NOTABLE

Machining Better Bearings

Brenco, Inc. (http://www.brencoqbs.com) isn't an automotive supplier, but it does provide products to the transportation industry, to an industry that uses wheels: the railway industry. According to the company, it provides more bearings for new railcar production in the U.S. than any other company.

Twin-spindle chucker significantly improves output a railway bearing producer.

In one of its facilities, it was using an old Acme six-spindle lathe in combination with a manual-load two-axis lathe or another Acme for secondary operations to produce bearing cones. There were several issues related to this, such as the fact that spare parts were not available; process consistency was low; part variation was high. Changeover required six hours.

So, a new system was put in place, four MW400 twin-spindle CNC chuckers from Murata Machinery USA (www.muratec-usa.com). The MW400 has a 380-mm chuck and provides a maximum turning diameter of 350 mm. The spindle motor capacity is 22 kW/30 minutes. The machine is engineered for heavy-duty cutting (e.g., there are rectangular sides and a turret bar structure).

The system is configured with a conveyor that feeds all four machines. Two operators handle all four machines in the cell. The benefits being realized are significant. Production has increased from 12,000 parts per week to 18,000. Changeover time is now 1.5 hours. There is greater repeatability in part production. Scrap is greatly reduced. Operator efficiency is 95%.