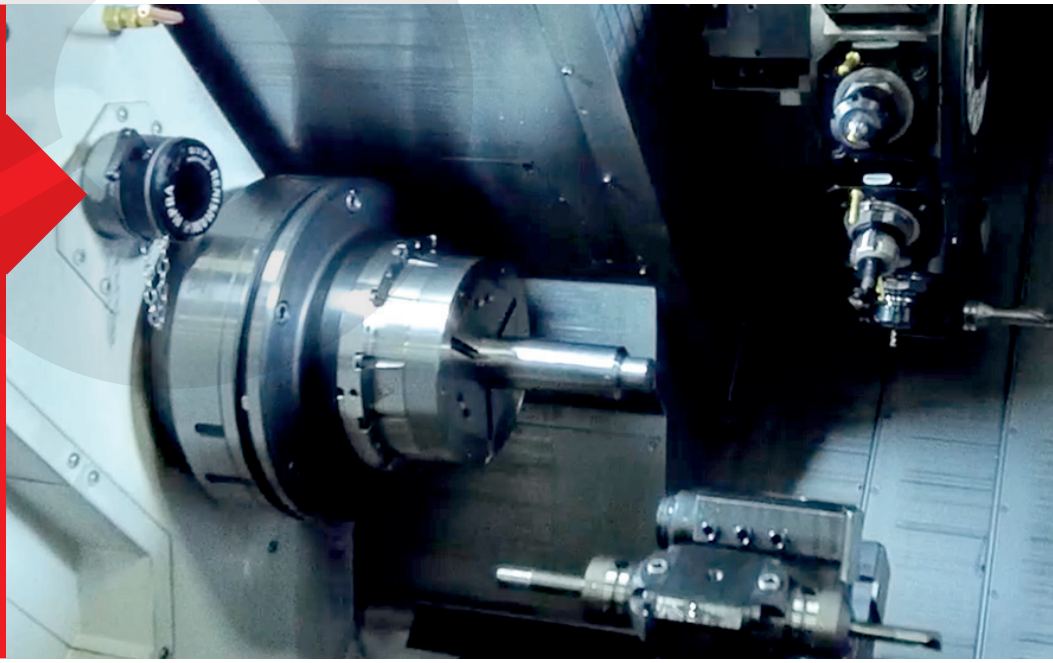
HAINBUCH

SUCCESS STORY
STOBER DRIVES

JULY 2025



centroteX quick change-over system on a Nakamura WT300 lathe.

PRECISION WORKHOLDING DELIVERS LONG-TERM VALUE AT STOBER DRIVES

STRATEGIC INVESTMENT IN FLEXIBILITY AND PRECISION

Five years ago, when the engineering team at STOBER Drives opted to install a HAINBUCH centroteX quick change-over system on their new Nakamura WT300 lathe, it would have been impossible to tell how successful that decision would be in meeting the latest customer requirements. Located in Maysville, Kentucky, STOBER Drives is the American division of an 85-year-old German manufacturer of high-quality gearboxes serving a diverse customer base, including manufacturers in the aerospace, automotive, medical, food processing, beverage, and semiconductor industries. The gearboxes range in size from hand-held units to a 30”x30” cube. Landon Garrison, manufacturing engineer, explains, »Our servo planetary series is our most popular. It’s an extremely rugged design known for precise performance and long life and is an especial favorite of the machine tool industry.«

MEETING EVOLVING DEMANDS WITH EFFICIENT CHANGE-OVERS

As demand increased, STOBER engineers saw the need for greater flexibility and increased production, while at the same time maintaining the required

Tony Gunn, MTDCNC, with Landon Garrison, Manufacturing Engineer at STOBER Drives.

precision. Parts involved include machine castings that require a heavy-duty three-jaw chuck, as well as 3.75-inch Durabar that is fed through the collet. Materials include 4142 steel, 17-4 stainless, and others. Part runs are typically in the range of 100 pieces. The engineering analysis identified the need to reduce change-over times – especially in the mid-size range.

Gary Meyer, Manufacturing Engineer, stated, »Our original system incorporated two lathes equipped with standard tooling and traditional chucks. It absorbed a large amount of time. We realized that what was needed was a workholding system that could accommodate collets, as well as a standard three-jaw chuck, and that offered the ability to change over quickly while still meeting our required tolerances and finish.«

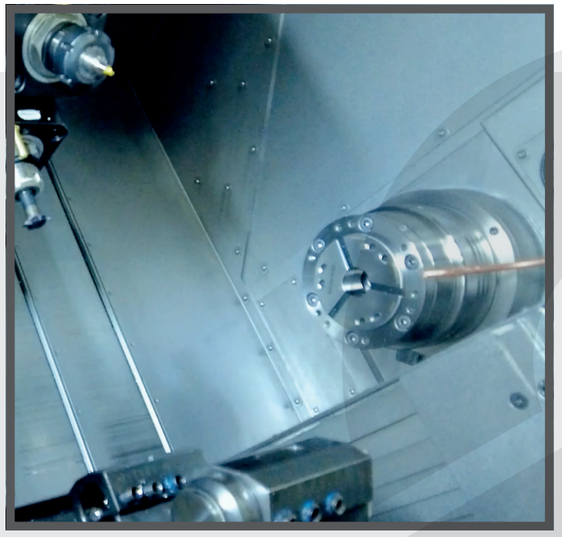
A MODULAR SYSTEM DESIGNED FOR VERSATILITY

At the IMTS expo, the STOBER team saw a demonstration of the HAINBUCH centroteX, a unique change-over system designed primarily for larger parts but capable of accommodating dozens of workholding configurations. Current workholding devices can also be integrated as part of the system. Jaw clamping diameter extends to 256 mm, clamping head chucks up to 100 mm, and Mandrel clamping from 8 to 200 mm. The heart of the centroteX system is a precision machined adaptor plate equipped with coupling receptors. When mounted on the spindle of the lathe, it can accommodate a wide variety of sizes that interface with the coupling and can be quickly attached with rapid-action screws.

ERGONOMICS, ACCURACY, AND LONG-TERM DURABILITY

Al Dopf, National Sales Manager for HAINBUCH America, explains, »centroteX is more than just a quick change-over system. Every aspect has been carefully engineered to ensure precise performance over a long service life. Realizing the importance of user-friendly ergonomic design to speed accurate set-up and to preclude operator injury from handling heavy chucks, centroteX includes the Monteq mounting aid, a specially engineered arc-shaped holder suspended from a spring mounting attachment equipped with quick-action bolts. The Monteq reduces change-over time to a matter of minutes. Precision is assured by clamping devices designed to exclude chips and other foreign materials from the clamping surfaces. To provide a safe, contamination-free environment for chucks and other components, as well as to enhance operator convenience, a specially designed wheeled cart is provided.«

The chucks used in conjunction with the system are likewise configured to provide the highest degree of precision. HAINBUCH is unique in building chucks from two specially machined metal components. The dual design provides our customers with the means of establishing ultra-precise calibration – a feature offered by no other manufacturer.



The HAINBUCH centroteX on the Nakamura WT300 enables fast clamping device change-overs with high precision and repeatability.

REAL RESULTS: FASTER CHANGE-OVERS AND GREATER THROUGHPUT

The original centroteX system was installed on a new Nakamura WT300 lathe. According to Landon Garrison, »The system exceeded our expectations and enabled us to perform operations that had previously required two lathes. Chuck change-overs that formerly took two hours are now accomplished in as low as 5 minutes. Training was also accomplished by a video and individual instruction, and our operators appreciate the ease of use.«

Initially, the system was involved in the manufacture of 10 to 12 part numbers, ranging from 2-inch diameter couplings to 10-inch housings – all meeting STOBER's high accuracy standards. Equally important was the system's ability to adapt and maintain exacting tolerances as materials offer greater machining challenges. »It is up to us to anticipate and meet our customers' needs as their products and demands evolve,« says Landon. »This has especially been the case with changes that have taken place in the foodservice industry. Due to more recent FDA regulations, parts that were formerly constructed of conventional steel now require stainless. Thanks to the accuracy and repeatability of the centroteX system, we have been able to meet that challenge while maintaining production goals thanks to fast change-over times. In fact, our business has grown, and last year we hit a major sales milestone. We will shortly be installing another Nakamura/centroteX combination to keep up with demand. We have also installed HAINBUCH chucks on other machines including a new dual-spindle lathe. We have found that HAINBUCH outlasts competitive workholding products by a factor of 2 to 1.«

PARTNERSHIP AND PLANNING LEAD TO LONG-TERM SUCCESS

Rick Tillberry, Regional Sales Manager – East Central Region for HAINBUCH America, comments, »Much of the success enjoyed by Landon and the team at STOBER Drives comes from their using superior analytic skills in developing a manufacturing strategy. By pinpointing the need for fast change-over while maintaining high repeatability, they chose a quick change-over system that could deliver both.

The HAINBUCH centroteX quick change-over system is likewise the result of strategic thinking in that the design encompasses not just the mechanical requirements but the comfort and safety of the operator. Working with Landon and his people at STOBER proves the value of long-term strategic thinking on both their side and ours and makes for a truly successful team effort.«

ABOUT STOBER DRIVES

STOBER Drives, a family-owned German engineering company founded in 1934, specializes in precision gearboxes, servo motors, and drive controllers. Known for innovation, STOBER introduced variable-speed drive technology in 1943 and developed the first directly coupled planetary gearbox with a high-dynamic servo motor in 1993. Today, the company operates globally with manufacturing facilities in Germany, the U.S., and China, delivering modular, high-performance mechatronic solutions for automation, robotics, packaging, and machine tool industries.

HAINBUCH develops and produces solutions for clamping, change-over, measuring and automation solutions for milling, turning and grinding operations on machine tools. The leading clamping technology manufacturer offers products such as chucks, mandrels, stationary clamping devices, quick change-over systems and automation solutions. The main focus is on products for set-up time optimization and clamping devices for networked and automated production.

The company's innovative developments include the SPANNTOP chuck [1977], the TOPlus IQ technology with intelligent sensor technology [2007], the energy-efficient lightweight carbon clamping devices [2011] and the AC line for the automated changing of entire clamping devices [2019]. In addition to standard products, HAINBUCH also manufactures individual special solutions and special clamping devices and creates new production possibilities using state-of-the-art clamping device technologies.

Founded in 1951 and based in Marbach, HAINBUCH GmbH is now owner-managed in the third generation and employs around 850 people in Germany, the USA, China, France, Great Britain, Italy, Sweden, Slovakia, Austria, Mexico and Japan.

Find out more at **www.hainbuch.com**