

Suggested Introductory Welding Skills

New Mexico Agriculture Education Classes

Basic Welding Skills – suggested electrodes – 6011, 6010, 7018

1. Stringer beads on scrap metal – electrode order- 6011,6010,7018
(Recommend an A or B quality skill minimum before moving from one skill to the next)
2. Bead plate – 4" x 4" ¼" plate – one electrode on each side, repeat until acceptable level of skill is attained
3. Butt weld –(Flat position) ¼" x 1" strap suggested – all electrodes if possible, test welds
4. Lap Weld – all electrodes
5. T weld – all electrodes
6. Pipe or tubing to a flat plate(pipe or tubing only needs to be 1/12" to 2" long)
7. Horizontal stringer beads
8. Vertical down stringer beads
9. Vertical up stringer beads
10. Overhead if possible to set up
11. Saddle pipe weld if supplies are available
12. Ninety degree corner in pipe

MIG Welding Skills

Repeat all basic welding skills on ¼" plate or 10 gauge metal and on 16 gauge metal.

Oxy-Fuel Cutting Skills

1. Straight cut on flat metal, ¼" metal or 10 gauge
2. Piercing metal and cutting a round or square hole
3. Square cut on pipe
4. 45 degree pipe cut
5. Saddle pipe cut
6. Track torch cut if available

Oxy-Fuel Welding / Brazing Skills

1. Puddle Weld – Molten puddle only with no electrode
2. Stringer bead on 16 gauge and 10 gauge metal (steel rod and brazing rod)
3. Lap weld(steel rod and brazing rod)
4. T weld (steel rod and brazing rod)

Plasma Cutting

1. Basic cutting on light gauge and thicker gauge metal
2. Basic plasma cam use, if available