

## Spot Welder

### •Review dress code

- Safety Glasses must be worn at ALL times in the Shop.
- Remind students that long hair must be tied back, loose clothing and/or jewelry must be removed
- Remind students that the EDGES of sheet metal may be VERY sharp.

- Spot welder is for sheet metal only.
- No steel sections, cables or rod.
- There are two dials on the right side of the machine that control the machine.
  - One is for current control (heat) the other is for weld duration (time).
  - These should only be changed with technician help.

### •Intro/Strengths

- Good for making decorative and semi-structural components
- Uses electrical current to melt and fuse two sheets together where electrodes meet.
- The spot weld is visible. This should be considered when designing connections.
- Pieces must overlap.

### •Operation

- Demonstrate operation Reminding students to:
  - **Apply firm, constant pressure** to foot pedal until cycle is complete.
  - **Listen and feel** the machine stop working when the cycle is complete.
    - One common mistake: students do not wait for the cycle to stop before lifting foot.
    - This causes arcing which dangerous.
  - Many new students do not apply enough foot pressure and think the machine is broken.
- Demonstrate making at least two spot welds to make a stable connection.
- Encourage students to make test weld(s) on a scrap of the same material their project is made from.

### Field Questions and students operate tool.

### •Remind students to clean up after themselves.

- Remove all material and scraps from table, surrounding area, and floor
- Show them where the metal recycling, brooms, etc. are located and what our expectations for clean-up are.

