

## WELDING OCCUPATIONS HAVE A SPARKLING FUTURE!

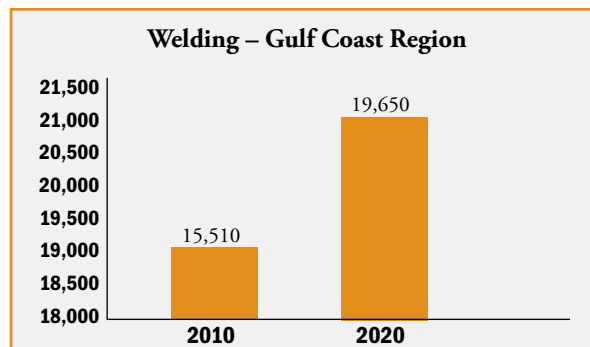
Welders are in short supply at the national, state, and local level. Opportunities are plentiful and can be very rewarding. The welder shortage is part of a broader shortage of skilled tradespeople affecting many industries across the Gulf Coast Region.\* The average age of welders continues to rise and as current workers consider retirement, trainers struggle to meet replacement demand.



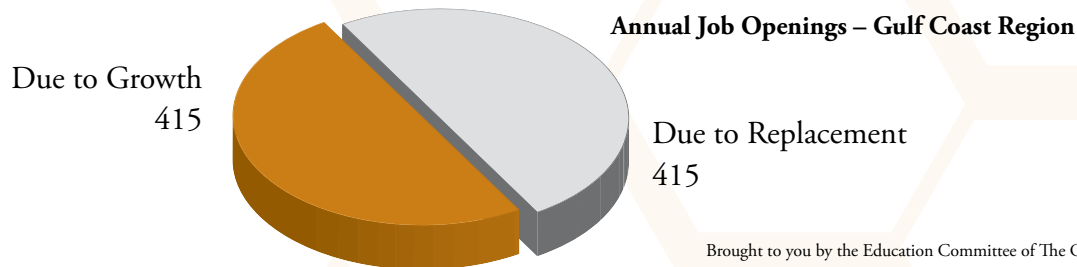
### Factors contributing to the shortage:

- a growing and aging population
- a workforce that is approaching retirement age
- difficulty in attracting a younger workforce

## THE GULF COAST REGION NEEDS TO TRAIN MORE THAN 800 NEW WELDERS EVERY YEAR FROM 2010 TO 2020!



## DO YOU ENJOY BUILDING THINGS? WELDERS WORK IN A WIDE VARIETY OF INDUSTRIES AND EARNED AN AVERAGE OF \$19.40 AN HOUR IN 2011!



Brought to you by the Education Committee of The Gulf Coast Workforce Board.  
For more information visit us on the web at [www.wrksolutions.com](http://www.wrksolutions.com)  
Latest data available. June 2013.

\*Includes the following counties: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton.

# FOCUS ON WELDING

2 OF 4

## PATHWAY TO A CAREER IN WELDING

Training for welding workers can range from a few weeks of school or on-the-job training for low-skilled positions to several years of combined school and on-the-job training for highly skilled jobs.

- Craft training programs at community colleges
- Craft training programs at vocational-technical institutes

While some employers provide basic training, they prefer to hire workers with experience or more formal training. Courses in blueprint reading, shop mathematics, mechanical drawing, physics, chemistry, and metallurgy are helpful. Some welders become certified to weld a test specimen according to specific codes and standards required by the employer. Welders can advance to more skilled welding jobs with additional training and experience and may become welding technicians, supervisors, inspectors, or instructors.



## WELDING OCCUPATIONS AND BEYOND

Welders can use their skills to pursue careers in other high-demand occupations such as:

- Welder-pipefitter and other pipe trades
- Welder-fitter
- Scaffold Builders
- Structural Welder
- Maintenance Mechanic
- Millwrights

## TALENTS, KNOWLEDGE, AND IMPORTANT ABILITIES FOR WELDING JOBS

- Building and Construction – Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings
- Design – Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models
- Mechanical – Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance
- Production and Processing – Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods
- Control Precision – The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine to exact positions
- Arm-Hand Steadiness – The ability to keep the hand and arm steady
- Manual Dexterity – The ability to quickly make coordinated movements
- Trunk Strength – The ability to use one's abdominal and lower back muscles repeatedly or continuously
- Near Vision – The ability to see details of objects at a close range

## PREPARING FOR A WELDING CAREER\*

9th Grade	Suggested Coursework		
	English I	World Geography	<b>Career-Related Electives:</b> N/A
	Algebra I	Languages other than English I	
	Biology	Health/PE or Equivalent	
10th Grade	Suggested Coursework		
	English II	World History	<b>Career-Related Electives:</b> Introduction to Construction Careers
	Geometry	Languages other than English II	
	Chemistry	Technology Applications	
11th Grade	Suggested Coursework		
	English III	United States History	<b>Career-Related Electives:</b> Career Preparation
	Algebra II	Communication Applications	
	Physics	PE or Equivalent	
12th Grade	Suggested Coursework		
	English IV	Government/Economics	<b>Career-Related Electives:</b> Career Preparation
	Precalculus	Fine Arts	

\*Source: AchieveTexas.org

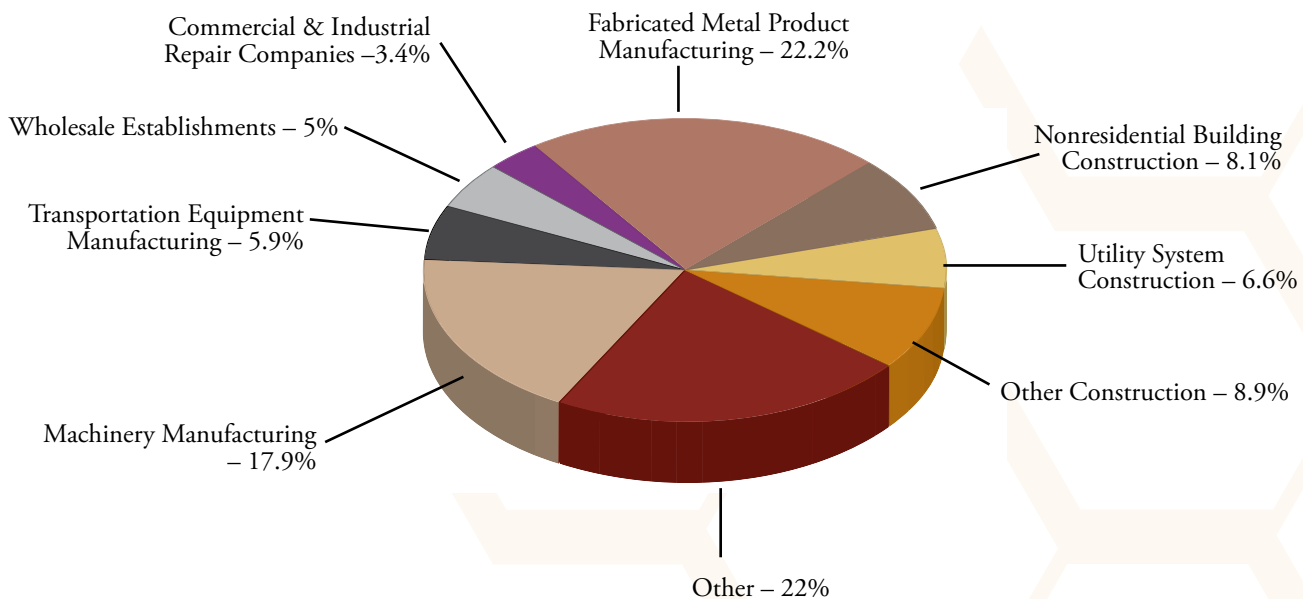
## GULF COAST REGION WELDING PROGRAMS

### COMMUNITY COLLEGES:

- Alvin Community College
- Brazosport College
- College of the Mainland
- Galveston College
- Houston Community College System
- Lee College
- Lone Star College System
- San Jacinto College District
- Wharton County Junior College



### Gulf Coast Region Where The Jobs Will Be In 2020 Welders, Cutters, Solderers, & Brazers



Workforce Solutions is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities.

Relay Texas Numbers:

1-800-735-2989(TDD) • 1-800-735-2988(VOICE) • 711

[www.wrksolutions.com](http://www.wrksolutions.com)