



- Turnkey systems dedicated to producing complete tube & shaft components from raw material (up to 60 foot long) in one fully automatic operation
- Simple adaption between tube and shaft applications

RDONS & OLIVER

PRECISION MACHINE TOOL MANUFACTURER CONTRACT MACHINING AND ASSEMBLY

- Capabilities include cutoff, milling, drilling, threading, tapping, boring, counter bore along with auto load and unload of the material
- Durable construction with precision heavy duty rails and turrets designed to handle high cutting loads
- Y-axis capability available on both 12-station turrets
- Total single-source responsibility for the design, manufacture, integration & support of all system components, including the automatic bar feed, sub-spindle & automatic finished part unloader
- Specialized material handling systems for ease of the load and unload of raw material & finished parts including no-mar surfaces to ensure no scratching or damage to any finished part surface
- Material handling system requires zero operator interface with the parts while in production
- Optional nesting system allows the machine to produce multiple part lengths and multiple part numbers within the same piece of raw material
  - Nesting maximizes material yield and minimizes remnant length
- System changeover time of (4-12) minutes per spindle when changing raw material diameter
- Highest cutting horsepower available on any 4-axis turning machine in size class
  - Standard 30-hp spindle drive with optional 40-hp, 50-hp or 80-hp drives available

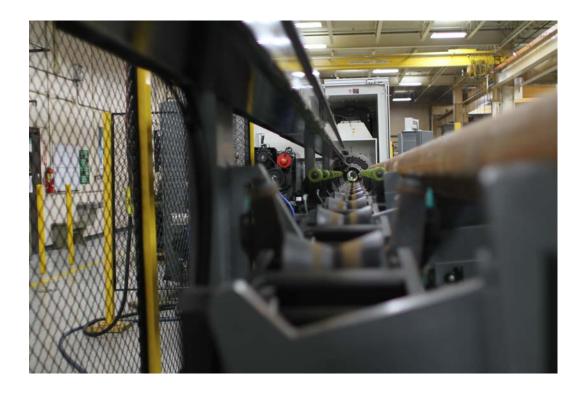
## **BARDONS & OLIVER**

- Standard 7.5-hp (10-hp optional) 4000-rpm live tooling, with er-40 tool interface collet system, will handle a wide range of mill and drill applications
- Angular contact ball bearing mounted precision spindle systems provide maximum thru-hole capacity at the highest possible spindle speeds
- Largest sub-spindle bores (3"-9") in the industry
- Superior operator access to chuck and turret tooling for ease of changing collet pads or cutting tool inserts
- Quick-change work holding systems for ease of changing collet pads or complete collet pad sets
- Interference-free chip flow with extra-wide chip conveyors
  - Extra-capacity chip conveyor exit-tunnel design easily handles heavy chip removal rates, stringy chips, and crop-ends
- Large volume, free-standing coolant tank, with chip screens and replaceable filters, for superior coolant management
- Standard Fanuc cnc control system with 24-month manufacturer's warranty



- Machine system is configured for unattended production capability
- Standard machine & material handling is readily adaptable to robotic or overhead gantry integration
- Tool pre-setter, tool life management, and part probing are all available options
- Standard right hand machine with optional left hand machine configuration
- Successful tube & shaft systems installed in over (80) major manufacturing plants throughout the world

## **BARDONS & OLIVER**



- 24/7 twelve-month full machine warranty which features:
  - No machine usage (annual hours) limitation on warranty
  - Spare parts inventory on-site at Bardons & Oliver
  - Many spare and critical parts are produced by the B&O contract machine shop
  - Industrial vpn Ethernet router (ewon) online troubleshooting of machine with phone assistance which also enables post warranty troubleshooting
  - Service technicians with 20 years of B&O machine tool experience along with a full staff of experienced service personnel in solon, including software engineers and assembly technicians
  - Proven Fanuc reliability with 24-month warranty and next-day repair part availability

Bardons & Oliver, an employee owned company with iso 9001:2008 with design certification, is committed to continuous improvement in designing, manufacturing, and delivering high quality products that meet or exceed the expectations of both its employees and our customers