

WELDING TECHNICAL TERMS 1

1. **AMPERE** - Unit of measurement of electrical current. One ampere of current will flow through a conductor that has a resistance of one ohm at a potential (electrical pressure) of one volt.
2. **ARC BLOW** - Wandering of an electric arc from its normal path because of magnetic forces.
3. **ARC CRATER** - Depression formed when the arc melts the base metal.
4. **ARC LENGTH** - Distance between the electrode and the base metal. In SMAW, this distance should be approximately equal to the electrode diameter.
5. **ARC WELDING** - A group of welding processes used to melt and weld metal using the heat of an electric arc, with or without filler metal.
6. **AWS** - American Welding Society
7. **BACKING** - Material placed beyond the root opening to control penetration and prevent a hot shortness hole. Backing may be machined to control the shape of the penetration bead.
8. **BASE METAL** - Metal to be welded, cut, or brazed.
9. **BEND TEST** - A test described by code in which a sample weld plate is bent under specific conditions until it fails.
10. **BEVEL ANGLE** - The angle formed between the prepared edge of one piece and a plane perpendicular to the surface of that piece.
11. **CARBON STEEL** - Steel made by adding small controlled amounts of carbon to pure iron.
12. **CIRCUIT** - The path of electron flow from the source through various components and back to the source.
13. **COMPLETE FUSION** - Fusion that has taken place over all the fusion faces and between all adjoining weld beads.
14. **CONCAVE BEAD** - A weld bead with a surface that curves inward (toward the root of the weld).
15. **CONSUMABLE ELECTRODE** - An electrode that is melted and becomes part of the weld.
16. **CONVEX BEAD** - A weld bead with a surface that curves outward (away from the root of the weld)
17. **COVER PASS** - The final pass that forms the face of the weld.
18. **COVERED ELECTRODE** - In Arc welding, a metal rod with a covering of materials that aid in the welding process.
19. **CRATER** - Depression in the face of the weld. Usually found at the termination of the weld or, while welding, directly beneath the arc.
20. **CURRENT** - The flow of electrons through an electrical circuit.