, the fully scalable servo actuator platform, will also be a part of the WITTENSTEIN exhibit at EMO 2019: servo motors with up to 92 percent efficiency and torsionally rigid precision gearboxes with up to 97 percent efficiency can be configured extremely flexibly to obtain individual servo actuators. The premo® XP Line, premo® TP Line and premo® SP Line provide application-related graduated performance characteristics depending on the requirements of the machine.

**Linear systems: Gearbox, motor, pinion and rack as customized system solutions**

Highly precise axes in machining centers and manufacturing systems, coupled with maximum productivity where space is restricted – these are the hallmarks of linear systems made by WITTENSTEIN. As perfectly matched components, the gearbox, pinion, rack and lubrication system enable optimized performance of the complete system. Three performance classes adapted to different smooth running, positioning accuracy and feed force requirements ensure a technically and commercially efficient design in the most diverse applications.

The Galaxie® Drive System, smart gearboxes with “cynapse” functionality, fully scalable premo® servo actuators and performance oriented linear systems – they can all be seen and experienced at WITTENSTEIN’s EMO booth in

Hall 8, Stand E22.

Picture (© WITTENSTEIN):

The Galaxie® Drive System will be at the center of the WITTENSTEIN SE exhibit at the upcoming EMO 2019.

Text and photographs in printable quality can be downloaded from

presse.wittenstein.de.

**WITTENSTEIN SE – one with the future**

With around 2900 employees worldwide and sales of €433.1 million in 2018/19, WITTENSTEIN SE 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 six pacesetting Business Units with separate subsidiaries for servo gearboxes, servo actuator systems, medical technology, miniature servo units, innovative gearing technology, rotary and linear actuator systems, nanotechnology and electronic and software components for drive technologies. Through its 60 or so subsidiaries and agents in approximately 40 countries, WITTENSTEIN SE ([www.wittenstein.de](http://www.wittenstein.de)) is additionally represented in all the world's major technology and sales markets.