Smart Factory Tabletop Mechatronics eLearning Curriculum

Each Smart Factory Tabletop Mechatronics system includes Amatrol's world-class multimedia curriculum that features video, 3D animations, interactive quizzes, and voiceovers of the text!

These courses meet all learning styles and can be used in a classroom environment or for independent, self-paced learning.

- **Portable PLC Troubleshooting (990-PABCL1F)**
- **Manufacturing Execution (87-TMEAB)**
- **Visual Communications (87-TVCAB)**
- **RFID/Sensors (87-TMS5AB1)**
- **Barcode (87-TBR1AB)**
- **Ethernet (87-TENAB82)**

What Is Industry 4.0?

Industry 4.0, also referred to as Smart Factory and the Industrial Internet of Things (IIoT), is the combination of cyber-physical systems, automation, and the Internet of Things to create a smart factory environment in which smart sensors and smart devices create an enormous amount of data ("big data") that can be shared via cloud technology to not only monitor real-time production status but also to predict future maintenance needs.

Upgrading to Smart Factory Tabletop Mechatronics Adds:

- ✓ Performance Analysis
- ✓ Smart Sensors
- ✓ Smart Product ID
- ✓ Network Communications
- ✓ Smart Maintenance
- ✓ Production Analysis

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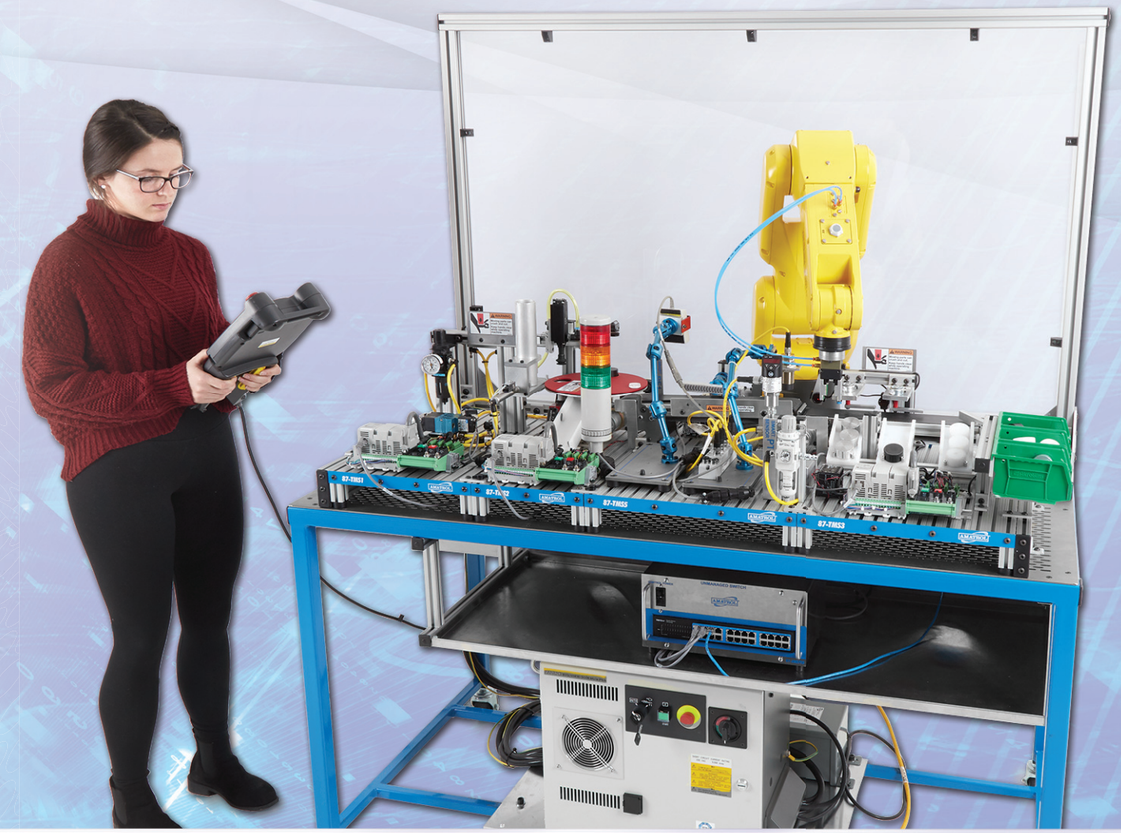
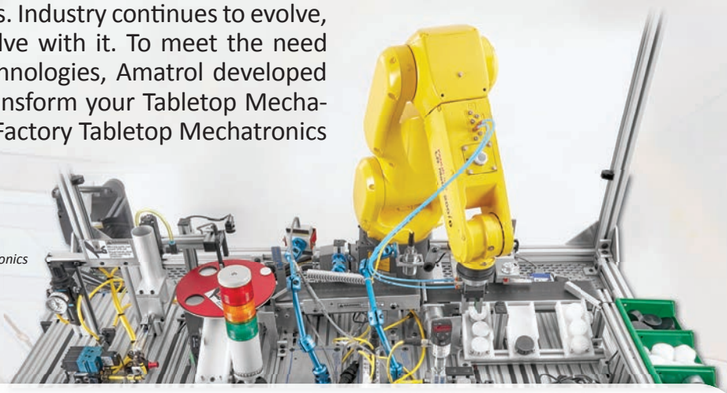


Smart Factory Tabletop Mechatronics Upgrade

Upgrade Tabletop Mechatronics for Industry 4.0 Training

Amatrol's Tabletop Mechatronics system is the premier solution for teaching advanced manufacturing skills. Industry continues to evolve, however, and your training must evolve with it. To meet the need to teach the latest Smart Factory technologies, Amatrol developed a new set of products designed to transform your Tabletop Mechatronics system into a hands-on Smart Factory Tabletop Mechatronics training system.



** NOTE: To upgrade to Amatrol's Smart Factory Tabletop Mechatronics system, you must own the full Tabletop Mechatronics system that consists of four stations (87-TMS1-4).*

Adds Performance Analysis & PLC Training

The portable PLC system acts as a cell controller for the Smart Factory Tabletop Mechatronics system, providing system performance analysis via I/O link of various parameters, such as transmitter pressure, photoeye signal strength, material type, and RFID tag output.

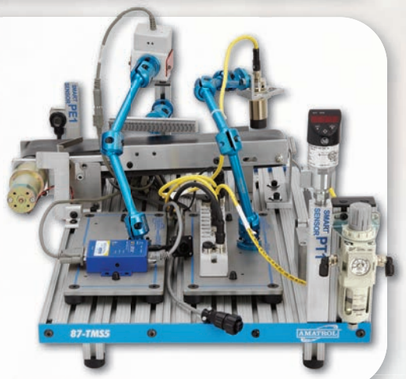
- **Portable PLC Troubleshooting** *(990-PABCL1F)*

Adds Smart Sensors & Product ID

Smart Factory technology integrates smart sensors with I/O link and product ID components to allow learners to track parts; view production history of sorting, acceptance, and rejection of parts; and monitor inventory control.

This new station for your Tabletop Mechatronics system features real-world components, including an RFID read station, smart photoelectric and analog pressure sensors, I/O link master, a conveyor, a barcode scanner, and an Ethernet-to-serial interface.

- **Barcode** *(87-TBR1AB)*
- **RFID/Sensors** *(87-TMS5AB1)*



Adds Industrial Robotics

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

- **FANUC Robot** *(87-TMS4F)*

Adds Smart Production

The visual communications system includes IGear Squeaks visual communications software and an IGear Squeaks mobile app.

Users will learn how to operate and configure supervisory control and data acquisition (SCADA) systems and cloud-based maintenance management systems.

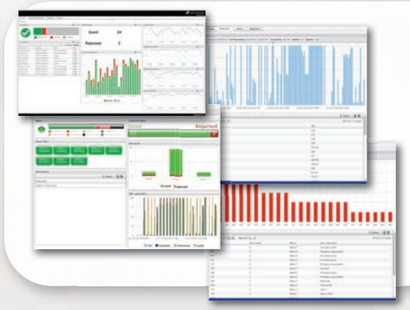
- **Visual Communications** *(87-TVCAB)*

Adds Network Communications

The Ethernet system teaches learners about industrial TCP/IP Ethernet networks, managed and unmanaged Ethernet switches, IP addresses, and Ethernet Subnets.

Hands-on skills taught include: how to connect an Ethernet network using both managed and unmanaged switches, setting IP addresses of robots and PLCs, transferring PLC programs via Ethernet networks, and monitoring network performance and diagnostics.

- **Ethernet** *(87-TENAB82)*



Adds Smart Maintenance

The manufacturing execution system features IGear Pulse manufacturing execution software.

Users will learn production control and monitoring of the Tabletop Smart Factory Mechatronics system, including how to control sensors, order entry, scheduling and schedule status, production statistics, and alarms.

- **Manufacturing Execution** *(87-TMEAB)*

Teach Industry-Applicable Smart Factory Skills