



Take Control with Osprey's New Drum Drive Jog Feature

A TECHNICAL SOURCE FOR CLIENTS AND EMPLOYEES OF OSPREY

TECHNICAL BULLETIN

The hygienic converting industry is full of fast-paced production environments where safety is the mission and minimizing downtime is the goal. New features that focus on these needs can prove invaluable to getting the job done. Osprey has a long history of developing new products and features to keep pace with our customer's needs and Drum Jog is no exception.

Safety in all regards

Customers who are looking for ways to improve plant safety will be excited to know that Osprey's primary goal when designing the Drum Jog was to eliminate the risks associated with drum media and seal change-outs. The steps to achieving this goal included:

- Eliminating the need to manually rotate the drums during media change-outs. This activity can be a potential source of worker stress due to the manual efforts necessary to rotate the drum. This is especially true with larger drum filters. According to 2018 data from the US Department of Labor, there were 308,630 reported cases of occupational injuries due to "Sprains, Strains, Tears".
- Leveraging safety devices and logic designs to keep all fans and motors in a safe state. By using proper components and procedures, it is possible to achieve a PL e Cat4 safety rating. Maintaining a high level of safety is critical to protecting users.

How is safety achieved?

It's important to look at the three main components of the Drum Jog system to answer this critical question.

Safety Switches: Each filter maintenance door switch uses uniquely coded RF technology that prevents misuse, shortcomings, and potential safety issues of other non-contact magnetic and locking style safety switches. The OSSD dual PNP style switches enables integration with a large range of safety relays, safety controllers, and safety PLCs.

Dedicated Safety PLC: The door safety circuit functions in unison with the Drum Jog circuit by

allowing a single access door to be opened during the operation. Should another door or access point be opened while in Jog mode, the system will immediately deactivate all motion via Safe Torque Off functions of the safety controllers and VFDs.



Enabling Device: Simply put, this is a hand-held pendant which gives the operator control over the drum rotation. Motion is enabled via a pre-determined procedure that discourages misuse. The pendant itself has an integrated pressure sensitive switch that, if not held properly, will prevent any unintended motion.

Time is money

Maintenance teams and technicians depend on equipment that is reliable and consistently allows them to perform routine tasks without surprises. It is not uncommon for media and seal changes to require a multiple person team and several hours to complete. A two or three-person maintenance crew can be reduced to a single operator who is in complete control of the process using the Drum Jog. Time is saved by enabling the user to focus on proper media alignment instead of struggling to rotate the drum.

Putting it to work

Field Bus Panel: For new filter systems, the Drum Jog circuit is integrated into the main electrical panel and controls circuit. An M12 connector located near the drum maintenance door makes connecting and disconnecting convenient for the user. This connection point is made at Osprey's new Field Bus Panel which provides a junction point between mounted devices on the filter enclosure and the main control panel. Pressure transducer, safety switches, rotation monitoring devices and more are all connected to a single location. Osprey is confident that customer's will quickly see the benefits of reducing wire trays and cabling during installation.

Legacy Filters: Older systems can also enjoy the benefits of the Drum Jog feature. For these systems, it is necessary to perform a careful evaluation on the existing controls architecture so that a safe working environment is maintained.

Stop fighting your maintenance schedules and ask Osprey about this new feature!

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