

EXPERIMENT_NO.4

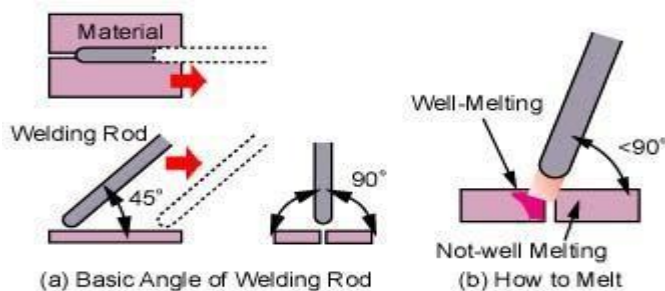
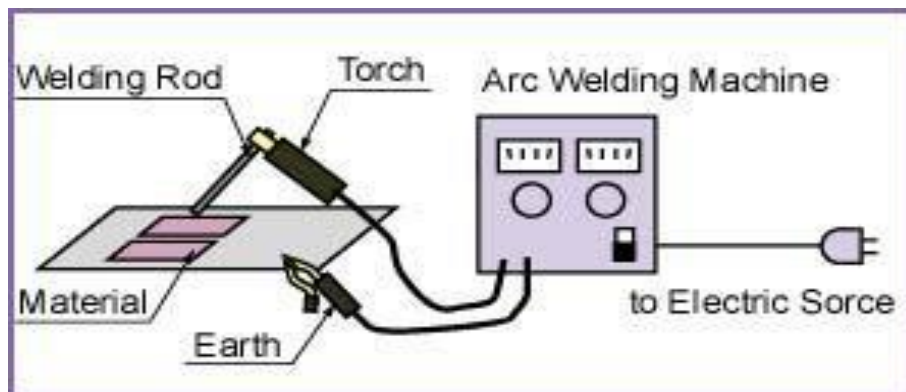
OBJECTIVE: Arc Welding experiment.

APPARATUS: Electrodes, Current source, welding machine.

THEORY: Arc welding is a type of welding that uses a welding power supply to create an electric arc between an electrode and the base material to melt the metals at the welding point. They can use either direct (DC) or alternating (AC) current, and consumable or non-consumable electrodes. The welding region is usually protected by some type of shielding gas, vapor, or slag. Arc welding processes may be manual, semi-automatic, or fully automated.

Type of Arc Welding: Gas metal arc welding (GMAW), Flux-cored arc welding (FCAW), Submerged arc welding (SAW), Gas tungsten arc welding (GTAW)

PROCEDURE:



Angles of Welding Rod

1. Clean the metal before welding
2. Set the joint
3. Strike a welding arc
4. Build up a weld pool

5. Start moving the weld pool across the metal
6. Finish the weld
7. Clean the slag
8. Examine the weld
9. Allow the metal to cool.

Result: Arc welding experiment has been performed.