

## Revolutionising production lines with the RID 3.0

In handling dry bulk for industrial production, efficiency and reliability are paramount. Introducing our third-generation Rotor Interference Detection 3.0 (RID 3.0) marks a significant advancement in maintaining the seamless operation of production lines. This cutting-edge system embodies a technological leap, offering a solution for remote and real-time rotor interference detection that promises to enhance system reliability like never before.

### **DETECTING METAL-TO-METAL CONTACT**

DMN-WESTINGHOUSE's RID 3.0 is engineered to detect metal pollution and unwanted rotor contact with the valve body or end covers, a critical function for preventing rotary valve damage and product contamination, ensuring operational integrity. By measuring electrical resistance with improved sensitivity, RID 3.0 identifies potential issues such as metal-to-metal contact or product build-up, alerting operators before significant problems arise. This proactive approach to maintenance is invaluable in industries where precision and uptime are critical.

### **PROBLEM-FREE OPERATION**

DMN-WESTINGHOUSE rotary valves are produced to the strictest tolerances and contact between the rotor and the body is not likely to occur. However, movement of the rotor can occur if the rotor bearings are worn out or if the rotor is not properly re-installed after cleaning. Rotor contact can cause metal particles in the product stream. Metal objects can also originate from other processes within the conveying system. In case of metal pollution or metal-to-metal contact, the rigid and straightforward design of the RID 3.0 ensures a quick alarm response.

### **REALTIME AND REMOTE**

One of the innovative features of RID 3.0 is its network connectivity, allowing for the remote setting and monitoring of alarm thresholds. This feature optimises the efficiency of rotary valves and significantly reduces unnecessary downtime, keeping production lines running smoothly. Moreover, RID 3.0's compatibility with contemporary communication protocols, through an added 4-20mA output and EtherNet/IP™, enhances automation capabilities, providing a seamless integration into existing systems.

### **PRACTICALITY FROM EVERY ANGLE**

User experience from the field highlights the practical benefits of RID 3.0. Machine operators appreciate the system's ability to maximise the efficiency of rotary valves by allowing for the precise setting of alarms based on specific rotary valve specifications. This precision ensures the correct values are applied to the right alarms, ensuring a highly efficient operation.

For maintenance personnel, the clarity in enabling and disabling the Clean-In-Place (CIP) mode before and after cleaning operations offers a crucial benefit. RID 3.0 ensures that the correct alarm values are maintained, providing certainty and ease of use for the team responsible for upkeep.

Service technicians benefit from adjusting alarms based on logged data, allowing for more accurate detection of metal-on-metal contact or contamination during operations. This feature, combined with the ease of monitoring measurements and resetting alarms during maintenance, significantly enhances the system's troubleshooting capabilities.

Thanks to the provided service tool, PLC engineers find integrating RID 3.0 functionalities into PLC systems straightforward. This integration allows for precisely configuring alarm relays and setting measurement ranges, ensuring the system's optimal performance.

### **A VITAL COMPONENT OF INDUSTRIAL EVOLUTION**

DMN-WESTINGHOUSE's RID 3.0 represents the next step in rotor interference detection technology and stands as an example of our drive to evolve industrial maintenance and operation. Its user-friendly design, advanced detection capabilities, and network integration make RID 3.0 a vital component for any production line seeking to future-proof its operations against unexpected downtime and maintain the highest product quality standards.

### **EFFICIENCY AND RELIABILITY**

The RID 3.0 is a game-changer for technical professionals leveraging technological advancements to enhance their dry bulk handling production lines. With the RID 3.0, the future of industrial production looks not only brighter but also more secure.

#### **The RID 3.0:**

- Very accurately detects unwanted contact between the rotor and body or end covers, preventing rotary valve damage and product contamination.
- Triggers even less false alarms than previous versions of the RID.
- Offers EtherNet/IP™ or 4-20mA output for enhanced network automation.
- Alerts operators remotely and in real-time about metal-to-metal contact or product accumulation.
- Activates the alarm if rotor damage occurs due to foreign objects.
- Has a rigid and straightforward design that ensures problem-free operation.
- Has a user-friendly service tool available for maintenance and troubleshooting.
- Offers CE and CSA certification, confirming compliance with international safety and performance standards.

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