

# Glossary

<b>TECHNICAL STANDARDS &amp; GUIDELINES</b>	
<b>ANSI Z41 SD Type II</b>	USA Standard for Industrial Safety Footwear incorporating Static Dissipative Properties.
<b>API RP2003</b>	American Petroleum Institute: Protection Against Ignitions Arising out of Static, Lightning, and Stray Current.
<b>ATEX 137</b>	European Directive covering work places with Potentially Explosive Atmospheres.
<b>ATEX 95</b>	European Directive covering equipment used in potentially explosive atmospheres.
<b>BS5958</b>	British Standard Code of practice for control of undesirable static electricity.
<b>CLC/TR 50404</b>	Cenelec Code of practice for the avoidance of hazards due to static electricity.
<b>COMAH</b>	Regulations governing the storage of hazardous chemicals in the United Kingdom.
<b>DSEAR</b>	Regulations governing the use of dangerous substances in the workplace.
<b>EN ISO 20345</b>	European footwear Standard incorporating details of anti-static footwear.
<b>NFPA 77</b>	Recommended practice on Static Electricity, published by National Fire Protection Association.
<b>ELECTROSTATIC TERMINOLOGY</b>	

<b>OGY</b>	
<b>Anti-Static</b>	Incapable of retaining a significant electrostatic charge.
<b>Bonding</b>	The process of connecting two or more conductive objects together by means of a conductor so that they are at the same electrical potential, but not necessarily at the same potential as the earth.
<b>Bonding Reels</b>	(or static discharge reels) Used for connecting conductive objects to an earthing or grounding point.
<b>Capacitance</b>	The amount of charge stored on a specified body or material to raise the potential difference by 1 volt.
<b>Conductive</b>	The ability to allow the flow of an electric charge.
<b>Conductor</b>	A material or object that allows an electric charge to flow easily through it.
<b>Dissipative Footwear</b>	Footwear that ensures a person standing on a conductive or dissipative floor has an acceptably low resistance to earth (ground).
<b>Grounding</b>	The process of bonding one or more conductive objects to the ground, so that all objects are at zero (0) electrical potential. (also known as Earthing in the UK)
<b>Grounding Systems</b>	With ground verification indicators often interlocked with the product transfer system.
<b>Electrostatic</b>	Static electricity.
<b>Ground Clamps</b>	Spring or screw down devices used to provide a secure ground connection.
<b>Ground Indicators</b>	Control systems using explosion protection and intrinsically safe techniques to monitor acceptable resistance to ground (earth) and provide verification and interlocks.
<b>Earthing</b>	Term used for "Grounding" as above.
<b>Grounding &amp; Bonding</b>	Combination of Grounding and Bonding techniques as defined above.

<b>Grounding Devices</b>	Purpose designed equipment used for electrostatic grounding.
<b>Leakage resistance</b>	The resistance (expressed in Ohms) between an object and the ground (earth).
<b>Non-conductive</b>	The ability to resist the flow of an electric charge.
<b>Non-conductor</b>	A material or object that resists the flow of an electric charge through it.
<b>Retractable Bonding Cables</b>	Cables with an inherent capability to retract when not in use.
<b>Retractable Grounding Assembly</b>	Used for connecting conductive objects to an earthing or grounding point.
<b>Self Testing Clamps</b>	Intrinsically Safe Bonding Clamps with ability to monitor resistance between conductive object and ground (earth) and provide verification of acceptable condition.
<b>Static Dissipative</b>	Capable of dissipating a static electric charge at an acceptable rate.
<b>Static Ground Monitoring</b>	The process of monitoring the resistance to ground (earth).
<b>Static Grounding Clamps</b>	Special purpose clamps designed to enable temporary or semi-permanent connection onto movable conductive objects.
<b>Static Grounding Reels</b>	Special purpose retractable cable reels with conductive cross-bonded components, designed to dissipate static electricity at an acceptable rate.
<b>Static Grounding Systems</b>	Control systems using explosion protection and intrinsically safe techniques to monitor acceptable resistance to ground (earth) and provide verification and interlocks.
<b>Static Discharge</b>	A release of static electricity that might be capable of causing ignition.
<b>Static Electricity</b>	Denoting or pertaining to an electric charge that is at rest..
<b>Static Grounding</b>	The process of bonding one or more conductive objects to the ground, so that all objects are at

	zero (0) electrical potential, to prevent static build up.
<b>Static Earth Monitoring</b>	Alternative term for Static Ground Monitoring - as above.
<b>Static Earthing Clamps</b>	Alternative term for Static Grounding Clamps - as above.
<b>Static Earthing Reels</b>	Alternative term for Static Grounding Reels - as above.
<b>Static Earthing Systems</b>	Alternative term for Static Grounding Systems - as above.
<b>Static Protection</b>	Protection against the build up of static electricity.
<b>HAZARDOUS AREA TERMINOLOGY</b>	
<b>Combustible</b>	Capable of burning.
<b>Explosion Protected</b>	Device enclosed in a housing that is capable of withstanding an explosion of a specified gas or vapor that may occur within it while preventing the propagation of flame to a surrounding flammable atmosphere.
<b>FIBC / IBC</b>	Flexible Intermediate Bulk Container, or "Big Bag" used to transfer powders. The IBC is the rigid version, often made from stainless steel or plastic, in a variety of shapes and sizes.
<b>FIBC (Type C)</b>	Special conductive FIBC for use with flammable powders.
<b>Hazardous Areas</b>	Potentially flammable/explosive atmosphere.
<b>Industrial Explosions</b>	Explosions in a work place environment.
<b>Ingress Protection</b>	Ability of an enclosure to prevent the ingress of undesirable liquids or dust/powders.

<b>Intrinsically Safe</b>	Electrical equipment and circuits incapable of generating energy sufficient to present a hazard in a flammable area.
<b>Minimum Ignition Energy</b>	The minimum energy that can ignite a mixture of a specified flammable material with air or oxygen. Often abbreviated as MIE.
<b>Temperature Class (Europe)</b>	The hazardous materials are classed by their auto-ignition temperature and the T rating is the maximum surface temperature that the certified equipment can reach (measured at 40°C ambient).
<b>Temperature Class (USA)</b>	Note that Temperature Class sub-divisions are used in the USA.
<b>AREA CLASSIFICATION</b>	
<b>Area Classification</b>	A system to indicate the degree to which flammable/explosive atmospheres are present (i.e. continuously, intermittently, abnormally).
<b>NEC 500 (USA): Division 1:</b>	Explosive atmosphere can exist all of the time or some of the time under normal operating conditions.
<b>Division 2:</b>	Explosive atmospheres are not likely to exist under normal operating conditions.
<b>Class I:</b>	Atmosphere with flammable gases, vapours or liquids.
<b>Class II:</b>	Atmosphere with combustible dusts.
<b>Class III:</b>	Atmosphere with ignitable fibers and flyings.
<b>Cenelec/IEC (Europe): Zone 0:</b>	Gas/Vapour explosive atmospheres present continuously, for long periods or frequently.
<b>Zone 20:</b>	Dust explosive atmospheres - as above.
<b>Zone 1:</b>	Gas/Vapour explosive atmospheres are likely to occur in normal operation.
<b>Zone 21:</b>	Dust explosive atmospheres - as above.

<b>Zone 2:</b>	Gas/Vapour explosive atmospheres are unlikely to occur, or be present only infrequently or for a short period only.
<b>Zone 22:</b>	Dust explosive atmospheres - as above.
<b>TRADE NAMES</b>	
<b>Bond-Rite™</b>	Intrinsically Safe Self-Testing Clamp (patented)
<b>Cenelectrex®</b>	Brand name of Newson Gale range of Static Control Equipment for Hazardous Areas.
<b>Cen-Stat™</b>	Hytrel® coated cables with anti-static properties. (Hytrel® is a registered Trade Mark of DuPont)
<b>Earth-Rite™</b>	Range of Static Grounding (Earthing) interlock systems.
<b>Retract-A-Clamp®</b>	Retractable coiled static grounding (earthing) and bonding assemblies. (Trade Mark of Stewart R Browne)
<b>Sole-Mate®</b>	Test station for industrial static dissipative footwear.