



Congratulations on your purchase of Simple Welding Rods!

The Simple Welding Rods are high-quality welding rods sintered from a special mix of different metal powders. They are used to weld/braze primarily Aluminum and Aluminum alloys, Zinc, Brass, and Copper. But can be used to braze any other non-magnetic metals (except for stainless steel).

The procedure of usage consists of a few simple steps.

These steps must be done properly in order to get a good weld:

1

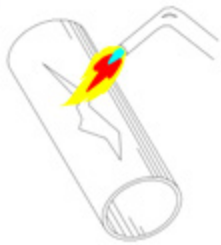


The surface to be welded should be metallurgical clean (free of oxidation layer, any free electrons, and ions).

Aluminum forms an oxidation layer on its surface, thus protecting the lower layers of oxidation.

We don't want this layer on the welded surface in order to get a good weld. Before heating the welding area - Brush it with a stainless steel brush (or sand with sandpaper) until shiny.

2



Use a heat source to heat the base metal (**don't apply the rod yet**).

You can use an LP gas torch, but MAPP Gas is a better choice.

The more heat the gas can develop, the more efficiently the base metal can be heated.

Try to evenly heat the area where you're about to apply the rod.

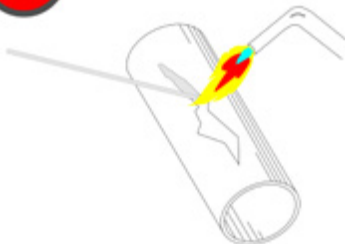
Be advised that MAPP Gas is about 3 times more powerful than a regular LP gas (Propane or Butane). You may use LP gas for most jobs where the parts you work on are thin and/or small.

For thick (and/or more massive parts) make sure you use MAPP Gas. Oxygen-acetylene (if available), is also a good choice of a heat source, especially if you work on thick and large parts.

If you're welding two pieces with different thickness, try to heat them equally by applying more flame to the thicker piece.

Do a quick brush while heating (before applying the rod), this will remove any newly formed oxidation layer and easily create a more rough surface (so the rod material can stick better to the surface of the welded part). The more you brush it, the better the connection (penetration in) to the base metal will be when the required temperature is achieved. However, several strokes are usually enough to do the job.

3



When you feel the required temperature (728°F / 387°C) is developed on the base material, do a few strokes with the brush on the area you are about to weld.

Keep the flame on the base metal, and test if the rod melts (if welding different thickness pieces - test with the thicker piece since it is harder to build heat). When the rod starts melting from the heated base metal, do a few more strokes with the stainless steel brush, keep the flame close to the spot where you're about to apply the rod (to maintain the temperature).

Apply the rod.

IMPORTANT: Do not put the rod directly under the flame.

The part may lose temperature in the following scenarios:

- Too small and thin - keeping a direct flame on it can cause damage.
- Too massive and thick - it dissipates the heat easily.

If the part is **small and/or thin**, keeping the flame on it will destroy it. Try to find an ideal distance to keep the flame on the part. It usually is best to keep it further away. This will keep the temperature while not melting or damaging the part.

If the part is massive and/or thick - heat the part a bit longer after the rod starts melting. Keep the flame on the part but away from the direct spot which you are applying rod. This will stop it from cooling down too fast (and will keep enough heat while applying the rod).

When finished, remove the flame and let it cool down naturally.
It will harden in a matter of seconds.

IMPORTANT: Let it cool down naturally i.e. don't immerse in water etc.
(Otherwise the joint won't stick well to the base metal).

That's about it!

If done properly - you'll have a sound joint, stronger than aluminum (base metal).

Always Keep In Mind

- A clean surface (free of oxidation layer) is the key to a good weld.
- Being in control of the heat is important, but can also be tricky.
- Letting the weld cool down naturally enables the strongest and highest quality joint.

You can visit our website to check for updated versions of these instructions.

Instruction video are also available: <http://bit.ly/SimpleWelding>

Always wear gloves and safety glasses (or goggles). Simple Solution Now LLC or its partners will not be held liable for any damages, injury or losses due to the misapplication of this product or any other reason whatsoever.