Electrical stuff

For TIG hook your torch up to the (-) and ground off the (+)

For stick hook your stinger up to the (+) and ground off the (-) easy enough... but here's some great information to sound smart.

Polarity in welding refers to the direction of the flow of electricity in the welding process. There are two types of polarities: direct current (DC) and alternating current (AC).

In DC welding, the electrode can be either positive or negative. When the electrode is positive, it is known as reverse polarity. This configuration allows for deeper penetration and faster welding speeds, making it suitable for welding thick materials. When the electrode is negative, it is known as straight polarity, which results in better deposition rates and works well for thinner materials.

In AC welding, the direction of the current constantly alternates between positive and negative. This allows for a combination of deep penetration and good deposition rates, making it suitable for a variety of welding applications.

The choice of polarity depends on the welding process, the type of material being welded, and the desired outcome.

DCEP stands for Direct Current Electrode Positive, while DCEN stands for Direct Current Electrode Negative. In DCEP, the electrode is connected to the positive terminal of the power source, while in DCEN, the electrode is connected to the negative terminal.

In DCEP welding, also known as reverse polarity, the heat is concentrated at the electrode, resulting in deeper weld penetration. This polarity is commonly used for welding thick materials and for high-speed welding processes.

In DCEN welding, also known as straight polarity, the heat is focused on the workpiece, leading to better deposition rates and smoother welds. DCEN is often utilized for welding thinner materials and for processes that require better control over the weld pool.

The selection of DCEP or DCEN depends on factors such as material thickness, type of electrode, and desired welding characteristics for a specific application.

Stick Welding



