CSM

Connected Smart Manufacturing

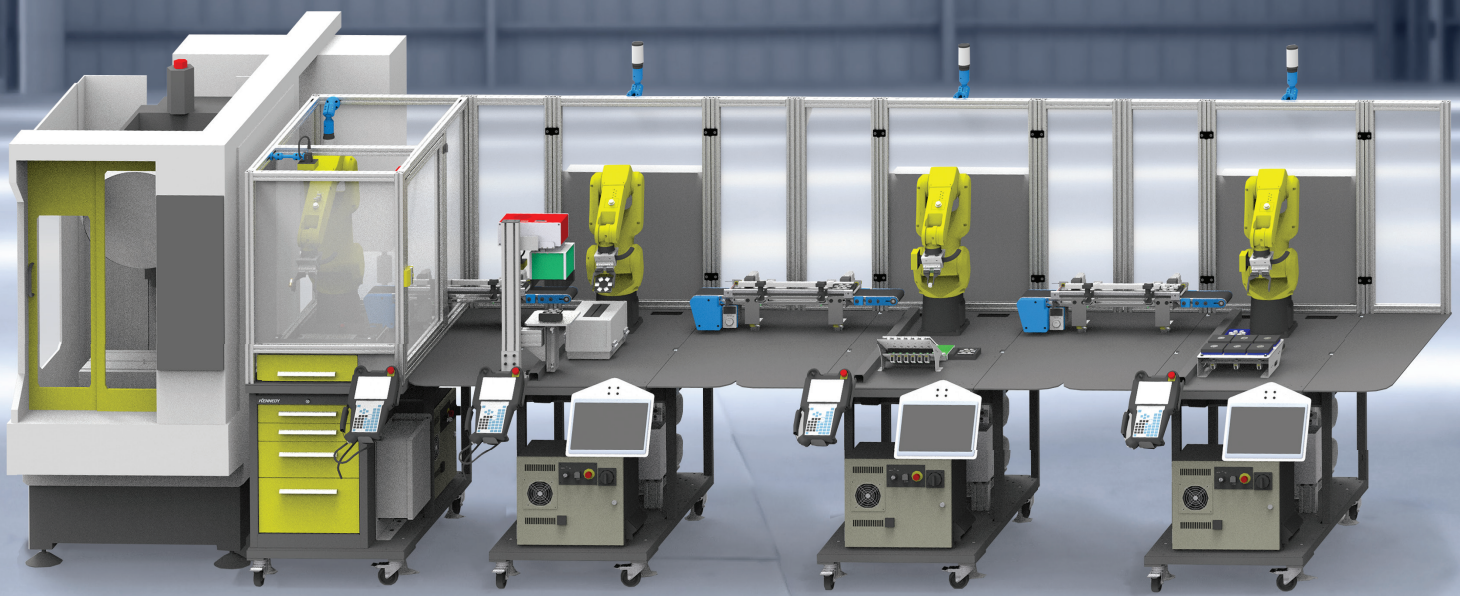
CNC | ROBOT | iRVISION

FANUC

CERTIFIED EDUCATION

IIoT 4.0 Manufacturing, Assembly, & Packaging

Modern manufacturing technology with a fully integrated and intelligent cell.



Integration Provided by:

APT MANUFACTURINGsolutions

FANUC

For more information contact:

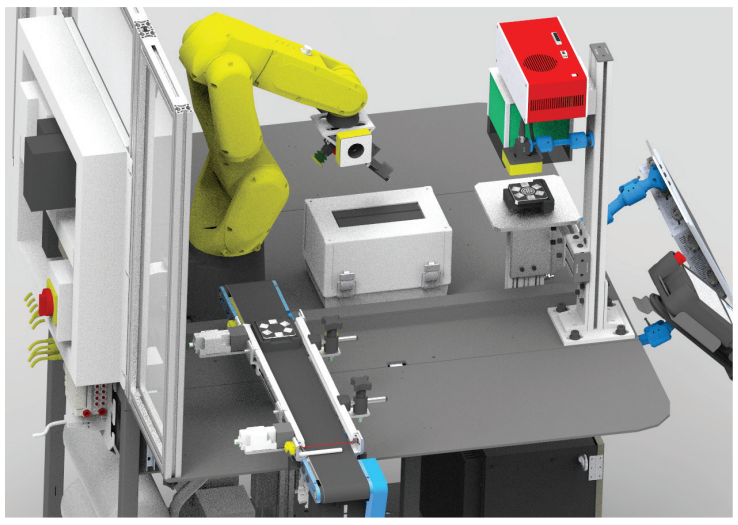
KLEIN Educational Systems, Inc.

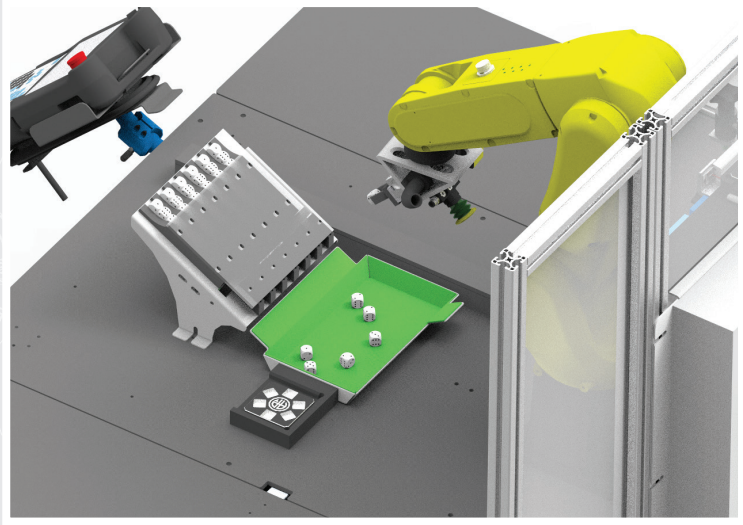
(800)-698-3249

www.kleineducational.com

CSM Features

- FANUC LR Mate 200iD/7L robotic machine tender to load and unload the CNC vertical machining center
- Automated manufacturing work holder for CNC machining center
- Vision inspection of machining operation
- Laser etching of machined part blank for custom logo
- Vision inspection of etching
- Vision guided picking and sorting at assembly and packaging
- Packaging of complete kit in logo printed box with choice of colors
- Advanced PLC to robot control
- Rockwell Logix 5000 series PLC programming
- Fault insertion for system training
- Rockwell HMI PanelView interface touch screens
- Fenceless robot cells with safety area scan
- Smart sensor technology over Balluff I/O Link with diagnostics
- Project based mechatronics at each operation
- Dual purpose EOAT on robots with vacuum and mechanical gripping
- Conveyors with VFD variable speed drives
- RFID manufacturing process tracking
- Modular robot work cells that can be used independently
- Materials included for all manufacturing





Training Areas	Levels
PLC, Robot, Vision, Safety, IIoT, Pneumatics, Vacuum, Motors, VFD, Laser, Machining, CNC programming, Process Engineering, Manufacturing	I,II, III, & Mechatronics

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