

NO RTEC JOB SPECIFIC SKILLS COMPETENCY

WELDER, COMBINATION (Arc and Gas)

DOT CODE: 819.384-010 SVP 6

CORE SKILL COMPETENCIES/INDICATORS

1. Can pass a simulated welding certificated standards and procedures test. (R, IN, I, S, T) *Note: This item requires achievement documentation, not just rating (Pre-test deficiency = No; Post-test proficiency = Yes)*
2. Can identify latest developments in metals, equipment, and welding processes/techniques. (R, IN, S, T)
3. Can demonstrate knowledge of manual and automated arc/gas equipment, and can select and set up as appropriate. (R, IN, S, T)
4. Can demonstrate ability to read and interpret blueprints, work orders, and/or layout specifications. (IN, S)
5. Can demonstrate proper technique used to analyze damaged metal. (IN, S)
6. Can identify and apply knowledge of Industry safety standards and emergency procedures. (R, IN, S, T)
7. Can demonstrate ability to perform automated or semi-automatic (machine) welding tasks. (R, S, T)
8. Can demonstrate ability to identify cast iron, steel, and non-ferrous metals by visual and spark test. (R, IN, S, T)
9. Can demonstrate ability to read basic welding symbols and follow directions in construction of a welded joint. (R, IN, S, T)
10. Can demonstrate ability to read a rule and measure to 1/16th" or 1 mm. (IN, S)
11. Can demonstrate proper technique used to light and adjust an oxyacetylene torch to a neutral flame. (R, S, T)
12. Can demonstrate proper technique used to complete a butt weld in a flat position on 16 gauge sheet or thinner metal (with or without a filler rod). (R, S, T)
13. Can demonstrate proper technique used to complete a corner weld in the flat position on 1/8th" metal without a filler rod. (R, S, T)
14. Can demonstrate proper technique used to complete a fillet weld in the flat position on 16 gauge and 1/8th" metals with a filler rod. (R, S, T)
15. Can demonstrate proper technique used to complete a horizontal butt weld on 16 gauge or thinner metal with a filler rod. (R, S, T)
16. Can demonstrate proper technique used to complete a vertical fillet weld on 16 gauge or thinner metal with a filler rod. (R, S, T)
17. Can demonstrate the correct set up procedure and use of the oxyacetylene flame cutting torch. (R, S, T)
18. Can demonstrate proper techniques used to braze steel or cast iron. (R, S, T)
19. Can explain the difference and advantages between the two systems of AC and AC/DC. (IN, S)
20. Can demonstrate ability to complete a single pass fillet weld in the flat position using: _____ 6013 electrodes; _____ 6011 electrodes; _____ 7018 electrodes. (R, S, T)
21. Can demonstrate ability to complete a single pass butt weld in the flat position using: _____ 6013 electrodes; _____ 6011 electrodes; _____ 7018 electrodes. (R, S, T)
22. Can demonstrate proper technique used to complete a multiple pass butt weld in the flat position. (R, S, T)
23. Can demonstrate proper technique used to complete a multiple pass fillet weld in the flat position. (R, S, T)
24. Can demonstrate proper technique used to complete a multiple pass butt weld in the vertical position. (R, S, T)

25. **Can demonstrate proper technique used to complete a multiple pass butt weld in the horizontal position. (R, S, T)**
26. **Can demonstrate proper technique used to complete an overhead weld. (R, S, T)**
27. **Can demonstrate proper technique used to examine welds to insure they meet standards or specifications. (R, IN, S, T)**
28. **Can demonstrate ability to work with precision as regards the attainment of set limits, tolerances, or standards. (R, S, T).**
29. **Can demonstrate ability to perform basic arithmetic operations. (IN, S)**