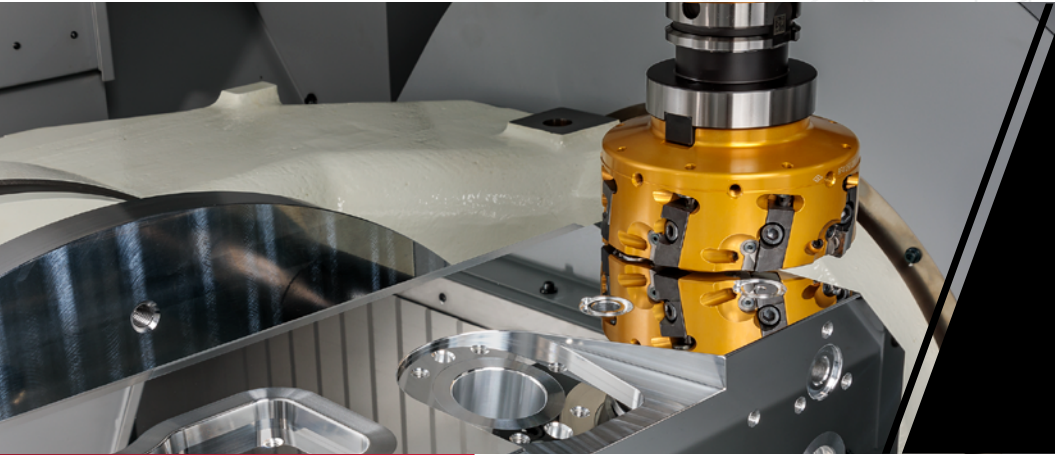




Pre-Flight Checklist for Your First CNC Machine

Needs & Workspace

- ☐ Determine use case: hobby vs. business/production
- ☐ List the first 5-10 projects (size, precision, material)
- ☐ Decide primary materials (wood/plastics, aluminum, steel)
- ☐ Measure available shop space

Machine Type & Capacity

- ☐ Confirm machine type (lathe, mill, etc.)
- ☐ Check work area vs. the largest part + workholding
- ☐ Verify axis clearances for machine functions
- ☐ Ensure the machine fits through doors/onto the floor

Build Quality & Performance

- ☐ Look for rigid frame construction
- ☐ Identify motion system (belts, lead/ball screws)
- ☐ Note spindle power, RPM, and cooling
- ☐ Verify advertised repeatability/accuracy

Power, Dust/Coolant, Environment

- ☐ Check power requirements (voltage, current)
- ☐ Verify machine air requirements
- ☐ Plan for dust extraction or chip/coolant management
- ☐ Consider noise levels and ventilation

Software & Workflow

- ☐ Confirm compatible control software & CAM
- ☐ Ensure post-processors exist
- ☐ Check software license maintenance costs
- ☐ Look for clear documentation/tutorials

Tooling, Workholding & Accessories

- ☐ Price a starter tooling kit for materials
- ☐ List needed work holding (clamps, vises, chucks, collets)
- ☐ Confirm spindle collet system
- ☐ Budget for quality control equipment for part measurement
- ☐ Budget for safety gear

Support, Training & Community

- ☐ Check the manufacturer's reputation for support
- ☐ Look for an active user community
- ☐ Inquire about training
- ☐ Verify spare parts availability

Costs & Upgrade Path

- ☐ Calculate total initial cost (machine, tools, software, etc.)
- ☐ Ask about warranties/return policies
- ☐ Check for upgrade options