

WELDING TECHNICAL TERMS - 4

1. **NATURAL GAS** - a naturally occurring mixture of hydrocarbon gases used as a fuel gas in some applications.
2. **NEUTRAL FLAME** - flame resulting from combining oxygen and a fuel gas in perfect proportions.
3. **NONCONSUMABLE ELECTRODE** - an electrode that does not melt and become part of the weld.
4. **NONDESTRUCTIVE TEST (NDT)** - a means of testing for defects that does not damage or destroy the weld.
5. **NORMALIZING** - heat treating process to eliminate internal stresses and create uniform grain size. Cooling is more rapid than in the annealing process.
6. **NOZZLE** - a ceramic or metal cup used on a torch to direct the shielding gas to the weld area.
7. **OD (OUTSIDE DIAMETER)** - the exterior width of a pipe or tube measured at its widest point.
8. **OHMMETER** - an instrument for measuring electrical resistance.
9. **OHMS** - the unit of measurement for resistance to the flow of electricity through a circuit.
10. **OPEN CIRCUIT VOLTAGE** - the voltage in the welding machine circuit when it is on but the arc is not struck.
11. **ORGANIC** - originating in once-living matter; animal or plant not mineral.
12. **ORIFICE** - a precisely bored hole through which gases flow. May be in a regulator, torch, or torch tip.
13. **ORTHOGRAPHIC PROJECTION** - a method of developing a mechanical drawing, based on viewing an object as if it were in a transparent cube.
14. **OSCILLOSCOPE** - an instrument that shows electrical impulses on a calibrated screen.
15. **OSHA** - The Occupational Safety and Health Administration. The federal agency responsible for safety in the workplace.
16. **OUT-OF-POSITION WELDING** - welds made in the vertical, horizontal, or overhead positions.
17. **OVERHEAD (4G) POSITION** - weld made on the underside of a joint, with the face of the weld in an approximately horizontal position.
18. **OVERHEATING** - applying excessive heat, and thus, damaging the properties of the metal. When the original properties cannot be restored, the damage is referred to as burning.
19. **OVERLAP** - a condition in which the bead is not fused into the base metal at the toe of the bead.
20. **OXIDATION** - the process in which oxygen combines with a material to form a chemical compound called an oxide.