

Ironworking Station training document:

Warning: The training provided for this tool is provided by amateurs. While the instructor will make every effort to accurately present the safe use of the Ironworking Station, they may be unfamiliar with some risks and dangers of using the tool. Further, your trainer will not be able to anticipate all potential risks. For example, the tools may break in such a way that present novel risks, not present at the time of training, or you may use the tools in an unanticipated manner that presents novel risks.

Warning: The person providing training on this tool is not an expert. They have some experience using the tool, and can describe some of the risks associated with using the Ironworking Station, however, you must always be aware that they may not have the experience or training to accurately identify all the risks associated with use of this tool. Further, the person providing this training, has no formal experience in providing training. Their explanations may not be as clear as those of a certified trainer. It is your responsibility to ensure that you understand all the points raised by your trainer.

Warning: It is your responsibility as a user to critically examine any operation you wish to perform and assess for yourself the risks involved. By using tools at Pumping Station: One you assume responsibility for ensuring that you are familiar with the safe operating procedures for those tools. If you are uncomfortable with your knowledge of the tool operations, or have not used the tool for an extended period it is your responsibility to either re-take the training, or find an experienced user to help you use the tool safely.

Warning: the maintenance for this tool is provided by amateurs, and may not be performed frequently or correctly. It is your responsibility to examine the tools prior to every use and ensure that they are operating correctly. If the tools are not operating correctly, do not use them. If you do note some of the tools operating incorrectly, please contact the area host or tool owner so that the tools can be repaired. Please also make a best effort to notify other users, so that no-one

Tool Specific Dangers:

-pinch points: The various tools at the Ironworking Station use gears and leverage to shear and bend metal bars. If you get your fingers in the mechanism, they can get crushed or nipped off. Always ensure that NO ONE has body parts near the tools when they are operating.

-flying metal: The various tools at the Ironworking Station use leverage to generate high forces. The blades of the tools and the workpieces may fracture sending metal fragments airborne.

-sharp edges: The tools in the Ironworking Station may leave sharp edges on the metal. These edges can cut you.

Warning: The listed dangers here are not exhaustive: it is your responsibility to assess each operation you perform at the Ironworking Station to determine any safety risks it may present, and take appropriate steps to mitigate those risks.

Required Personal Protective Equipment (PPE):

-safety glasses: protect against airborne metal fragments that may be ejected from the tools

-closed toed shoes

Recommended PPE:

-gloves: protects against abrasion/cuts from the sharp edges on workpieces. Gloves will NOT protect against pinch points in the tools

-long pants/sleeved shirt: protect against airborne metal fragments. It is unlikely that any fragments will cause serious injury to exposed skin, however, covering exposed skin with heavy cloth like denim or leather, will add additional insurance in the event the tools do fracture and eject metal shards.

Appropriate attire:

-closed toed shoes: Cut pieces may drop and injure exposed toes.

-While gloves long-sleeves and long pants may protect against some cases, use of this attire is left to the user's discretion. Bare-hands, shorts and tee-shirt are OK as long as the user is comfortable risking abrasion and cuts.

Operations shown:

-angle iron shearing: Basic operation of the Whitney angle iron shears

-flat bar shearing: Basic operation of the Edwards Alligator shear

-Angle iron notching: basic operation of the Whitney angle iron notcher

-Angle iron/flat bar bending: basic operation of the Whitney benders

-Rod parting: Use of the Whitney and Marvel rod parting tools

-Punching: Use of the Whitney punch

Prohibited operations:

-Working with Stainless Steel

-Working with abrasives (e.g. fiberglass, sandpaper etc.) If in doubt, ask the area host or tool owner

-Working with wood

-cutting through weld bead or weld spatter.

-Shearing angle thicker than 2 inch x 2 inch x ¼ inch on the Whitney angle iron shear

-Notching bars thicker than ¼ inch on the Whitney notcher

-bending bars thicker than ¼ inch or grater than 2 inch wide on the Whitney bender

-Shearing flat bars thicker than ½ inch, on the Edwards Alligator Shear

-Shearing rods thicker than 3/4" on the Edwards Alligator Shear

Note: Operations not explicitly prohibited in this document may be performed at the user's risk. It is recommended that the user contact the area host or tool owner prior to performing unusual operations with the tool in order to get feedback on the proposed operation.

Supplemental information:

-demo video of Whitney Angle Iron shear, Whitney Notcher and Whitney bender. The last tool in the video is NOT part of the PS1 Ironworking Station:

<https://www.youtube.com/watch?v=o7ndyT848Kk>