

## Earth-Rite<sup>®</sup> FIBC

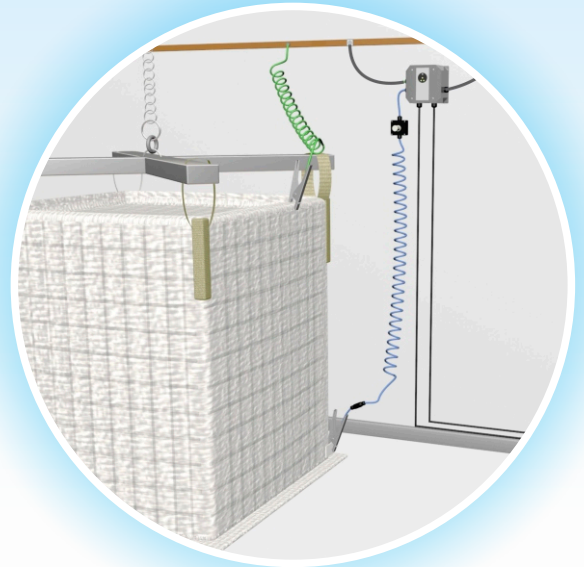
Static grounding protection for Type C FIBC located in potentially combustible dust atmospheres.

The **Earth-Rite FIBC** is designed to safely remove static electricity from Type C FIBC and eliminate the risk of uncontrolled incendive static spark discharges.

Static electricity is capable of providing an ignition source in areas where many combustible powders are processed or handled. The amount of energy required will depend on the explosive characteristics of the dust/air mix, but in order to control these risks, the **Earth-Rite FIBC** may be used to safely dissipate electrostatic charges from Type C FIBC and prevent uncontrolled incendive static spark discharges.

The **Earth-Rite FIBC** continuously monitors the static dissipative path through the bag's conductive filaments, via a verified earth grounding point.

Three attention grabbing green LEDs pulse repeatedly to indicate to operators when the FIBC has a verified and continuously monitored static ground connection.



The Earth-Rite<sup>®</sup> FIBC ensures Type C FIBC bags are protected from incendive electrostatic discharges during bag filling and discharging operations.

The **Earth-Rite FIBC** includes:

- **SDP Controller (static dissipative polyester) with Intrinsically Safe Monitoring Module.**
- **FIBC Grounding Clamp with single conductor Hytrel<sup>®</sup> Protected Cable.**
- **Junction Box with Stowage Pin for stowing FIBC Grounding Clamp.**



Earth-Rite<sup>®</sup> FIBC ground monitoring system



## Features and Benefits

**Attention grabbing LEDs** | Three green LEDs continuously pulse informing operators that the FIBC bag to be protected from static discharges is correctly grounded. When the system is not in use, or when it detects the resistance in the static dissipative loop is higher than  $1 \times 10^8$  ohms\*, a red LED illuminates the indicator panel located in the SDP indicator station.

**Continuous Ground Loop Monitoring** | monitors the resistance of the static dissipative loop through the FIBC bag back to the Earth-Rite FIBC via the plant earth grounding point. If the system detects that resistance in the loop is higher than  $1 \times 10^8$  ohms\*, it engages a pair of output contacts.

**Two volt free output contacts** | The primary contact can interlock with electro-mechanical devices or PLC systems to shutdown the flow of product. The secondary contact can interface with attention grabbing audible alarms or strobe lights to provide an extra degree of safety over the hazard.

**Easy Installation** | Simple to mount SDP enclosures complemented by straightforward cabling and PCB system wiring. Flexible hazardous area enclosure location options with separate IS monitoring / indicator and Power supply PCBs. Power supply PCB can run off both 240V and 110V mains / line voltage supply.

\* CLC/TR: 50404 states that the resistance through a Type C FIBC bag should not exceed  $1 \times 10^8$  ohms.

A new standard, IEC 61340-4-4, states that the resistance through a Type C FIBC bag should not exceed  $1 \times 10^7$  ohms if the minimum ignition energy of the surrounding atmosphere is 3 mJ or less.

**Ordering codes** for both options can be located on the Earth-Rite FIBC Technical Specification sheet which can be downloaded from the Newson Gale website.



X45F FIBC stainless steel grounding clamp with Quick Connect and optional lengths of Hytel protected single core cable included.



The Earth-Rite® FIBC can be installed in Zoned / Classified combustible dust atmospheres. If gas and vapour atmospheres are present an Ex(d) / XP Zone 1 / Class I, Div. 1 system may be specified.

Options	Certification	
Ex(d)XP Flameproof enclosure for gas & vapour atmosphere.		
2nd X45F clamp connects FIBC bag to verified earth grounding point.	<b>Ingress Protection</b> IP 66	<b>Temperature Range</b> -40°C to +55°C - ATEX -13°F to +122°F - CSA
Explosion Proof Strobe Light	<b>Power Supply</b> 110/120V or 220/240V AC, 50-60Hz 12V or 24V DC	
IEC/Cenelec (European) and NEC/CEC (North American) versions available		

For ordering codes and more detailed technical information please refer to product technical specification sheet.

The Earth-Rite FIBC forms part of the Earth-Rite range of Static Grounding and Bonding Equipment available from Newson Gale