

Robotic Machine Tending

Accurate, Consistent, & Flexible

Machine tending can be highly intensive and repetitive work that is best suited for the consistency of a robotic solution. Robots are used to pick product from a supply position, transport it to a machine, orient it, and then interact with the machine. Bastian's robotic vision capabilities and unique end of arm tool designs allow our machine tending systems to handle parts in a wide variety of positions and orientations with extreme precision.



Part Identification and Sortation



Standard Dual-Grip Tool

How does it work?

Robotic machine tending can provide manipulation and transport capabilities that are more complex than basic material handling processes. The robot is used to secure the product from a supply position, unload and reload a machine tool, interact with the machine controls, and then deposit the finished part for further processing.

As an independent integrator, Bastian Robotics can help identify the most cost-effective robotic solution. We are able to take on machine tending projects that are highly customized given the flexibility of our in-house design and manufacturing.

Benefits

- Custom end of arm tool provides repeatable accuracy and improves quality of production
- Robots can be mounted between multiple machines and/or overhead to save floor space
- Improved ergonomic conditions
- Allows for 24/7 robotic tending
- Increased machine and system utilization
- Net production can increase more than 25%
- Lower overhead cost

Specifications

- Custom end of arm tools built to meet product specifications
- Integration of multiple robot brands
- Products from 1 pound to 2,500 pounds
- Up to 5 machines tended at the same time
- Up to 720 cycles per hour
- Custom accessories such as vision inspection
- Interlocks with machinery and safety system
- Meets OSHA, RIA, & ANSI safety requirements

Applications

- Robotic deburring and flash removal
- Stamping, punching, trimming, EDM, and forging press loading and unloading
- Loading of CNC milling and turning machines
- Holding a product for welding, etching, or inspection
- Parts loaded automatically or manually by an operator
- Suitable for corrosive and high temperature environments
- Scrap metal and raw material handling

Contact

- Interested in implementing this technology in your facility or simply want to know more about it?

Please contact us today for additional information:

- Email: info@bastiansolutions.com
- Phone: (800) 569-6762
- www.bastianrobotics.com



Multiple Fixture Part Loading



Anodized Aluminum Tool Construction



Part Handling in Foundry Conditions



Large Part Handling