TEACH INDUSTRY 4.0 IN YOUR CLASSROOM

The world of advanced manufacturing is undergoing a technological revolution as more businesses turn to Smart Factory technologies to improve the effectiveness and efficiency of processes and communication within their facilities.

Smart Factory Tabletop Mechatronics Curriculum

Ethernet
87-TENAB82
- Industrial Networks
- Ethernet IP Addresses
- Network Performance
- Managed Switch Ethernet
- Switch Diagnostics

Barcode Reader
87-TBR1AB
- Barcode Operation
- Scan Accuracy
- Ethernet-to-Serial Interface
- Barcode Programming
- Function Blocks

Smart Sensors
87-TMS5AB1
- RFID Programming
- RFID Operation
- Photoelectric Sensors
- Pressure/Vacuum Sensors

Visual Communication
87-TVCAB
- Cloud-Based Data Acquisition
- SCADA Operation
- Configuring Cloud-Based SCADA
- Maintenance Management Operation
- Configuring Maintenance Management

Manufacturing Execution
87-TMEAB
- Order entry
- Scheduling
- Schedule Status
- Production Statistics
- Alarms

PLC Troubleshooting
990-PABCL1F
- Controller Operations
- PLC Program Operations
- PLC I/O Testing
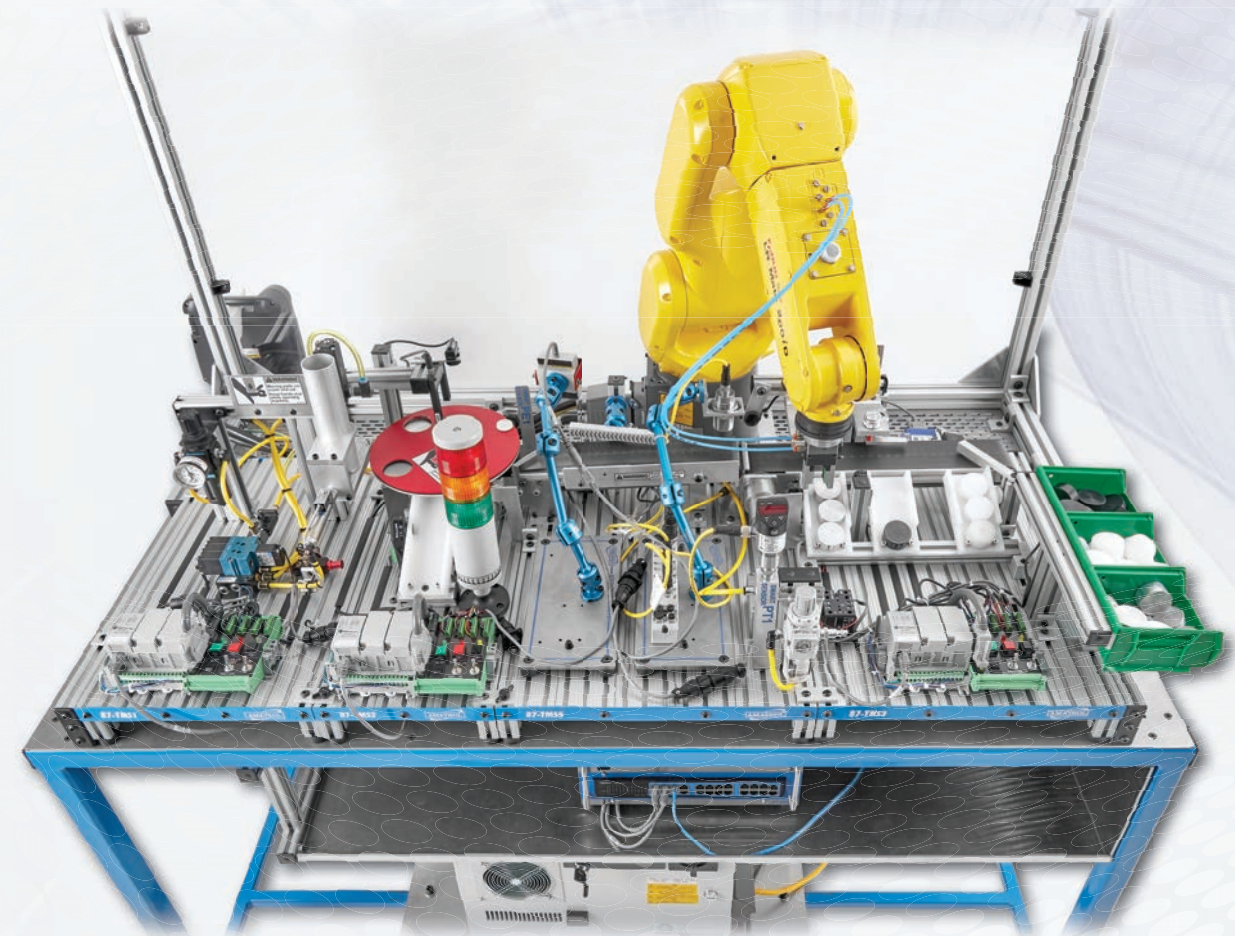- Event Sequencing
- Processor Troubleshooting

Amatrol's Industry 4.0 Fundamentals

Smart Factory Tabletop Mechatronics is part of Amatrol's Industry 4.0 Fundamentals (I4F) multi-course program. The multi-course program is designed to introduce students to Industry 4.0 and prepare them to pursue exciting careers related to Industry 4.0 technologies. I4F is divided into four courses: Introduction to Mechatronics, Industrial Control Systems, Robot Operations and Programming, and Industrial Internet of Things.

I4F Learning Systems
- Smart Factory Tabletop Mechatronics
- Portable AC/DC Electrical (990-ACDC1)
- Portable Electrical Control (990-EC1)
- Portable Pneumatics (990-PN1)
- Portable Measurement Tools (990-MES1)
- Robotics 1 &2 (96-ROB1 & ROB2)
- Portable Hydraulics 1 (990-BH1)
- CNC Machines (96-CNC1)
- Skill Boss Manufacturing (95-MSB1)
- Portable Electronic Sensors (990-SN1)

Smart Factory Tabletop Mechatronics System (87-TMS) with Optional FANUC Robot

SMART FACTORY TABLETOP MECHATRONICS

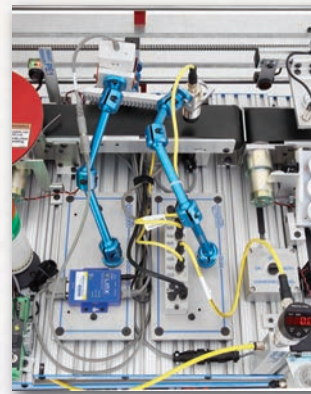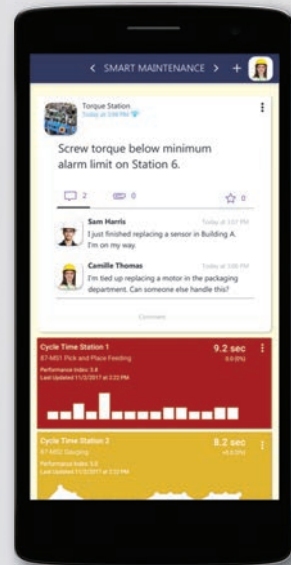## HANDS-ON SMART FACTORY TRAINING WITH INDUSTRIAL SENSORS, I/O LINK, AND CLOUD-BASED SOFTWARE

HANDS-ON SMART PERFORMANCE MAINTENANCE AND ANALYSIS

Visual Communication
87-TVCAB
- Visual Communications Software
- Mobile App Download
- Cloud-Based SCADA

Smart Sensors
87-TMS5AB1
- RFID
- Photoelectric Sensor
- Pressure Sensor
- I/O Link Master
- Conveyor

Barcode Reader
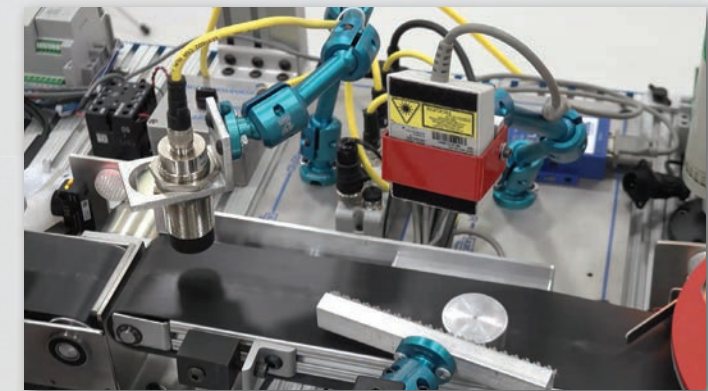### 87-TBR1AB
- Barcode Reader
- Ethernet-to-Serial Interface

87-TMS5AB1 and 87-TBR1AB

Amatrol Brings the Fourth Industrial Revolution Into Your Classroom!

Amatrol's Smart Factory Tabletop Mechatronics Learning System combines technology from the Industial Internet of Things (IIoT), such as smart sensors, cloud-based software, I/O Link, and mobile apps, with traditional mechatronics equipment. This hands-on equipment and corresponding eLearning curriculum will upskill future and current workforce members to the cutting edge of manufacturing technology.
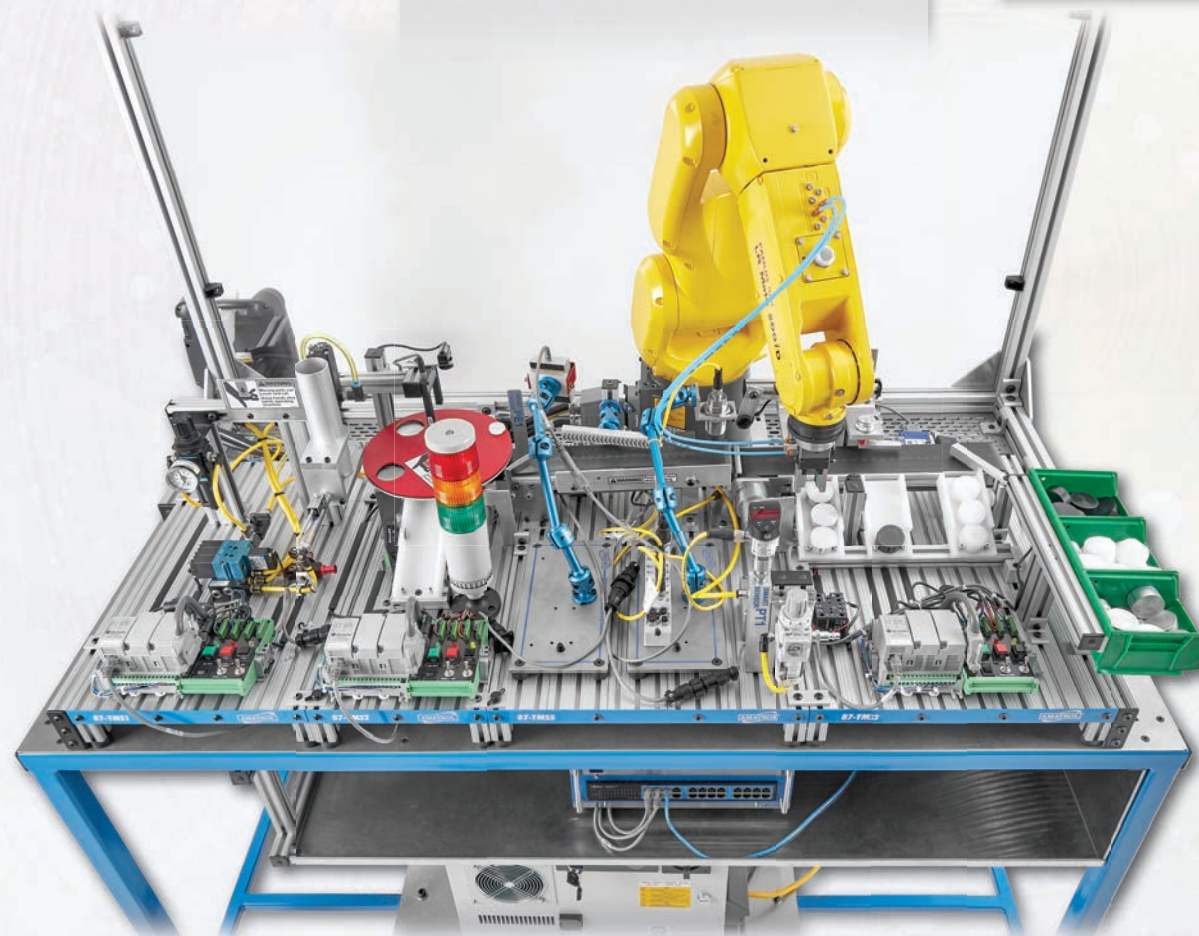

87-TMS5AB1 and 87-TBR1AB
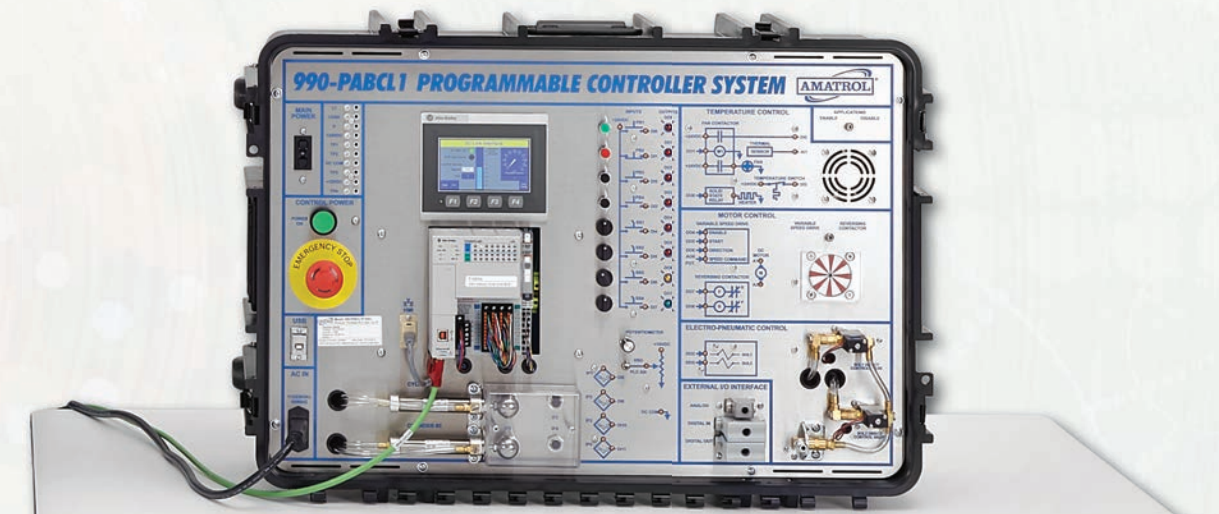
Industrial Robot
87-TMS4F

To provide learners with hands-on experience with an industry-leading industrial robot, Amatrol's Smart Factory Tabletop Mechatronics system can be supplemented with an optional FANUC 200iD 6-Axis Articulated Arm Servo Robot.

Ethernet
87-TENAB82
- 24-port Unmanaged Ethernet Switch
- 8-port Managed Ethernet Switch
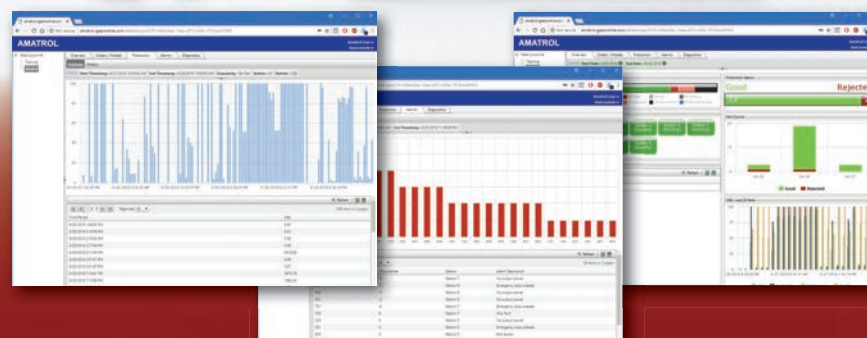
PLC Troubleshooting
990-PABCL1F
- I/O Link Interface for Mechatronics System Status
- Allen-Bradley L16 Processor
- FaultPro for electronically-inserted fault troubleshooting

Manufacturing Execution
87-TMEAB
- Manufacturing Execution Software
- Cloud Hosting
- Control Multiple Sensors with One Program

World-Class Interactive Multimedia Curriculum

Amatrol's multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes. For specifics on multimedia, see the back page of this brochure.