Model MT10D
Machine Tender

The Patented (US 9,351,569) ACE MT Series Model MT10D Robotic Machine Tending System provides an automated method for loading and unloading virtually any machine tool.

How Does It Work?
An operator simply opens each of the drawers from outside the robot cell, places raw parts into each drawer fixture and then closes each drawer. Next, the operator cycle starts both the machine tool and the robot. The robot moves to the top drawer, lifts the drawer handle, pulls the drawer into the robot cell and locks it into position for part unloading. The robot now unhooks from the drawer handle, picks the first part from the drawer and then loads the machine tool. On the next cycle, a finished part is unloaded from the machine tool and a new raw part is loaded. The robot moves back to the drawer to place the finished part back into the drawer. As drawers are completed, the robot moves down to the next available drawer.

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<th>FEATURES</th>
<th>BENEFITS</th>
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<tr>
<td>Simple drawer system for parts loading</td>
<td>Easy to use. Operator can access drawers not in use by robot and refill with raw parts. Uses customer made fixture plates reducing cost.</td>
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<td>Compact size</td>
<td>Provides good line of sight to machining process while still maintaining access to the machine controller.</td>
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<td>Integrated tabletop</td>
<td>Convenient place for gauging of parts after processing. May also be used for other quality control functions.</td>
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<td>Integrated robot base with fork truck pockets provides easy relocation of the robot and MT Series drawer cabinet</td>
<td>Provides easy relocation of drawer system.</td>
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<td>Modular construction</td>
<td>Promotes quick installation and commissioning of system.</td>
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OPTIONS
• MT Series four drawer cabinet with part fixture area of 48” W x 24” D x 5” H per drawer
• Vision camera and lighting for random/non-fixtured part pick in drawer
• Extruded aluminum/woven wire safety fence enclosure with interlocked access door(s)
• Drawer fixture plates
• Task lighting over tabletop
• Scalable, other robot size and payload capacity available
• Part take-away conveyor for use when finished parts are not placed back in drawer

SPECIFICATIONS
Robot - 12kg Payload capacity, six-axis, electric servo driven robot with controller and color Teach Pendant.
Drawer Cabinet - MT Series three drawer with part fixture area of 48” W x 24” D x 6” H per drawer and a 24” x 60” butcher block tabletop.
Robot Tooling Prep - Main air supply filter-regulator with manual lockout and shut-off. Robot shoulder kit with two double solenoid valves for gripper actuation and one single solenoid for air blast.
Stacklight - Mounted on included safety fence panel to indicate machine status.
Frame - Structural tube weldment with integrated fork pockets.
Cell Control - ACE standard operator panel on Teach Pendant featuring touch screen control for system functions and messaging.

Specifications subject to change without notice. Please contact ACE for application suitability.
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Optional - Drawer Fixtures Plates
Optional - Dual End of Arm Tooling
Robot Controller with Touch Screen Teach Pendant
Configuration - Dual Machine Parallel Front Entry
Configuration - Dual Machine Parallel Side Entry
Configuration - Parallel Front Entry