Static grounding and bonding systems are essential to provide security in safety critical applications, where flammable products being transferred at high velocity, or wherever there is a real danger of isolated objects becoming highly charged in hazardous / explosive atmospheres.

Static Control Consulting Engineers have developed intelligent earth monitoring unit to prevent static charge accumulation & discharge it to earth safely during tanker filling and offloading operation. The intelligent EMU ensure that correct bonding and grounding procedure are carried out before transfer operation begins. The intelligent EMU carries out a unique "TANKER VERIFICATION" check before going over to monitor the static earth path.

The system becomes permissive only if clamp is connected only to the tanker body, thereby eliminating the potential for operator error and make system FULL PROOF. The monitoring circuit comprises of intrinsic safe circuit duly certified by CMRI. The system becomes permissive when correct bonding to earth takes place. Local indicator confirm the earth condition to the operator, while voltage free contacts may be interlocked with pumps, valves, alarms etc. For applications involving other types of conductive plants (drums, vessels, rail tanker etc) an earth monitor unit with only earth path check is available.

**Key feature of the system**

- It provides an effective connection to earth and prevents static accumulation
- It continuously monitors the connection to the tanker and to earth, providing instant feedback to the operator
- It may be interlocked with equipment (pumps/valves/alarms) to stop the operation if the earth or tanker connection should become faulty
- The system cannot be bypassed by clamping onto any object other than the tanker
- The earth connection is automatically made enabling any residual charge to safely dissipate within the explosion protected enclosure (or out of the hazardous area in the case of a safe area controller)
The operation of Intelligent earth monitoring switch operates on following logic.

**Certification**
- Monitoring circuit - Ex ia IIC T6
- Enclosure - Exd IIB T4 IP 65

**Power Supply**
- 230 V ± 10 %, 50 Hz

**System Accessories**
- Controller with indicator light, Junction box, Heavy duty clamp, 5 mtr Cable

**For further information contact:**
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