

Welding*

Manufacturing Career Cluster

(AAS Non-Transfer Degree)

SAN JUAN COLLEGE

NATURE OF WORK

The most common way to permanently join metal parts is by welding. Welding is the process of heating metal pieces, then melting and fusing them to form a permanent bond. Welding, because of its strength, is used in shipbuilding, automobile manufacturing and repair, aerospace applications, and thousands of other manufacturing activities. In the construction of buildings, bridges and other structures, welding is used to join beams. There are many types of welding equipment set ups in a variety of positions, such as flat, vertical, horizontal and overhead. Welders may use semiautomatic welding, which incorporates machinery, such as a wire feeder, to perform welding tasks. The most common is manual welding, in which the work is entirely controlled by the welder.

WORKING CONDITIONS

Welders are often exposed to a number of hazards, including the intense light created by the arc, poisonous fumes, and very hot materials. Some of the safety gear is special shoes, goggles, hoods with protective lenses and other devices designed to prevent burns and eye injuries and as protection from falling objects. Automated welders are not exposed to as many dangers, but a face shield or goggles usually provide adequate protection for these workers. Welders can work outdoors in inclement weather and indoors in confined spaces. They may be required to lift heavy objects and work in a variety of awkward positions.

TRAINING & QUALIFICATIONS

Training for welding can range from a few weeks of school or on-the-job training for low-skilled positions to several years of combined school and on-the-job training for highly skilled. Formal training is available in high school and postsecondary institutions such as community colleges.

JOB OUTLOOK

Job prospects should be excellent. Employment of welders is expected to grow about as fast as the average through 2014. Many openings will arise as workers retire or leave the occupation. The demand for welders will be high because almost every manufacturing industry uses welding at some stage of manufacturing or in the repair and maintenance of equipment.

CAREER OPTIONS

Welding, soldering, and brazing workers

ESTIMATED SALARY RANGE

New Mexico — \$20,120 - \$37,259

Nationally — \$28,640 - \$47,080

RELATED OCCUPATIONS

Machinists, machine setters, operators, and tenders. Tool and die makers, sheet metal workers and boilermakers.

SJC Basic Program Information

- A student must earn a grade of "C" or higher in order to receive a degree or certificate.
- Attendance is an intricate part of the learning process, thus, poor attendance can contribute to poor student success.



For further information go to:

www.sanjuacollege.edu/pages/158.asp

www.bls.gov/oco/ocos226.htm

www.careers-nm.org

*Most of this information is from the Occupational Outlook Handbook, 2005-2006

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