

RotorCheck 5.0 - Contact monitoring of rotary valves



ENHANCEMENT OF SAFETY AND COMFORT FOR OPERATION OF ROTARY VALVES

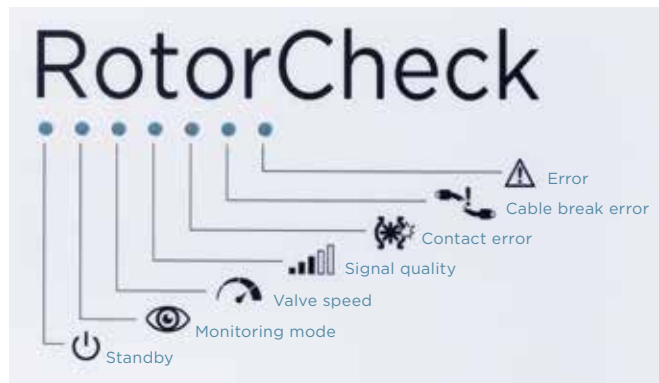
- _ Report of unintended metal contact between housing and rotor which may be caused by improper operating conditions, process disturbances - like higher temperatures or foreign bodies
- _ Chance to prevent metal contamination of the bulk material at the earliest possible stage
- _ Minimized risk of serious damage of the valve or subsequent plant equipment



RotorCheck 5.0 mounted on a rotary valve type ZRD



RotorCheck electronics installed in a control cabinet



Intuitive LED display for monitoring of control state

ROTORCHECK 5.0 | CONTACT MONITORING OF ROTARY VALVES

CHARACTERISTICS

- _ For powder and granulate applications (baby food, dairy powder, instant coffee, XLPE, PC, ...)
- _ Electronic self-monitoring (cable break etc.)
- _ Integrated speed sensor and error memory
- _ Evaluation electronics protected from dust and vibrations by metal housing and installation in a control cabinet

OPTIONS

- _ Applicable in EX-zones (inside 0/20, outside 1/21) with integrated zener barriers
- _ Can be retrofitted to existing Coperion rotary valves
- _ Ethernet-module Profinet or Modbus - e.g. for visualization of process and error analysis
- _ Read and change parameters via web interface

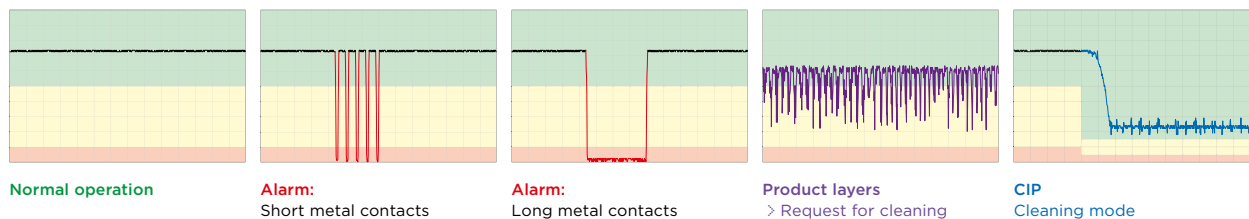
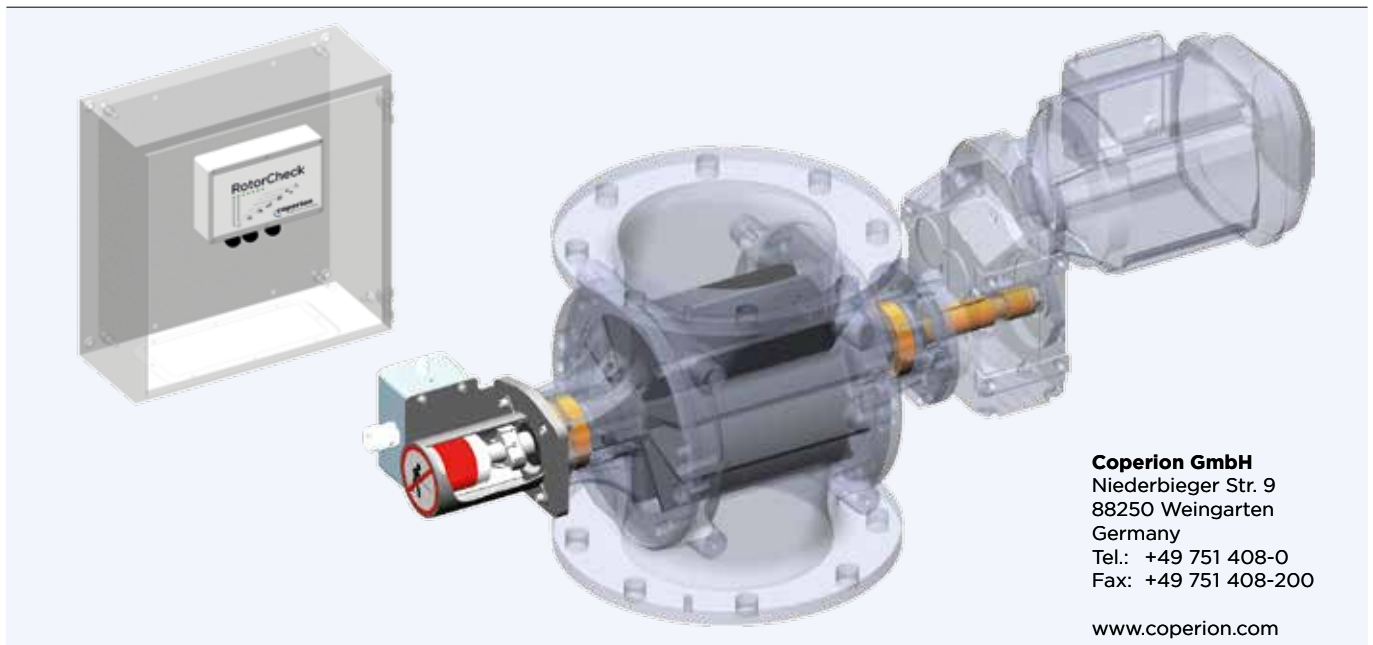


Fig.: Possible visualization within customer's process control system

FUNCTION:

The rotary valve is supplied with a housing and rotor configuration that are isolated from one another and then connected to a proprietary electronics package installed in the control cabinet that evaluates signals/incidents. If a conductive contact occurs, the proprietary electronics package evaluates this conductive contact (such as a metal-metal contact). Signals are reported

to the customer's control center and incidents are indicated by LEDs on the housing of the terminal box.

Random or product-induced measurement signal fluctuations (e.g. product layers) are filtered out to minimize false indications. Additionally, electronics monitor the speed of the valve as well as their own functionally programmed observations/disturbances, e.g. cable break.

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