

SKILL SETS

SKILLS

PERFORM WORK-IN- PROCESS DIMENSIONAL OR SURFACE VERIFICATION 5267.0	Check straight cuts.	Check shapes.	Check threads.	Check holes.	Check tapers.
	5267.01	5267.02	5267.03	5267.04	5267.05
	Check hardness.	Maintain material identification.	Deburr workpiece.	Check surfaces.	Perform final inspection.
	5267.06	5267.07	5267.08	5267.09	5267.10
	Complete work documentation.				
	5267.11				
PERFORM BENCH WORK 5268.0	Hand-file.	Hand-saw.	Hand-drill holes.	Hand-tap threaded holes.	Hand-ream.
	5268.01	5268.02	5268.03	5268.04	5268.05
	Chase threads.	Hand-grind.	Practice good housekeeping.		
	5268.06	5268.07	5268.08		
PERFORM SAWING 5269.0	Check fused/welded blade.	Lay out features of engineering drawings.	Locate and position workpiece in saw.	Select speeds and feeds of saw.	Install and test-run blade.
	5269.01	5269.02	5269.03	5269.04	5269.05
	Check first cut-off.	Cut shapes using a vertical bandsaw.	Cut squared and angled surfaces using a power cut-off saw.	Maintain material identification.	Deburr workpiece.
	5269.06	5269.07	5269.08	5269.09	5269.10
	Perform final inspection.	Complete work documentation.	Move workpiece.	Practice good housekeeping.	
	5269.11	5269.12	5269.13	5269.14	

SKILL SETS

SKILLS

PERFORM DRILLING USING DRILL PRESS/MACHINE 5270.0	Select drill tooling. 5270.01	Identify and prepare cutting tools for drills. 5270.02	Locate and position workpiece in drill. 5270.03	Set up tooling in drills. 5270.04	Select speeds and feeds of drill. 5270.05
	Center-drill a layout punch mark. 5270.06	Drill a hole. 5270.07	Chamfer a hole. 5270.08	Ream a hole. 5270.09	Machine-thread a hole. 5270.10
	Spot-face a hole. 5270.11	Counter-bore a hole. 5270.12	Counter-sink a hole. 5270.13	Maintain material identification. 5270.14	Deburr workpiece. 5270.15
	Perform final inspection. 5270.16	Move workpiece. 5270.17	Practice good housekeeping. 5270.18	Complete work documentation. 5270.19	
PERFORM MACHINE GRINDING 5271.0	Select grinding wheel. 5271.01	Check condition of grinding wheel. 5271.02	Install grinding wheel. 5271.03	Locate and position workpiece in grinder. 5271.04	Surface grind workpiece. 5271.05
	Hone holes 5271.06	Lap workpiece 5271.07	Grind inside and outside diameters. (ID/OD) 5271.08	Grind tools and cutters. 5271.09	Check ground surfaces. 5271.10
	Perform final inspection. 5271.11	Move workpiece. 5271.12	Complete work documentation. 5271.13	Practice good housekeeping. 5271.14	

SKILL SETS

SKILLS

PERFORM MILLING 5273.0	Select milling cutting tools. 5273.01	Identify and prepare milling cutting tools. 5273.02	Set-up and maintain milling adjustable support tools. 5273.03	Set-up milling cutting tools. 5273.04	Select speeds and feeds of mill. 5273.05
	Perform fly-cutting. 5273.06	Face-mill. 5273.07	Machine steps, cut-outs, angles, and open slots. 5273.08	Machine a pocket or slot. 5273.09	Machine a hole. 5273.10
	Bore holes. 5273.11	Maintain material identification. 5273.12	Deburr workpiece. 5273.13	Perform final inspection. 5273.14	Move workpiece. 5273.15
	Complete work documentation. 5273.16	Practice good housekeeping. 5273.17			
PERFORM NC/CNC COMPUTERIZED CONTROLLED MACHINING 5274.0	Identify and select numerically controlled machining process 5274.01	Identify, select, and set up NC/CNC cutting tools and tool holders. 5274.02	Identify, select, and set machine parameters. 5274.03	Position, align, & secure workpiece in NC/CNC machine. 5274.04	Input and verify part program to NC/CNC machine controls. 5274.05
	Verify tool sequence, tool path, and collision avoidance program. 5274.06	Monitor NC/CNC machining process. 5274.07	Make adjustments to tooling and offsets. 5274.08	Maintain material identification. 5274.09	Perform final inspection. 5274.10
	Move workpiece. 5274.11	Complete work documentation. 5274.12	Practice good housekeeping. 5274.13		

SKILL SETS

SKILLS

PERFORM ELECTRICAL DISCHARGE MACHINING (EDM) 5275.0	Identify and select EDM process. 5275.01	Develop EDM electrodes. 5275.02	Identify, select, and set up EDM machining components. 5275.03	Identify, select, and set machine parameters. 5275.04	Position, align, and secure workpiece in EDM machine. 5275.05
	Cut the workpiece by EDM machine. 5275.06	Maintain material identification. 5275.07	Perform final inspection. 5275.08	Move workpiece. 5275.09	Complete work documentation. 5275.10
	Practise good housekeeping. 5275.11				
DEVISE AND DETAIL A PLAN FOR THE DIE OR TOOL-BUILDING PROCESS 5276.0	Verify the features of die or tool components. 5276.01	Develop and organize a die or tool-building plan. 5276.02	Perform die or tool-building related calculations. 5276.03	Assemble and verify die or tooling stock materials. 5276.04	Produce a detailed sketch of die or tooling components. 5276.05
FABRICATE COMPONENTS OF DIES, TOOLS, JIGS, OR FIXTURES 5277.0	Cut and prepare raw material. 5277.01	Block up and establish datum. 5277.02	Machine components of dies, tools, jigs, or fixtures. 5277.03	Heat-treat the components. 5277.04	Mark the die or tooling components. 5277.05
	Fabricate and assemble sub-assemblies 5277.06	Final fit sub-assemblies die, or tooling components. 5277.07	Inspect die or tooling fit and functions. 5277.08	Move workpiece. 5277.09	Complete work documentation. 5277.10

SKILL SETS

SKILLS

FABRICATE A PROTOTYPE PIECE PART 5278.0	Develop and organize a prototype building-plan 5278.01	Produce preliminary sketches of the prototype. 5278.02	Build tooling aids for the prototype. 5278.03	Manufacture the prototype piece part. 5278.04	Perform final inspection. 5278.05
	Document the prototype piece part building-process. 5278.06				
ASSEMBLE AND FINALIZE DIES 5279.0	Read and interpret die drawings and sketches. 5279.01	Set up and operate press. 5279.02	Spot-form the steels and tools. 5279.03	Prepare and form an initial blank. 5279.04	Tool-proof forming stations. 5279.05
	Finalize the blank shape. 5279.06	Prepare and finalize cutting steels. 5279.07	Finalize die assembly for final piece part production. 5279.08	Try out and trouble-shoot the die. 5279.09	Inspect part produced by developed die. 5279.10
	Final inspect die. 5279.11	Complete work documentation. 5279.12			