### **FANUC**





### MTEC

#### MACHINE TENDING EDUCATIONAL CELL

# PATHWAY TO CSM





Shown with FANUC ROBODRILL D14MiB5

- Students familiar with CNC and/or robots have the opportunity to learn real world advanced automation integration
- FANUC CNC controller Interface between robot and CNC for seamless integration
- Preconfigured with load and unload program templates for simple build with no complex programming needed



| MTEC FEATURES                               | Levil CNC<br>LMV-400<br>O <i>i</i> -MF Controls | ROBODRILL CNC<br>a-D14MiB5<br>FANUC 31 <i>i</i> -B5 | FANUC LR Mate<br>Machine<br>Tender |
|---|---|---|------------------------------------|
| Pricing                                     | \$\$  | \$\$\$  | \$                                 |
| Integrated industrial production line       | ✓   | ✓   | ✓                                  |
| Industry 4.0                                | ✓   | ✓   | ✓                                  |
| FANUC Certification                         | ✓   | ✓   | ✓                                  |
| FANUC CNC controls                          | ✓   | ✓   |                                    |
| Machine actual parts                        | ✓   | ✓   |                                    |
| CNC tool holder type                        | S20T ER-16                                      | BT-30   |                                    |
| Coolant                                     | ✓   | ✓   |                                    |
| Spindle RPM                                 | 14000   | 10000   |                                    |
| FANUC robot machine tender                  | ✓   | ✓   |                                    |
| FANUC iRVision for inspection and sort      |   |   | ✓                                  |
| Fenceless robot cells with safety area scan |   |   | ✓                                  |
| Banner safety controller                    |   |   | ✓                                  |
| Fluid power pneumatics                      |   |   | ✓                                  |
| Portable (fits in classroom)                | ✓   |   | ✓                                  |
| Fault insertion                             |   |   | ✓                                  |
| Robot end-of-arm tool                       |   |   | gripper                            |
| APT integration curriculum                  | ✓   | ✓   | ✓                                  |
| 120V 20 amp                                 | ✓   |   | ✓                                  |

### **MTEC Features**

## **FANUC**

#### **ROBOTICS**

### FANUC LR Mate 200*i*D/7L long-arm 6-axis robot

- R30iB Plus robot controller
- 2D iRVision optional

#### CNC

- Smart Trouble Shooting Function
- Memory card slot plus USB port
- Built-in interlock function for safety
- Enables robot operation and system status display on the robot operation screen
- Custom PMC to create, read, and write ladder programs



#### CNC

- Tabletop machine
- 120V power
- FANUC robot load/unload
- Qualifies for FANUC CNC Cert
- · Qualifies for FANUC Robot Cert



- Fold-up work table for laptop, textbook, etc.
- Safety area scanner for fenceless robot operation or safety interlocked access door to robot work area
- · 3-color beacon operation indicator light
- Swivel casters with brakes and rotation lock
- Part locating template for NIMS mill block or dual conveyor in/out for parts blanks
- Single 2-jaw EOAT for NIMS mill block (3/4" x 2 1/2" x 3 1/2" aluminum, 50 pcs included)

### **CERTIFICATIONS, CURRICULUM & SOFTWARE**

\*Ask your reseller about FANUC education grant offerings before purchase.

### **FANUC**

### Material Handling (MH) CERT Instructor Training and Toolkit:

- (1) online seat for CERT Cart Safety Features
- (1) online seat for Robot Operations
- (1) online seat for HandlingTool
- (1) online seat for HandlingPRO
- (1) seat for live HandlingTool at a FANUC facility
- (1) ROBOGUIDE Simulation Software license
- (1) FANUC Robot Operations Manual
- (1) FANUC HandlingTool Manual
- (1) FANUC HandlingPRO (ROBOGUIDE Simulation) Manual

#### Material Handling (MH) CERT School Comprehensive Educational Package:

- (25) online seats for Robot Operations
- (25) online seats for HandlingTool
- (25) online seats for HandlingPRO
- (25) ROBOGUIDE Simulation software licenses

#### CNC:

- FANUC CNC industry-recognized certification
- School instructor receives FANUC training using FANUC-approved curriculum
- FANUC CNC Simulators and FANUC CNC controller for student's certification
- Student will receive letter of completion and instructor can issue student certificates from provided template



#### **Integration Project-Based Learning (PBL) Curriculum**

- Daily lesson plans
- Assessment and grade charts

For more information contact: education@aptmfg.com 419-542-6681 x1126