## Mechanical Technology

This recommended list is based upon a classroom size of 25 students. All costs are estimated and should be adjusted and verified with current quotes. No specific equipment vendor or brand names are endorsed due to various possibilities, but school districts should consult with stakeholders to ensure industry-recognized equipment and software are purchased. The intent of this list is to provide school districts with guidance on the equipment needed to cover the state standards for a Mechanical Technology program.

| ClAsSROOM EQUIPMENT |  | \$18,210 |  |
| :---: | :---: | :---: | :---: |
| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| 25 | Student Workstations w/chairs | \$400 | \$10,000 |
| 1 | Teacher Workstation w/chair | \$400 | \$400 |
| 1 | Teacher Computer (enhanced graphics/memory/speed, download capable) | \$2,500 | \$2,500 |
| 1 | Presentation Equipment (e.g., interactive whiteboard (IWB), or other interactive display system, including software and accessories) | \$3,000 | \$3,000 |
| 1 | Networkable Laser Printer (black/white or color) | \$400 | \$400 |
| 1 | Vertical File Cabinet (lockable) | \$330 | \$330 |
| 2 | Storage Cabinets ( $36^{\prime \prime} \times 12^{\prime \prime} \times 72^{\prime \prime}$ ) (lockable) | \$300 | \$600 |
| 2 | Bookcases ( $36^{\prime \prime} \times 12^{\prime \prime} \times 42^{\prime \prime}$ ) | \$115 | \$230 |
| 2 | White Boards (4' $\times 8^{\prime}$ ) | \$110 | \$220 |
| 1 | Eyewash Station | \$300 | \$300 |
| 1 | Fire Extinguisher | \$130 | \$130 |
| 1 | First Aid Kit | \$100 | \$100 |

PROGRAM EQUIPMENT

| TOTAL: |  |  |  |
| :---: | :--- | ---: | :---: |
| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| 25 | Student Computers (enhanced memory/speed, download capable) | $\$ 1,500$ | $\$ 37,500$ |
| 1 | Technology Storage/Charging System (optional) | $\$ 2,000$ | $\$ 2,000$ |
| 1 | Motor Control Trainer | $\$ 12,000$ | $\$ 12,000$ |
| 1 | Sensor Trainer | $\$ 12,000$ | $\$ 12,000$ |
| 1 | Pneumatic and Hydraulic Trainer | $\$ 12,000$ | $\$ 12,000$ |
| 1 | Virtual Welder | $\$ 10,000$ | $\$ 10,000$ |
| 1 | Computer Numerical Control (CNC) Mill (2' $\left.\times 3^{\prime}\right)$ | $\$ 7,000$ | $\$ 7,000$ |
| 1 | Welding Simulator with Software | $\$ 7,000$ | $\$ 7,000$ |
| 1 | Engine Trainer | $\$ 4,500$ | $\$ 4,500$ |

## Program Equipment (cont.)

| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| :---: | :--- | ---: | :---: |
| 1 | Bench Lathe | $\$ 4,500$ | $\$ 4,500$ |
| 1 | Programmable Logic Controller (PLC) | $\$ 4,000$ | $\$ 4,000$ |
| 2 | Electrical Trainers | $\$ 3,200$ | $\$ 6,400$ |
| 6 | Advanced Robotics Kits | $\$ 1,500$ | $\$ 9,000$ |
| 1 | Manual Mill | $\$ 1,500$ | $\$ 1,500$ |
| 1 | Plasma Cutter | $\$ 1,500$ | $\$ 1,500$ |
| 1 | Gas Metal Arc Welder (GMAW) | $\$ 1,200$ | $\$ 1,200$ |
| 1 | Shielded Metal Arc Welder (SMAW) | $\$ 1,000$ | $\$ 1,000$ |
| 1 | Hazardous Material Safety Cabinet (45-gallon capacity) | $\$ 1,000$ | $\$ 1,000$ |
| 1 | Storage Cabinet for Sanitized Eye Protection Equipment | $\$ 800$ | $\$ 800$ |
| 1 | Air Compressor (with accessories) | $\$ 600$ | $\$ 600$ |
| 3 | Oxy-fuel Welders/Cutting Equipment | $\$ 600$ | $\$ 1,800$ |

INSTRUCTIONAL MATERIALS

| QTY | TOTAL: | \$3,000 |  |
| :---: | :--- | :---: | :---: |
| 25 | Student Textbooks (Approved by NDE) | UNIT | TOTAL |
| 1 | Teacher Textbook Edition and Resources | $\$ 100$ | $\$ 2,500$ |

## Instructional Supplies

TOTAL: \$27,625

| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| :---: | :--- | ---: | ---: |
| 1 | Electrical Lockout Station | $\$ 445$ | $\$ 445$ |
| 1 | 4-Lock Lockout Station | $\$ 180$ | $\$ 180$ |
| Varies | Automotive Tools (brake, engine, transmission, drivetrain repair) | $\$ 8,000$ | $\$ 8,000$ |
| Varies | Measuring Equipment (framing squares, measuring tapes, calipers, <br> micrometers, levels, multimeters, tachometers, etc.) | $\$ 5,000$ | $\$ 5,000$ |
| Varies | Power Tools (dependent on materials used, includes grinders, reciprocating <br> saws, soldering, rotary tools, grinders, saws, etc.) | $\$ 5,000$ | $\$ 5,000$ |
| Varies | Hand Tools (socket sets, vises, clamps, hammers, hex keys/Allen wrenches, <br> utility knives, etc.) | $\$ 2,500$ | $\$ 2,500$ |
| Varies | Welding Tools (clamps, slag hammers, electrode tip cleaners, flint strikers, <br> (arts, etc.) | $\$ 2,000$ | $\$ 2,000$ |
| Varies | Welding Materials (electrodes, metal, wire, gas, etc.) | $\$ 2,000$ | $\$ 2,000$ |
| Varies | Personal Safety Equipment (welding hoods, gloves, ear protection, aprons, <br> etc.) | $\$ 1,000$ | $\$ 1,000$ |

## Instructional Supplies (cont.)

| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| :---: | :--- | ---: | :---: |
| Varies | Supplies (various types of paper, sketching pencils/paints, lead, erasers, ink <br> cartridges, etc.) | $\$ 1,000$ | $\$ 1,000$ |
| Varies | Computer Accessories (cases, covers, etc.) | $\$ 500$ | $\$ 500$ |

## Оther Total: \$325

| QTY | ITEM DESCRIPTION | UNIT | TOTAL |
| :---: | :--- | ---: | ---: |
| 1 | Occupational Safety and Health Administration (OSHA) Instructor Training | $\$ 300$ | $\$ 300$ |
| 1 | OSHA Tag out / Lock out Instructor Training | $\$ 25$ | $\$ 25$ |

## Category Totals:

| Classroom Equipment | $\$ 18,210$ |
| :--- | ---: |
| Program Equipment | $\$ 137,300$ |
| Instructional Materials | $\$ 3,000$ |
| Instructional Supplies | $\$ 27,625$ |
| Other | $\$ 325$ |
| Estimated Program Total | $\$ 186,460$ |

