Renton Technical College – Welding Program

WELD 102 - Oxyacetylene Welding and Thermal Cutting – 8 credits

Competencies:

OAW – Oxygen/Acetylene Welding

1. OAW-01 Perform surfacing weld in the flat position using 16 gauge mild sheet steel and 1/16" filler rod
2. OAW-02 Perform weld on a butt joint using 16 gauge mild sheet steel and 1/16" filler rod in flat position
3. OAW-03 Perform weld on a butt joint using 16 gauge mild sheet steel and 1/16" filler rod in vertical position
4. OAW-04 Perform weld on a corner joint using 16 gauge mild sheet steel without filler metal in flat position
5. OAW-05 Perform weld on a corner joint using 16 gauge mild sheet steel without filler metal in vertical position
6. OAW-06 Perform weld on a lap joint using 16 gauge mild sheet steel and 1/16" filler rod in flat position
7. OAW-07 Perform weld on a lap joint using 16 gauge mild sheet steel and 1/16" filler rod in vertical position
8. OAW-08 Perform weld on a tee joint using 16 gauge mild sheet steel tee and 1/16" filler rod in flat position
9. OAW-09 Perform weld on a tee joint using 16 gauge mild sheet steel tee and 1/16" filler rod in vertical position
10. OAW-10 Student shall demonstrate an understanding of all equipment used and variables associated with the OAW process The course requires the student to read and view the Victor OXY-FUEL Welding, Cutting & Heating Guide, and the Victor Cutting and OXY-FUEL safety video

TC – Thermal Cutting

1. TC-01 Perform an Oxygen/Acetylene cutting test using blue print
2. TC-02 Perform Oxygen/Acetylene flushing on steel plate
3. TC-03 Student shall demonstrate an understanding of all equipment used and variables with the cutting process. The course requires the student to read and view the Victor OXY-FUEL Welding, Cutting & Heating Guide, and the Victor Cutting and OXY-FUEL safety video

B – Brazing

1. B-01 Perform BRAZE in flat position on 16 gauge mild steel sheet
2. B-02 Perform BRAZE on a butt joint in flat position using 16 gauge mild steel sheet
3. B-03 Perform BRAZE on a butt joint in vertical position using 16 gauge mild steel sheet
4. B-04 Perform BRAZE on a lap joint in flat position using 16 gauge mild steel sheet
5. B-05 Perform BRAZE on a lap joint in vertical position using 16 gauge mild steel sheet
6. B-06 Perform BRAZE on a tee joint in flat position using 16 gauge mild steel sheet
7. B-07 Perform BRAZE on a tee joint in vertical position using light gauge mild steel sheet
8. B-08 Perform BRAZE on a V-groove in a flat position using ¼" plate
9. B-09 Perform BRAZE on a V-groove in a vertical position using ¼" plate
10. B-10 Student shall demonstrate an understanding of all equipment used and variables with the cutting process. The course requires the student to read and view the Victor OXY-FUEL Welding, Cutting & Heating Guide, and the Victor Cutting and OXY-FUEL safety video.

RTC Approved 10/12/09