**Sheet Metal Competencies & Tool List 2023**

**Competencies**

The following is a list of competences to help prepare your contestants for the SkillsUSA North Carolina State Sheet Metal competition:

* How to properly wear safety gear (safety Glasses and Gloves)
* How to cut and notch sheet metal
* How to use tape measure for marking the patterns of the project
* How to fold the metal using finger breaks
* How to use roller for rolling sheet metal curves
* How to use Pittsburgh machine for making Pittsburgh lock and put them together
* How to use S drives and C drives to connect the duct together after each piece has been made
* How to properly use all tools.

**Items student MUST to Bring**

* Safety Glasses
* Gloves (Leather or sheet metal gloves)
* Sheet Metal tools for cutting, notching, & snipping
* Sheet metal hammer and hand bender
* Rivets and rivet gun
* One-page Resume due to the Contest Chair prior to beginning the written exam, which is the first contest station for everyone. Failure to submit the Resume will result in a 10-point penalty on the Overall Score for the entire contest.

***Students may choose to bring other items from the national tool list such as:***

* One each: Aviation M1, Aviation M2, Aviation M3 and combination or pattern tinner’s snips
* 8" sheet metal worker’s vice grips & 8" or 10" regular vice grips
* 12" combination square with glass level
* 24" flat steel square
* 8" combination pliers
* One each 6" and 12" straight-leg sprint dividers
* Flexible steel tape measure
* Scratch awl
* Screwdriver set (minimum one slotted and one Phillips)
* One each ball peen, setting and riveting hammers
* Wood, leather or rubber mallet
* Two hand groovers, one for 1 ⁄4 " grooved lock, one for 5 ⁄16 " grooved lock
* 36" straightedge
* Two wooden pencils & Marking pen
* Drive cleat turner
* Hand-held calculator for written test
* Center punch
* One pound rivet set
* Small trammel points
* Scratch gauges