

Occupational Profile



Welders & Cutters

OVERVIEW

Use hand-welding or flame-cutting equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Belongs to the Manufacturing career cluster and Production career pathway.

SKILLS & KNOWLEDGE NEEDED

Basic Skills:

- Operation and Control
- Critical Thinking
- Monitoring
- Reading Comprehension

Technology Skills:

- Analytical or Scientific Software
- Calendar and Scheduling Software
- Computer Aided Design Software
- Data Base User Interface and Query Software
- Spreadsheet Software

Knowledge

- Production and Processing
- Design
- Administration and Management
- Mechanical
- Mathematics

DOES THIS DESCRIBE YOU?

Work Interests involve descriptive categories (compatible with Holland's Model) attributed to success in this career:

- **Realistic** – Involves work activities that include practical, hands-on problems and solutions; often dealing with plants, animals, and real-world materials like wood, tools, and machinery.
- **Conventional** – Enjoy following set procedures and routines developed through higher authority; includes working with data and details more than with ideas.

Work Styles reflect an ability to acquire skills and knowledge for success in this career:

- **Attention to Detail**
- **Dependability**
- **Adaptability/Flexibility**
- **Independence**
- **Innovation**

Work Values are associated with aspects of work that provide satisfaction in this career:

- **Relationships**—Provide service to others in noncompetitive environment.
- **Support**—Management backing.
- **Working Conditions**—Job security; good working conditions.

Aptitudes reflect an ability to acquire skills and knowledge for success in this career:

- **Arm-Hand Steadiness**
- **Near Vision**
- **Control Precision**
- **Multilimb Coordination**
- **Problem Sensitivity**

ESTIMATED & PROJECTED EMPLOYMENT

Occupational Title	2014 Estimated Employment	2024 Projected Employment	2014-24 Employment Change	Annual Growth Rate (%)	Total Annual Openings
Total, All Occupations	1,795,100	1,949,240	154,140	0.9	58,145
Production Occupations	161,460	173,485	12,030	0.7	4,695
Welders, Cutters, Solderers, & Brazers	8,510	9,140	630	0.7	305

Source: <https://www.iowaworkforcedevelopment.gov/occupational-projections>

2017 WAGE & SALARY (\$)

Occupational Title	Mean Wage	Mean Salary	Entry Wage	Entry Salary	Exp Wage	Exp Salary
Total All Occupations	20.93	43,539	10.09	20,991	26.35	54,813
Production Occupations	17.06	35,492	11.59	24,108	19.80	41,185
Welders, Cutters, Solderers, & Brazers	17.88	37,189	13.87	28,848	19.88	41,360

Source: <https://www.iowaworkforcedevelopment.gov/occupational-employment-and-wages>

EDUCATION & TRAINING



Education	Work Experience	Job Training
High School Diploma	None	Moderate-Term On-The-Job

A diploma is required for most welder positions with training received from vocational schools, industry-based programs, and/or apprenticeships. Sources: <https://www.iowaworkforcedevelopment.gov/occupational-projections>, https://www.bls.gov/emp/ep_education_training_system.htm, and <https://www.dol.gov/apprenticeship/>

NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level	Minimum Skill Level	Maximum Skill Level
Applied Mathematics	3	3	5
Locating Information	4	3	5
Reading for Information	3	3	5
Applied Technology	3	3	6
Business Writing	1	1	1
Workplace Observation	3	1	4
Listening for Understanding	2	1	3

An ACT assessment-based credential issued in determining essential work skills needed for employment success across industries and occupations. The greater the score, the greater the skill level (Bronze = 3, Silver = 4, Gold = 5, Platinum = 6 & higher). Source: <http://www.act.org/content/act/en/products-and-services/workkeys-for-employers/assessments.html>

PRIMARY INDUSTRY SECTORS

(Where are Welders and Cutters Employed?)

Machinery Mfg
 Fabricated Metal Product Mfg
 Transportation Equipment Mfg
 Primary Metal Mfg
 Repair and Maintenance
 Self Employed
 Specialty Trade Contractors
 Agriculture
 Electrical Equipment, Appliance, and Component Mfg

Source: <https://www.iowaworkforcedevelopment.gov/occupational-projections>

ADDITIONAL SOURCES:

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