

OCCUPATIONAL TOOLS AND EQUIPMENT LIST

SHEET METAL WORKER



Government of Newfoundland Labrador
Department of Education and Early Childhood Development
Apprenticeship and Trades Certification Division

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Preface

This document is intended as a companion to the March 2018 Plans of Training for the **Sheet Metal Worker** occupation. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeship.

Acknowledgements

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We offer you a sincere thank you.

Contact Information

Department of Education and Early Childhood Development
Apprenticeship and Trades Certification Division
Tel: 709-729-2729 / 1-877-771-3737
Email: app@gov.nl.ca
Web: www.gov.nl.ca/app

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
SHEET METAL WORKER**

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT			
Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
PERSONAL PROTECTIVE EQUIPMENT			
Coveralls	1	B	
Ear Plugs	1 set	B	
Gloves (e.g. Kevlar)	1	B	
Safety Boots	1	B	
Safety Glasses	1	B	
Welding Gloves (TIG)	2 pairs	B	
Welding Goggles	1	B	
Welding Shield	1	B	
HAND TOOLS			
Aviation Snips (R.H. and L.H.)	1 of each	B	
Combination or Straight Snip	1	B	
Drafting Set	1	B	
Hand Seamer/Folding Pliers	1	B	
Marking Pen	1	B	
Scratch Awl	1	B	
Screwdriver Set	1	B	
Setting Hammer	1	B	
Tape measure (1/4 in.)	1	B	

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT

Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
Tape measure (3/4 in.)	1	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
PERSONAL PROTECTIVE EQUIPMENT AND SAFETY EQUIPMENT				
First Aid Kit	2	8	B	O.H. & S. Requirement
Safety Glasses	2	8	B	
Face Shield (Clear)	3	5	B	
Gloves (e.g. Kevlar)	2	8	B	
Hearing Protection (ear plugs)	15 sets	1	B	Tool Crib
Eye Wash Station(s)	2	8	B	Per shop environment
Welding Gloves (TIG)	2 pairs	8	B	
Welding Goggles	2	8	B	
Welding Shield	8	2	B	
HAND TOOLS				
Adjustable Wrench	5	3	B	
Metric & Standard Allen Keys	3 sets of each	5	B	
Aviation Snips R.H. and L.H.	5 of each	3	B	
Ball Peen Hammer	5	3	B	
Bulldog Snips	3	5	B	
Circumference Rule	3	5	B	
C-clamp Vise Grip	10	2	B	Various Sizes

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
Caulking Gun	1	15	B	
Center Punch	5	3	B	
Chalk Line	1	15	B	
Cold Chisels (various)	5	3	B	
Combination Snip	1	15	B	
Dividers (various)	5	3	B	
Files (various types)	15	1	B	
Framing Square	15	1	B	
Groove Seamer - Hand Groover Set	3 sets of each size	5	B	
Hacksaw	3	5	B	
Handseamer/Folding Pliers	5	3	B	
Hand Crimpers	3 sets	5	B	
Hand Dolly (various types)	5	3	B	
Hand Notcher	1	15	B	
Level (2 ft.)	3	5	B	
Marking Pen	15	1	B	
Metal Straight Edge (1 metre)	5	3	B	
Pliers (various)	3 sets	5	B	
Plumb Bob	1	15	B	
Pop Riveter	5	3	B	
Prick Punch	5	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
Rivet Set	3	5	B	
Riveting Hammer	5	3	B	
Scratch Awl	3	5	B	
Screwdriver Set	1	15	B	
Setting Hammer	4	4	B	
Socket Set	2	8	B	
Soldering Copper Sets	2	8	B	
Straight Snip	1	15	B	
Whitney Punch	1	15	B	
Wire and Bolt Cutters	1	15	B	
Wire Brushes	5	3	B	
Wooden Mallett	5	3	B	
LAYOUT AND DRAFTING EQUIPMENT				
Beam Compass	1	15	B	
Drafting Set	3	5	B	
T-Square	15	1	B	
MEASURING TOOLS				
Micrometer	1	15	B	
Spirit level (2 sizes)	2 of each	8	B	
Tape measure (1/4 in.)	2	8	B	
Tape measure (3/4 in.)	2	8	B	
Trammel Point	5	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
METAL FORMING STAKES				
Beak Horn	1	15	B	
Bench Plate	1	15	B	
Blow Horn	1	15	B	
Candle Mould	1	15	B	
Common Square	1	15	B	
Copper Smith	1	15	B	
Creasing Stake	1	15	B	
Double Seaming with Heads	1	15	B	
Hatchet	1	15	B	
Hollow Mandrel	2	8	B	
Solid Mandrel	1	15	B	
Square Stake	1	15	B	
PORTABLE POWER TOOLS AND ACCESSORIES				
Angle Grinder	1	15	B	
Chop Saw	1	15	B	
Cordless Drill (1/2")	3	5	B	
Double Cutter	1	15	B	
Electric Drill (3/8")	3	5	B	
Jigsaw	1	15	B	
Reciprocating Saw	1	15	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
Portable Plasma Cutter	1	15	B	
Portable Spot Welder	1	15	B	
Unishear	1	15	B	
INSPECTION TOOLS				
Manometer	2	8	A	
Sling Psychrometer	8	2	A	
Ductulator Chart	8	2	A	
ROTARY MACHINES				
Beading Machine	1	15	B	
Burring Machine	1	15	B	
Combination Beading and Crimping Machine	1	15	B	
Double Seaming Equipment	1	15	B	
Easy Edger	1	15	B	
Elbow Edging	1	15	B	
Furnace Collar lock	1	15	B	
Slip Roll Former	1	15	B	
Turning Machine	1	15	B	
Wiring Machine	1	15	B	
SHOP TOOLS AND EQUIPMENT				
Bar Folder	1	15	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
Bench Vice	1	15	B	
Box and Pan Brake	1	15	B	
Cleat Folder	1	15	B	
Drill Press	1	15	B	
Four Foot Shear	1	15	B	
Pittsburgh Machine	1	15	B	
Soldering Furnace or Pot	1	15	B	
Universal Hand Brake (8 ft.)	1	15	B	
CNC Plasma Cutting Table (with sheet metal fitting programming)	1	15	B	
Clinch Lock Machine	1	15	B	
Magnetic Brake	1	15	B	
Hydraulic Press	1	15	B	
Hydraulic Shear	1	15	B	
Hydraulic Ironworker	1	15	B	
Power Rolls	1	15	B	
WELDING EQUIPMENT				
AC/DC Power Unit	1	15	B	
MIG Welding Equipment (GMAW)	8	2	E	Pre-employment training (E) requires 1 machine per 2 students.

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
MIG Welding Equipment (GMAW)	15	1	A	Direct entry level 1 (NLCS) and advanced levels require 1 machine per student.
Oxy-acetylene Welding Equipment	15	1	B	
TIG Welding Equipment (GTAW)	8	2	E	Pre-employment training (E) requires 1 machine per 2 students.
TIG Welding Equipment (GTAW)	15	1	A	Direct entry level 1 (NLCS) and advanced levels require 1 machine per student.