

Novice/Intermediate Welding

The Novice/Intermediate welding contest gives students the opportunity to compete at the Wyoming SkillsUSA Leadership and Skills Conference. This is a State Only Contest. Winners are not eligible to move on to the National conference. Students are given a simplified print and should be able to perform the following processes. Generally, the Novice level is for freshman/sophomore or students that are in their first year of a welding program. The intermediate level is generally for sophomore/junior or students that are in the second part/year of a welding program.

Produce welds using a Shielded Metal Arc Welding (SMAW) process to AWS QC10 standards

Demonstrate safety procedures for SMAW

Demonstrate ability to correctly set up SMAW power sources, related welding equipment and do basic process and equipment troubleshooting for welding of carbon steel and/or stainless steel

Select correct type of electrode based on carbon steel and/or stainless steel plate (1/4" to 1/2" thickness)

Prepare carbon steel and/or stainless steel for welding

Produce welds using a Gas Metal Arc Welding (GMAW) process to AWS QC10 standards

Demonstrate correct safety procedures for GMAW

Demonstrate ability to correctly set up GMAW power sources, related welding equipment and do basic process and equipment troubleshooting

Identify short circuiting, globular, spray and pulsed transfer welding of carbon steel, stainless steel and/or aluminum

Select correct type of filler metal, type of shielding gas, amperage and voltage based on carbon steel, stainless steel and/or aluminum sheet and/or plate (1/16" to 3/8" thickness)

Prepare the carbon steel, stainless steel and/or aluminum for welding

Produce cut materials using an Oxygen Fuel Cutting (OFC) process to AWS QC10 standards

Demonstrate safety procedures for OFC

Demonstrate ability to correctly set up the OFC equipment for cutting and do basic process troubleshooting

Note: This contest is not a freshman, sophomore, junior, senior class. It is based on the skill set the student as acquired. In order to compete at the Advanced Level (which is the national qualifier), students must also be proficient in GTAW process.

