1. The voltage across the welding arc and is measured from the end of the electrode to the weld puddle. Arc voltage is determined in part by arc length. Arc voltage is the variable that determines weld bead shape
2. The deflection of an electric arc from its normal path because of magnetic forces. Arc blow is generally only a concern in DC (Direct Current) welding.
3. The path that electrical current takes, either from the work through the welding power supply through the electrode or vice-versa.
4. Lack of fusion that is the result of applying too cold of a weld to too thick of a plate. This condition is generally only a problem in short arc GMAW welding.
5. The angle formed between the prepared edge of a member and a plane perpendicular to the surface of the member.
6. A welding technique in which the welding torch or gun is directed opposite to the progress of weld.
7. The distance between the end of the welding electrode to the work piece. In constant voltage welding
8. The measurement of the amount of electricity flowing past a given point in a conductor per second. Amperage is the unit of measure of current. Amperage is the variable that controls deposition rates and penetration in arc welding. In wire feed welding, amperage is determined through wire feed speed for a given wire type and diameter.
9. The metal to be welded.
10. The amount of electricity passing through a conductor in a given amount of time. Units for current are amps