

MW120G TURNING MACHINE

HIGHER ACCURACY, PERFORMANCE & INCREASED PART CAPACITY

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Muratec's MW120G line of turning machines recently received an accuracy upgrade. Due to today's increasing demand for tighter tolerances on machined parts, Murata has introduced a thermal control system as a standard feature on the MW120 machine.

Thermal sensors placed in the machine work envelop and spindle-head housing constantly monitor and relay temperature readings to the machine controller. Based on this information, the tool offset page is updated and thermal adjustments are made as needed using a predetermined offset formula. This is a seamless process and no input or action is required from the operator. However, there is a temperature offset monitor page that allows the operator to view machine thermal changes and any resultant offsets.

In conjunction with the thermal control system, an improved air-flow system has been added to the MW120. Vent ducts and fans are located at the rear main drive motors and on either side of the machine. Air is pulled in from floor level through the bed of the machine, around the drive motors and across the spindle heads, then exhausts out the top of the machine. This increased air circulation helps to dissipate any naturally occurring heat buildup from the drive motors and hydraulic systems. This new thermal control system helps reduce dimensional variation scrap after returning the machine to production from extended work stoppage, lunch, shift change, maintenance, etc.

Another accuracy improvement is the addition of two independent hydraulic systems. Sometimes extreme tight tolerance, fine-finish operations on one spindle (like hard turning) can be influenced by the operation and cutting characteristics on the opposite spindle. Murata's split-bed design machine already minimizes the effect of this type of cutting. However, the new independent left and right hydraulic systems eliminate any influence the old single (shared) hydraulic system caused during turret clamping.

The gantry z-axis stroke has increased from 150mm to 200mm. This change will allow longer work pieces to be setup on the MW120. The machine has a new gray and blue color scheme with updated graphics, and interior work-lights have been upgraded from a CFL type to LED.

Muratec's MW120G is designed for medium- to high-volume production in the automotive industry along with the flexibility to compete in the manufacturing of smaller lot sizes in other industries.

This automated CNC turning center features twin horizontal spindles and two independent turrets with eight tool stations in the standard configuration. The MW120 provides the ability to produce higher accuracy and higher part finishes at a lower part cost and in minimal space. With a large diameter turret bar and three-piece turret coupling, rigidity of the machine is increased. The spindle bearings allow for ultra-high accuracy on the workpiece.

The compact machine is designed for continuous automatic unattended production and offers an accessible, operator-friendly design for safe, fast workpiece setup. MW120 owners can expect reduced total process time, reduced work-in-process inventory, reduced labor, setup and tooling costs.

Automatic work location sensors, special automated part workflow and handling, and a variety of other options are available to configure the turning center for specific applications. Work feeders, post- process gauging, auto tool shift function -- and more -- expand the capabilities of the MW120G. Customers have the advantage of Muratec's wealth of experience in the design and implementation of customized turnkey systems.

The MW120G is just one of the machines in the MW/MS family of Muratec turning centers. From the extremely quick MW100GT (6" chuck) to the large capacity MW400 (15" chuck), Muratec offers an automated solution for your turning requirements.