

WELDING TECHNOLOGY SAFETY POLICIES page 1

THIS SAFETY POLICY MUST BE READ BY ALL CONTINUING STUDENTS

WELCOME TO CALIFORNIA'S LARGEST AND SAFEST COLLEGE WELDING PROGRAM

All students enrolled in laboratory welding courses at Cerritos College must read and fully understand the safety policies of the Welding Department. Students must follow all safety rules and procedures at all times while in the laboratory areas. After you have read the following safety requirements, and your instructor has discussed the specific safety issues of the class you are taking, you will be asked to fill out a Student Safety Contract, sign it, date it, and return it to your instructor. Your instructor will explain the Contract and will go over all laboratory safety policies applicable to your class like the specific Safety Data Sheets that will be required and will be part of the curriculum for your specific class. If at any time you have a safety question please ask your instructor. Thank you for your cooperation.

General Safety Information

To ensure a safe learning environment for all students, the following general safety instructions have been compiled to inform you of the rules and regulations of the Welding Center. These practices and procedures are common in the welding industry. The Department has Safety Data Sheets for each welding process as well as each type of fabrication equipment. Each student will be given a written Safety Data Sheet, verbal instructions, and a live instructor demonstration on the proper safety procedures, operation, and safety hazards associated with that specific type of equipment. Each student will sign their name verifying that they have received both verbal and written safety information, were provided with an instructor demonstration, and that they have had all of their safety questions answered. This procedure and policy is required before students may use any type of equipment. Even after these safety policies have been completed, some equipment like hydraulic shears may only be operated with the instructor being present. Students must never cut or weld on a container that has held a flammable substance. All containers must be assumed dangerous until proven otherwise. Always keep your mind on your work. Inattention may result in a serious accident to you, your instructor, or fellow student. All metals should be considered hot. Report all accidents and or injuries immediately to your instructor no matter how small they might be. Welding on any motor driven vehicle is strictly prohibited. You must never grab or touch metals without gloves on. Never stand metal vertically, hide it, or stack it on top of or underneath tables, machines, equipment and or lockers. It could fall and cause serious injuries. Because of liability and legal reasons, students cannot bring personal projects from home that need to be welded or repaired. Students are not permitted to fabricate, weld, or cut on personal projects of any kind. Do not weld or flame cut on or close to concrete floors or structures. This can cause the concrete to explode and cause personal injury. Students may not smoke regular or electronic cigarettes, eat food, drink beverages, listen to stereos, use electronic devices, or use cell phones in the lecture rooms or in the laboratory.

Safety Glasses:

Safety glasses must be worn at all times in both the inside and outside welding laboratories. Safety glasses must be worn under your welding hood while performing all welding and cutting operations. Both safety glasses and a clear full face shield must be worn when using the belt sanders, angle grinders, and saws. All safety glasses must have side shields, meet OSHA standards and comply with ANSI Z87.1. Safety glasses are designed to protect your eyes from flying particles and objects. They do not protect your eyes from ultraviolet light produced by electric arc welding processes. Safety glasses with a welding hood equipped with the appropriated number filter lens must be used to watch or perform all electric arc welding.

Personal Equipment:

Students must wear appropriate protective clothing that is made of either 100% cotton or flame resistant material like Nomex. Polyesters, nylons, and other synthetics must not be worn as they are flammable and will melt onto your skin. Hard leather safety boots must be 6 inches minimum in height and preferably steel toed. Tennis type shoes are not allowed. Students may not borrow other students' tools or equipment without permission. The use of earplugs is recommended to protect you from the noisy shop environment and may additionally protect your ears from sparks and debris when welding in the overhead position or pipe welding out of position. Students must wear gloves when handling metals and especially when handling sheet metals to avoid the possibility of lacerations. The FCAW process requires a respirator and a long sleeve shirt to be worn under the leather jacket. GTAW welding may be performed without a leather jacket, as long as all skin below the chin is covered.

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Lifting:

Cautious, thoughtful, and correct lifting, moving, and handling of large, heavy welded assemblies is important to ensure you and fellow students are not injured. Students should not tack up welding projects in the overhead position that weigh more than five pounds or tack up projects in the vertical position that weigh more than ten pounds. Improper work habits can cause serious personal injury as well as cause damage to equipment and materials. When you are lifting a heavy object, the weight of the object should be distributed evenly between both hands and your legs should be used to lift, not your back. Do not try to lift a large or bulky object without help if the object is heavier than you can lift with one hand. When moving heavy, large, and or long pieces of metal like steel bars, angle iron, tubing, and pipe, make sure that the appropriate number of people are involved in the lifting and moving of the material so it can be moved easily and safely. Students must not try to lift or move heavy, bulky, or long metals that can't be moved easily and in anyway may cause injury. These situations and materials must be lifted and moved with the presence of the instructor and possibly with the use of the forklift and or crane. Only instructors and or CC staff may operate the forklift and crane.

Equipment:

Students are not permitted to weld or use equipment before or after class hours. Students may only work in the laboratory during their official designated class hours. The instructor must be present in the laboratory during all welding and cutting operations. Before students are allowed to use any machine or power equipment they must be given operational safety instructions as well as an instructor demonstration. Read all safety instructions posted on machines and equipment before use. Students are not allowed to use any power metal fabrication equipment without their instructor being present. Students may not use any power equipment or machine that is left unlocked without first asking for permission and having your instructor present. Students are absolutely not permitted to use the Department's forklift. Only CCC forklift certified and licensed personnel may operate the forklift. If a machine or piece of equipment is broken, malfunctioning, or not working properly, please immediately inform your instructor so it can be fixed or tagged "out of service". Students must not attempt to repair, modify or remove safety devices from any equipment in the welding laboratory. All repairs must be done by qualified personnel. All safety devices are for your protection. Students using their own personal angle grinders are responsible for following the manufacturer's safety guidelines. The removal of the wheel guard is prohibited. The use of wire wheels on personal grinders is prohibited because of the danger associated with flying wires and or objects.

Common Sense:

Remember if it doesn't look, smell, or sound right, it probably isn't. It is your responsibility to work safe, so please, ask the question if you are unsure of the operation of any tool or piece of equipment found in the laboratory. The only stupid question is the one that wasn't asked. Safety is job number one!

A Note on Safety from the Welding Staff:

Certified welders work in all kinds of environments like buildings, ships, refineries, power plants, and fabrication shops. Most construction jobs and careers that are performed in the field have added safety hazards. Careers in these environments while not as safe as a desk type job can be performed safely if you always maintain an attitude of caution and safety. Most accidents and injuries are a result of not following Safety Procedures or disregarding them all together. The instructors in the Welding Department have many years of combined welding experience. Some instructors have been welding for over thirty years and are in perfect health and don't own a pair of reading glasses. The instructors of this Department with the help of our twenty plus Industry Advisory Committee Members have several meetings each year to update and improve all safety aspects of our Program. Shop equipment is inspected every day. Instructors include safety in every lecture and demonstration they perform. Our goal is to not just get you through our Program safely, but to instill in each student a Life Long Attitude of Safety First that will ensure a safe, healthy, and successful welding career.