



Drill Press I

OVERVIEW

This certification validates that an individual has the skills and knowledge to successfully complete process planning, basic drilling applications, machine set ups, operations, inspection techniques and safety standards.

COMPETENCIES

KNOWLEDGE + SKILLS

Applied Mathematics	Arithmetic IPR Calculations	SFM to RPM Conversion Use of Scientific Calculator
Cutting Tool Assembly	Fitting (tightening and setting) Inspection of Cutters	Inspection of Holders
Cutting Tool Selection	Cutter Applications Cutter Features/Attributes	Manufacturers Technical Data References
Inspection	Feature with Size Verification Feature without Size Verification Perpendicularity Verification	Position Verification Surface Finish Verification
Machine Maintenance	Coolants Oils and Lubrications	Refractometer Readings
Machine Safety	Machine Guarding	
Machining Applications	Counterboring Countersinking Drilling	Reaming Tapping
Measurements	Reading Micrometers Reading Steel Rule Reading Vernier Scales Use of Calipers	Use of Dial Indicators Use of Drop Indicators Use of Micrometers Use of Steel Rules
Operations	Deburring	Part Loading (vise/fixture)
Print Reading	Block Tolerances Line Types and Conventions Orthographic Projection	Surface Finish Requirements Title Blocks and Revisions
Process Planning	Machine Configuration Machine Selection	Operation Sequencing Workholding Concepts/Devices
Setup	Aligning Cutters to Center Punch (crosshatch) Mounting Stops	Moveable Vise-Jaw Adjustment



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COMPETENCIES

KNOWLEDGE + SKILLS

Shop Safety

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|---|-------------------------------------|
| Blood Born Pathogen | Personal Protective Equipment (PPE) |
| Fire Prevention/Suppression | Safety Data Sheets (SDS) |
| Hazardous Material Identification System (HMIS) | Waste Removal |
| Lock Out/Tag Out | |