CTE Frameworks - Sheet Metalworking Equipment List

May 2024

## Equipment List:

### Safety Gear:

* Safety goggles, gloves, ear protection, and welding aprons.

### Measuring, Marking, and Layout Tools:

* Steel rulers, tape measures
* Squares, combination squares, tee squares, triangle
* Dividers
* Protractors, compass
* Micrometer, calipers
* Marking pens
* Awls
* Scribes, Trammel points
* Drawing board

### Hand Tools:

* Seamers
* Files
* Hand punch
* Hammer
* Mallet

### Cutting Tools:

* Tin snips, aviation snips, bulldog snips
* Nibbler
* Squaring shears, bench shears, or guillotine shears
* Hand turning machines
* Blind rivet gun
* Circle Cutter

### Bending and Shaping Tools:

* Bench brakes, box and pan brakes, or finger brakes
* Slip rolls
* Bar folders
* Cheek benders

### Joining Tools:

* Riveting tools
* Sheet metal screws
* Spot welders
* Soldering irons

### Finishing Tools:

* Files, deburring tools, sandpaper, and emery cloth

### Handheld Power Tools:

* Electric shears, mechanical nibblers, mechanical seamers
* Drills bits, taps and dies
* Masonry rotary hammer drill
* Reciprocating saw
* Right angle grinder
* Air die grinder
* Handheld plasma cutter

### Equipment:

* Turret free standing punch
* Power Shears
* Power rolling equipment
* Drill press
* Iron worker
* Vertical ban saw
* Horizontal ban saw
* Chop saw or cold saw
* Pedestal grinder
* Lock forming machines

### Welding Equipment:

* Gas metal arc welding equipment (GMAW)
* Gas Tungsten Arc welding equipment (GTAW)
* Cutting torch and supplies, swirl ring, electrode and torch tip

### Sheet Metal Stock:

* Various types of sheet metal in different thicknesses e.g., aluminum, steel, copper

### Workbenches and Clamps:

* Sturdy workbenches equipped with vices or clamps

### Maintenance Equipment:

* Lubricants, cleaning materials, and tools for maintaining the sheet metalworking equipment