Leader supports multi-axis manufacturing

Leader Chuck Systems has recently added the Exact Machinery range of precision CNC rotary tables and indexing units to its extensive product portfolio. The Taiwanese company has over two decades experience, continuously developing new and innovative products to improve the manufacturing processes and productivity for precision engineering companies in every industrial sector. The ISO 9001 accredited 180-strong company produces over 3,000 units each year at its 4,800 m² state-of-the-art manufacturing facility.

The NCT, TRT and ERT range of worm and wheel drive CNC tilt and turn rotary tables are available in a wide range of sizes, from 125 to 500 mm diameter. They feature a wear-resistant design with high rotational torque, dynamic accuracy and easy installation and maintenance. Rotary tables expand any machining centres production capacity.

Mounted in either a horizontal or vertical plane, these tables are used to add 4th and 5th axis capability. Inside the rotary tables, the worm shaft and worm gear system define the accuracy and life of the table. Through the strict inspection and in-house machining of the worm system, Exact guarantees products optimal performance and high dynamic durability.

Material selection for the rotary tables includes special high-tensile aluminiumbrass equal in strength to a steel alloy for the worm gear and a hardened alloy steel for the worm shaft. The combination of brass and alloy steel offers less friction so the rotational motor torque is transferred efficiently. The worm gear has a large pitch diameter that creates a large engagement area and less pressure on the contact surface, resulting in increased wear resistance.



The HC range of automatic indexing tables can be used with the worktable in either the horizontal or vertical plane, and are suitable for use on machining centres, rotary transfer machines and almost any type of manufacturing system. Sizes range from 200 to 500 mm diameter, and up to $1,800 \times 1,800 \text{ mm}$ for the heavy duty models. Rotation is by a worm and wheel driven via a servo motor, hydraulically clamped through a three-piece coupling that generates a resistance to high machining forces for outstanding positioning accuracy and rigidity.

Featuring a non-lifting, Hirth coupling design that has an exceptional holding force and a working surface that does not raise and lower during indexing, it allows a solid sealing system to prohibit swarf, chip or cutting fluid ingress into the housing for reliability and longevity. Hydraulic rack and pinion drive with built-in cushions ensure smooth operation with optimum cycle times; the table clamp and unclamp functions are hydraulic and monitored for safety by feedback switches.

Leader's managing director, Mark Jones says: "Exact is a professional global supplier built on a robust technological research and development foundation, complemented by a quality minded workforce using

state-of-the-art manufacturing equipment and a stringent quality control system. Like Leader, the company is committed to finding a solution that achieves or exceeds customer satisfaction."

Exact's quality CNC tables are used in a wide variety of applications in the medical, aerospace and motorsports industries, in the manufacturing of oil & water pipeline valves and equipment and in job shops where flexibility is required. Also, the automotive, heavy goods and passenger transit industries that demand critical tolerances with repeatability and reliability. Here, the cost-per-part is driven down by global competition, and these companies are looking to specialists such as Exact to provide increases in efficiency and productivity, giving them the edge by implementing process improvements.

Based in Tamworth, Leader Chuck Systems has an enviable reputation for the in-house design and production of Leader chucking, stationary clamping, gripping and workholding products. A respected brand name for high quality equipment with more than 60 years' experience, the company also stocks products from the very best suppliers, such as AutoGrip, Bison, CARVEsmart, Exact Machinery, Gamet, Hainbuch, Hewa, Iram, Lexair, Maprox, MicroCentric, Orange Vise, Posistop, Walmag Magnetics, ZeroClamp and Zweifel. Able to provide the right chuck or gripping solution for any application, Leader Chuck offers quality, precision, and reliability at competitive prices with reliable expert advice and a commitment to customer

service. Leader Chuck Systems Ltd Tel: 01827 700000 Email: mjones@leaderchuck.com www.leaderchuck.com

