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## Welders, Cutters, and Welder Fitters

Louisiana

### Summary of Job Duties

**Welders, Cutters, and Welder Fitters** [Video](#) - Use hand-welding or flame-cutting equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

### Detailed Job Description

**Welders, Cutters, and Welder Fitters** Welders, cutters, solderers, and brazers use hand-held or remotely controlled equipment to join or cut metal parts.

Welders, cutters, solderers, and brazers use hand-held or remotely controlled equipment to join or cut metal parts. They also fill holes, indentations, or seams in metal products.

Duties

Welders, cutters, solderers, and brazers typically do the following:

- Study blueprints, sketches, or specifications

- Calculate the dimensions of parts to be welded
- Inspect structures or materials to be welded
- Ignite torches or start power supplies
- Monitor the welding process to avoid overheating
- Maintain equipment and machinery

Welding is the most common way of permanently joining metal parts. In this process, heat is applied to metal pieces, melting and fusing them to form a permanent bond. Because of its strength, welding is used in shipbuilding, automobile manufacturing and repair, aerospace applications, and thousands of other manufacturing activities. Welding also is used to join steel beams in the construction of buildings, bridges, and other structures and to join pipes in pipelines, power plants, and refineries.

Welders work in a wide variety of industries, from car racing to manufacturing. The work that welders do and the equipment they use vary with the industry. Arc welding, the most common type of welding today, uses electrical currents to create heat and bond metals together—but there are more than 100 different processes that a welder can use. The type of weld is usually determined by the types of metals being joined and the conditions under which the welding is to take place.

Cutters use heat to cut and trim metal objects to specific dimensions. Their work is closely related to that of welders. However, instead of joining metals, cutters use the heat from an electric arc, a stream of ionized gas called plasma, or burning gases to cut and trim metal objects to specific dimensions. Cutters also dismantle large objects, such as ships, railroad cars, automobiles, buildings, and aircraft. Some operate and monitor cutting machines similar to those used by welding machine operators.

Solderers and brazers also use heat to join two or more metal objects together. Soldering and brazing are similar, except that the temperature used to melt the filler metal is lower in soldering. Soldering uses metals with a melting point below 840 degrees Fahrenheit. Brazing uses metals with a higher melting point.

Soldering and brazing workers use molten metal to join two pieces of metal. However, the metal added during the soldering or brazing process has a melting point lower than that of the piece, so only the added metal is melted, not the piece. Therefore, these processes normally do not create distortions or weaknesses in the piece, as can occur with welding.

Soldering commonly is used to make electrical and electronic circuit boards, such as computer chips. Soldering workers tend to work with small pieces that must be positioned precisely.

Brazing often is used to connect cast iron and thinner metals that the higher temperatures of welding would warp. Brazing also can be used to apply coatings to parts in order to reduce wear and protect against corrosion.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

## **Job Zone**

The section below shows the job zone information for Welders, Cutters, and Welder Fitters. Job Zone Three: Medium Preparation Needed.

Education	Experience	Training
Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.	Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.	Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Jobs Available

This section shows the number of job openings advertised online in Louisiana for Welders, Cutters, and Welder Fitters and for the related occupational group of Production Occupations on November 22, 2020 (Jobs De-duplication Level 2).

Occupation	Job Openings
Welders, Cutters, and Welder Fitters	<u>77</u>
Production Occupations	<u>1,006</u>

Source: Online advertised jobs data

## Monthly Job Count

This section shows the number of job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana October, 2020 (Jobs De-duplication Level 2).

Occupation	Job Openings
Welders, Cutters, and Welder Fitters 	126

 GREEN OCCUPATIONS

Source: Online advertised jobs data

## Jobs Area Distribution

This section shows the distribution of number of job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana by parishes on November 22, 2020 (Jobs De-duplication Level 2).



Job Openings



Job Source: Online advertised jobs data

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

## Jobs in Related Occupations

This section shows the number of job openings advertised online in Louisiana for occupations related to Welders, Cutters, and Welder Fitters on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Occupation	Median Wage	Job Openings	*Related By
1	Welders, Cutters, and Welder Fitters	\$50,895	<u>77</u>	N/A
2	<u>Industrial Truck and Tractor Operators</u>	\$37,033	<u>57</u>	O*NET
3	<u>Helpers--Production Workers</u>	\$31,693	<u>50</u>	O*NET
4	<u>Painters, Construction and Maintenance</u>	\$42,182	<u>26</u>	O*NET
5	<u>Agricultural Equipment Operators</u>	\$27,021	<u>24</u>	O*NET

Rank	Occupation	Median Wage	Job Openings	*Related By
6	<u>Structural Metal Fabricators and Fitters</u> 🌱	\$45,331	<u>16</u>	O*NET
7	<u>Helpers--Carpenters</u> 🌱 🌱	\$33,810	<u>14</u>	O*NET
8	<u>Roofers</u> 🌱 🌱	\$37,593	<u>9</u>	O*NET
9	<u>Metal Workers and Plastic Workers, All Other</u>	N/A	<u>7</u>	SOC4
10	<u>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</u>	\$49,704	<u>6</u>	O*NET
11	<u>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</u>	\$25,514	<u>4</u>	O*NET
12	<u>Layout Workers, Metal and Plastic</u>	\$58,729	<u>4</u>	O*NET
13	<u>Foundry Mold and Coremakers</u>	N/A	<u>3</u>	O*NET
14	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	\$44,296	<u>2</u>	SOC4
15	<u>Sawing Machine Setters, Operators, and Tenders, Wood</u>	\$36,720	<u>2</u>	O*NET
16	<u>Dredge Operators</u>	\$35,406	<u>2</u>	O*NET
17	<u>Coil Winders, Tapers, and Finishers</u>	\$29,280	<u>1</u>	O*NET
18	<u>Engine and Other Machine Assemblers</u> 🌱	\$46,161	<u>1</u>	O*NET
19	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$42,806	<u>1</u>	O*NET
20	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	<u>1</u>	O*NET
21	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$33,935	<u>1</u>	O*NET
22	<u>Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	<u>1</u>	O*NET
23	<u>Shoe Machine Operators and Tenders</u>	N/A	<u>1</u>	O*NET
24	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	\$29,955	<u>1</u>	O*NET
25	<u>Cutters and Trimmers, Hand</u>	N/A	<u>1</u>	O*NET
26	<u>Ophthalmic Laboratory Technicians</u> 🌱	\$28,262	<u>1</u>	O*NET
27	<u>Painters, Transportation Equipment</u>	N/A	<u>1</u>	O*NET

Rank	Occupation	Median Wage	Job Openings	*Related By
28	<a href="#">Painting, Coating, and Decorating Workers</a>	\$29,854	1	O*NET
29	<a href="#">Stone Cutters and Carvers, Manufacturing</a>	\$27,396	1	O*NET

 BRIGHT OUTLOOK NATIONALLY |  GREEN OCCUPATIONS

Job Source: Online advertised jobs data

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

\*Related By: O\*NET™ - The [Occupational Information Network](#). O\*NET is a registered trademark of the [US Department of Labor/Employment and Training Administration](#).

SOC4 - Occupational grouping based on 1st 4 digits of the [Standard Occupational Classification](#) system.

## Candidates Available

This section shows potential candidates in the workforce system in Louisiana for Welders, Cutters, and Welder Fitters and for the related occupational group of Production Occupations on November 22, 2020.

Occupation	Candidates
Welders, Cutters, and Welder Fitters	2,989
Production Occupations	20,543

Source: Individuals with active résumés in the workforce system.

## Candidate Area Distribution

This section shows the distribution of potential candidates in the workforce system for Welders, Cutters, and Welder Fitters in Louisiana by parishes on November 22, 2020.

Rank	Area Name	Median Wage	Candidates
1	<a href="#">Jefferson Parish</a>	\$50,895 state level wages	1,572
2	<a href="#">Orleans Parish</a>	\$50,895 state level wages	1,541
3	<a href="#">East Baton Rouge Parish</a>	\$50,895 state level wages	1,517

<b>Rank</b>	<b>Area Name</b>	<b>Median Wage</b>	<b>Candidates</b>
4	<u>Lafayette Parish</u>	\$50,895 state level wages	1,412
5	<u>Iberia Parish</u>	\$50,895 state level wages	1,401
6	<u>Ascension Parish</u>	\$50,895 state level wages	1,391
7	<u>Livingston Parish</u>	\$50,895 state level wages	1,373
8	<u>Iberville Parish</u>	\$50,895 state level wages	1,367
9	<u>St. Charles Parish</u>	\$50,895 state level wages	1,366
10	<u>St. Martin Parish</u>	\$50,895 state level wages	1,363



Candidates



Candidate Source: Individuals with active résumés in the workforce system.

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

## Candidates in Related Occupations

This section shows how many potential candidates in the workforce system were looking for work in Louisiana in occupations related to Welders, Cutters, and Welder Fitters on November 22, 2020.

Rank	Occupation	Median Wage	Candidates	*Related By
1	<u>Helpers--Production Workers</u> 🌟	\$31,693	3,590	O*NET
2	Welders, Cutters, and Welder Fitters 🟢	\$50,895	2,989	N/A
3	<u>Industrial Truck and Tractor Operators</u> 🟢	\$37,033	1,038	O*NET
4	<u>Painters, Construction and Maintenance</u>	\$42,182	960	O*NET
5	<u>Helpers--Carpenters</u> 🌟 🟢	\$33,810	591	O*NET
6	<u>Structural Metal Fabricators and Fitters</u> 🟢	\$45,331	264	O*NET



Rank	Occupation	Median Wage	Candidates	*Related By
7	<u>Agricultural Equipment Operators</u> 🌟	\$27,021	253	O*NET
8	<u>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</u>	\$49,704	176	O*NET
9	<u>Painting, Coating, and Decorating Workers</u>	\$29,854	128	O*NET
10	<u>Roofers</u> 🌟 🍃	\$37,593	99	O*NET
11	<u>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</u> 🍃	\$40,118	94	O*NET
12	<u>Painters, Transportation Equipment</u>	N/A	89	O*NET
13	<u>Printing Press Operators</u>	\$30,411	74	O*NET
14	<u>Floor Layers, Except Carpet, Wood, and Hard Tiles</u> 🌟	\$43,944	65	O*NET
15	<u>Layout Workers, Metal and Plastic</u>	\$58,729	45	O*NET
16	<u>Engine and Other Machine Assemblers</u> 🍃	\$46,161	41	O*NET
17	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	\$29,955	39	O*NET
18	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$33,935	38	O*NET
19	<u>Metal Workers and Plastic Workers, All Other</u>	N/A	34	SOC4
20	<u>Cutters and Trimmers, Hand</u>	N/A	29	O*NET
21	<u>Sawing Machine Setters, Operators, and Tenders, Wood</u>	\$36,720	26	O*NET
22	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$42,806	25	O*NET
23	<u>Refractory Materials Repairers, Except Brickmasons</u>	N/A	22	O*NET
24	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	22	O*NET
25	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	\$44,296	21	SOC4
26	<u>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</u>	\$25,514	19	O*NET

Rank	Occupation	Median Wage	Candidates	*Related By
27	<u>Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	19	O*NET
28	<u>Ophthalmic Laboratory Technicians</u> ✨	\$28,262	19	O*NET
29	<u>Dredge Operators</u>	\$35,406	18	O*NET
30	<u>Rail Car Repairers</u>	\$49,923	17	O*NET
31	<u>Floor Sanders and Finishers</u> ✨	N/A	14	O*NET
32	<u>Fallers</u>	N/A	12	O*NET
33	<u>Tool Grinders, Filers, and Sharpeners</u>	\$33,312	10	SOC4
34	<u>Bicycle Repairers</u> ✨	N/A	9	O*NET
35	<u>Mine Shuttle Car Operators</u>	N/A	9	O*NET
36	<u>Model Makers, Metal and Plastic</u>	N/A	8	O*NET
37	<u>Print Binding and Finishing Workers</u>	\$32,129	8	O*NET
38	<u>Tapers</u>	N/A	7	O*NET
39	<u>Coil Winders, Tapers, and Finishers</u>	\$29,280	6	O*NET
40	<u>Forging Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	6	O*NET
41	<u>Mechanical Door Repairers</u> ✨	\$41,529	5	O*NET
42	<u>Welders, Cutters, Solderers, and Brazers</u>	\$50,895	4	SOC4
43	<u>Solderers and Brazers</u> 🌱	\$50,895	4	O*NET
44	<u>Stone Cutters and Carvers, Manufacturing</u>	\$27,396	4	O*NET
45	<u>Molding and Casting Workers</u>	\$27,396	4	O*NET
46	<u>Foundry Mold and Coremakers</u>	N/A	3	O*NET
47	<u>Tool and Die Makers</u>	\$43,334	2	SOC4
48	<u>Timing Device Assemblers and Adjusters</u>	N/A	1	O*NET

🌟 BRIGHT OUTLOOK NATIONALLY | 🌱 GREEN OCCUPATIONS

Candidate Source: Individuals with active résumés in the workforce system.

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

\*Related By: O\*NET™ - The Occupational Information Network. O\*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.

SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

## Jobs and Candidates Available

This section shows the number of job openings advertised online, as well as potential candidates in the workforce system in Louisiana for Welders, Cutters, and Welder Fitters and for the related occupational group of Production Occupations on November 22, 2020 (Jobs De-duplication Level 2).

Occupation	Job Openings	Candidates	Candidates per Job
Welders, Cutters, and Welder Fitters	<u>77</u>	2,989	38.82
Production Occupations	<u>1,006</u>	20,543	20.42

Job Source: Online advertised jobs data

Candidate Source: Individuals with active résumés in the workforce system.

## Jobs and Candidates Area Distribution

This section shows the distribution of number of job openings advertised online, as well as potential candidates in the workforce system for Welders, Cutters, and Welder Fitters in Louisiana by parishes on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Area Name	Median Wage	Job Openings	Candidates	Candidates per Job
1	<u>St. Charles Parish</u>	\$50,895 state level wages	<u>1</u>	1,366	1,366.00
2	<u>St. Mary Parish</u>	\$50,895 state level wages	<u>1</u>	1,328	1,328.00
3	<u>Rapides Parish</u>	\$50,895 state level wages	<u>1</u>	1,325	1,325.00
4	<u>St. Bernard Parish</u>	\$50,895 state level wages	<u>1</u>	1,309	1,309.00
5	<u>St. Tammany Parish</u>	\$50,895 state level wages	<u>1</u>	1,298	1,298.00
6	<u>Richland Parish</u>	\$50,895 state level wages	<u>1</u>	1,197	1,197.00

Rank	Area Name	Median Wage	Job Openings	Candidates	Candidates per Job
7	<u>St. Landry Parish</u>	\$50,895 state level wages	<u>2</u>	1,275	637.50
8	<u>St. Helena Parish</u>	\$50,895 state level wages	<u>2</u>	1,272	636.00
9	<u>Cameron Parish</u>	\$50,895 state level wages	<u>2</u>	1,254	627.00
10	<u>Ascension Parish</u>	\$50,895 state level wages	<u>3</u>	1,391	463.67



Candidates per Job



Job Source: Online advertised jobs data

Candidate Source: Individuals with active résumés in the workforce system.

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

## National Supply and Demand Summary

**Welders, Cutters, and Welder Fitters** Employment of welders, cutters, solderers, and brazers is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations.

Employment growth reflects the need for welders in manufacturing because of the importance and versatility of welding as a manufacturing process. The basic skills of welding are similar across industries, so welders can easily shift from one industry to another, depending on where they are needed most. For example, welders who are laid off in the automotive manufacturing industry may be able to find work in the oil and gas industry.

The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings. Also, the construction of new power generation facilities and, specifically, pipelines transporting natural gas and oil may result in new jobs.

### Job Prospects

Overall job prospects will vary with the worker's skill level. Job prospects should be good for welders trained in the latest technologies. However, welders who do not have up-to-date training may face strong competition for jobs.

For all welders, job prospects should be better for those willing to relocate.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

## Employers by Number of Job Openings

This section shows the employers with the highest number of job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Employer Name	Job Openings
1	B&D Contracting, Inc.	4
2	Bollinger Shipyards, Inc.	4
3	Advantage Resourcing	3
4	Aptim	3
5	C & C Marine And Repair, L.L.C.	3
6	Crest Industries	3
7	General Electric Company	3

Rank	Employer Name	Job Openings
8	Sabre Industries, Inc.	<u>3</u>
9	Bo-Mac Contractors, LTD.	<u>2</u>
10	EMCOR Group, Inc.	<u>2</u>

Source: Online advertised jobs data

## Advertised Job Skills

This section shows the top advertised detailed job skills found in job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Job Skill	Advertised Skill Group	Job Opening Match Count
1	Welding	Welding Skills	<u>131</u>
2	Gas metal arc welding (GMAW)	Welding Skills	<u>29</u>
3	Arc welding	Welding Skills	<u>16</u>
4	Assemble parts	Assembler Skills	<u>10</u>
5	Preventative maintenance	Maintenance Technician Skills	<u>10</u>
6	Work from blueprints	Assembler Skills	<u>7</u>
7	Tig welding	Welding Skills	<u>6</u>
8	Must be flexible	Basic Skills	<u>5</u>
9	Attention to detail	Basic Skills	<u>4</u>
10	Decision making	Basic Skills	<u>4</u>

Source: Online advertised jobs data

## Advertised Tools and Technology

This section shows the top advertised detailed tools and technologies found in job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Tool or Technology	Advertised Tool and Technology Group	Job Opening Match Count
1	Welding equipment	Welding Tools	<u>43</u>
2	Gas welding equipment	Gas Welding/Brazing or Cutting Apparatus	<u>25</u>

Rank	Advertised Detailed Tool or Technology	Advertised Tool and Technology Group	Job Opening Match Count
3	Ladders	Ladders	<u>23</u>
4	Grills	Commercial Use Grills	<u>16</u>
5	Wire Brush	Wire Brushes	<u>13</u>
6	Cutting equipment	Printing Cutters	<u>12</u>
7	Flame cutting equipment	Flame Cutting Machines	<u>12</u>
8	Straightening presses	Hydraulic Press Brake	<u>10</u>
9	Portable Grinder	Power Grinders	<u>10</u>
10	Safety glasses	Safety Glasses	<u>10</u>

Source: Online advertised jobs data

## Typical Job Skills

This section shows the job skills that are related to Welders, Cutters, and Welder Fitters.

Rank	Typical Job Skills	Typical Skill Category
1	Operate welding equipment	Work Output
2	Assemble metal or plastic parts or products	Work Output
3	Align parts or workpieces to ensure proper assembly	Work Output
4	Lay out parts to prepare for assembly	Work Output
5	Measure dimensions of completed products or workpieces to verify conformance to specifications	Information Input
6	Select production equipment according to product specifications	Mental Processes
7	Ignite fuel to activate heating equipment	Work Output
8	Adjust equipment controls to regulate gas flow	Work Output
9	Determine metal or plastic production methods	Mental Processes
10	Monitor equipment operation to ensure that products are not flawed	Information Input
11	Mark products, workpieces, or equipment with identifying information	Information Input

<b>Rank</b>	<b>Typical Job Skills</b>	<b>Typical Skill Category</b>
12	Review blueprints or other instructions to determine operational methods or sequences	Information Input
13	Operate grinding equipment	Work Output
14	Trim excess material from workpieces	Work Output
15	Clean workpieces or finished products	Work Output
16	Smooth metal surfaces or edges	Work Output
17	Signal others to coordinate work activities	Interacting With Others
18	Heat material or workpieces to prepare for or complete production	Work Output
19	Design templates or patterns	Mental Processes
20	Mount materials or workpieces onto production equipment	Work Output
21	Notify others of equipment repair or maintenance needs	Interacting With Others
22	Watch operating equipment to detect malfunctions	Information Input
23	Clean production equipment	Work Output
24	Cut industrial materials in preparation for fabrication or processing	Work Output
25	Shape metal workpieces with hammers or other small hand tools	Work Output
26	Disassemble equipment for maintenance or repair	Work Output
27	Repair parts or assemblies	Work Output
28	Reshape metal workpieces to established specifications	Work Output
29	Fill cracks, imperfections, or holes in products or workpieces	Work Output
30	Estimate material requirements for production	Mental Processes
31	Maintain inventories of materials, equipment, or products	Interacting With Others
32	Operate metal or plastic forming equipment	Work Output
33	Assemble metal structures	Work Output
34	Drill holes in parts, equipment, or materials	Work Output
35	Assemble temporary equipment or structures	Work Output
36	Apply protective or decorative finishes to workpieces or products	Work Output



<b>Rank</b>	<b>Typical Job Skills</b>	<b>Typical Skill Category</b>
37	Mix ingredients to create specific finishes	Work Output
38	Solder parts or workpieces	Work Output
39	Melt metal, plastic, or other materials to prepare for production	Work Output

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Personal Skills

This section shows the personal skills that are most useful for Welders, Cutters, and Welder Fitters. Click on a link in the Personal Skills column to view more detailed information.

<b>Personal Skill</b>	<b>Skill Description</b>	<b>Rank by Importance (Out of 100)</b>
<a href="#"><u>Critical Thinking</u></a>	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	53
<a href="#"><u>Operation and Control</u></a>	Controlling operations of equipment or systems.	53
<a href="#"><u>Monitoring</u></a>	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.	50
<a href="#"><u>Reading Comprehension</u></a>	Understanding written sentences and paragraphs in work related documents.	50
<a href="#"><u>Active Listening</u></a>	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	47
<a href="#"><u>Speaking</u></a>	Talking to others to convey information effectively.	47
<a href="#"><u>Operation Monitoring</u></a>	Watching gauges, dials, or other indicators to make sure a machine is working properly.	47
<a href="#"><u>Judgment and Decision Making</u></a>	Considering the relative costs and benefits of potential actions to choose the most appropriate one.	47
<a href="#"><u>Quality Control Analysis</u></a>	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.	44

<b>Personal Skill</b>	<b>Skill Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Time Management</u>	Managing one's own time and the time of others.	44
<u>Mathematics</u>	Using mathematics to solve problems.	44
<u>Coordination</u>	Adjusting actions in relation to others' actions.	44
<u>Complex Problem Solving</u>	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.	41
<u>Equipment Selection</u>	Determining the kind of tools and equipment needed to do a job.	38
<u>Instructing</u>	Teaching others how to do something.	38
<u>Writing</u>	Communicating effectively in writing as appropriate for the needs of the audience.	38
<u>Social Perceptiveness</u>	Being aware of others' reactions and understanding why they react as they do.	38
<u>Repairing</u>	Repairing machines or systems using the needed tools.	38
<u>Troubleshooting</u>	Determining causes of operating errors and deciding what to do about it.	35
<u>Management of Personnel Resources</u>	Motivating, developing, and directing people as they work, identifying the best people for the job.	35
<u>Active Learning</u>	Understanding the implications of new information for both current and future problem-solving and decision-making.	35
<u>Service Orientation</u>	Actively looking for ways to help people.	35
<u>Persuasion</u>	Persuading others to change their minds or behavior.	31
<u>Learning Strategies</u>	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.	31
<u>Systems Analysis</u>	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.	31

<b>Personal Skill</b>	<b>Skill Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Systems Evaluation</u>	Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.	31
<u>Equipment Maintenance</u>	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.	28
<u>Management of Material Resources</u>	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.	25
<u>Negotiation</u>	Bringing others together and trying to reconcile differences.	25
<u>Operations Analysis</u>	Analyzing needs and product requirements to create a design.	22
<u>Technology Design</u>	Generating or adapting equipment and technology to serve user needs.	22
<u>Management of Financial Resources</u>	Determining how money will be spent to get the work done, and accounting for these expenditures.	16
<u>Installation</u>	Installing equipment, machines, wiring, or programs to meet specifications.	13
<u>Programming</u>	Writing computer programs for various purposes.	6
<u>Science</u>	Using scientific rules and methods to solve problems.	6

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Typical Education Requirements

**Welders, Cutters, and Welder Fitters** Welders, Cutters, and Welder Fitters usually require at least a High school diploma or equivalent. However, not all employers may make this a hiring requirement.

Source: This information is based on the BLS Occupational Outlook Handbook (OOH).

## Required Level of Education

This section shows the results of a national survey listing the most common required level of education for Welders, Cutters, and Welder Fitters.

<b>Rank</b>	<b>Required Level of Education</b>	<b>Percentage of Respondents</b>
1	Post-Secondary Certificate - awarded for training completed after high school (for example, in agriculture or natural resources, computer services, personal or culinary services, engineering technologies, healthcare, construction trades, mechanic and repair technologies, or precision production)	41.32%
2	High School Diploma - or the equivalent (for example, GED)	39.62%
3	Some College Courses	13.17%
4	Less than a High School Diploma	5.85%
5	Associate's Degree (or other 2-year degree)	0.05%

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## On The Job Training

This section shows the results of a national survey listing the most common lengths of on the job training for Welders, Cutters, and Welder Fitters.

<b>Rank</b>	<b>On The Job Training</b>	<b>Percentage of Respondents</b>
1	Over 6 months, up to and including 1 year	38.64%
2	Over 1 year, up to and including 2 years	21.43%
3	Over 1 month, up to and including 3 months	18.90%
4	Over 2 years, up to and including 4 years	8.96%
5	Anything beyond short demonstration, up to and including 1 month	6.23%
6	Over 3 months, up to and including 6 months	3.24%
7	None or short demonstration	2.48%
8	Over 4 years, up to and including 10 years	0.06%
9	Over 10 years	0.06%

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## On-Site or In-Plant Training

This section shows the results of a national survey listing the most common lengths of on-site or in-plant training for Welders, Cutters, and Welder Fitters.

Rank	On-Site or In-Plant Training	Percentage of Respondents
1	Over 6 months, up to and including 1 year	21.57%
2	Over 1 month, up to and including 3 months	21.10%
3	Over 2 years, up to and including 4 years	20.21%
4	Over 1 year, up to and including 2 years	19.55%
5	Over 3 months, up to and including 6 months	10.57%
6	Up to and including 1 month	4.52%
7	None	2.42%
8	Over 4 years, up to and including 10 years	0.06%

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Education Level of Jobs and Candidates

This section shows the minimum level of education requested by employers on job openings advertised online, as well as the educational attainment of potential candidates in the workforce system that are looking for jobs as Welders, Cutters, and Welder Fitters in Louisiana on November 22, 2020. There were 43 job openings advertised online that did not specify a minimum education requirement (Jobs De-duplication Level 2).

Rank	Education Level	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
1	No Minimum Education Requirement	<u>20</u>	25.97%	0	N/A
2	Less than High School	0	N/A	385	12.88%
3	High School Diploma or Equivalent	<u>9</u>	11.69%	1,358	45.43%
4	1 Year of College or a Technical or Vocational School	<u>3</u>	3.90%	325	10.87%
5	2 Years of College or a Technical or Vocational School	0	N/A	274	9.17%
6	3 Years of College or a Technical or Vocational School	0	N/A	77	2.58%
7	Vocational School Certificate	<u>2</u>	2.60%	454	15.19%


Rank	Education Level	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
8	Associate's Degree	0	N/A	78	2.61%
9	Bachelor's Degree	0	N/A	31	1.04%
10	Master's Degree	0	N/A	2	0.07%
11	Specialized Degree (e.g. MD, DDS)	0	N/A	5	0.17%
12	Not Specified	<u>43</u>	55.84%	0	N/A

Job Source: Online advertised jobs data


Candidate Source: Individuals with active résumés in the workforce system.

## Education Training Programs

This section shows the Education Training Programs for Welders, Cutters, and Welder Fitters in Louisiana.

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
<a href="#"><u>Advanced Welding School, LLC</u></a>	<a href="#"><u>GMAW/FCAW PIPE</u></a> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$8,000	8 Weeks	
<a href="#"><u>Advanced Welding School, LLC</u></a>	<a href="#"><u>GMAW/FCAW STRUCTURAL</u></a> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$8,000	8 Weeks	

<b>Provider Name</b>	<b>Program Name</b>	<b>Location</b>	<b>Tuition</b>	<b>Length</b>	<b>WIOA Eligible</b>
<u>Advanced Welding School, LLC</u>	<u>GTAW ADVANCED EXOTIC ALLOY</u> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$12,000	8 Weeks	
<u>Advanced Welding School, LLC</u>	<u>GTAW PIPE</u> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$9,000	8 Weeks	
<u>Advanced Welding School, LLC</u>	<u>GTAW STRUCTURAL</u> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$9,000	8 Weeks	
<u>Advanced Welding School, LLC</u>	<u>SMAW PIPE</u> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$8,000	8 Weeks	

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
<u>Advanced Welding School, LLC</u>	<u>SMAW STRUCTURAL</u> An industry-recognized certificate or certification, Employment, A measurable skills gain leading to a credential, A measurable skills gain leading to employment	Walker, LA	\$8,000	8 Weeks	
<u>Associated Builders &amp; Contractors - Lake Charles (Pelican)</u>	<u>Welding Level 1 - 3</u>	WESTLAKE, LA	\$8,400	720 Hours	
<u>Associated Builders and Contractors - B.R. (Pelican)</u>	<u>WELDING - FAST TRACK</u>	BATON ROUGE, LA	\$1,033	384 Hours	
<u>Associated Builders and Contractors - B.R. (Pelican)</u>	<u>Welding Level 1 - 3</u>	BATON ROUGE, LA	\$8,400	720 Hours	

Source: U.S. Department of Commerce, Bureau of the Census, Midyear Estimates

## Advertised Job Certifications

This section shows the top advertised certification groups found in job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Certification Group	Advertised Certification Sub-Category	Job Opening Match Count
1	American Welding Society (AWS) Certifications	Welding	3
2	International Executive Housekeepers Association (IEHA)	Housekeeping	1



Rank	Advertised Certification Group	Advertised Certification Sub-Category	Job Opening Match Count
3	American Council for Accredited Certification (ACAC)	Environmental Science	1

Source: Online advertised jobs data

## Training Program Completers

There is no data available for Welders, Cutters, and Welder Fitters in Louisiana.

## National Education, Training, Licensing and Qualifications

### Welders, Cutters, and Welder Fitters Education & Training

A high school diploma or equivalent, combined with technical and on-the-job training, is typically required for anyone to become a welder, cutter, solderer, or brazer. High school technical education courses and postsecondary institutions, such as vocational-technical institutes, community colleges, and private welding, soldering, and brazing schools offer formal technical training. In addition, the various branches of the U.S. Armed Forces operate welding and soldering schools.

Courses in blueprint reading, shop mathematics, mechanical drawing, physics, chemistry, and metallurgy are helpful.

An understanding of electricity also is helpful, and knowledge of computers is gaining importance as welding, soldering, and brazing machine operators become more responsible for programming robots and other computer-controlled machines.

Although numerous employers are willing to hire inexperienced entry-level workers and train them on the job, many prefer to hire workers who have been through training or credentialing programs. Even entry-level workers with formal technical training still receive several months of on-the-job training.

### Licenses, Certifications, and Registrations

Courses leading to certification are offered at many welding schools. For example, the American Welding Society offers the Certified Welder designation.

Some welding positions require general certification in welding or certification in specific skills, such as Certified Welding Inspector and Certified Robotic Arc Welding.

The Institute for Printed Circuits offers certification and training in soldering. In industries such as aerospace and defense, which need highly skilled workers, many employers require these certifications. Certification can show mastery of lead-free soldering techniques, which are important to many employers.

Some employers pay the cost of training and testing for employees.

### Important Qualities

**Detail oriented.** Welders, cutters, solderers, and brazers perform precision work, often with straight edges and minimal flaws. The ability to see details and characteristics of the joint and detect changes in molten metal flows requires good eyesight and attention to detail.

**Manual dexterity.** Welders, cutters, solderers, and brazers must have a steady hand to hold a torch in one place. Workers must also have good hand–eye coordination.

**Physical stamina.** The ability to endure long periods of standing and repetitious movements is important for welders, cutters, solderers, and brazers.

**Physical strength.** Welders, cutters, solderers, and brazers must be in good physical condition. They often must lift heavy pieces of metal and move welding or cutting equipment, and they sometimes bend, stoop, or reach while working.

**Spatial-orientation skills.** Welders, cutters, solderers, and brazers must read, understand, and interpret two- and three-dimensional diagrams in order to fit metal products correctly.

**Technical skills.** Welders, cutters, solderers, and brazers must operate manual or semiautomatic welding equipment to fuse metal segments.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

## Typical Work Experience Requirements

**Welders, Cutters, and Welder Fitters** Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Related Work Experience

This section shows the results of a national survey listing the most common related work experience for Welders, Cutters, and Welder Fitters.

Rank	Related Work Experience	Percentage of Respondents
1	Over 2 years, up to and including 4 years	30.04%

<b>Rank</b>	<b>Related Work Experience</b>	<b>Percentage of Respondents</b>
2	Over 1 year, up to and including 2 years	17.17%
3	Over 3 months, up to and including 6 months	12.83%
4	Over 10 years	10.54%
5	Over 4 years, up to and including 6 years	10.53%
6	Over 6 years, up to and including 8 years	10.48%
7	Over 6 months, up to and including 1 year	4.17%
8	Over 1 month, up to and including 3 months	4.08%
9	None	0.11%
10	Up to and including 1 month	0.06%

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Work Experience of Jobs and Candidates

This section shows the minimum required work experience requested by employers on job openings advertised online, as well as the experience level of potential candidates in the workforce system that are looking for jobs as Welders, Cutters, and Welder Fitters in Louisiana on November 22, 2020. There were 44 job openings advertised online that did not specify a minimum experience requirement (Jobs De-duplication Level 2).

<b>Rank</b>	<b>Experience</b>	<b>Job Openings</b>	<b>Percentage of Job Openings</b>	<b>Potential Candidates</b>	<b>Percentage of Potential Candidates</b>
1	Not Specified	44	57.14%	0	N/A
2	Entry Level	2	2.60%	0	N/A
3	Less than 1 year	6	7.79%	155	5.19%
4	1 Year to 2 Years	16	20.78%	123	4.12%
5	2 Years to 5 Years	9	11.69%	298	9.97%
6	5 Years to 10 Years	0	N/A	402	13.45%
7	More than 10 Years	0	N/A	2,011	67.28%

Job Source: Online advertised jobs data  
Candidate Source: Individuals with active résumés in the workforce system.

## Current Job Order Wage Information

The employer has NOT indicated a salary range for this job. The information below shows statistics on typical salaries in the local labor market for Welders, Cutters, and Welder Fitters. This data is NOT an indication of what this employer is willing to pay for this job.

## Employment Wage Statistics

This section shows the estimated employment wage statistics for individuals in Louisiana employed for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in 2019.

Rate Type / Statistical Type	Entry level	Median	Experienced
Annual wage or salary	\$33,141	\$50,895	\$79,041
Hourly wage	\$15.93	\$24.47	\$38.00

Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.

## Wage Rates on Advertised Jobs

This section shows a statistical breakdown of available wage data on the 77 job openings advertised online for Welders, Cutters, and Welder Fitters in Louisiana that posted a salary on November 22, 2020.

Rate Type / Statistical Type	Entry Level	Median	Experienced
Annual wage or salary	\$36,003	\$41,400	\$47,427
Hourly Wage	\$17.31	\$19.90	\$22.80

Source: Online advertised jobs data

Note: This information is based on actual job orders and is not based on a statistically valid labor market survey. Hourly wage rate calculations in this section assume a 40 hour work week.

## Desired Salary of Available Candidates

This section shows the desired salary of potential candidates in the workforce system that are looking for jobs as Welders, Cutters, and Welder Fitters in Louisiana on November 22, 2020.

Rank	Desired Salary	Potential Candidates	Percentage of Potential Candidates
1	Not Specified	818	27.02%
2	\$5,000 - \$19,999	25	0.83%
3	\$20,000 - \$34,999	476	15.72%
4	\$35,000 - \$49,999	921	30.42%
5	\$50,000 - \$64,999	509	16.81%
6	\$65,000 - \$79,999	207	6.84%
7	\$80,000 - \$94,999	49	1.62%
8	\$95,000 or more	23	0.76%





Source: Individuals with active résumés in the workforce system.

## Wage Rates Area Distribution

There is no data available for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana.

## Wage Rates in Related Occupations

This section shows a comparison of 2019 median annual rates for occupations that are in the same occupational family as Welders, Cutters, and Welder Fitters for Louisiana.

Rank	Occupation	Median	*Related By
1	<u>Layout Workers, Metal and Plastic</u>	\$58,729	O*NET
2	<u>Welders, Cutters, Solderers, and Brazers</u>	\$50,895	SOC4
3	Welders, Cutters, and Welder Fitters 	\$50,895	N/A
4	<u>Solderers and Brazers</u> 	\$50,895	O*NET
5	<u>Rail Car Repairers</u>	\$49,923	O*NET
6	<u>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</u>	\$49,704	O*NET
7	<u>Engine and Other Machine Assemblers</u> 	\$46,161	O*NET
8	<u>Structural Metal Fabricators and Fitters</u> 	\$45,331	O*NET
9	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	\$44,296	SOC4

Rank	Occupation	Median	*Related By
10	<u>Floor Layers, Except Carpet, Wood, and Hard Tiles</u> 🌟	\$43,944	O*NET
11	<u>Tool and Die Makers</u>	\$43,334	SOC4
12	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$42,806	O*NET
13	<u>Painters, Construction and Maintenance</u>	\$42,182	O*NET
14	<u>Mechanical Door Repairers</u> 🌟	\$41,529	O*NET
15	<u>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</u> 🌟	\$40,118	O*NET
16	<u>Roofers</u> 🌟 🌱	\$37,593	O*NET
17	<u>Industrial Truck and Tractor Operators</u> 🌱	\$37,033	O*NET
18	<u>Sawing Machine Setters, Operators, and Tenders, Wood</u>	\$36,720	O*NET
19	<u>Dredge Operators</u>	\$35,406	O*NET
20	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	\$33,935	O*NET
21	<u>Helpers--Carpenters</u> 🌟 🌱	\$33,810	O*NET
22	<u>Tool Grinders, Filers, and Sharpeners</u>	\$33,312	SOC4
23	<u>Print Binding and Finishing Workers</u>	\$32,129	O*NET
24	<u>Helpers--Production Workers</u> 🌟	\$31,693	O*NET
25	<u>Printing Press Operators</u>	\$30,411	O*NET
26	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	\$29,955	O*NET
27	<u>Painting, Coating, and Decorating Workers</u>	\$29,854	O*NET
28	<u>Coil Winders, Tapers, and Finishers</u>	\$29,280	O*NET
29	<u>Ophthalmic Laboratory Technicians</u> 🌟	\$28,262	O*NET
30	<u>Stone Cutters and Carvers, Manufacturing</u>	\$27,396	O*NET
31	<u>Molding and Casting Workers</u>	\$27,396	O*NET
32	<u>Agricultural Equipment Operators</u> 🌟	\$27,021	O*NET
33	<u>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</u>	\$25,514	O*NET
34	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET

Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.

\*Related By: O\*NET™ - The Occupational Information Network. O\*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.

SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

## Wage Rates by Industry

There is no data available for Welders, Cutters, and Welder Fitters in Louisiana.

## National Earnings Data Summary

**Welders, Cutters, and Welder Fitters** The median annual wage for welders, cutters, solderers, and brazers was \$39,390 in May 2016. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$26,800, and the highest 10 percent earned more than \$62,100.

In May 2016, the median annual wages for welders, cutters, solderers, and brazers in the top industries in which they worked were as follows:

Specialty trade contractors \$42,900  
Repair and maintenance 39,340  
Manufacturing 38,200  
Merchant wholesalers, durable goods 37,790

Wages for welders, cutters, solderers, and brazers vary with the worker's experience and skill level, the industry, and the size of the company.

Most welders, cutters, solderers, and brazers work full time, and overtime is common. Many manufacturing firms have two or three 8- to 12-hour shifts each day, allowing the firm to continue production around the clock if needed. As a result, welders, cutters, solderers, and brazers may work evenings and weekends.

Source: U.S. Department of Labor Bureau of Labor Statistics

## Occupational Employment & Future Employment Outlook

This section shows the long term employment projections for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana from 2016-2026.

<b>Occupation</b>	<b>2016 Estimated Employment</b>	<b>2026 Projected Employment</b>	<b>Total 2016- 2026 Employment Change</b>	<b>2016-2026 Annual Avg. Percent Change</b>
Welders, Cutters, Solderers, and Brazers	15,902	17,381	1,479	0.89%
Total All	2,034,986	2,203,144	168,158	0.80%

Source: Occupational Employment Projections

## Employment Data Area Distribution

This section shows the distribution of the 2016 estimated employment for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana by regional labor market area.

<b>Rank</b>	<b>Area</b>	<b>2016 Estimated Employment</b>
1	<u>2nd Regional Labor Market Area, Baton Rouge</u>	4,097
2	<u>4th Regional Labor Market Area, Lafayette</u>	3,399
3	<u>1st Regional Labor Market Area, New Orleans</u>	3,007
4	<u>5th Regional Labor Market Area, Lake Charles</u>	2,013
5	<u>3rd Regional Labor Market Area, Houma</u>	1,370
6	<u>7th Regional Labor Market Area, Shreveport</u>	1,025
7	<u>6th Regional Labor Market Area, Alexandria</u>	602
8	<u>8th Regional Labor Market Area, Monroe</u>	438
















Source: Labor Market Statistics, Occupational Employment Projections Program



# Employment Data in Related Occupations

This section shows the 2016 Estimated Employment in Louisiana for occupations related to Welders, Cutters, and Welder Fitters.

Rank	Occupation	2016 Estimated Employment	*Related By
1	<a href="#">Solderers and Brazers</a> 	15,902	O*NET
2	<a href="#">Welders, Cutters, and Welder Fitters</a> 	15,902	SOC4
3	<a href="#">Welders, Cutters, Solderers, and Brazers</a>	15,902	SOC4
4	<a href="#">Painters, Construction and Maintenance</a>	8,434	O*NET
5	<a href="#">Industrial Truck and Tractor Operators</a> 	6,776	O*NET
6	<a href="#">Helpers--Production Workers</a> 	5,874	O*NET
7	<a href="#">Structural Metal Fabricators and Fitters</a> 	2,175	O*NET
8	<a href="#">Helpers--Carpenters</a>  	1,894	O*NET
9	<a href="#">Printing Press Operators</a>	1,537	O*NET
10	<a href="#">Painters, Transportation Equipment</a>	968	O*NET
11	<a href="#">Roofers</a>  	832	O*NET
12	<a href="#">Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</a> 	670	O*NET
13	<a href="#">Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</a>	623	O*NET
14	<a href="#">Agricultural Equipment Operators</a> 	620	O*NET
15	<a href="#">Sawing Machine Setters, Operators, and Tenders, Wood</a>	484	O*NET
16	<a href="#">Ophthalmic Laboratory Technicians</a> 	442	O*NET
17	<a href="#">Tapers</a>	422	O*NET
18	<a href="#">Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</a>	373	O*NET
19	<a href="#">Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</a>	363	O*NET
20	<a href="#">Rail Car Repairers</a>	358	O*NET
21	<a href="#">Layout Workers, Metal and Plastic</a>	357	O*NET
22	<a href="#">Print Binding and Finishing Workers</a>	341	O*NET
23	<a href="#">Floor Layers, Except Carpet, Wood, and Hard Tiles</a> 	326	O*NET

Rank	Occupation	2016 Estimated Employment	*Related By
24	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	303	O*NET
25	<u>Tool and Die Makers</u>	259	SOC4
26	<u>Fallers</u>	241	O*NET
27	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	194	O*NET
28	<u>Dredge Operators</u>	193	O*NET
29	<u>Molding and Casting Workers</u>	188	O*NET
30	<u>Stone Cutters and Carvers, Manufacturing</u>	188	O*NET
31	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	178	O*NET
32	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	173	SOC4
33	<u>Metal Workers and Plastic Workers, All Other</u>	158	SOC4
34	<u>Painting, Coating, and Decorating Workers</u>	126	O*NET
35	<u>Tool Grinders, Filers, and Sharpeners</u>	115	SOC4
36	<u>Engine and Other Machine Assemblers</u> 🌱	73	O*NET
37	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	51	O*NET
38	<u>Cutters and Trimmers, Hand</u>	48	O*NET
39	<u>Coil Winders, Tapers, and Finishers</u>	36	O*NET
*	<u>Bicycle Repairers</u> 🌱	Confidential	O*NET
*	<u>Floor Sanders and Finishers</u> 🌱	Confidential	O*NET
*	<u>Forging Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Confidential	O*NET
*	<u>Foundry Mold and Coremakers</u>	Confidential	O*NET
*	<u>Mechanical Door Repairers</u> 🌱	Confidential	O*NET
*	<u>Model Makers, Metal and Plastic</u>	Confidential	O*NET
*	<u>Pourers and Casters, Metal</u>	Confidential	O*NET
*	<u>Refractory Materials Repairers, Except Brickmasons</u>	Confidential	O*NET

\* Rank is suppressed for confidential data.

Source: Occupational Employment Projections

\*Related By: O\*NET™ - The Occupational Information Network. O\*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.

SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

## Projected Annual Openings

This section shows the long term projected annual openings for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana from 2016 to 2026.

<b>Occupation</b>	<b>Total Annual Average Openings</b>	<b>Annual Average Openings Due to Growth</b>	<b>Annual Average Openings Due to Replacement</b>
Welders, Cutters, Solderers, and Brazers	N/A	N/A	N/A
Production	N/A	N/A	N/A

Source: Labor Market Statistics, Occupational Employment Projections Program

## Projected Annual Openings Area Distribution

This section shows the distribution of the total annual average openings for Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana by regional labor market area from 2016 to 2026.

Rank	Area	Total Annual Average Openings
1	<u>1st Regional Labor Market Area, New Orleans</u>	N/A
2	<u>2nd Regional Labor Market Area, Baton Rouge</u>	N/A
3	<u>3rd Regional Labor Market Area, Houma</u>	N/A
4	<u>4th Regional Labor Market Area, Lafayette</u>	N/A
5	<u>5th Regional Labor Market Area, Lake Charles</u>	N/A
6	<u>6th Regional Labor Market Area, Alexandria</u>	N/A
7	<u>7th Regional Labor Market Area, Shreveport</u>	N/A
8	<u>8th Regional Labor Market Area, Monroe</u>	N/A

There is no total annual average openings data available for Welders, Cutters, and Welder Fitters in Louisiana.





Source: Labor Market Statistics, Occupational Employment Projections Program

## Projected Annual Openings in Related Occupations

This section shows the projected total annual average openings in Louisiana for occupations related to Welders, Cutters, and Welder Fitters from 2016 to 2026.

Rank	Occupation	Total Annual Average Openings	*Related By
1	<u>Agricultural Equipment Operators</u> 🟡	N/A	O*NET
2	<u>Coil Winders, Tapers, and Finishers</u>	N/A	O*NET
3	<u>Cutters and Trimmers, Hand</u>	N/A	O*NET
4	<u>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</u> 🟢	N/A	O*NET
5	<u>Dredge Operators</u>	N/A	O*NET
6	<u>Engine and Other Machine Assemblers</u> 🟢	N/A	O*NET
7	<u>Fallers</u>	N/A	O*NET

Rank	Occupation	Total Annual Average Openings	*Related By
8	<u>Floor Layers, Except Carpet, Wood, and Hard Tiles</u> 🌟	N/A	O*NET
9	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	SOC4
10	<u>Helpers--Carpenters</u> 🌟 🌿	N/A	O*NET
11	<u>Helpers--Production Workers</u> 🌟	N/A	O*NET
12	<u>Industrial Truck and Tractor Operators</u> 🌿	N/A	O*NET
13	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET
14	<u>Layout Workers, Metal and Plastic</u>	N/A	O*NET
15	<u>Metal Workers and Plastic Workers, All Other</u>	N/A	SOC4
16	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET
17	<u>Molding and Casting Workers</u>	N/A	O*NET
18	<u>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET
19	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET
20	<u>Ophthalmic Laboratory Technicians</u> 🌟	N/A	O*NET
21	<u>Painters, Construction and Maintenance</u>	N/A	O*NET
22	<u>Painters, Transportation Equipment</u>	N/A	O*NET
23	<u>Painting, Coating, and Decorating Workers</u>	N/A	O*NET
24	<u>Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</u>	N/A	O*NET
25	<u>Print Binding and Finishing Workers</u>	N/A	O*NET
26	<u>Printing Press Operators</u>	N/A	O*NET
27	<u>Rail Car Repairers</u>	N/A	O*NET
28	<u>Roofers</u> 🌟 🌿	N/A	O*NET
29	<u>Sawing Machine Setters, Operators, and Tenders, Wood</u>	N/A	O*NET
30	<u>Solderers and Brazers</u> 🌿	N/A	O*NET
31	<u>Stone Cutters and Carvers, Manufacturing</u>	N/A	O*NET
32	<u>Structural Metal Fabricators and Fitters</u> 🌿	N/A	O*NET

Rank	Occupation	Total Annual Average Openings	*Related By
33	<u>Tapers</u>	N/A	O*NET
34	<u>Tool and Die Makers</u>	N/A	SOC4
35	<u>Tool Grinders, Filers, and Sharpeners</u>	N/A	SOC4
36	<u>Welders, Cutters, and Welder Fitters</u> 	N/A	SOC4
37	<u>Welders, Cutters, Solderers, and Brazers</u>	N/A	SOC4
38	<u>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</u>	N/A	O*NET
39	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	N/A	O*NET
*	<u>Bicycle Repairers</u> 	Confidential	O*NET
*	<u>Floor Sanders and Finishers</u> 	Confidential	O*NET
*	<u>Forging Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Confidential	O*NET
*	<u>Foundry Mold and Coremakers</u>	Confidential	O*NET
*	<u>Mechanical Door Repairers</u> 	Confidential	O*NET
*	<u>Model Makers, Metal and Plastic</u>	Confidential	O*NET
*	<u>Pourers and Casters, Metal</u>	Confidential	O*NET
*	<u>Refractory Materials Repairers, Except Brickmasons</u>	Confidential	O*NET

 BRIGHT OUTLOOK NATIONALLY |  GREEN OCCUPATIONS

\* Rank is suppressed for confidential data.

Source: Occupational Employment Projections

## Industries by Employment

This section shows the industries that employed the highest number of Welders, Cutters, Solderers, and Brazers (no data available for Welders, Cutters, and Welder Fitters) in Louisiana in 2016.

Rank	Industry Title	Estimated Employment	Percent of Total Employment
1	<u>Heavy and Civil Engineering Construction</u>	2,921	18.37%
2	<u>Fabricated Metal Product Manufacturing</u>	2,082	13.09%
3	<u>Specialty Trade Contractors</u>	1,443	9.07%

Rank	Industry Title	Estimated Employment	Percent of Total Employment
4	<a href="#"><u>Transportation Equipment Manufacturing</u></a>	1,413	8.89%
5	<a href="#"><u>Machinery Manufacturing</u></a>	1,409	8.86%
6	<a href="#"><u>Construction of Buildings</u></a>	1,258	7.91%
7	<a href="#"><u>Administrative and Support Services</u></a>	1,079	6.79%
8	<a href="#"><u>Support Activities for Mining</u></a>	993	6.24%
9	<a href="#"><u>Self-Employed and Unpaid Family Workers, Primary Job</u></a>	867	5.45%
10	<a href="#"><u>Repair and Maintenance</u></a>	397	2.50%

Source: Louisiana Workforce Commission, Occupational Projections Program

## Work Activities

This section shows the most common work activities required by Welders, Cutters, and Welder Fitters in order of importance. Click on a link in the Work Activity column to view more detailed information.

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
<a href="#"><u>Controlling Machines and Processes</u></a>	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).	89
<a href="#"><u>Handling and Moving Objects</u></a>	Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.	82
<a href="#"><u>Identifying Objects, Actions, and Events</u></a>	Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.	76
<a href="#"><u>Operating Vehicles, Mechanized Devices, or Equipment</u></a>	Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.	74

**Rank by Importance (Out of 100)**

**Work Activity**

**Work Activity Description**

Performing General Physical Activities

Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

70

Getting Information

Observing, receiving, and otherwise obtaining information from all relevant sources.

70

Communicating with Supervisors, Peers, or Subordinates

Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

70

Inspecting Equipment, Structures, or Material

Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

69

Thinking Creatively

Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.

68

Training and Teaching Others

Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others.

65

Monitor Processes, Materials, or Surroundings

Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

63

Organizing, Planning, and Prioritizing Work

Developing specific goals and plans to prioritize, organize, and accomplish your work.

61

Making Decisions and Solving Problems

Analyzing information and evaluating results to choose the best solution and solve problems.

61

Processing Information

Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

60



<b>Work Activity</b>	<b>Work Activity Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Repairing and Maintaining Mechanical Equipment</u>	Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.	57
<u>Coordinating the Work and Activities of Others</u>	Getting members of a group to work together to accomplish tasks.	57
<u>Evaluating Information to Determine Compliance with Standards</u>	Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.	57
<u>Updating and Using Relevant Knowledge</u>	Keeping up-to-date technically and applying new knowledge to your job.	57
<u>Assisting and Caring for Others</u>	Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.	56
<u>Coaching and Developing Others</u>	Identifying the developmental needs of others and coaching, mentoring, or otherwise helping others to improve their knowledge or skills.	56
<u>Developing Objectives and Strategies</u>	Establishing long-range objectives and specifying the strategies and actions to achieve them.	55
<u>Estimating the Quantifiable Characteristics of Products, Events, or Information</u>	Estimating sizes, distances, and quantities; or determining time, costs, resources, or materials needed to perform a work activity.	55
<u>Guiding, Directing, and Motivating Subordinates</u>	Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.	55
<u>Provide Consultation and Advice to Others</u>	Providing guidance and expert advice to management or other groups on technical, systems-, or process-related topics.	55

<b>Work Activity</b>	<b>Work Activity Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Judging the Qualities of Things, Services, or People</u>	Assessing the value, importance, or quality of things or people.	54
<u>Scheduling Work and Activities</u>	Scheduling events, programs, and activities, as well as the work of others.	54
<u>Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment</u>	Providing documentation, detailed instructions, drawings, or specifications to tell others about how devices, parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.	51
<u>Establishing and Maintaining Interpersonal Relationships</u>	Developing constructive and cooperative working relationships with others, and maintaining them over time.	50
<u>Documenting/Recording Information</u>	Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.	49
<u>Analyzing Data or Information</u>	Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.	47
<u>Developing and Building Teams</u>	Encouraging and building mutual trust, respect, and cooperation among team members.	47
<u>Interpreting the Meaning of Information for Others</u>	Translating or explaining what information means and how it can be used.	46
<u>Communicating with Persons Outside Organization</u>	Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.	46
<u>Selling or Influencing Others</u>	Convincing others to buy merchandise/goods or to otherwise change their minds or actions.	44

<b>Work Activity</b>	<b>Work Activity Description</b>	<b>Rank by Importance (Out of 100)</b>
<a href="#"><u>Monitoring and Controlling Resources</u></a>	Monitoring and controlling resources and overseeing the spending of money.	44
<a href="#"><u>Performing for or Working Directly with the Public</u></a>	Performing for people or dealing directly with the public. This includes serving customers in restaurants and stores, and receiving clients or guests.	42
<a href="#"><u>Repairing and Maintaining Electronic Equipment</u></a>	Servicing, repairing, calibrating, regulating, fine-tuning, or testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.	40
<a href="#"><u>Resolving Conflicts and Negotiating with Others</u></a>	Handling complaints, settling disputes, and resolving grievances and conflicts, or otherwise negotiating with others.	40
<a href="#"><u>Performing Administrative Activities</u></a>	Performing day-to-day administrative tasks such as maintaining information files and processing paperwork.	39
<a href="#"><u>Interacting With Computers</u></a>	Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.	30
<a href="#"><u>Staffing Organizational Units</u></a>	Recruiting, interviewing, selecting, hiring, and promoting employees in an organization.	27

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Tasks

This section shows the most common tasks required by Welders, Cutters, and Welder Fitters in order of importance. Click on a link in the Task column to view more detailed information.

<b>Tasks</b>	<b>Task Description</b>	<b>Rank by Importance (Out of 100)</b>
<a href="#"><u>Weld components in flat, vertical, or overhead positions.</u></a>	Core	90
<a href="#"><u>Operate safety equipment and use safe work habits.</u></a>	Core	89

<b>Tasks</b>	<b>Task Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Lay out, position, align, and secure parts and assemblies prior to assembly, using straightedges, combination squares, calipers, and rulers.</u>	Core	87
<u>Examine workpieces for defects and measure workpieces with straightedges or templates to ensure conformance with specifications.</u>	Core	85
<u>Recognize, set up, and operate hand and power tools common to the welding trade, such as shielded metal arc and gas metal arc welding equipment.</u>	Core	84
<u>Weld separately or in combination, using aluminum, stainless steel, cast iron, and other alloys.</u>	Core	83
<u>Clamp, hold, tack-weld, heat-bend, grind or bolt component parts to obtain required configurations and positions for welding.</u>	Core	83
<u>Select and install torches, torch tips, filler rods, and flux, according to welding chart specifications or types and thicknesses of metals.</u>	Core	83
<u>Ignite torches or start power supplies and strike arcs by touching electrodes to metals being welded, completing electrical circuits.</u>	Core	82
<u>Connect and turn regulator valves to activate and adjust gas flow and pressure so that desired flames are obtained.</u>	Core	82
<u>Determine required equipment and welding methods, applying knowledge of metallurgy, geometry, and welding techniques.</u>	Core	81
<u>Operate manual or semi-automatic welding equipment to fuse metal segments, using processes such as gas tungsten arc, gas metal arc, flux-cored arc, plasma arc, shielded metal arc, resistance welding, and submerged arc welding.</u>	Core	81
<u>Monitor the fitting, burning, and welding processes to avoid overheating of parts or warping, shrinking, distortion, or expansion of material.</u>	Core	81
<u>Analyze engineering drawings, blueprints, specifications, sketches, work orders, and material safety data sheets to plan layout, assembly, and welding operations.</u>	Core	81

<b>Tasks</b>	<b>Task Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Mark or tag material with proper job number, piece marks, and other identifying marks as required.</u>	Core	81
<u>Chip or grind off excess weld, slag, or spatter, using hand scrapers or power chippers, portable grinders, or arc-cutting equipment.</u>	Core	79
<u>Prepare all material surfaces to be welded, ensuring that there is no loose or thick scale, slag, rust, moisture, grease, or other foreign matter.</u>	Core	79
<u>Remove rough spots from workpieces, using portable grinders, hand files, or scrapers.</u>	Core	79
<u>Preheat workpieces prior to welding or bending, using torches or heating furnaces.</u>	Core	77
<u>Develop templates and models for welding projects, using mathematical calculations based on blueprint information.</u>	Core	76
<u>Position and secure workpieces, using hoists, cranes, wire, and banding machines or hand tools.</u>	Core	76
<u>Guide and direct flames or electrodes on or across workpieces to straighten, bend, melt, or build up metal.</u>	Core	76
<u>Detect faulty operation of equipment or defective materials and notify supervisors.</u>	Core	76
<u>Clean or degrease parts, using wire brushes, portable grinders, or chemical baths.</u>	Core	74
<u>Cut, contour, and bevel metal plates and structural shapes to dimensions as specified by blueprints, layouts, work orders, and templates, using powered saws, hand shears, or chipping knives.</u>	Core	72
<u>Repair products by dismantling, straightening, reshaping, and reassembling parts, using cutting torches, straightening presses, and hand tools.</u>	Core	72
<u>Fill holes, and increase the size of metal parts.</u>	Core	72
<u>Check grooves, angles, or gap allowances, using micrometers, calipers, and precision measuring instruments.</u>	Core	71

Tasks	Task Description	Rank by Importance (Out of 100)
<u>Operate metal shaping, straightening, and bending machines, such as brakes and shears.</u>	Core	70
<u>Set up and use ladders and scaffolding as necessary to complete work.</u>	Core	67
<u>Hammer out bulges or bends in metal workpieces.</u>	Core	66
<u>Dismantle metal assemblies or cut scrap metal, using thermal-cutting equipment, such as flame-cutting torches or plasma-arc equipment.</u>	Core	66
<u>Signal crane operators to move large workpieces.</u>	Supplemental	78
<u>Use fire suppression methods in industrial emergencies.</u>	Supplemental	73
<u>Estimate materials needed for production and manufacturing and maintain required stocks of materials.</u>	Supplemental	71
<u>Join parts such as beams and steel reinforcing rods in buildings, bridges, and highways, bolting and riveting as necessary.</u>	Supplemental	69
<u>Gouge metals, using the air-arc gouging process.</u>	Supplemental	67
<u>Mix and apply protective coatings to products.</u>	Supplemental	58
<u>Operate brazing and soldering equipment.</u>	Supplemental	52
<u>Melt lead bars, wire, or scrap to add lead to joints or to extrude melted scrap into reusable form.</u>	Supplemental	47

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## National Working Conditions

**Welders, Cutters, and Welder Fitters** Welders, cutters, solderers, and brazers wear protective clothing and goggles for safety.

Welders, cutters, solderers, and brazers held about 404,800 jobs in 2016. The largest employers of welders, cutters, solderers, and brazers were as follows:

- Manufacturing 61%
- Specialty trade contractors 7
- Self-employed workers 5
- Repair and maintenance 4

Merchant wholesalers, durable goods 4

Welders and cutters may work outdoors, often in inclement weather, or indoors, sometimes in a confined area designed to contain sparks and glare. When working outdoors, they may work on a scaffold or platform high off the ground.

In addition, they may have to lift heavy objects and work in awkward positions while bending, stooping, or standing to work overhead.

### Injuries and Illnesses

Welders, cutters, solderers, and brazers have one of the highest rates of injuries and illnesses of all occupations. They are often exposed to a number of hazards, including very hot materials and the intense light created by the arc. They wear safety shoes, heat-resistant gloves, goggles, masks with protective lenses, and other equipment to prevent burns and eye injuries and to protect them from falling objects.

The Occupational Safety and Health Administration (OSHA) requires that welders work in safely ventilated areas in order to avoid danger from inhaling gases and fine particles that can result from welding processes. However, they can minimize injuries if they follow safety procedures.

### Work Schedules

Most welders, cutters, solderers, and brazers work full time, and overtime is common. Many manufacturing firms have two or three 8- to 12-hour shifts each day, allowing the firm to continue production around the clock if needed. As a result, welders, cutters, solderers, and brazers may work evenings and weekends.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

## Typical Work Conditions

This section shows the most common work conditions required by Welders, Cutters, and Welder Fitters in order of importance.

<b>Work Condition</b>	<b>Work Condition Description</b>	<b>Rank by Importance (Out of 100)</b>
Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection, Hard Hats, or Life Jackets	How much does this job require wearing common protective or safety equipment such as safety shoes, glasses, gloves, hard hats or life jackets?	100

<b>Work Condition</b>	<b>Work Condition Description</b>	<b>Rank by Importance (Out of 100)</b>
Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or Controls	How much does this job require using your hands to handle, control, or feel objects, tools or controls?	84
Importance of Being Exact or Accurate	How important is being very exact or highly accurate in performing this job?	82
Face-to-Face Discussions	How often do you have to have face-to-face discussions with individuals or teams in this job?	81
Indoors, Not Environmentally Controlled	How often does this job require working indoors in non-controlled environmental conditions (e.g., warehouse without heat)?	80
Exposed to Contaminants	How often does this job require working exposed to contaminants (such as pollutants, gases, dust or odors)?	80
Frequency of Decision Making	How frequently is the worker required to make decisions that affect other people, the financial resources, and/or the image and reputation of the organization?	74
Work With Work Group or Team	How important is it to work with others in a group or team in this job?	72
Structured versus Unstructured Work	To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?	71
Impact of Decisions on Co-workers or Company Results	What results do your decisions usually have on other people or the image or reputation or financial resources of your employer?	71
Time Pressure	How often does this job require the worker to meet strict deadlines?	70
Responsible for Others' Health and Safety	How much responsibility is there for the health and safety of others in this job?	69



<b>Work Condition</b>	<b>Work Condition Description</b>	<b>Rank by Importance (Out of 100)</b>
Sounds, Noise Levels Are Distracting or Uncomfortable	How often does this job require working exposed to sounds and noise levels that are distracting or uncomfortable?	68
Freedom to Make Decisions	How much decision making freedom, without supervision, does the job offer?	68
Contact With Others	How much does this job require the worker to be in contact with others (face-to-face, by telephone, or otherwise) in order to perform it?	67
Spend Time Standing	How much does this job require standing?	67
Exposed to Minor Burns, Cuts, Bites, or Stings	How often does this job require exposure to minor burns, cuts, bites, or stings?	64
Exposed to Hazardous Equipment	How often does this job require exposure to hazardous equipment?	62
Spend Time Making Repetitive Motions	How much does this job require making repetitive motions?	61
Very Hot or Cold Temperatures	How often does this job require working in very hot (above 90 F degrees) or very cold (below 32 F degrees) temperatures?	58
Spend Time Bending or Twisting the Body	How much does this job require bending or twisting your body?	57
Coordinate or Lead Others	How important is it to coordinate or lead others in accomplishing work activities in this job?	56
Level of Competition	To what extent does this job require the worker to compete or to be aware of competitive pressures?	56
Wear Specialized Protective or Safety Equipment such as Breathing Apparatus, Safety Harness, Full Protection Suits, or Radiation Protection	How much does this job require wearing specialized protective or safety equipment such as breathing apparatus, safety harness, full protection suits, or radiation protection?	56

<b>Work Condition</b>	<b>Work Condition Description</b>	<b>Rank by Importance (Out of 100)</b>
Consequence of Error	How serious would the result usually be if the worker made a mistake that was not readily correctable?	54
Exposed to Hazardous Conditions	How often does this job require exposure to hazardous conditions?	52
Extremely Bright or Inadequate Lighting	How often does this job require working in extremely bright or inadequate lighting conditions?	49
Responsibility for Outcomes and Results	How responsible is the worker for work outcomes and results of other workers?	49
Importance of Repeating Same Tasks	How important is repeating the same physical activities (e.g., key entry) or mental activities (e.g., checking entries in a ledger) over and over, without stopping, to performing this job?	49
Physical Proximity	To what extent does this job require the worker to perform job tasks in close physical proximity to other people?	46
Spend Time Walking and Running	How much does this job require walking and running?	40
Cramped Work Space, Awkward Positions	How often does this job require working in cramped work spaces that requires getting into awkward positions?	39
Deal With External Customers	How important is it to work with external customers or the public in this job?	37
Spend Time Sitting	How much does this job require sitting?	35
Deal With Unpleasant or Angry People	How frequently does the worker have to deal with unpleasant, angry, or discourteous individuals as part of the job requirements?	34
Telephone	How often do you have telephone conversations in this job?	33

<b>Work Condition</b>	<b>Work Condition Description</b>	<b>Rank by Importance (Out of 100)</b>
Outdoors, Exposed to Weather	How often does this job require working outdoors, exposed to all weather conditions?	33
Indoors, Environmentally Controlled	How often does this job require working indoors in environmentally controlled conditions?	32
Exposed to High Places	How often does this job require exposure to high places?	31
Frequency of Conflict Situations	How often are there conflict situations the employee has to face in this job?	30
In an Enclosed Vehicle or Equipment	How often does this job require working in a closed vehicle or equipment (e.g., car)?	29
Pace Determined by Speed of Equipment	How important is it to this job that the pace is determined by the speed of equipment or machinery? (This does not refer to keeping busy at all times on this job.)	27
In an Open Vehicle or Equipment	How often does this job require working in an open vehicle or equipment (e.g., tractor)?	27
Spend Time Kneeling, Crouching, Stooping, or Crawling	How much does this job require kneeling, crouching, stooping or crawling?	25
Spend Time Climbing Ladders, Scaffolds, or Poles	How much does this job require climbing ladders, scaffolds, or poles?	24
Public Speaking	How often do you have to perform public speaking in this job?	19
Spend Time Keeping or Regaining Balance	How much does this job require keeping or regaining your balance?	19

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## **Work Values and Needs**

This section shows the information on the current work values for your selected occupation.

<b>Work Value</b>	<b>Work Value Description</b>	<b>Rank By Extent (Out of 100)</b>
Support	Occupations that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.	61
Working Conditions	Occupations that satisfy this work value offer job security and good working conditions. Corresponding needs are Activity, Compensation, Independence, Security, Variety and Working Conditions.	39
Relationships	Occupations that satisfy this work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment. Corresponding needs are Co-workers, Moral Values and Social Service.	33
Independence	Occupations that satisfy this work value allow employees to work on their own and make decisions. Corresponding needs are Creativity, Responsibility and Autonomy.	33
Achievement	Occupations that satisfy this work value are results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment. Corresponding needs are Ability Utilization and Achievement.	28
Recognition	Occupations that satisfy this work value offer advancement, potential for leadership, and are often considered prestigious. Corresponding needs are Advancement, Authority, Recognition and Social Status.	28

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Typical Tools

This section shows common tools used by Welders, Cutters, and Welder Fitters.

<b>Detailed Tool</b>	<b>Tool Group</b>
Adjustable wrenches	Adjustable wrenches
Underwater welding equipment	Alternating current AC arc welder

**Detailed Tool**

Anvils  
Motorized cutting torches  
Pattern cutting torches  
Calipers  
Vernier calipers  
Metal cutting dies  
Desktop computers  
Mobile welding units  
Drill presses  
Portable magnetic drill presses  
Punch presses  
Underwater electrode holders  
Welding electrode holders  
Semiautomatic flame-cutting equipment  
Gas flow measurement instruments  
Forklifts  
Current converters  
Oxyacetylene welding equipment  
Rod ovens  
Storage ovens and hot boxes  
Goggles  
Hand chipping hammers  
Hand clamps  
Electric overhead hoists  
Metal benders  
Hydraulic presses  
Impact wrenches  
Hydraulic jacks  
Ladders  
Laser printers  
Laser welders

**Tool Group**

Anvils  
Blow torch  
Blow torch  
Calipers  
Calipers  
Cutting die  
Desktop computers  
Direct current DC arc welder  
Drill press or radial drill  
Drill press or radial drill  
Drill press or radial drill  
Electrode holder  
Electrode holder  
Flame cutting machine  
Flow sensors  
Forklifts  
Frequency converters  
Gas welding or brazing or cutting apparatus  
Gas welding or brazing or cutting apparatus  
Gas welding or brazing or cutting apparatus  
Goggles  
Hammers  
Hand clamps  
Hoists  
Hydraulic press brake  
Hydraulic press frames  
Impact wrenches  
Jacks  
Ladders  
Laser printers  
Laser welding machine

## Detailed Tool

Levels  
Light trucks  
Hydraulic truck lifts  
Swing stages  
Brakes  
Bandsaws  
Metal inert gas MIG welders  
Wirefeed welders  
Slitters  
Metal markers  
Computerized numerical control CNC programmable welding robot controllers  
Micrometers  
Single-cut mill saw files  
Milling machines  
Nibblers  
Personal computers  
Pipe cutters  
Plasma welders  
Air drills  
Air chisels  
Air scalers  
Buffers  
Power chippers  
Power drills  
Grinding machines  
Power grinders  
Cutoff saws  
Power saws  
Steam cleaning equipment  
Waterproof gloves

## Tool Group

Levels  
Light trucks or sport utility vehicles  
Manlift or personnel lift  
Manlift or personnel lift  
Manual press brake  
Metal band sawing machine  
Metal inert gas welding machine  
Metal inert gas welding machine  
Metal slitting saw  
Metal stamps  
Microcontrollers  
Micrometers  
Mill saw file  
Milling machines  
Nibblers  
Personal computers  
Pipe or tube cutter  
Plasma arc welding machine  
Pneumatic drill  
Pneumatic hammer  
Pneumatic sanding machines  
Power buffers  
Power chippers  
Power drills  
Power grinders  
Power grinders  
Power saws  
Power saws  
Pressure or steam cleaners  
Protective gloves

**Detailed Tool**

Angle finders  
Protractors  
Pinchbars  
Pry bars  
Comealongs  
Punches  
Ratchets  
Self-contained breathing apparatus  
Respirator hose masks  
Welding lenses  
Scaffolding  
Scribers  
Shears  
Unishears  
Portable gas operated arc welders  
Shielded arc welding tools  
Socket wrench sets  
Soldering irons  
Wire feed rate measurement instruments  
Resistance welding equipment  
Welding guns  
Squares  
Straightedges  
Metal cutting taps  
Temperature gauges  
Fillet weld gauges  
Electric pipe threaders  
Hand pipe threaders

**Tool Group**

Protractors  
Protractors  
Pry bars  
Pry bars  
Pullers  
Punches or nail sets or drifts  
Ratchets  
Respiration air supplying self contained breathing apparatus or accessories  
Respirators  
Safety glasses  
Scaffolding  
Scribers  
Shears  
Shears  
Shielded metal arc welding or stick welding machine  
Shielded metal arc welding or stick welding machine  
Socket sets  
Soldering iron  
Speed sensors  
Spot welding machine  
Spot welding machine  
Squares  
Straight edges  
Taps  
Temperature gauge  
Thickness measuring devices  
Threading machine  
Threading taps

<b>Detailed Tool</b>	<b>Tool Group</b>
Lathes	Tracer or duplicating or contouring lathe
Overhead cranes	Track cranes
Heliarc welding equipment	Tungsten inert gas welding machine
Tungsten inert gas TIG welding equipment	Tungsten inert gas welding machine
Two way radios	Two way radios
Ultrasonic welding equipment	Ultrasonic welding machine
Arc voltage measurement instruments	Voltage or current meters
Welding current measurement instruments	Voltage or current meters
Brazing equipment	Welder torch
Welding torches	Welder torch
Underwater electrodes	Welding electrode
Welding electrodes	Welding electrode
Direct current DC sources	Welding generator
Hand shields	Welding masks
Welding masks	Welding masks
Welding shields	Welding masks
Welding tips	Welding or cutting tip
Welding robots	Welding robots
Electrode wires	Welding wire
Dive suits	Wetsuits
Winches	Winches
Power wire brushes	Wire brushes
Wire brushes	Wire brushes
Wire cutters	Wire cutters

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Typical Technology

This section shows common technology used by Welders, Cutters, and Welder Fitters.

<b>Detailed Technology</b>	<b>Technology Group</b>
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Detailed Technology	Technology Group
Scientific Software Group Filter Drain FD	Analytical or scientific software
OmniFleet Equipment Maintenance Management	Calendar and scheduling software
EZ Pipe	Computer aided design CAD software
Recordkeeping software	Data base user interface and query software
IBM Notes	Electronic mail software
Microsoft Office	Office suite software
Microsoft Excel	Spreadsheet software

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Licensing Information

There is no data available for Welders, Cutters, and Welder Fitters in Louisiana.

## Typical Knowledge Categories

This section shows the most common knowledge categories required by Welders, Cutters, and Welder Fitters in order of importance. Click on a link in the Knowledge Category column to view more detailed information.

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
<a href="#">Production and Processing</a>	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.	66
<a href="#">Design</a>	Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.	62
<a href="#">Administration and Management</a>	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.	60
<a href="#">Mechanical</a>	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.	57
<a href="#">Mathematics</a>	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.	52

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
<u>Customer and Personal Service</u>	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.	51
<u>English Language</u>	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.	51
<u>Engineering and Technology</u>	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.	50
<u>Building and Construction</u>	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.	46
<u>Physics</u>	Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.	30
<u>Public Safety and Security</u>	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.	29
<u>Computers and Electronics</u>	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.	26
<u>Personnel and Human Resources</u>	Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.	23
<u>Clerical</u>	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.	21

<b>Knowledge Category</b>	<b>Knowledge Category Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Economics and Accounting</u>	Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.	21
<u>Chemistry</u>	Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.	20

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Typical Work Abilities Required

This section shows the results of a national survey listing the most common work abilities required by Welders, Cutters, and Welder Fitters in order of importance. Click on a link in the Work Ability column to view more detailed information.

<b>Work Ability</b>	<b>Work Ability Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Arm-Hand Steadiness</u>	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.	72
<u>Near Vision</u>	The ability to see details at close range (within a few feet of the observer).	66
<u>Control Precision</u>	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.	63
<u>Multilimb Coordination</u>	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.	63
<u>Problem Sensitivity</u>	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.	63
<u>Visualization</u>	The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.	63

<b>Work Ability</b>	<b>Work Ability Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Manual Dexterity</u>	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.	60
<u>Depth Perception</u>	The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object.	53
<u>Information Ordering</u>	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).	53
<u>Selective Attention</u>	The ability to concentrate on a task over a period of time without being distracted.	53
<u>Static Strength</u>	The ability to exert maximum muscle force to lift, push, pull, or carry objects.	53
<u>Deductive Reasoning</u>	The ability to apply general rules to specific problems to produce answers that make sense.	50
<u>Finger Dexterity</u>	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.	50
<u>Oral Comprehension</u>	The ability to listen to and understand information and ideas presented through spoken words and sentences.	50
<u>Oral Expression</u>	The ability to communicate information and ideas in speaking so others will understand.	50
<u>Speech Recognition</u>	The ability to identify and understand the speech of another person.	50
<u>Trunk Strength</u>	The ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing.	50
<u>Category Flexibility</u>	The ability to generate or use different sets of rules for combining or grouping things in different ways.	47
<u>Extent Flexibility</u>	The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.	47
<u>Far Vision</u>	The ability to see details at a distance.	47

<b>Work Ability</b>	<b>Work Ability Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Inductive Reasoning</u>	The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).	47
<u>Perceptual Speed</u>	The ability to quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.	47
<u>Reaction Time</u>	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.	47
<u>Response Orientation</u>	The ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.	47
<u>Speech Clarity</u>	The ability to speak clearly so others can understand you.	47
<u>Flexibility of Closure</u>	The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.	44
<u>Fluency of Ideas</u>	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).	44
<u>Hearing Sensitivity</u>	The ability to detect or tell the differences between sounds that vary in pitch and loudness.	44
<u>Stamina</u>	The ability to exert yourself physically over long periods of time without getting winded or out of breath.	44
<u>Written Comprehension</u>	The ability to read and understand information and ideas presented in writing.	44
<u>Speed of Limb Movement</u>	The ability to quickly move the arms and legs.	41
<u>Auditory Attention</u>	The ability to focus on a single source of sound in the presence of other distracting sounds.	38

<b>Work Ability</b>	<b>Work Ability Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Gross Body Coordination</u>	The ability to coordinate the movement of your arms, legs, and torso together when the whole body is in motion.	38
<u>Originality</u>	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.	38
<u>Rate Control</u>	The ability to time your movements or the movement of a piece of equipment in anticipation of changes in the speed and/or direction of a moving object or scene.	38
<u>Speed of Closure</u>	The ability to quickly make sense of, combine, and organize information into meaningful patterns.	38
<u>Time Sharing</u>	The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).	38
<u>Visual Color Discrimination</u>	The ability to match or detect differences between colors, including shades of color and brightness.	38
<u>Wrist-Finger Speed</u>	The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.	38
<u>Written Expression</u>	The ability to communicate information and ideas in writing so others will understand.	38
<u>Dynamic Strength</u>	The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue.	35
<u>Gross Body Equilibrium</u>	The ability to keep or regain your body balance or stay upright when in an unstable position.	35
<u>Mathematical Reasoning</u>	The ability to choose the right mathematical methods or formulas to solve a problem.	35
<u>Number Facility</u>	The ability to add, subtract, multiply, or divide quickly and correctly.	35
<u>Glare Sensitivity</u>	The ability to see objects in the presence of glare or bright lighting.	31
<u>Spatial Orientation</u>	The ability to know your location in relation to the environment or to know where other objects are in relation to you.	31

<b>Work Ability</b>	<b>Work Ability Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Memorization</u>	The ability to remember information such as words, numbers, pictures, and procedures.	25
<u>Peripheral Vision</u>	The ability to see objects or movement of objects to one's side when the eyes are looking ahead.	25
<u>Night Vision</u>	The ability to see under low light conditions.	22
<u>Sound Localization</u>	The ability to tell the direction from which a sound originated.	22
<u>Dynamic Flexibility</u>	The ability to quickly and repeatedly bend, stretch, twist, or reach out with your body, arms, and/or legs.	13
<u>Explosive Strength</u>	The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object.	13

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Typical Work Interests

This section shows the results of a national survey listing the most common work interests for Welders, Cutters, and Welder Fitters in order of importance.

<b>Work Interest</b>	<b>Work Interest Description</b>	<b>Rank by Importance (Out of 100)</b>
Realistic	Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.	100
Conventional	Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.	39

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

# Typical Work Styles

This section shows the most common work styles required by Welders, Cutters, and Welder Fitters in order of importance. Click on a link in the Work Style column to view more detailed information.

<b>Work Style</b>	<b>Work Style Description</b>	<b>Rank by Importance (Out of 100)</b>
<a href="#"><u>Attention to Detail</u></a>	Job requires being careful about detail and thorough in completing work tasks.	93
<a href="#"><u>Dependability</u></a>	Job requires being reliable, responsible, and dependable, and fulfilling obligations.	82
<a href="#"><u>Integrity</u></a>	Job requires being honest and ethical.	75
<a href="#"><u>Independence</u></a>	Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.	75
<a href="#"><u>Adaptability/Flexibility</u></a>	Job requires being open to change (positive or negative) and to considerable variety in the workplace.	75
<a href="#"><u>Innovation</u></a>	Job requires creativity and alternative thinking to develop new ideas for and answers to work-related problems.	75
<a href="#"><u>Leadership</u></a>	Job requires a willingness to lead, take charge, and offer opinions and direction.	74
<a href="#"><u>Analytical Thinking</u></a>	Job requires analyzing information and using logic to address work-related issues and problems.	73
<a href="#"><u>Initiative</u></a>	Job requires a willingness to take on responsibilities and challenges.	72
<a href="#"><u>Persistence</u></a>	Job requires persistence in the face of obstacles.	71
<a href="#"><u>Cooperation</u></a>	Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.	70
<a href="#"><u>Self Control</u></a>	Job requires maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior, even in very difficult situations.	66



<b>Work Style</b>	<b>Work Style Description</b>	<b>Rank by Importance (Out of 100)</b>
<u>Stress Tolerance</u>	Job requires accepting criticism and dealing calmly and effectively with high stress situations.	64
<u>Concern for Others</u>	Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job.	62
<u>Achievement/Effort</u>	Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.	59
<u>Social Orientation</u>	Job requires preferring to work with others rather than alone, and being personally connected with others on the job.	47

Source: This information is based on O\*NET™ data. O\*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

## Related Occupations

This section shows a list of occupations related to Welders, Cutters, and Welder Fitters. Click an occupation title to see more information about that occupation.

<b>Rank</b>	<b>Related Occupations</b>	<b>Duties</b>	<b>*Related By</b>
1	<u>Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend heating equipment, such as heat-treating furnaces, flame-hardening machines, induction machines, soaking pits, or vacuum equipment to temper, harden, anneal, or heat-treat metal or plastic objects.	SOC4
2	<u>Metal Workers and Plastic Workers, All Other</u>	All metal workers and plastic workers not listed separately.	SOC4
3	<u>Tool and Die Makers</u>	Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.	SOC4
4	<u>Tool Grinders, Filers, and Sharpeners</u>	Perform precision smoothing, sharpening, polishing, or grinding of metal objects.	SOC4

Rank	Related Occupations	Duties	*Related By
5	<u>Welders, Cutters, Solderers, and Brazers</u>	Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.	SOC4
6	<u>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.	O*NET
7	<u>Engine and Other Machine Assemblers</u>	Construct, assemble, or rebuild machines, such as engines, turbines, and similar equipment used in such industries as construction, extraction, textiles, and paper manufacturing.	O*NET
8	<u>Forging Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend forging machines to taper, shape, or form metal or plastic parts.	O*NET
9	<u>Foundry Mold and Coremakers</u>	Make or form wax or sand cores or molds used in the production of metal castings in foundries.	O*NET
10	<u>Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend lathe and turning machines to turn, bore, thread, form, or face metal or plastic materials, such as wire, rod, or bar stock.	O*NET
11	<u>Layout Workers, Metal and Plastic</u>	Lay out reference points and dimensions on metal or plastic stock or workpieces, such as sheets, plates, tubes, structural shapes, castings, or machine parts, for further processing. Includes shipfitters.	O*NET
12	<u>Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend milling or planing machines to mill, plane, shape, groove, or profile metal or plastic work pieces.	O*NET
13	<u>Model Makers, Metal and Plastic</u>	Set up and operate machines, such as lathes, milling and engraving machines, and jig borers to make working models of metal or plastic objects. Includes template makers.	O*NET

Rank	Related Occupations	Duties	*Related By
14	<u>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend more than one type of cutting or forming machine tool or robot.	O*NET
15	<u>Ophthalmic Laboratory Technicians</u> ♦	Cut, grind, and polish eyeglasses, contact lenses, or other precision optical elements. Assemble and mount lenses into frames or process other optical elements. Includes precision lens polishers or grinders, centerers-edgers, and lens mounters.	O*NET
16	<u>Painters, Transportation Equipment</u>	Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, trains, boats, and airplanes. Includes painters in auto body repair facilities.	O*NET
17	<u>Patternmakers, Wood</u>	Plan, lay out, and construct wooden unit or sectional patterns used in forming sand molds for castings.	O*NET
18	<u>Sawing Machine Setters, Operators, and Tenders, Wood</u>	Set up, operate, or tend wood sawing machines. May operate CNC equipment. Includes lead sawyers.	O*NET
19	<u>Shoe Machine Operators and Tenders</u>	Operate or tend a variety of machines to join, decorate, reinforce, or finish shoes and shoe parts.	O*NET
20	<u>Solderers and Brazers</u> ♣	Braze or solder together components to assemble fabricated metal parts, using soldering iron, torch, or welding machine and flux.	O*NET
21	<u>Timing Device Assemblers and Adjusters</u>	Perform precision assembling, adjusting, or calibrating, within narrow tolerances, of timing devices such as digital clocks or timing devices with electrical or electronic components.	O*NET
22	<u>Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders</u>	Set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.	O*NET
23	<u>Woodworking Machine Setters, Operators, and Tenders, Except Sawing</u>	Set up, operate, or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers, and wood nailing machines. May operate CNC equipment.	O*NET

Rank	Related Occupations	Duties	*Related By
24	<u>Agricultural Equipment Operators</u> ✨	Drive and control farm equipment to till soil and to plant, cultivate, and harvest crops. May perform tasks, such as crop baling or hay bucking. May operate stationary equipment to perform post-harvest tasks, such as husking, shelling, threshing, and ginning.	O*NET
25	<u>Bicycle Repairers</u> ✨	Repair and service bicycles.	O*NET
26	<u>Coil Winders, Tapers, and Finishers</u>	Wind wire coils used in electrical components, such as resistors and transformers, and in electrical equipment and instruments, such as field cores, bobbins, armature cores, electrical motors, generators, and control equipment.	O*NET
27	<u>Cutters and Trimmers, Hand</u>	Use hand tools or hand-held power tools to cut and trim a variety of manufactured items, such as carpet, fabric, stone, glass, or rubber.	O*NET
28	<u>Dredge Operators</u>	Operate dredge to remove sand, gravel, or other materials in order to excavate and maintain navigable channels in waterways.	O*NET
29	<u>Fallers</u>	Use axes or chainsaws to fell trees using knowledge of tree characteristics and cutting techniques to control direction of fall and minimize tree damage.	O*NET
30	<u>Floor Layers, Except Carpet, Wood, and Hard Tiles</u> ✨	Apply blocks, strips, or sheets of shock-absorbing, sound-deadening, or decorative coverings to floors.	O*NET
31	<u>Floor Sanders and Finishers</u> ✨	Scrape and sand wooden floors to smooth surfaces using floor scraper and floor sanding machine, and apply coats of finish.	O*NET
32	<u>Helpers--Carpenters</u> ✨ 🌱	Help carpenters by performing duties requiring less skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.	O*NET
33	<u>Helpers--Production Workers</u> ✨	Help production workers by performing duties requiring less skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment.	O*NET
34	<u>Industrial Truck and Tractor Operators</u> 🌱	Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.	O*NET
35	<u>Mechanical Door Repairers</u> ✨	Install, service, or repair automatic door mechanisms and hydraulic doors. Includes garage door mechanics.	O*NET

<b>Rank</b>	<b>Related Occupations</b>	<b>Duties</b>	<b>*Related By</b>
36	<u>Mine Shuttle Car Operators</u>	Operate diesel or electric-powered shuttle car in underground mine to transport materials from working face to mine cars or conveyor.	O*NET
37	<u>Molding and Casting Workers</u>	Perform a variety of duties such as mixing materials, assembling mold parts, filling molds, and stacking molds to mold and cast a wide range of products.	O*NET
38	<u>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend metal or plastic molding, casting, or coremaking machines to mold or cast metal or thermoplastic parts or products.	O*NET
39	<u>Painters, Construction and Maintenance</u>	Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May remove old paint to prepare surface prior to painting. May mix colors or oils to obtain desired color or consistency.	O*NET
40	<u>Painting, Coating, and Decorating Workers</u>	Paint, coat, or decorate articles such as furniture, glass, plateware, pottery, jewelry, toys, books, or leather.	O*NET
41	<u>Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</u>	Set up, operate, or tend plating or coating machines to coat metal or plastic products with chromium, zinc, copper, cadmium, nickel, or other metal to protect or decorate surfaces. Includes electrolytic processes.	O*NET
42	<u>Pourers and Casters, Metal</u>	Operate hand-controlled mechanisms to pour and regulate the flow of molten metal into molds to produce castings or ingots.	O*NET
43	<u>Print Binding and Finishing Workers</u>	Bind books and other publications or finish printed products by hand or machine. May set up binding and finishing machines.	O*NET
44	<u>Printing Press Operators</u>	Set up and operate digital, letterpress, lithographic, flexographic, gravure, or other printing machines. Includes short-run offset printing presses.	O*NET
45	<u>Rail Car Repairers</u>	Diagnose, adjust, repair, or overhaul railroad rolling stock, mine cars, or mass transit rail cars.	O*NET

Rank	Related Occupations	Duties	*Related By
46	<u>Refractory Materials Repairers, Except Brickmasons</u>	Build or repair equipment such as furnaces, kilns, cupolas, boilers, converters, ladles, soaking pits and ovens, using refractory materials.	O*NET
47	<u>Rock Splitters, Quarry</u>	Separate blocks of rough dimension stone from quarry mass using jackhammer and wedges.	O*NET
48	<u>Roofers</u> 🌟 🌿	Cover roofs of structures with shingles, slate, asphalt, aluminum, wood, or related materials. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.	O*NET
49	<u>Stone Cutters and Carvers, Manufacturing</u>	Cut or carve stone according to diagrams and patterns.	O*NET
50	<u>Structural Metal Fabricators and Fitters</u> 🌿	Fabricate, position, align, and fit parts of structural metal products.	O*NET
51	<u>Tapers</u>	Seal joints between plasterboard or other wallboard to prepare wall surface for painting or papering.	O*NET

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

Source: \*\*Related By: O\*NET™ - The Occupational Information Network. O\*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.  
SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

## Career Ladder

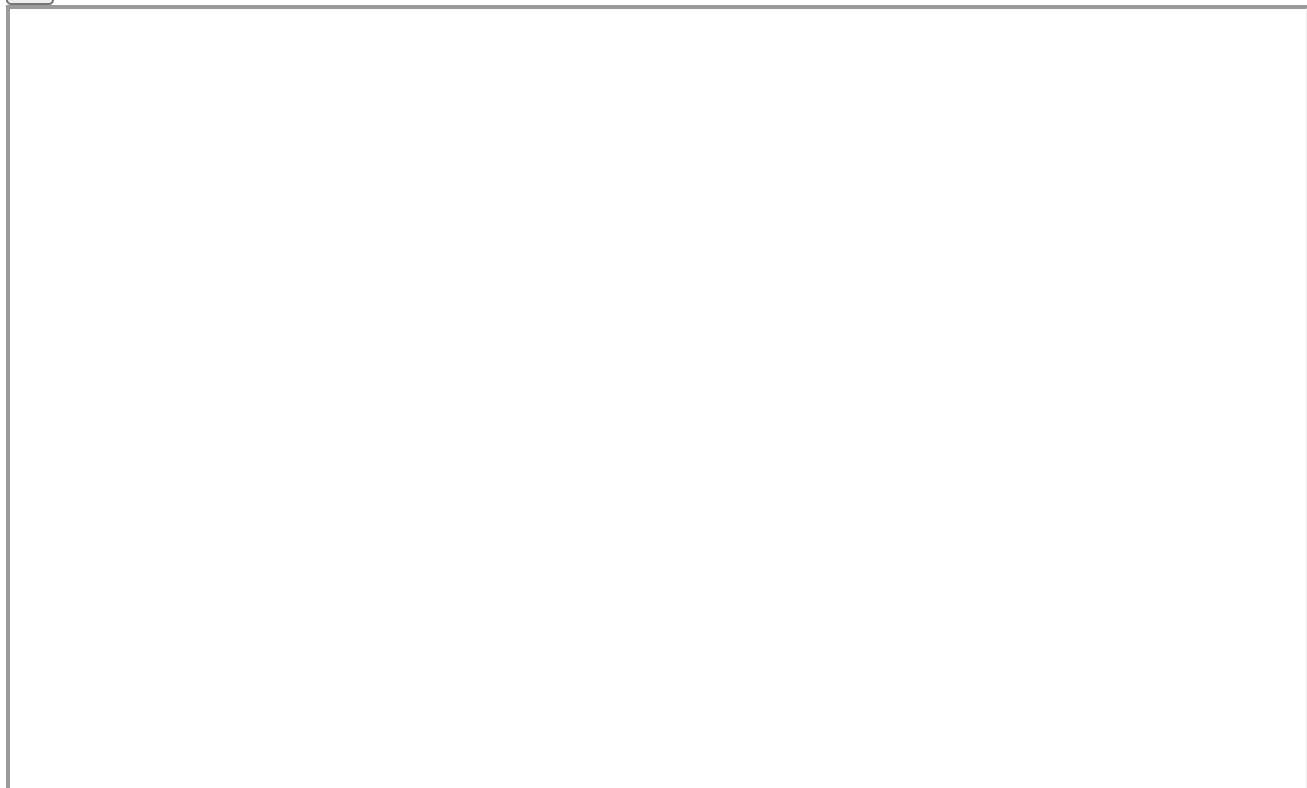
This section shows the top 10 occupations and the corresponding individuals in the workforce system who were previously Welders, Cutters, and Welder Fitters and have changed their occupation over the last 5 years.

Occupation Title	Number of Individuals that Moved	Percentage of Individuals that Moved
<u>Pipe Fitters and Steamfitters</u> 🌟 🌿	549	21.23%
<u>Construction Laborers</u> 🌟 🌿	405	15.66%
<u>Structural Iron and Steel Workers</u> 🌟 🌿	307	11.87%
<u>Laborers and Freight, Stock, and Material Movers, Hand</u> 🌟 🌿	254	9.82%
<u>Boilermakers</u> 🌿	217	8.39%

<b>Occupation Title</b>	<b>Number of Individuals that Moved</b>	<b>Percentage of Individuals that Moved</b>
<u>Maintenance and Repair Workers, General</u> 🌟 🌿	200	7.73%
<u>Structural Metal Fabricators and Fitters</u> 🌿	194	7.50%
<u>Heavy and Tractor-Trailer Truck Drivers</u> 🌟 🌿	167	6.46%
<u>Helpers--Production Workers</u> 🌟	157	6.07%
<u>Construction Carpenters</u> 🌟 🌿	136	5.26%

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

Source: Individuals with active résumés in the workforce system.



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