

Reference No.																			
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SELF-ASSESSMENT GUIDE

Qualification	MACHINING NC I																	
Units of Competency Covered	<ul style="list-style-type: none"> • Perform bench work (basic) • Turn workpiece • Mill workpiece • Grind workpiece • Shape workpiece • Repair workpiece 																	
Instruction:																		
<ul style="list-style-type: none"> • Read each question and check the appropriate column to indicate your answer. 																		
Can I?																	YES	NO
PERFORM BENCH WORK (BASIC)																		
• Interpret drawing and check benchwork materials, tools and supplies as required *																		
• Sharpen cutting and marking tools according to industry procedure and work safety standards *																		
• Check dimensions of materials needed using appropriate measuring tool/s *																		
• Perform required bench work operations based on drawing, and according to industry standards *																		
• Measure workpiece according to drawing specifications *																		
TURN WORKPIECE																		
• Interpret drawing of turning work and clarify the task required *																		
• Plan sequence of turning operation according to drawing specifications *																		
• Prepare and inspect materials, tools and supplies based on drawing *																		
• Test run machine to be used *																		
• Prepare cutting tools and measuring tools needed in operation *																		
• Identify defective turn work piece and tools *																		
• Determine material suitable to the machine *																		
• Mount material on chuck according to work requirements *																		
• Use centering instruments according to material requirements *																		
• Select cutting tools and holders according to job requirements *																		
• Mount cutting tools to the holder following industry standards *																		
• Mount tool holder on the tool post following established industry practices *																		

• Align cutting tool to the tail stock and centering gauge following established industry practices *		
• Set-up lathe accordingly to calculated speeds and feeds *		
• Use lathe accessories, if required		
• Operate lathe according to job specifications *		
• Monitor performance of the machine and cutting tools based on the manufacturer's manual *		
• Check and measure workpiece during turning operation, according to work specifications *		
• Perform quality check of finished workpiece according to industry procedure *		
MILL WORKPIECE		
• Interpret drawing of vertical milling work and clarify the task required *		
• Plan sequence of milling operation according to drawing specifications *		
• Prepare and inspect materials, tools and supplies based on drawing *		
• Test run machine to be used *		
• Prepare cutting tools and measuring tools needed in operation *		
• Determine material suitable to the machine *		
• Mount, align and clamp machine vice to machine table *		
• Mount and center workpiece on machine vice according to industry standards *		
• Select cutting tools and holders according to job requirements *		
• Mount cutting tools to the holder following industry standards *		
• Set-up milling machine according to calculated speeds and feeds *		
• Use milling machine accessories, if required		
• Operate milling machine according to job specifications *		
• Monitor and identify performance of the machine and cutting tools based on the manufacturer's manual *		
• Check and measure workpiece during milling operation, according to work specifications *		
• Perform quality check of finished workpiece according to industry procedure *		
GRIND WORKPIECE		
• Interpret drawing of grinding work and clarify the task required *		
• Plan sequence of grinding operation according to drawing specifications*		
• Prepare and inspect materials, tools and supplies based on drawing *		
• Determine workpiece suitable to grinding machine *		

• Prepare grinding wheels and measuring tools needed in operation *		
• Test run machine to be used *		
• Mount workpiece on magnetic plate according to work requirements *		
• Use precision vise to hold workpiece, if required *		
• Use grinding machine accessories, if required *		
• Operate grinding machine according to job specifications *		
• Monitor and identify performance of grinding wheel based on the industry standards *		
• Check and measure workpiece during grinding operation, according to work specifications *		
• Perform quality check of finished workpiece according to industry procedure *		
SHAPE WORKPIECE		
• Interpret drawing of shaping work and clarify the task required *		
• Plan sequence of shaping operation according to drawing specifications*		
• Prepare and inspect materials, tools and supplies based on drawing *		
• Test run machine to be used *		
• Prepare cutting tools and measuring tools needed in operation *		
• Determine appropriateness of material to machine *		
• Mount material on vise according to work requirements *		
• Select cutting tools and holders according to job requirements *		
• Mount cutting tools to the holder following industry standards *		
• Mount tool holder on the tool post following established industry practices *		
• Set-up length of stroke of shaper according to workpiece length *		
• Use shaper accessories, if required *		
• Operate shaper according to job specifications *		
• Monitor performance of the machine and cutting tools based on the manufacturer's manual *		
• Check and measure workpiece during turning operation, according to work specifications *		
• Perform quality check of finished workpiece according to industry procedure *		
REPAIR WORKPIECE		
• Identify job repair needed based on drawing *		

• Prepare workpiece, tools, materials, and electric welding machine according to industry standards *		
• Set-up welding machine in accordance with manufacturer's instructions*		
• Position holding devices in conformity with job requirements *		
• Demonstrate tack welding and root pass in accordance with drawing *		
• Clean root pass from slugs and defects *		
• Inspect welded workpiece based on work specifications		
• Repair defective weld in workpiece following work specifications *		
• Check quality of welded workpiece according to specifications *		
PERFORM POST- ACTIVITIES		
• Shutdown machines according to manufacturer's manual *		
• Maintain and store tools based on established procedures *		
• Tag and report defective tools and machines according to workplace procedures, if any *		
• Perform good housekeeping following 5S *		
• Dispose wastes according to waste management procedures and environmental regulations *		
• Accomplish checklist of workpiece specifications *		
• Practice works safety and health measures when performing tasks *		
I agree to undertake assessment with the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.		
Candidate's Name and Signature		Date