

Occupations in Welding

Precision Production Trades

> Brazer > Solderer > Welder/Cutter > Welding Machine Operator

Welding Facts

- The earliest recorded welds occurred in 3,500 B.C., the Bronze Age. In long-sealed Egyptian tombs, pictures of welders and their ancient tools have been discovered.
- During the Middle Ages, the art of blacksmithing was developed, and many items of iron were produced which were welded by hammering. It was not until the 19th century that welding as we know it today was invented.

Source: http://www.welding.com/edu_weld2.shtml

- In 1969, Russian cosmonauts were the first to attempt to weld in space. Today, advances in welding technology have made welding essential for projects like the construction of the International Space Station.
- Over 50 percent of U.S. products require welding, including race cars, bridges, ships, computers, medical devices, farm equipment, cell phones, scooters, and MP3 players.

Source: http://careersinwelding.com/welding_fun_facts.php

"All of the CTE courses I took in high school have prepared me to be a strategic thinker and hands-on learner. . . CTE has prepared me to go straight from high school into the welding industry."

Shyann Young, Welding student

Break free of the traditions and barriers that limit your choices.
What's stopping you? Be different! Try something new!
Is a nontraditional career in your future?

Talk to your school counselor
about a nontraditional career in STS.

www.UtahCTE.org



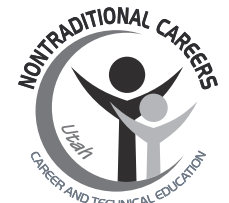
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Welding

A NONTRADITIONAL CAREER PATH FOR WOMEN



Break free of the barriers that limit your career choices.



SKILLED AND TECHNICAL SCIENCES EDUCATION

Nontraditional Careers

Did you know a nontraditional career is any occupation in which women or men comprise 25 percent or less of its total employment?

Women in nontraditional occupations earn more money than those in female-oriented fields.

Choosing a nontraditional career path can mean:

- > Greater job satisfaction.
- > Higher wages and better benefits.
- > Great advancement opportunities.
- > Economic self-sufficiency.
- > Broader job opportunities.
- > Freedom to pursue a career related to your interests and abilities.

BREAK with tradition and explore a nontraditional career!

Welding as a Career

Welding is the process of joining metal parts by melting and fusing them to form a permanent bond. There are over 100 different welding processes; however, the most common and simplest type is arc welding, where electrical currents create heat and bond metals together.

Welders work in many industries, including automobile manufacturing and repair, large building construction, refining, shipbuilding, and manufacturing.

Career and Technical Education Pathways

High school is a great time to try out a wide range of Career Pathways by enrolling in Career and Technical Education (CTE) courses. As an added bonus, you will be developing work-related skills that can be put to immediate and profitable use.

CTE provides courses and Pathways consistent with industry training and certification, thus providing depth and meaning for both visual and hands-on learning and education that can be applied in today's job market.

Through participation in CTE, Skilled and Technical Sciences Education can guide you as you take courses in your chosen Pathway.

By taking an STS course, you will acquire essential technical and leadership skills, and learn how to properly use tools and equipment that will enable you to successfully work in your area of choice. You will also gain an important foundation of knowledge and skills necessary for continuing your education in STS.

Employment

In 2008, welders, cutters, solderers, and brazers held approximately 412,000 jobs in the United States, with about 65 percent of jobs being in manufacturing.¹

In Utah, an entry-level position for a welder generally starts at an average hourly wage of \$18.30 or \$38,064 per year.² Increases in salary are based upon training and experience. In Utah, a welder must be licensed.

Working Conditions

Welders work both outdoors and indoors. They may have to work from high platforms or in awkward positions. They may also be required to lift heavy objects. Many of these situations depend on the specific industry in which the welder works. Welders are often exposed to intense light created by the welding process, as well as hazardous fumes, and burns. Welders wear protective equipment such as hoods with protective lenses, leather gloves, and leather clothing. Welders also wear safety shoes and goggles.

4.7 percent of the welding, soldering, and brazing workers are women.³

Outlook

Although the need for welders will continue to decline over the next decade due to continued enhancements of productivity and increased automation, the outlook for welders in manufacturing is strong. This is due to the importance and versatility of welding as a manufacturing process.

In Utah, the annual growth rate in this occupation is expected to be 4.8 percent through the year 2016, with employment totaling 740.²

UtahFutures

Log on to UtahFutures.org to learn more about a career in welding. From the home page, click on the "occupations" option to find an occupation that interests you and link to the description for that occupation. (Refer to the sample list of occupations on the back of this page.) Check out employment opportunities, working conditions, outlook, skills and abilities, and wages for your selected occupation.

Is a nontraditional career in your future?



¹ U.S. Bureau of Labor Statistics

² Utah Department of Workforce Services

³ Department of Labor, Women's Bureau, Nontraditional Occupations for Women in 2008