

# Machine of the month

## Turnkey system eliminates secondary operations

Designed and built by Hydromat Inc., St. Louis, the HW 25-12 rotary-transfer machine is a modular system consisting of up to 12 horizontal and 6 vertical tool-spindle units, rigidly mounted around a precision cast iron ring.

To achieve high productivity and precision machining, while eliminating costly secondary operations, the design of the HW 25-12 includes an inverting unit. The inverter removes the workpiece from the collet, turns it 180°, end-for-end, and places it precisely back in the same collet, which is being continuously flushed with filtered coolant. This provides the capability to completely machine the back side of the part.

ing to milling. The quick-change system also permits quick, easy tool replacement for worn tools or complete job changeovers.

With a 1-in. capacity, the HW 25-12 machine handles the production of parts from barstock or blanks up to 4.0-in. in length.

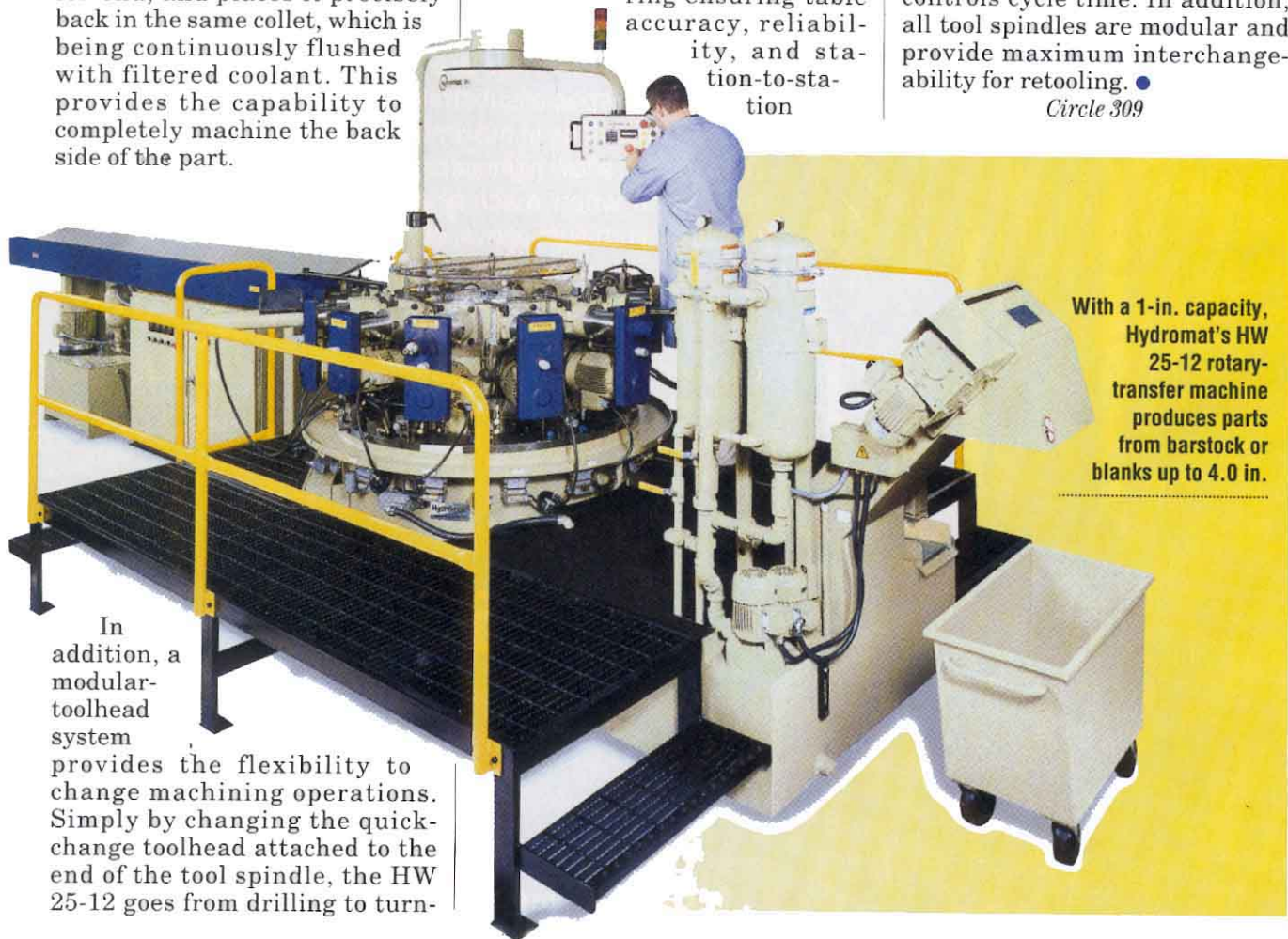
The basic machine consists of an indexing table and tool-spindle units, electrical cabinet, hydraulic power supply, automatic loading system or barfeeder, and a chip conveyor/coolant filtration system.

With a precision-ground Hirth ring ensuring table accuracy, reliability, and station-to-station

repeatability to within 0.002 in., a stationary workpiece can undergo various types of machining operations, such as, drilling, cross drilling, boring, turning, milling, external and internal recessing, threading, tapping, broaching, and more.

Being a hydraulically controlled machine, the HW 25-12 maintains infinitely variable feeds for each tool spindle. Each of the independently controlled tool spindles works simultaneously, so the longest machining operation controls cycle time. In addition, all tool spindles are modular and provide maximum interchangeability for retooling. ●

Circle 309



With a 1-in. capacity, Hydromat's HW 25-12 rotary-transfer machine produces parts from barstock or blanks up to 4.0 in.

In addition, a modular-toolhead system provides the flexibility to change machining operations. Simply by changing the quick-change toolhead attached to the end of the tool spindle, the HW 25-12 goes from drilling to turn-