

Custom-Designed Dual Robotic Manufacturing Cell Accelerates Cycle Times & Boosts Operator Safety

THE CUSTOMER CHALLENGE

A manufacturer of custom-molded metal parts was seeking a robotic manufacturing cell that would improve productivity and improve operator safety. The manufacturer turned to Machine Concepts to engineer, build, program and install a custom solution.

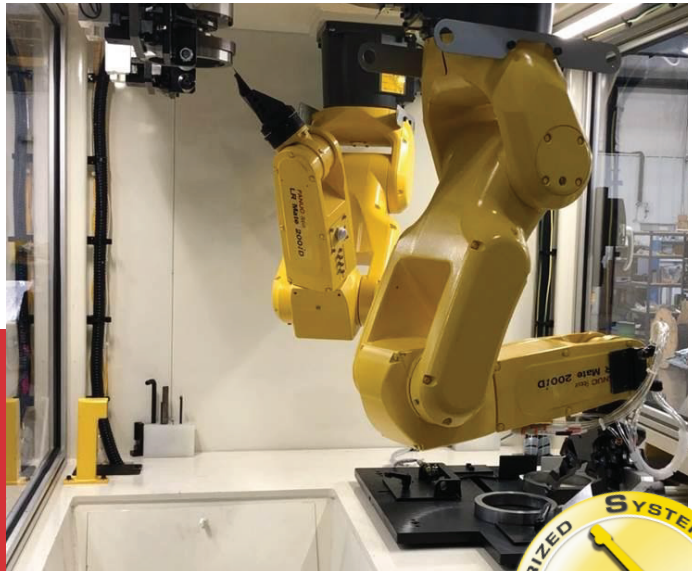
THE SOLUTION

With safety of paramount consideration, Machine Concepts engineered and built a dual robotic manufacturing cell that is completely enclosed with Lexan guarding and locking safety-rated handles, preventing any operator intervention during operation.

For complete autonomous operation, parts are shuttled in and out of the production cell via entry and exit conveyors.

THE RESULTS

With two Fanuc Robots working in unison, the manufacturing cell can perform manufacturing operations with cycle times under **10 seconds per part**.



Custom Designed Dual Robotic Manufacturing Cell

Learn more about the key technologies >>>



THE CELL'S KEY TECHNOLOGIES

- ◆ A pair of Fanuc LR Mate 200iD Robots with quick-change fingers to accommodate different sized parts to support a wide part variance.
- ◆ Allen Bradley controls, including a PanelView Plus 600 HMI and Rockwell FactoryTalk.
- ◆ A control system capable of storing part-specific programs, which also interfaces with a plant-wide reporting system.
- ◆ A software system with an expandable library of parts, allowing up to 40 different models to be processed on the same machine. Machine Concepts programmed all of the software for the unit in-house.

The cell also features areas for tool storage, allowing for quick changes to the robot end-of-arm tooling and part locating fixtures.

CUSTOMIZED SOLUTIONS TO FIT YOUR PRODUCTION NEEDS

At Machine Concepts, our specialty is innovative solutions that increase productivity and quality, decrease production costs and improve operator safety. From conceptual design to operational equipment, we partner with your team to deliver pioneering technologies and machinery that overcome your production challenges.

**ARE YOU READY TO TRANSFORM YOUR
CHALLENGE INTO AN OPPORTUNITY?**

LEARN MORE ABOUT OUR CUSTOM AUTOMATION SOLUTIONS.