

OCCUPATIONAL TOOLS AND EQUIPMENT LIST

Process Operator Occupation



Government of Newfoundland Labrador
Department of Advanced Education and Skills
Apprenticeship and Trades Certification Division

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Preface

This document is intended as a companion to the 2012 Plan of Training for the Process Operator occupation. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeships.

Acknowledgements

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We offer you a sincere thank you.

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Note:

The numbers suggested in the following Tools and Equipment List represent the required minimum. Please verify this list with your selected training institution.

Tools and Equipment List
Process Operator

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
HAND TOOLS				
Allen wrenches: Imperial and Metric	5 sets		B	
Ball Peen Hammer	5		B	
Centre Punch	5		B	
Crescent Wrenches, all sizes (6", 8", 12")	5 of each		B	
Crowbar	2		B	
Diagonal Cutters	5		B	
Drill Bits, set, up to 1/2"	3		B	
Easy Outs	2 sets		B	
Fixed Vice	5		B	
Flaring Tools	3		B	
Fuse Puller	5		B	
Gauge Blocks	1		B	
Gauge Pointer Puller	2		B	
Hack Saw	5		B	
Hand Files (assorted)	5 sets		B	
Ignition Wrenches	5 sets		B	
Jewellers Screwdrivers	5		B	
Knock-out Punches, 1/2" up to 1-1/4"	2		B	
Level, Different Sizes	3		B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Locking Pliers, 12" and 16"	5-12"; 1-16"		B	
Magnet, Telescopic	3		B	
Measuring Tape	5		B	
Micrometers (Assorted)	3		B	
Mirrors, Telescope	3		B	
Needle-Nose Pliers	5		B	
Nut Drivers (Assorted)	5 sets		B	
Open-End Wrenches (Combination)	5 sets		B	
Packing Puller	2 sets		B	
Pipe Threader (½" up to 1- 1/4" and 1/12")	1		B	
Pipe Wrenches, 6", 10", 12", 18", 24"	2 each		B	
Soft-Face Hammer	3		B	
Pliers (Assorted Sizes, Linesman)	5		B	
Punches	2 sets		B	
Reamers	2		B	
Screw Extractors	2 sets		B	
Screw Starters (Philips and Slot)	2 sets		B	
Screwdrivers (Philips, Slot and Robinsons)	2 sets		B	
Scriber	2		B	
Sockets (Imperial and Metric, 1/4" - 3/8" and ½" Drive)	1 set of each		B	
Square	2		B	

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Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Steel Rule	2		B	
Strap Wrenches	5		B	
Striker	2		B	
Taps and Dies Set (Imperial and Metric, up to $\frac{1}{2}$ "")	1 each		B	
Torque Wrench, $\frac{1}{2}$ " drive	2		B	
Tube Benders, $\frac{1}{4}$ " & $\frac{3}{8}$ " & $\frac{1}{2}$ "	5 sets		B	
Tube Cutters	5 sets		B	
Tweezers	2		B	
Vernier Calipers	2		B	
Vice Grips	5		B	
Wire Brushes	2		B	
Wire Crimpers	5		B	
Wire Strippers	5		B	
POWER TOOLS				
Grinders	2		B	
Hammer Drill, $\frac{3}{8}$ "	1		B	
Jig Saw	2		B	
Portable Electric Drill, 18-volt	3		B	
Soldering Iron	5		B	
Soldering Torch	5		B	
TEST EQUIPMENT AND ACCESSORIES				
Barometer	1		B	
Lab scale Process Control Unit	5		B	Examples to be found at C.N.A. Ridge Road campus

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Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
				St. John's, Instrumentation and Control Technician/Technologist program
Capacitance Simulators	2		B	
Current Calibrator	5		B	
Current Tracer	1		B	
Deadweight Tester	1		B	
Decade Resistance Box	2		B	
Dew Point Tester	1		B	
Digital Logic Probe	1		B	
Digital Multimeter	5		B	
Frequency Counter	1		B	
Frequency Generator	1		B	
Grounding Mats	2		B	
Hand-Held Configurators	3		B	
Hand-Held Pyrometer	1		B	
Hydrometer	1		B	
Lab Scales	1		B	
Laptop Computer	1		B	
Magmeter (Portable)	1		B	
Manometer and Standards	5		B	
Millivoltmeter Calibrator	5		B	
Modems (AMS)	1		B	
Oscilloscope	1		B	
Personal Computer (Shop)	5		B	

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Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
pH Simulator/Buffers	5 sets		B	
Pneumatic Test Stand	1		B	
Portable Sound Level Meter	1		B	
Power Supplies	5 dual channel		B	
Printers	1		B	
Regulators	5		B	
Signal Generators	1		B	
Signature Analyzer	1		B	
Software	as required		B	
Strobotac	1		B	
Temperature Bath	1		B	
Test Gas	1		B	
Test Gauges (Pressure Vacuum)	5		B	
Thermometer	5		B	
Thyschrometer	as required		B	
Vacuum Pumps	5		B	
Wrist Ground Strap	15		B	

RELATED TOOLS AND EQUIPMENT

Drill Press	1		B	
Fixed Vice	1		B	
Mobile Radio	1 set		B	
Portable Cart	2		B	
Slings	as required		B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Step Ladders	2		B	
Wire Labeler	2		B	
Wooden/Fibreglass Stepladders	2		B	

PROTECTIVE CLOTHING AND DEVICES

Coveralls	15		B	
Ear Muffs	15		B	
Ear Plugs	15		B	
Eye Wash Bottle (Station)	1		B	
Face Shield	2		B	
Fire Extinguishers	as required		B	
First Aid Kit	as required		B	
Geiger Counter	1		B	
Gloves	15		B	
Hard Hat	15		B	
Mask (Dust)	as required		B	
Safety Boots	15		B	
Safety Glasses	15		B	
Splash Goggles	15		B	
Nitrile gloves (small, medium and Large)	3 boxes		B	

Note: If identifying sets, please include specific information.