

Course Title

Welding 2A
Agricultural Welding 2A

Description of Target Group

This course is designed for any student interested in developing saleable skills in the welding industry. It is recommended for students who have completed Welding 1A and 1B and those who obtain instructor's approval.

Purpose

The overall purpose Welding 2A is to provide a combination of subject matter and activities designed to develop skills necessary to perform advanced welding techniques used in today's welding industries. It will also develop in the student an awareness of safe shop practices, appreciation for welding, and advance use of gas and electric welding. The areas of tungsten inert gas and metallic inert gas are expanded upon and the students become aware of their important role in welding. Other areas are covered as listed in the course outline to help the student develop insight into career opportunities, exploration and educational planning in welding.

Standards of Expected Student Achievement

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Complete district safety test with a passing score.
2. Work safely with oxyacetylene and arc welding equipment and understand how it works when given an oral test.
3. Weld vertical, horizontal, and overhead.
4. Identify the problems of heat distortion.
5. Place welds properly where necessary to complete the project.
6. Identify safety working procedures for welding on larger farm and other related equipment.
7. An understanding of the importance that must be given to details and assembly of welding projects.
8. Identify the correct welding process to use in order to complete the job satisfactorily.
9. Select the proper welding machine, polarity and electrode to complete the job satisfactorily.
10. Set-up and properly weld with the tungsten inert gas welding machine.
11. Set-up for the welding operation correctly.
12. Awareness of the importance of welding to our farming and industrial
13. Familiarity with opportunities in the welding industry.
14. Pay all shop fees pending.

Welding 2A and Agricultural Welding 2A (continued)

Instructional Materials

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District.

Activities

The student will be exposed to media such as films, filmstrips, and charts to help them conceive the ideas presented. This will reinforce the concepts and techniques presented. Considerable time is spent on building skills for job entry level. Many fabrication jobs are done by the students; these are similar to ones they would do in industry. A variety of other welding processes are covered as indicated in the course outline.

Course Title

Welding 2B
Agricultural Welding 2B

Description of Target Group

This course is designed for students interested in increasing practices and skills learned in Vocational Welding 2A.

Purpose

Activities and subject matter in Welding 2B are designed to develop advanced welding skills and techniques. Awareness of shop practices and the advance use of gas, electric welding, tungsten inert gas and metallic inert gas, as well as career opportunities are expanded.

Standards of Expected Student Achievement

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Complete district safety test with a passing score.
2. Identify and use safe working procedures for welding on large equipment and related equipment.
3. Understand welding assembly techniques.
4. Set up large welding operations correctly.
5. Familiarity with opportunities in the welding industry.
6. Pay all shop fees pending.

Instructional Materials

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District.

Activities

Large job fabrication is done by the students; media exposure includes film, filmstrips and charts.