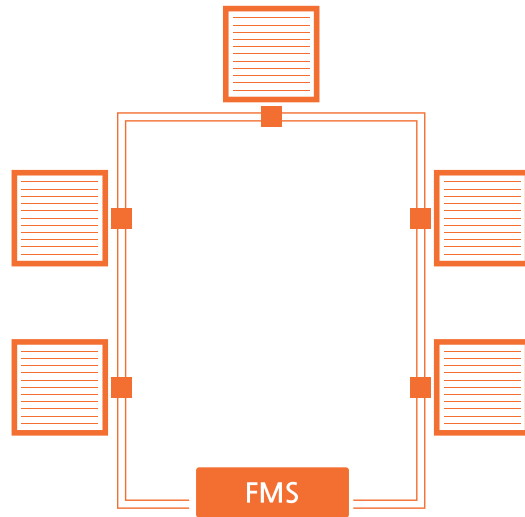




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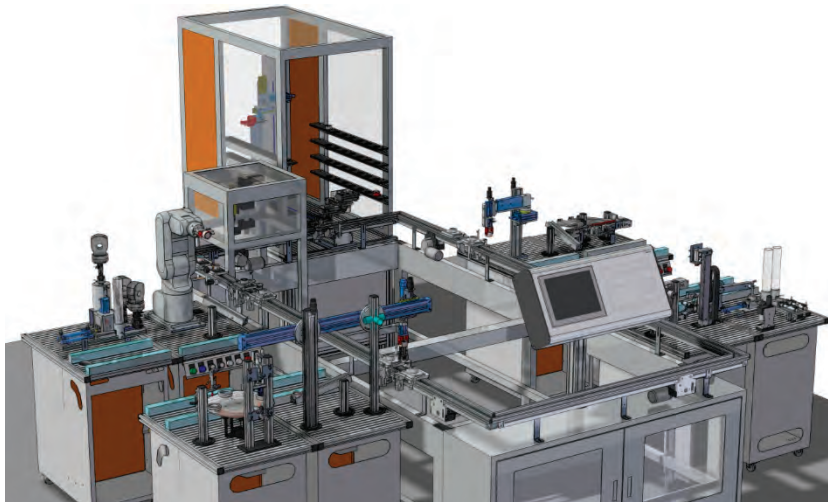
FLEXIBLE MANUFACTURING SYSTEM (FMS)

CHAPTER

09

Introduction	246
Factory Automation Training System (FMS-130)	247
Changeable FMS with customer's order	248
Integrated technologies (FMS)	249
HMI and Monitoring and Simulation	250

Flexible Manufacturing System (FMS)



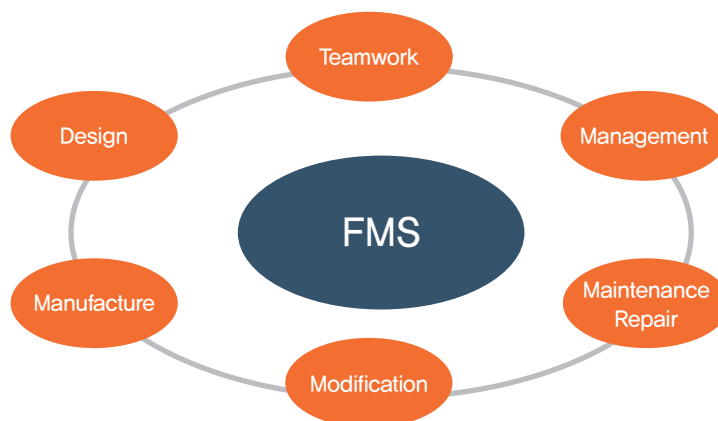
Introduction

The Flexible Manufacturing System (FMS) training set is composed of various automation technologies intended for integration. It is possible to develop a teaching plan for adapting to diverse industrial equipment.

The aim of this training set is analysis and application of the FMS with manufacturing technologies such as CAD, CAPP, CAM, CAQ and MRP through the Ethernet.

This equipment is designed for the effective education of an automated industrial production system. Theoretical knowledge and system design is required to implement the production process.

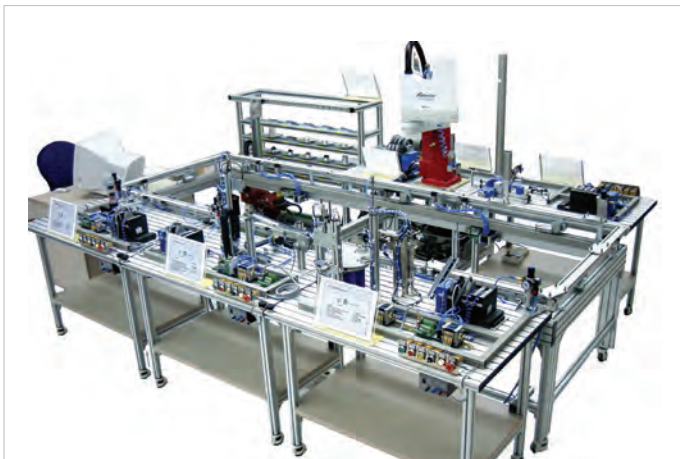
This equipment includes modules for Distribution, Testing, Processing, Robot, Handling, Packing, and Automated Warehouse Storage.



Factory Automation Training System (FMS-130)



FMS training set implements a Plan-Do-Check-Action training procedure to master the following subjects:



- Understanding the mechanical construction and parts,
- Pneumatics, electric system
- PLC system
- Network system with PLCs
- Electric control system and installation
- Analog and digital signal processing
- Conveyor system
- Material processing and testing
- Robot system
- Process control system

Changeable FMS with customer's order



- Different order, different specification.
- Any kind of robot, PLC, motor and electric devices
- Compatible system expansion with MPS training set
- New design possibility with industrial CNC equipment
- Control system interface (AS-i, Ethernet, Interbus, Profibus)

APPLICATIONS

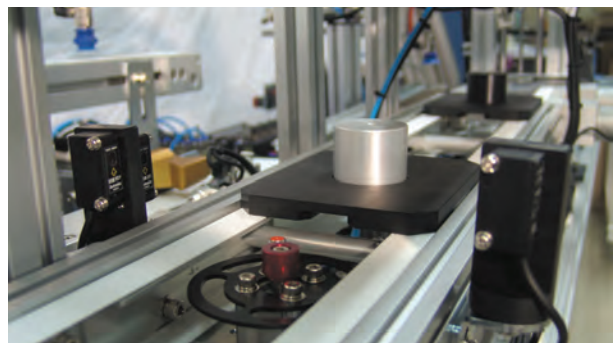
Unmanned automated warehouse system

Physical Distribution control system

Manufacturing and Processing
Integrated System

Robot Application Control Systems

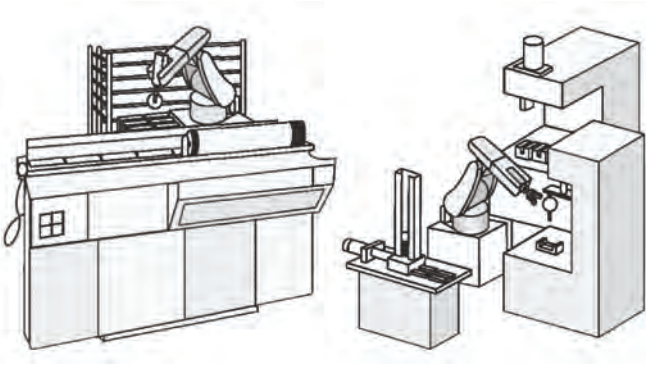
Servo Control Systems



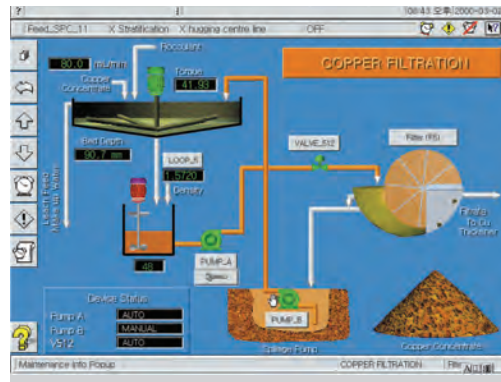
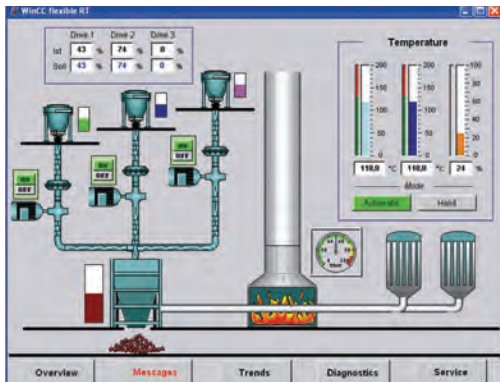
Integrated technologies (FMS)

technology		contents
M E C H A T R O N I C S	Mechanics	Understanding mechanical parts
		Assembly and disassembly
		Planning and designing mechanism
		Understanding and utilizing pneumatics
		Structures of robot system
	Electrics	Electric composition and drawing circuit
		Understanding electric devices
		Electric interface
		Communication methods and measurement Operating
	Electronics	Principle of sensors
		Structure and usage of PLC
		Special functions in PLC
		Robot control technology and PLC system
		PLC system with process control system
	Cooperation	Maintenance and quality control for system optimizing
		Planning and organization of work process
		Sharing opinions and cooperation on a project.

HMI and Monitoring and Simulation



Monitoring system in unit process and overall process
 Embodiment of a real-time control
 Simulation with a virtual program tool
 Learning programming language of PLC, PC-Based Controller



Memo

