



Welder

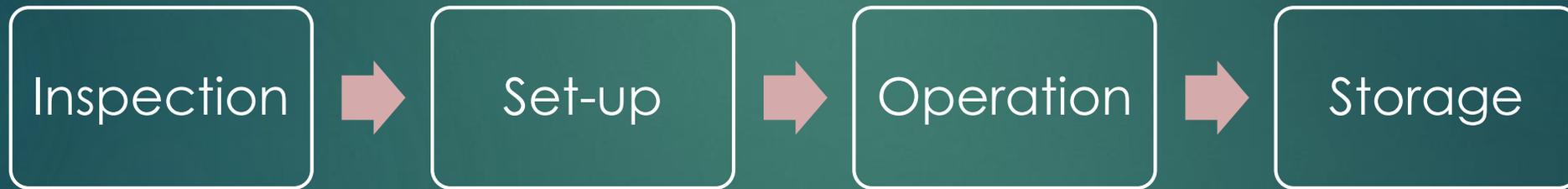
BEST PRACTICES

Welder Uses

- ▶ Welding steel (Hitches)
- ▶ Welding aluminum (Aluminum Rails)
- ▶ Welding stainless steel (Rear Casing)



Best Practice - Tooling



Inspect Before Use

- ▶ Make sure cord, plug, and anything near outlet are dry
- ▶ Check cables for wear
- ▶ Work lead must have good metal to metal contact
- ▶ Welding mask must be set to the correct shade
- ▶ Ventilation must be sufficient for removing fumes from welding

Safety

- ▶ Welding mask
- ▶ Safety glasses
- ▶ Flame resistant gloves
- ▶ Flame resistant chaps
- ▶ Flame resistant Jacket

Mask



Gloves



Welding Jacket



Chaps



Glasses

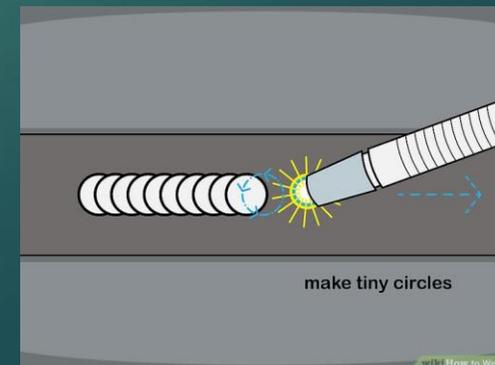


Set-Up

- ▶ Remove all flammables within 35 feet of the welding arc
- ▶ Clean off metal your welding as much as possible
- ▶ Check that there is enough of the correct wire in the gun
- ▶ Set your wire speed and voltage for specific thickness of material
- ▶ Check that the correct gas tank is connected for the material you plan to weld
- ▶ Make sure work lead is connected to material being welded or the work table as close to the piece your welding as possible
- ▶ The connection must be metal to metal with no insulators between

Operation

- ▶ Position the tip of the gun on a 20° angle
- ▶ Turn the welder on and press the trigger
- ▶ Move the gun over the metal slowly to create weld (1-2 seconds before moving)
- ▶ Maintain a 3/4" tip
- ▶ Make tiny circles with your gun as you weld
- ▶ When finished shut off welder and set gun so the tip isn't burning anything
- ▶ Wait for work piece to cool and inspect your weld



Steel

- ▶ Some high carbon steel requires pre heating and post heating
- ▶ The more carbon in the steel the more likely for weld to crack
- ▶ Wire Type- .035" Solid/hard (ER70s-6)
- ▶ Gas Type-25% CO₂, 75% Argon

Aluminum

- ▶ Use pull technique when welding aluminum
- ▶ Gas used is 100% Argon
- ▶ Set voltage and wire speed for thickness of piece
- ▶ Cleaner aluminum= better welding conditions

Stainless Steel

- ▶ Separate welder in shop than Aluminum/Steel welder
- ▶ .035" Stainless Wire
- ▶ Tri mixed gas (90%He/7.5%Ar/2.5%CO₂)
- ▶ Normally use push technique

Watch Out For...

- ▶ Melt through (voltage set too high)
- ▶ Electronics coming too close to welder (electricity can ruin them)
- ▶ Fumes/Gases
- ▶ Electric shock

Instructional Video

MIG Welding Basics



▶ <https://www.youtube.com/watch?v=U1GTgDQFE4A>

Tool Storage

- ▶ Shut off power
- ▶ Unplug from outlet
- ▶ Shut off gas
- ▶ Wrap up cords
- ▶ Wrap up gas hoses
- ▶ Wait for gun to cool
- ▶ Store in clean dry place

Training

Training Quiz



- ▶ <https://www.flexiquiz.com/SC/N/42797ff3-a49e-4d8e-bf45-356235546fc5>