

# [Method of gsaw welding](https://assignbuster.com/method-of-gsaw-welding/)

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## GSAW Welding

Gas Shielded Arc Welding or GSAW is just another method of arc-welding. The gas is supplied by the electrode. It is a relatively quick and simple procedure. It requires a considerable amount of setup, however, the process of arc-welding by GSAW is much less complicated. There are several ways GSAW is done and is used by welding companies throughout the world as it is considered a good way to arc-weld. GSAW welding has several advantages and is the reason why it is used for several commercial purposes. Some disadvantages, however, come with it that hinder the production rate. It requires a consumable electrode, torch, and pieces to work on. The quality, ultimately, is dependent upon the experience of the welder, the speed of travel throughout the welding process, and the settings of the equipment, such as the voltage, amperage, and direction of current (AC/DC).

Gas Shielded Arc Welding produces the arc as soon the electrode is touches the job. The arc is generated instantaneously that burns at 10, 000°F. The resin flux applied on electrode creates the gas needed, as it burns. The flux acid also pushes away any oxygen in the atmosphere to prevent oxidation from occurring on the job and provides for a stronger weld. The electrode used for GSAW welding is made of similar material that the metal being worked on is made of. It’s alloyed with other metal(s) to give it desirable qualities for a stronger joint. The electrode is consumable which means each electron takes a globule of the electrode and deposits it into the base metal.

Several advantages come with GSAW welding. The foremost advantage of using this type of welding procedure is that it is very quick and can be done in few amount of time. As mentioned previously, the arc is generated almost instantaneously. This quick generation is a result of the temperature the arc is. The arc generated is 10, 000°F and quickly melts the metal, creating the arc. This quickly generated arc prevents warping of the metal because of instantaneous heat. Alloyed metals the electrode is composed of gives better qualities and makes for a stronger joint between the metals. These are some advantages that GSAW welding has.

However, there are also disadvantages that come with the use of GSAW welding. The largest disadvantage GSAW welding has is that the electrode, being consumable, gets shorter as it melts and as it gets shorter, the welder must keep adjusting the distance away from the job. Another disadvantage of GSAW welding is that if the electrode is too far away and not at the correct distance from the base metal, the arc will be lost and will require a restart. These disadvantages are the only few reasons GSAW welding may not seem particularly helpful in certain situations.

In conclusion, GSAW welding is a method of arc-welding in which a consumable electrode is used to create in arc on the metal by touching the job and pulling back. This creates an arc, immediately. The 10, 000°F heat generated quickly melts the metal, creating the arc. A main advantage that comes with the use of GSAW welding is the job takes relatively little time and is simpler than other processes. This is why it is a preferred method. A disadvantage, in contrast, is that the electrode cannot move too far from the base metal or the arc will be lost. This would then require a restart, doing everything all over again. GSAW welding is used commonly and if trained well, GSAW welding can be a useful method of arc-welding.