According to U.S. Bureau of Labor Statistics, welders may work in a variety of industries, including car racing, but two out of three welding jobs are in manufacturing industries.
WELDERS ENGAGE IN A PROCESS THAT PERMANENTLY JOINS METAL PARTS together by applying heat to the pieces of metal, melting them and fusing them to form a bond. The most common process is gas metal arc welding (GMAW), but gas tungsten arc welding and shielded metal arc welding are also widely used. According to Careers in Welding, an American Welding Society (AWS) and National Center for Welding and Training (Weld-Ed) Web site, in more advanced welding technologies, lasers are combined with GMAW in a hybrid process to make cuts that are up to a half inch deep, narrow and extremely precise.

The Workplace
According to U.S. Bureau of Labor Statistics, welders may work in a variety of industries, including car racing, but two out of three welding jobs are in manufacturing industries. Welding is used in building airplanes and ships, as well as in building and maintaining power plants, and the heating and cooling systems for hospitals, offices and manufacturing plants.

Educational Requirements
While training requirements for welders may vary, the highly skilled positions require both classroom and on-the-job training, which is available in high schools and technical and community colleges. Other sources of education include the military and unions such as the UA, which is the union of plumbers, pipefitters and steamfitters. Some employers require certification, such as that offered by AWS.

Earnings
According to the U.S. Department of Labor’s Occupational Outlook Handbook, the median wages of welders, cutters, solderers and brazers were $16.13 an hour in May 2008, with the highest 10 percent earning more than $24.38. But Careers in Welding notes that making $100,000 or more isn’t out of the question for the very best welders who are willing to work in some far-off spots.

Job Outlook
The *Occupational Outlook Handbook* projects that good job opportunities are expected for skilled welders. Some employers report difficulty finding qualified workers trained in the latest technologies, so graduates of welding schools are having little trouble finding employment.

**Explore More**

For more information about the career of welder and the education and training it requires, here are some places to turn.

American Welding Society  
[www.aws.org](http://www.aws.org)

Careers in Welding  
[www.careersinwelding.com](http://www.careersinwelding.com)

Fabricators and Manufacturers Association  
[www.fmanet.org](http://www.fmanet.org)

National Association of Manufacturers  
[www.nam.org](http://www.nam.org)

The National Center for Welding Education and Training  
[www.weld-ed.org](http://www.weld-ed.org)