Integrated Linear/Rotary Laser Machining Platforms

The LaserTurn 1 is an integrated linear-rotary motion subsystem that combines automated material handling with high performance direct-drive linear and rotary motion to provide the highest throughput, highest accuracy, cylindrical laser processing system available. The system includes an automated, pneumatically actuated Type D collet closer. The collet closer has a clear aperture for product feed-through and can support tubing diameters from 0.1 to 7.9 mm in dry cutting applications, and up to 3.0 mm when configured for wet cutting operation. The collet closer is designed to minimize axial tube motion during clamping operations by keeping the collet stationary and moving the tapered mating surface during collet open/close operation.