

 **DSCF0067 – Manual Lathe**

- **Description:** Large manual lathe used for cylindrical turning, threading, and boring.
 - **Purpose:** Cuts rotating metal using various tool posts and feeds.
 - **Job Role: Manual Machinist / Lathe Operator**
 - **Skills Developed:**
 - Setup and operation of manual lathes
 - Use of micrometers, dial indicators
 - Threading, facing, drilling on a lathe
 - **Employer Pitch:** Students trained on this machine are ready for job shops, toolrooms, and maintenance departments that need precision manual turning work.
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 **DSCF0068 – Manual Lathe**

- **Description:** Manual lathe with DRO (digital readout), quick-change tooling, and tailstock.
 - **Purpose:** Precision turning, thread cutting, and bore work.
 - **Job Role: Manual Machinist / Lathe Operator**
 - **Skills Developed:**
 - Taper turning, threading, knurling
 - Safe use of the compound rest and tailstock
 - Manual threading calculations
 - **Employer Pitch:** Shops looking for versatile machinists or apprentices gain hands-on technicians who understand foundational machining practices.
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 **DSCF0069 – Bridgeport Vertical Mill**

- **Description:** Manual vertical mill with DRO and machinist vise.
 - **Purpose:** Cutting slots, drilling, facing, and squaring parts.
 - **Job Role: Manual Machinist / Toolcrib Attendant**
 - **Skills Developed:**
 - Squaring stock, reading offsets, facing, pocketing
 - Tramming the head, adjusting backlash
 - DRO use for precise measurements
 - **Employer Pitch:** Ideal for employers looking for precision one-off or repair part makers, or journeymen in R&D and prototyping departments.
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 **DSCF0070 – Mori Seiki ZL-35 CNC Lathe**

- **Description:** CNC turning center with automatic tool turret and enclosure.
 - **Purpose:** Automatic production of cylindrical parts using G-code.
 - **Job Role:** CNC Lathe Operator / Set-up Machinist / Production Machine Operator
 - **Skills Developed:**
 - CNC lathe setup, tool offsetting, program loading
 - G & M code basics, part inspection, job repeatability
 - Safe operation of automated machining processes
 - **Employer Pitch:** Students with this training are job-ready for production lines, especially in automotive, aerospace, and high-volume precision turning shops.
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 **DSCF0071 – CNC Lathe with Setup Station**

- **Description:** Expanded view of CNC lathe with nearby setup and tooling carts.
 - **Purpose:** Emphasizes real-world workstations with multi-job setups.
 - **Job Role:** CNC Lathe Operator / Set-up Machinist / Production Machine Operator
 - **Skills Developed:**
 - Organization of tooling, part inspection stations
 - Understanding production workflow
 - Visual machine troubleshooting
 - **Employer Pitch:** Students understand more than button pushing—they know how to manage workflow, reduce downtime, and optimize setups.
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 **DSCF0072 – Horizontal Bandsaw**

- **Description:** Coolant-fed industrial saw for cutting raw bar stock.
 - **Purpose:** Cuts stock to length before it's machined.
 - **Job Role:** Material Handler / Saw Operator / Manufacturing Assistant
 - **Skills Developed:**
 - Saw speed/feed settings
 - Clamp techniques and safety
 - Cut-to-length measurements
 - **Employer Pitch:** Entry-level position with upward mobility. Ideal for students to get in the door, assist skilled machinists, and grow from within.
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 **DSCF0073 – Mazak VTC-20 Vertical CNC Mill**

- **Description:** Enclosed vertical CNC machining center with automatic tool changer.
 - **Purpose:** Executes complex 3-axis milling programs.
 - **Job Role:** CNC Mill Operator / CNC Set-up Machinist / CNC Trainee Programmer
 - **Skills Developed:**
 - G-code navigation and program editing
 - Tool setting, probing, and verification
 - Multi-op job setup, fixture use
 - **Employer Pitch:** Students trained on this machine bring both technical skills and production experience, minimizing onboarding time.
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 **DSCF0074 – Mazak VTC-20**

- **Description:** Controller view of the same VMC, showing hydraulic and coolant components.
 - **Purpose:** Highlights system-level understanding of the machine.
 - **Job Role:** CNC Mill Operator / CNC Set-up Machinist
 - **Skills Developed:**
 - Preventative maintenance awareness
 - Coolant system troubleshooting
 - Machine anatomy understanding
 - **Employer Pitch:** Students with machine maintenance knowledge can reduce shop downtime and work directly with engineers and maintenance staff to keep jobs flowing.
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 **DSCF0075 – Mori Seiki MV-40 CNC Mill with Rotary**

- **Description:** Vertical machining center with 4th-axis rotary fixture.
- **Purpose:** Advanced multi-face part machining.
- **Job Role:** CNC Set-up Machinist / CNC Trainee Programmer / Production Machine Operator
- **Skills Developed:**
 - Rotary axis calibration and indexing
 - Sub-programs for multi-face parts
 - Toolpath planning
 - Controller familiarity (FANUC-style)
 - Tool libraries, offsets, simulation
 - Process optimization
- **Employer Pitch:** Valuable for complex production roles and prototyping jobs where 3D thinking and high precision are key. Students trained on this CNC mill understand both standard and advanced part production, including rotary axis integration and accurate tool management.

 **DSCF0078 – Leadwell MCV-1300P CNC Mill (Wide View)**

- **Description:** A vertical machining center with a visible tool magazine and automatic tool changer, shown with a full control interface.
- **Purpose:** Executes precision 3-axis milling operations for large or multiple parts.
- **Job Role:** **CNC Production Operator / Set-up Machinist / CNC Trainee Programmer**
- **Skills Developed:**
 - Understanding of tool changers and carousel systems
 - Multi-op setup and fixturing
 - Program cycling and part inspection
 - Tool pre-setting and offsetting
 - Basic M-code and cycle use
 - Setup sheet interpretation
- **Employer Pitch:** This machine represents standard production CNC milling. Students operating this equipment gain essential experience with automated tool changes and machine cycling.

 **DSCF0080 – Inspection Lab / Surface Plate**

- **Description:** A granite surface plate with a height gage, indicator, V-blocks, and assorted metrology tools.
- **Purpose:** Used for dimensional inspection and precision measurement.
- **Job Role:** **Quality Inspector / CMM Technician (Manual)**
- **Skills Developed:**
 - Use of height gages and indicators
 - Precision measurement and blueprint reading
 - Surface plate practices and tolerance checks
- **Employer Pitch:** Graduates with surface plate experience are equipped for first-piece, in-process, and final inspection in precision manufacturing environments.

 **DSCF0081 – LPG Forklift (Titan 35)**

- **Description:** A propane-powered Titan forklift in a warehouse environment with stacked pallet inventory.
- **Purpose:** Moves heavy loads and raw material within the shop or warehouse.
- **Job Role:** **Material Handler / Forklift Operator**
- **Skills Developed:**
 - Forklift operation and maneuvering
 - Safe lifting practices
 - Warehouse logistics and materials movement
- **Employer Pitch:** Forklift training ensures students can contribute immediately to material movement and inventory operations, a core support role in most manufacturing shops.

 **DSCF0085 – Corporate Conference Room (Front View)**

- **Description:** A modern conference room with a large table, projection screen, and leather seating for meetings.
- **Purpose:** Used for team meetings, project briefings, and training sessions.
- **Job Role:** **Project Management Trainee / Engineering Trainee / CNC Programmer Trainee**
- **Skills Developed:**
 - Team collaboration and presentation
 - Project planning and communication
 - Corporate etiquette and reporting
 - CAM Programming environment
- **Employer Pitch:** Students exposed to this setting develop communication, planning, and administrative coordination skills necessary for technical team leadership.

 **DSCF0087 – Corporate Conference Room (Rear View)**

- **Description:** Rear view of the meeting room with a projector on the table, plants, and visual decor.
- **Purpose:** Supports administrative and planning functions of a manufacturing business.
- **Job Role: Project Management Trainee / Engineering Trainee / CNC Programmer**
- **Skills Developed:**
 - Meeting preparation and leadership
 - Facility management and coordination
 - Visual presentation and reporting
 - CAM Programming Environment
- **Employer Pitch:** Students prepared for office-side operations gain skills in logistics, documentation, and interdepartmental communication—key for advancement beyond the shop floor.