

LoadWorld

with DX100 Controller

Improve Productivity Through Robotic Machine Tending

LoadWorld® is a pre-engineered standard robot solution for machine tending that can be integrated with new or existing machines. Robotic automation of the machining process improves productivity by reducing loading/unloading time; more parts are produced in less time due to improved spindle utilization. It can even continue to produce parts during breaks or off-shift periods. Part quality also is increased due to consistency in the loading/unloading process. LoadWorld can improve worker safety by reducing lifting and repetitive motion injuries. Let LoadWorld tend your machines and improve your bottom-line performance.



HIGHLIGHTS

Flexibility is the Key

- A variety of LoadWorld systems are available to service your machines. Machines that can be automated include drill tap, turning centers and vertical machining centers.
- LoadWorld is a basic, pre-engineered automation cell that works with a wide range of customer processes and can be configured to meet your specific needs.
- Standard designs reduce cost and delivery times, increase reliability and maintainability.
- Yaskawa Motoman's highly flexible articulated robots can perform additional secondary operations which cannot be accomplished using hard automation. Examples of such value-added operations include deburring, polishing, marking and packing operations.
- Assembled on a common base with fork pockets for easy moving.
- Wire mesh guarding with door and safety interlock.
- Three-jaw back-to-back gripper, pneumatics package, I/O cables, cable management and finger blanks are included.

Wide Range of Available Robots

LoadWorld is designed to work with a wide range of Motoman® robots with payloads from 6-50 kg. Larger robots are available.

Controls

- LoadWorld comes standard with the DX100 programming pendant interface panel software. This software allows the programming pendant to be configured to perform HMI functions including teach/play selection, system start/stop, job selection, servo on and alarm indication. The standard configuration can be changed to fit specific application needs.
- Each LoadWorld package includes a DeviceNet card that handles I/O communication between the robot controller and part stocker. This network can be expanded to include robot to machine tool communication.
- Robot collision detection software protects tooling and equipment in case of programming or operator error.
- Servo hibernation software turns off servo power when the robot is idle, resulting in reduced operating costs.

Part Stocker

- Fabricated rigid steel construction for high durability.
- Four-drawer design handles parts up to 6" tall.
- 150 lb capacity per drawer.
- Stocker design provides precise tool mounting for quick changeover.
- 24" square nominal drawer size.
- Indicator lights, pushbutton controls and integrated latch allow drawer loading while robot is working.
- Four-drawer stocker can be used for four independent jobs or one continuous job.

ARM YOURSELF

...with a cost-effective, efficient LoadWorld for high-volume machine tending results... packaged in a complete, low-risk, industry-proven solution.



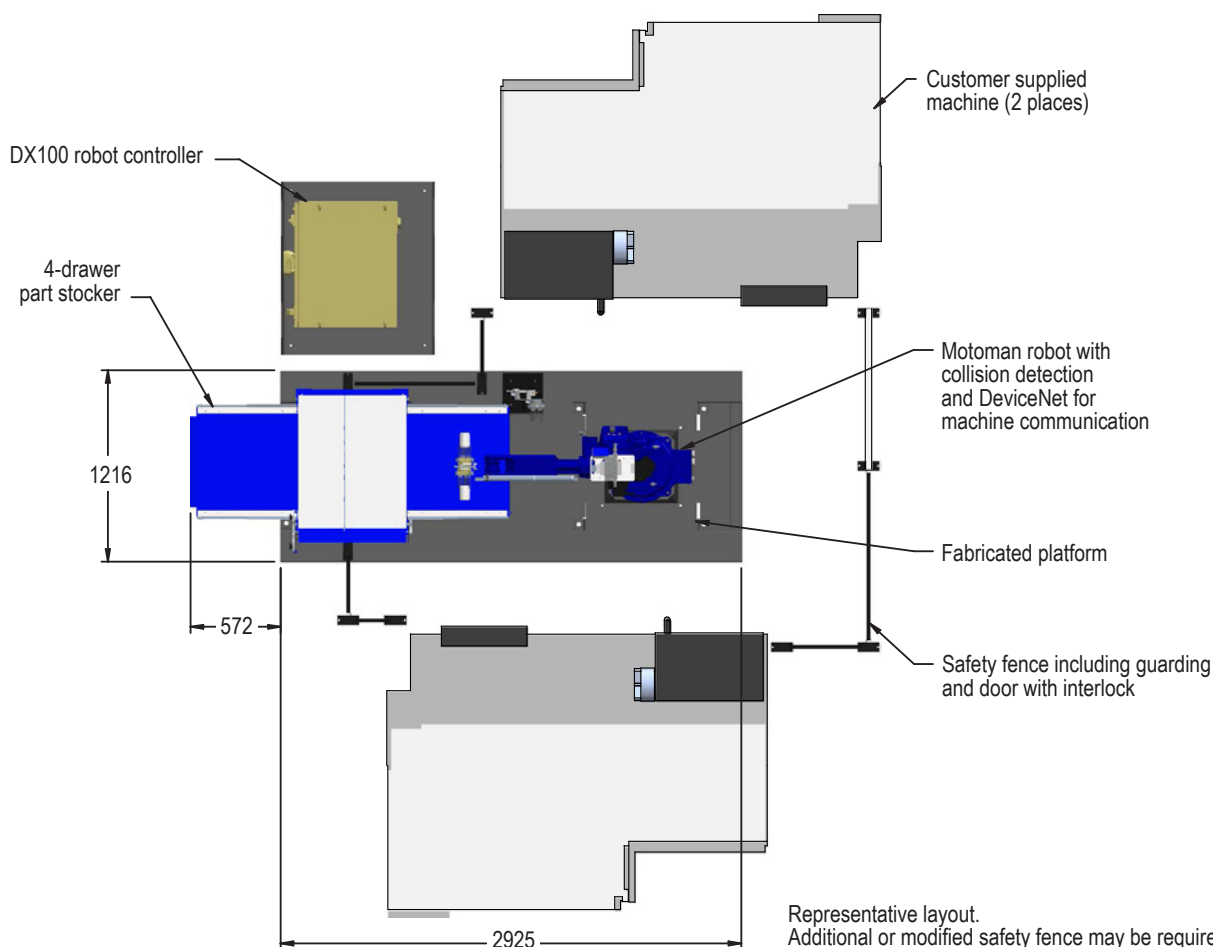
THREE-JAW GRIPPER



FOUR-DRAWER PART STOCKER

TOP 3 REASONS TO BUY!

- Improves productivity by increasing spindle utilization and the ability to run unattended; typically robotic automation increases spindle utilization to 95%
- Improves quality by providing accurate and consistent part loading and unloading
- Saves money by reapplying precious labor resources



LOADWORLD SPECIFICATIONS

Robots	MH6, HP20D, MH50	Operator Control (robot programming pendant)	Servo ON Master Job Start E-Stop Robot hold Alarm reset
DX100 Controller (See data sheet DS-399)	Programming pendant w/single point of control Graphic input of parameters Large 5.7" color touch screen Menu-driven application software Memory: 200,000 steps, 10,000 instructions Password protection: 4 levels, 100 users Collision detection software Built-in PLC capability Ladder logic editing/monitoring displays Compact flash or USB backup Built-in Ethernet port	Total Safety Environment (in compliance with ANSI/RIA R15.06-2012)	Safety-rated, tamper-resistant interlocks Single point of operator control Barrier guarding Cycle start button interlocked w/safeguards Interlocked doors

OPTIONS

- Part re-grip stand
- Part inspection chute (parts not returned into cell)
- Two-jaw gripper
- Robot-mounted part blow off
- Part nests and gripper fingers
- Custom gripper designs
- Integrated MotoSight™ vision
- Robot tool changer and rack
- Machine-specific interfaces
- Additional or custom part stocker
- Turnkey services (programming, runoff)
- Training and installation
- Bar code and RFID scanning
- PC-based HMI cell controller
- Auto doors
- Gauging and conveyors