Guardian Environmental Leak Detector

Early Detection to Avoid Oil on the Ground
Philadelphia Mixing Solutions, Ltd™ and its subsidiary Mixing Solutions Limited™ lead the industry in providing customers with improved agitation and mixing processes for their mission-critical mixing operations. Backed by over 60 years of industry experience, and with a rich tradition of technology going back to our roots with the original Philadelphia Gear Corporation, our engineers can analyze, design and implement superior mixing operations in a wide variety of agitation applications.

ARE YOU WORRIED ABOUT ENVIRONMENTAL CONSEQUENCES FROM WEEPING OR FAILING SEALS?

Would effective leak detection better protect you against environmental consequences or issues?

If so, the Guardian Environmental Leak Detector is the answer. With two systems available, you can get first alert warning of liquid from your mixing tank due to mechanical seal wear.

Both systems have visual indicators and require no separate lube oil. This makes it easy to install and cost-effective to maintain.

Both systems will help alert you to a failing seal when used as recommended. Our Guardian Plus Leak Detection system uses an Emerson® Rosemount® 2120 vibrating fork level switch that can be wired to your tank hub system for an automatic alert or to shut down your mixer if this becomes necessary.

The system is ASME compliant and has a large capacity storage vessel.

**GUARDIAN VISUAL UNIT**
- Works with new units or retrofit on BSE and BSER units with an existing 3/8 in. atmospheric (non-process side) drain port in the seal
- Easy maintenance, no separate lube oil needed
- Visual check

**GUARDIAN PLUS UNIT**
- Works with new units or retrofit on BSE and BSER units with an existing 3/8 in. atmospheric (non-process side) drain port in the seal
- Easy maintenance, no separate lube oil needed
- Uses a Rosemount® 2120 vibrating fork level switch that can be wired to existing systems for alerts to a failing seal
- Coated vessel with site gauges and level switch that, when wired correctly, can send a signal back to the control room
- Ties into a Rosemount® 2410 tank hub with proper installation
- Two visual sight indicators
- Magnetic test point is located on the side of the housing, allowing a functional test of the Rosemount® 2120 and a system connected to it. By holding a magnet to the target, the output changes state for as long as the magnet is held there.

The units are intended to aid in maintenance activities aimed at detecting seal failure early. They are not intended to be used for spill prevention.
GUARDIAN VISUAL UNIT

- Atmospheric vent cap
- Carbon steel 1.5 gallon/5.7 liter seal containment vessel
- Rosemount® 2120 vibrating fork level switch
  - Status-indicating ‘heartbeat’ LED
  - CL 1 Div. 1 Groups A, B, C & D
  - ATEX Compliant Cat II 1/2 G D
- Drain valve with barb end connection
- 3D visual sight gauges
- 316 SS – 0.50" braided flex tubing
- Pyrex catch basin for visual leak detection

GUARDIAN PLUS UNIT

- Carbon steel mounting plate bolts directly to the existing cover-plate bolt pattern
- 316 SS pipe
- 316 SS – 0.50" braided flex tubing
- 316 SS compression tube fittings