Reduce the impact of unplanned releases
Pressure relieving equipment

“The space between a rupture disc and pressure relief valve shall be provided with a pressure gage, a try cock, free vent, or suitable telltale indicator.”
ASME, 2013, “Rules For Construction of Pressure Vessels”, SECTION VIII – Division 1 UG-127

Application Overview

Figure 1:
- Under normal conditions, pressure is atmospheric behind rupture disc
- Rupture discs extend the life of a PRV by protecting it from corrosive conditions

Figure 2:
- When membrane failure or pinhole leak occurs, minor pressure build-up occurs, PRV is now exposed to corrosive conditions
- The rupture disc membrane no longer fails at specified DP as the pressure on the backside has increased consequently shifting the point of failure
- Basic pressure indicators lack the ability to communicate data allowing dangerous conditions to go unnoticed

RECEIVE AN EARLY WARNING BEFORE DANGEROUS OVER PRESSURE CONDITIONS OCCUR
- Diagnose and address issues faster with timely process information, process alerts, and device diagnostics.
- Leverage LCD display functionality to receive local insight into process variables.

SAFELY MONITOR NEW READINGS IN HAZARDOUS AREAS OR REMOTE LOCATIONS
- Quickly and easily identify where problematic conditions exist so you can take preventative action to protect your assets
- Communicate process data regularly without manual rounds and data entry – all with WirelessHART™ ease and speed
GAIN REAL-TIME VISIBILITY INTO PRV AND RUPTURE DISC STATUSES AND PROCESS CONDITIONS WITH WIRELESS PRESSURE TRANSMITTERS

- Align with ASME standards – Industry best practices are designed to help increase personnel and plant safety
- Monitor back pressure of the rupture disc to know the pressure build-up in front of any pressure relief equipment (protecting the PRV/PSV)
- Receive alerts when pressure in spool piece starts to increase to gain insight into leaking rupture disc membrane

RECEIVE INSIGHT INTO RUPTURE DISC STATUS WITH WIRELESS DISCRETE TRANSMITTERS

- Enables access to discrete output from rupture disc indicator to detect membrane failure.

REDUCE FINES AND ENVIRONMENTAL IMPACTS WITH WIRELESS ACOUSTIC TRANSMITTERS

- Time-stamped alerts allow you to conduct root cause analyses so you can avoid future releases
- Immediate notification of a release enables you to act quickly and reduce the severity of the release
- Detect leaking caused by improper valve seating

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