

Machinist Toolbox Layout – Visual Aid Guide

Objective:

Help students set up a professional machinist toolbox, organized for success, efficiency, and workplace readiness.

Top Tray / Top Compartment (Quick Access Items)

- - 6" Dial Caliper
- - 0-1" Micrometer
- - Small Machinist Flashlight
- - 6" Steel Ruler
- - Center Punch
- - Scriber
- - Sharpie Pens (Fine and Ultra Fine)
- - Mechanical Pencil
- - Small Calculator
- - 6" Deburring Tool
- - Safety Glasses
- - Pocket Knife or Box Cutter



Drawer 1: Precision Measuring Tools

- - 0-1" Outside Micrometer
- - 1-2" Outside Micrometer
- - Depth Micrometer (0-3" Range)
- - Telescoping Bore Gauges
- - Edge Finder
- - Dial Indicator (.001" or .0005" Grad)
- - Magnetic Base for Indicator
- - Height Gage (if space allows)

Drawer 2: Layout and Marking Tools

- - Combination Square Set (Protractor, Center Head, Square Head)
- - Surface Gage with Scriber
- - Machinist's Compass/Dividers
- - Prick Punch and Center Punch
- - Layout Dye (Blue Dykem)
- - Layout Brushes or Cotton Swabs

Drawer 3: Hand Tools and Setups

- - Allen Wrench Sets (SAE & Metric)
- - Adjustable Wrench (6" and 8")
- - Small Crescent Wrench

- - Open-End Wrench Set (inch or metric as needed)
- - Dead Blow Hammer
- - Brass or Rawhide Mallet
- - Ball Peen Hammer
- - Small Vice Grips
- - Tweezers

Drawer 4: Cutting Tools and Deburring

- - Files (Flat, Round, Triangular, Needle File Set)
- - Deburring Tools
- - Countersinks (60°, 82°, 90°)
- - Chamfer Tools
- - Center Drills (Assortment)
- - Spot Drills

Drawer 5: Machine Setup Tools

- - Edge Finder (Electronic or Mechanical)
- - Parallel Set
- - 1-2-3 Blocks (pair)
- - Adjustable Parallel Set (if available)
- - Machinist Jack Set (small set)
- - Angle Blocks (optional)
- - Small C-Clamps
- - Step Clamps (small kit)

Drawer 6: Hardware and Miscellaneous

- - Extra Screws (Socket Head Cap Screws)
- - T-nuts and Studs (if manual mill setups are required)
- - Spare Inserts (if using insert tooling)
- - Extra Batteries (for flashlights, calipers)
- - Anti-seize compound (optional)
- - Small Container for Loose Items

Side Storage or Door Racks (if available)

- - Precision Level
- - Tape Measure
- - Air Nozzle / Blow Gun
- - Shop Towels / Rags

Tips for Students:

- - Label each drawer for easy finding.
- - Keep all measuring tools clean, dry, and in protective cases.
- - Return every tool to its assigned spot immediately after use.
- - Perform weekly cleaning and maintenance of toolbox and tools.
- - Bring toolbox checklists to internships or interviews to demonstrate professionalism.