**Welding Nomenclature**

**Arc welding (AW):** A group of welding processes that produces coalescence of work pieces by heating them with an arc. The processes are used with or without filler metal.

**As-welded, adj:** pertaining to the condition of weld metal, welded joints and weldments after welding, or chemical treatments.

**Backing:** A material or device placed against the back side of the joint, or at both sides of a weld in electro slag and electro gas welding, to support and retain molten weld metal. The material may be partially fused or remain unfused during welding and may be either metal or nonmetal.

**Back step Sequence:** a longitudinal sequence in which weld passe4s are made in the direction opposite to the progress of welding.

**Base Metal (material):** the metal (material) or alloy to be welded, brazed, soldered, or cut.

**Deposition Rate:** the weight of metal deposited in a unit of time.

**Depth of Fusion**: the distance that fusion extends inth the base metal or previous bead from the surface melted during welding.

**Direct Current Elextrode Negative (DCEN):** the arrangment of direct current arc welding leads in which the electrode is the negative pole and the workpiece is the positive pole of the welding arc.

**Direct Current Electrode Positive (DCEP):** the arrangment of direct current arc welding leads in which the electrode is the positive pole and the workpiece is the negative pole of the welding arc.

**Discontinuity:** An interruption of the typical structure of a material, such as a lack of homogeneity in its mechanical, metallurigical, or physical characteristics. a Discontinuity is not necessarily a defect.

Convexity: the maximum distance from the face of a convex fillet weld perpendicular to a line joining the weld toes.

**Crack:** a fracture type discontinuity characterized by a sharp tip and high ratio of length and width to opening displacement

**Crater:** a depression in the weld face at the termination  of a weld bead

**Cylinder:** a portable container used for transportation and storage of compressed gases.

**Cylinder manifold:** a multiple header for interconnection of gas sources with distribution points.

Convexity: the maximum distance from the face of a convex fillet weld perpendicular to a line joining the weld toes.

**Complete fusion:** fusion over the entire fusion faces and between all adjoining weld beads. See also incomplete fusion.

**Concavity:** the maximum distance from the face of a concave fillet weld perpendicular to a line joining the weld toes.

**Consumable Insert:** filler metal that is placed at the joint root before welding, and is intended to be completely fused into the joint root to become part of the weld.

**Contactor:** a device for repeatedly establishing and interrupting an electric power circuit.

**Contact tube:** a device which transfers current to a continuous electrode.