



M-SAMC Master PBO List

Master Equipment List

First Release

Topic Area	Equipment
1 Digital Literacy	Computer Flash Drive MS Word (or equivalent) Internet Access MS Excel (or equivalent) Email access MS Powerpoint (or equivalent) MS Access (or equivalent) Projection capability
2 Instrumentation	Amitrol Festo Hart protocol communicator Clamp on miliameters Process control Flukes 4-20 miliamp simulators (if process meters unavailable) Multiple transmitters and transducers I-P transducers Scientific calculator (e.g. TI-84 Plus) Schematics diagrams Miliamp clamp
3 PLC 5	Allen Bradley, suitcase trainers (or equivalent)
4 FANUC	FANUC, Roboguide software
5 ControlLogix	Allen Bradley, or equivalent
6 Siemens PLC	Suitcase Trainers Amitrol (or equivalent)
7 Basic Mechanical Power	DAC Amitrol Lab Volt Fault Simulator
8 Integrated Systems	SMC/AMTEC/Festo/Amitrol Integrated Systems Simulator (or equivalent) Software-based (e.g. LogixPro) Schematic/diagram required SMC/AMTEC/Festo/Amitrol Integrated Systems Simulator (or equivalent) Microsoft Word, Powerpoint, Visio (or equivalent) SMC/AMTEC/Festo/Amitrol Integrated Systems Simulator (or equivalent)



Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCT GRANT: TC23767
 PRIMARY DEVELOPER: M-SAMC Innovation Team 2

<p>9 Safety</p>	<p>OSHA 10 Hour Industry Training Portable Ladder Safety Fire Safety Machine Guarding Lockout Tag-Out Training Personal Protective Equipment Lockout Tag-Out Training Hazardous Communication Charts Welding, Cutting, & Brazing Safety Confined Space Safety Material Handling and storage safety Hoist operator's manual First aid/CPR/AED</p>
<p>10 Hydraulics</p>	<p>"Electro-Hydraulics Learning System Intermediate Hydraulics Learning Systems Hydraulic Learning System" Accumulator Charging Assembly "Electro-Hydraulics Learning System Intermediate Hydraulics Learning Systems Hydraulic Learning System" Hydraulic Fluid Serviec Learning System "Electro-Hydraulics Learning System Intermediate Hydraulics Learning Systems Hydraulic Learning System" Hydraulic Troubleshooting Learning Systems "Electro-Hydraulics Learning System Intermediate Hydraulics Learning Systems Hydraulic Learning System" Hydraulic Fluid Serviec Learning System</p>
<p>11 Machine Tool</p>	<p>Lathe Milling Machine Vertical Milling Machine Twist Drill Drill Press Band saw Hand and Bench Tools Power Tools</p>
<p>12 Print Reading for Industry</p>	<p>Pictorial and Orthographic Projections Prints to Read, interpret, & analyze Blueprint Symbols Electrical & Electronic Circuit Diagrams Piping Diagrams Hydraulic & Pneumatic Circuit drawings Welding Symbols drawings Electrical Diagrams and Schematics</p>
<p>13 Preventative Maintenance</p>	<p>SMC/AMTEC/Festo/Amitrol Integrated Systems Simulator (or equivalent) Mechanical Drives Learning System Oil Analysis Kit Viscosimeter</p>
<p>14 Predictive Maintenance</p>	<p>SMC/AMTEC/Festo/Amitrol Integrated Systems Simulator (or equivalent) Mechanical Drives Learning System Laser Shaft Alignment Learning System Vibration Analyzer Flir Infrared Camera or equivalent</p>



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15 Pneumatics	Pneumatic Learning System Variety of hand tools
16 Industrial Electricity	Direct Current Learning System Digital Multi Meter (DMM) Analog VOM Meg-ohmmeter Clamp-on meter DC Power Supply Oscilloscope Electrical Soldering Learning System Alternating Current Learning System Digital Multimeter (DMM) Analog VOM Meg-ohmmeter Clamp-on meter DC Power Supply Function Generator Oscilloscope Electrical Soldering Learning System
17 Industrial Electronics	Electronic Devices Learning Trainer Electrical Soldering Learning System Electronic Sensors Learning System Power and Controls Learning System Oscilloscope Function Generator Curve Tracer Transistor Tester Digital Multi Meter (DMM) Analog VOM
18 ACDC Motors	Basic Electrical Machine Learning System Tachometer Clamp-on meter Meg-ohmmeter Digital Multi-meter (DMM) Wattmeter Electric Motor Troubleshooting Learning System Electric Motor Control Learning System AC Variable Frequency Drive Learning System Tachometer Clamp-on meter Meg-ohmmeter Digital Multi-meter (DMM) Wattmeter
19 Welding	

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