Newson Gale is proud to launch the Earth-Rite® Dual Grounding System (DGS). Combining visual indication, interlocking capabilities, and two intrinsically safe monitoring circuits, the system is our latest solution for simultaneous grounding operations in hazardous area industries.

In hazardous environments, simultaneous processes requiring the transfer of flammable or combustible materials are a regular occurrence. The Earth-Rite® Dual Grounding System (DGS) has two independent ground monitoring circuits that allow operators to ground and continuously monitor two items of metal conductive plant equipment concurrently, such as two bulk transportation vehicles or other metallic vessels like Ex IBCs and metal drums.

This feature is commonly used to ground trucks and tank cars during transloading operations or to ground up to two trucks or tank cars that are being loaded/unloaded at dedicated loading rack installations. If these vessels encounter electrostatically charged liquids and powders, they have the potential to accumulate hazardous levels of electrostatic charge that has the capability of discharging static sparks with energies far in excess of the minimum ignition energies of a vast range of combustible gases, vapors and dusts.

Principles of Use and Industry Guidance

The unit’s flameproof aluminium enclosure houses attention grabbing high intensity LEDs that inform operators when the system is in a permissive or non-permissive state. The flashing green LEDs provide process operators with a continuous visual reference point that enables them to monitor the ground status of conductive metal equipment capable of accumulating static electricity. The DGS system allows engineers, operators and HSE professionals to comply with international standards, guidance and recommended practices, as each ground monitoring channel ensures a resistance of 10 Ohms or less throughout the duration of the process as outlined in IEC TS 60079-32-1, NFPA 77 and API RP 2003.
Installation and Interlocking with the Process

Installing a DGS system onto a mobile transloader allows a portable grounding system to be taken alongside the process equipment whenever it is needed. The hazardous area approved system (Zone 1/Class 1, Div 1) can interlock with on-board control equipment, such as pumps, PLCs and valves to prevent the flow of product before reliable grounding is in place, ensuring a safe working process and enhancing the standard operating procedure by providing an additional layer of safety.

Design Principles

Static electricity in hazardous atmospheres is an ever-present source of ignition in many sectors of processing industries. Newson Gale has a solution-orientated, user friendly approach to product design, and a track record of delivering robust and reliable products for ease of use in hazardous environments where safety is of paramount importance.

“Newson Gale is committed to maintaining our position as a leading static control company, and believe it is our people, innovative approach and technology that will shape the future of hazardous area static grounding control in safeguarding plants, people and processes.”

About Newson Gale

For over 30 years, Newson Gale has been leading the way in hazardous area static grounding control, serving industries where processes generating static electricity have the potential to ignite flammable or combustible atmospheres.

To help control these risks, Newson Gale offers a wide range of static grounding and bonding equipment which is made to provide optimum safety in explosive atmospheres and other hazardous operating environments. The Newson Gale range prevents static charge accumulation by using practical and innovative design, and ensures effective static control on three levels:

- Earth-Rite® series of static ground indicators and interlock systems
- Bond-Rite® series of self-testing static grounding clamp units
- Can-Stat™ series of static grounding and bonding clamps, cables, reels and test instruments

Why compromise on safety? Contact Newson Gale.