

Collaborative Robotics - Machine Tending

Omron TM Robots offers advantages that provide quick integration and improved operational intelligence

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Machine tending is one of the top applications for collaborative robots due to the high return on investment and operator productivity gains. Skilled operators can increase their value with a collaborative robot assisting with repetitive tasks. Operators then can maintain operation of multiple machines or focus on skilled activities like machine set up or quality control.

Machine tending applications:

- Metal machine tool and CNC machines
- Plastic injection molding machine
- Stamping and punch presses
- Grinding and cutting machines

Collaborative robots integrated into operation quickly which will increase your production and flexibility immediately.

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Fast intuitive set up

Omron TM offers hand on teaching of the cobot with integrated bottom in the end of the arm to teach position, actuate gripper, and use vision tools. All teaching is recorded by the controller that automatically creates the program for you.



Visual Programming

Once you have finished teaching your application you can see your program and set up specific tasks, decisions, and configuration intelligent function blocks like 3D location, inspections, and code reading easily with interactive guides.



3D Vision location

Using "landmark" tags Omron TM cobots can automatically detect their 3D location making set up, part locations, and even machine operation intelligent. This eliminates precision cobot mounting, part tooling, and even enables stacking.



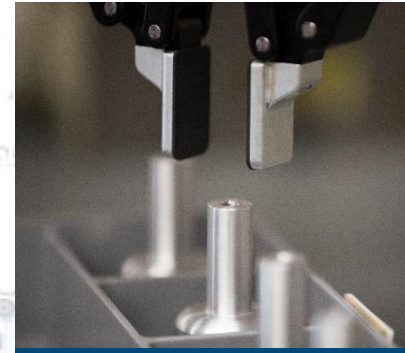
Automate controls

Omron's TM 3D vision location capability can also operate machine controls, push buttons, switches, read text, and operate touch screens with a magnetic tool tip reducing or even eliminating control integration with other machines.



Precision loading

Precision operation is critical to continuous automation of machine tending. Machines, robots, or parts get moved or bumped in a dynamic production floor. Omron TM with 3D vision location can maintain precision operation.



Quality inspection

Automate more than just the operation but also quality inspection of 100% of the parts being produced along with code reading for traceability. The camera on the cobot arm plus two additional cameras can be used for advanced applications.