

OCCUPATIONAL  
TOOLS AND EQUIPMENT LIST

**Process Operator Occupation**



Government of Newfoundland Labrador  
Department of Education  
Institutional and Industrial Education Division

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## **Preface**

This document is intended as a companion to the 2011 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**

Advisory committees, industry representatives, instructors and apprenticeship staff provided valuable input to the development of this document. Without their dedication to quality apprenticeship training, this document could not have been produced.

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

<b>SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION</b>				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
<b>HAND TOOLS</b>				
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"	<b>3</b>		<b>B</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	<b>5</b>		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	

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<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
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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Steel Rule	2		B	
Strap Wrenches	5		B	
Striker	2		B	
Taps and Dies Set (Imperial and Metric, up to ½")	1 each		B	
Torque Wrench, ½" drive	2		B	
Tube Benders, 1/4" & 3/8" & ½"	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	
<b>POWER TOOLS</b>				
Grinders	2		B	
Hammer Drill, 3/8"	1		B	
Jig Saw	2		B	
Portable Electric Drill, 18-volt	3		B	
Soldering Iron	5		B	
Soldering Torch	5		B	
<b>TEST EQUIPMENT AND ACCESSORIES</b>				
Barometer	1		B	
Lab scale Process Control Unit	5		B	<b>Examples to be found at C.N.A. Ridge Road campus</b>

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				<b>St. John's, Instrumentation and Control Technician/Technologist program</b>
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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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	
<b>RELATED TOOLS AND EQUIPMENT</b>				
Drill Press	1		B	
Fixed Vice	1		B	
Mobile Radio	1 set		B	
Portable Cart	2		B	
Slings	as required		B	

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Step Ladders	2		B	
Wire Labeler	2		B	
Wooden/Fibreglass Stepladders	2		B	
<b>PROTECTIVE CLOTHING AND DEVICES</b>				
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	
Hart 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.