

WELDING TECHNICAL TERMS - 6

1. **PRESSURE** - force exerted on a given area, expressed in psi or pascals.
2. **PRESSURE REGULATORS** - device used to reduce the cylinder pressure of a gas to a usable (working) pressure for welding.
3. **PRESSURE TEST** - procedure used to determine the maximum pressure that a cylinder or tank can hold. The test consists of forcing a gas or fluid into the cylinder or tank under increasing pressure until the vessel fails.
4. **PROCEDURE QUALIFICATION RECORD (POR)** - document containing the actual welding variables used to produce an acceptable weld. The procedure qualification record is used to qualify a welding procedure specification.
5. **PROGRAM** - a series of step-by-step directions and process parameters (times, pressures) set on the automatic controls of a welding machine or placed in the memory of computer/controller.
6. **PROJECTION WELDING (PW)** - resistance spot welding process in which current is concentrated at points where projections on adjacent pieces are in contact.
7. **PULL GUN** - a GMAW welding gun that pulls the electrode wire through the cable.
8. **PULSED SPRAY TRANSFER** - a GMAW process in which the current is pulsed to take advantage of the spray mode of metal transfer, but with current values below the spray transition current.
9. **PURGING** - the process of passing the correct gas through a regulator, torch, and hose to clean out any air or undesirable gas that may be in the system.
10. **PUSH-PULL SETUP** - a system formed when a GMAW pull gun pulls the electrode wire through the cable and the wire feeder pushes the wire.
11. **QUENCHING** - rapid cooling of metal in a heat-treating process as a means of hardening it.
12. **QUICK-CONNECT TERMINAL** - a heavy-duty electrical terminal that easily connects and disconnects from a welding machine.
13. **RADIOGRAPH** - an image on film produced by X-rays.
14. **RATED OUTPUT CURRENT** - the maximum current flow a welding machine can produce.
15. **RECTIFIER** - an electronic device (such as a diode) that acts like a one-way valve as current flows through it. It converts AC (alternating current) to DC (direct current).
16. **REDUCING FLAME** - an oxyfuel gas flame with a slight excess of fuel gas.
17. **REFERENCE LINE** - the horizontal line drawn on a welding symbol. All information about the weld is positioned above or below this line.
18. **REGULATOR** - device used to control the volume and pressure of a welding or shielding gas as it flows from the cylinder to the torch.
19. **REGULATOR ADJUSTING SCREW** - a screw that controls the working pressure of gas delivered by the regulator.
20. **RESIDUAL STRESS** - stress that remains in a body (such as a weldment) after the external forces or thermal gradients have been removed.