

ROBOTICS APPLICATION



6-Axis Robot Cell for CNC Machining Center

An add-on 6-Axis Robot Cell for CNC Machine Tending

This 6-Axis Robot Cell was developed to integrate directly with a CNC Machining Center providing a turnkey solution for automated operation. The Cell includes custom fixtures and End-of-Arm-Tooling (EOAT) designed specifically for the product being processed. It includes a seamless control system integration with an Allen-Bradley PLC for automation control, the appropriate safety circuit and machine guarding, plus complete interfacing to the Fanuc Series 0i-MC CNC Controller.

The Robot Cell can be designed for a variety of CNC Machining Centers including:

- Vertical/Horizontal Milling
- EDM
- Electrochemical Grinding
- Lathe/Screw Machine



System Details

Basic Features:

- Integrated Welded & Painted Steel Base Frame
- Safety Guarding, Controls, and interfacing to the CNC Control System
- Fluorescent Task-Light and 120VAC Duplex Outlet
- Filter-Regulator Assembly
- Leveling Feet and Swivel Casters
- Complete Control System Enclosure

Control System:

- 30A Fused Disconnect
- Incoming Power Circuit Breaker
- A-B Micrologix 1100 PLC
- 10A 24VDC Power Supply
- Lock-Out/Tag-Out Ready
- NEMA 12 Enclosure
- 8-Port Ethernet Switch
- Safety Relays
- External Programming Port
- Safety Stickers
- Multiple E-Stop Buttons
- Service Bypass Key Switch
- Start/Stop/Reset Buttons
- Alarm Tower
- Interlocked Doors
- 32 Source Input & Output PLC Expansion
- Robot Controller
- Schematics

Dimensions: 72" L x 48" W x 79" H

