

# OCCUPATIONAL TOOLS AND EQUIPMENT LIST

## **SHEET METAL WORKER**



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 March 2013 Plan 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 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 SHEET METAL WORKER

| SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT |                               |  |          |
|--|-------------------------------|--|----------|
| Item   | Units for Individual Students | Required for Entry (E)<br>Advanced (A)<br>Both (B) | Comments |
| <b>PERSONAL PROTECTIVE EQUIPMENT</b>               |                               |  |          |
| 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  |          |
| <b>HAND TOOLS</b>                                  |                               |  |          |
| 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  |          |
| 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              |
| <b>PERSONAL PROTECTIVE EQUIPMENT AND SAFETY EQUIPMENT</b>       |                       |                           |  |                       |
| 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  |                       |
| <b>HAND TOOLS</b>   |                       |                           |  |                       |
| Adjustable Wrench   | 5                     | 3                         | B  |                       |
| Metric & Standard Allen Keys                                    | 3 sets                | 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         |
| Caulking Gun  | 1                     | 15                        | B  |                       |
| Center Punch  | 5                     | 3                         | B  |                       |

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|---|-----------------------|---------------------------|--|----------|
| Item  | Units per 15 Students | Maximum Students per Unit | Required for Entry (E) Advanced (A) Both (B) | Comments |
| Chaulk 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  |          |
| Rivet Set   | 3                     | 5                         | B  |          |
| Riveting Hammer   | 5                     | 3                         | B  |          |
| Scratch Awl   | 3                     | 5                         | B  |          |
| Screwdriver Set   | 1                     | 15                        | B  |          |

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|---|-----------------------|---------------------------|--|----------|
| Item  | Units per 15 Students | Maximum Students per Unit | Required for Entry (E) Advanced (A) Both (B) | Comments |
| 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  | 1                     | 15                        | 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  |          |
| 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  |          |

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|---|-----------------------|---------------------------|--|----------|
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| Copper Smith  | 1                     | 15                        | B  |          |
| Creasing Stake  | 1                     | 15                        | B  |          |
| Double Seaming with Heads                                       | 1                     | 15                        | B  |          |
| Hatchet   | 1                     | 15                        | B  |          |
| Hollow Mandrel  | 1                     | 15                        | B  |          |
| Solid Mandrel   | 1                     | 15                        | B  |          |
| Square Steak  | 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  |          |
| Portable Plasma Cutter  | 1                     | 15                        | B  |          |
| Portable Spot Welder  | 1                     | 15                        | B  |          |
| Unishear  | 1                     | 15                        | B  |          |
| ROTARY MACHINES   |                       |                           |  |          |
| Beading Machine   | 1                     | 15                        | B  |          |
| Burring Machine   | 1                     | 15                        | B  |          |
| Combination Beading and Crimping Machine                        | 1                     | 15                        | B  |          |

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|---|-----------------------|---------------------------|--|----------|
| Item  | Units per 15 Students | Maximum Students per Unit | Required for Entry (E) Advanced (A) Both (B) | Comments |
| Double Seaming Equipment  | 1                     | 15                        | B  |          |
| Easy Edger  | 1                     | 15                        | B  |          |
| Elbow Edging  | 1                     | 15                        | B  |          |
| Furnace Collar lock   | 1                     | 15                        | B  |          |
| Ring and Circle Shears  | 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  |          |
| 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  |          |
| WELDING EQUIPMENT   |                       |                           |  |          |
| AC/DC Power Unit  | 1                     | 15                        | B  |          |
| MIG Welding Equipment (GMAW)                                    | 15                    | 1                         | B  |          |



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| Oxy-acetylene Welding<br>Equipment                                     | 15                               | 1  | B   |                 |
| TIG Welding Equipment  | 15                               | 1  | B   |                 |