

Tool List for Skills USA Welding Fabrication 2020

All standard personal safety items: safety glasses, hearing protection, full face shield for grinding & cutting, welding gloves, metal working gloves, weld coat/jacket, leather shoes (or boots-NO SNEAKERS/TENNIS SHOES), welding helmet (at least one per team)

Tools:

115V extension cord (20ft is good), angle hand grinder*, extra discs, at least 2each, for grinder (grinding, cutting, and finishing discs), files: flat and round, soap stone and/or marker, tape measurer, angle-square, straight edge, drafting compass, protractor, assorted C-clamps & locking plier clamps (Visegrip type), chipping hammer, center punch, hammer.

The 2020 project will require a high degree of precision in fabrication and assembly to be successful functioning. It's advised to bring a Dremel type tool with a grind stone to waller out a 1/2" dia hole if project alignment is off by much. Or.. be sure to have a round file and lots of elbow grease!

Please add for 2020:

Post secondary only, will be using GTAW-DC process. Please provide your own tool (grinder) or chemical tungsten sharpening item

The welders we will be using in 2020 are Lincoln Electric's Powermig 210MP.
Operational guide via web link below:

<http://www.lincolnelectric.com/assets/servicenavigator-public/lincoln3/imt10164.pdf>

Welding processes we will be using are GMAW with .035" dia weld wire and SMAW process with 1/8"E7018 & 1/8" E6011

OA cutting of 3/16" thick steel (OA equipment will be provided)

*Angle Grinders **warning:** all grinders must have shields and proper sized discs. **If grinders do not comply they will be banned, disallowed, forbidden to be used!** If a grinder is thought to be unsafe it will be disallowed.