

## Exploratory VICA Welding

### **Scope of Exploratory VICA Welding Contest**

In this contest the student will be tested on the ability to follow written instructions and to perform basic welding techniques. The student will be checked on proper safety precautions and use personal safety equipment.

The following are some simple welding skills a student can be graded on.

#### **Station #1:**

Using 3/8 inch plate steel 10 inches square, soapstone and some form straight edge lay out four times on the plate steel. The first line will be drawn 1 ½ inches from the left edge across the piece of steel. Draw three other lines across the steel 1 inch over to the right and parallel to the previous lines drawn. Use shielded-arc welder, run a bead of weld on each line drawn. Each weld should be in the opposite direction of previous weld. Check for proper welder settings and welding techniques.

#### **Station #2:**

In this station the student will use a mig wire feed welder. Using a 6 inch square of 3/8 inch plate steel, the student will spot weld this piece of steel in an upright position to the pieces used in station #1. This piece should be positioned 1 inch to right of the last weld performed in #1 above. Weld te two pieces of metal together on the opposite side of the track weld. Here again check for welder settings and techniques.

#### **Station #3:**

Use oxyacetylene cutting torch, cut a 3 inch diameter hole in the 10 inch square piece of metal used in #1 and #2 above. This hole would be drawn by a judge and centered 3 inches down and 2 inches in from the right end of the steel plate. Check student for proper gauge adjustments and cutting techniques.

#### **Student Eligibility:**

Age: 14 thru 16

Grades: 8, 9, 10

Note: Tenth-grade students must be a first-year student in program

Electrodes Used: E6010 5 pt and E 7018

3/32 or 1/8 size