GO LOW:

Control the High Costs of Fugitive Emissions with Swagelok Low-E Valves

Low-Emission Valves

As sustainability and profitability become ever more critical to the overall success of virtually all fluid-related markets and applications, learn how to minimize the associated dangers and excessive costs of uncontrolled gas emissions from process equipment – primarily due to Valve, Pump, and Flange Connection dynamic/static seal leakage.

Of utmost importance and concern are Volatile Organic Compounds (VOCs), such as benzene, methane, and ethanol. They not only jeopardize air quality but contribute to ozone formation, causing large government agencies to set emission limits, with heavy fines levied for violations. Valves, in fact, account for an estimated 62% of all VOCs at a typical facility. That's why you should strongly consider Low-Emission Valves to ensure compliance with current environmental regulations such as the Clean Water Act and the Clean Air Act.

LDAR (Leak Detection and Repair) programs,

many that specify the use of only Low-E valves, are also commonplace in plants that strive to contain harmful emissions. Three methods are mainly used for such control:

- Instituting a plan where leaks are identified through in-situ testing of valves and connections using EPA Method 21
- Identifying, documenting, and repairing leaks within a defined timeframe
- Lowering allowable leak limits for valves, connections, and pumps

In addition, a requirement mandating that all future MRO (Maintenance, Repair, Operations) valves be certified Low-E is almost always included.

So, what, exactly, is a Low-E valve?

Typically, the component manufacturer provides either:

- A written guarantee that the valve will not leak beyond 100 parts per million for five years
- A written guarantee, certification, or equivalent documentation that the valve has been tested and found to be leaking at no greater than 100 PPM

It can be challenging, however, for a valve user to fully comprehend all the differences inherent in both of those options. For a more in-depth overview of the advantages/disadvantages of the aforementioned forms of Low-E validation:

https://www.swagelok.com/en/blog/fugitive-emissions?_ga=2.224279384.213448395.1677617072-1376492829.1676662616&_gl=1*k7nyu*_ga*MTM3NjQ5MjgyOS4xNjc2NjYyNjE2*_ga_XBR6JNNC76*MTY3NzYxNzA3Mi40LjEuMTY3NzYxNzA4MS4wLjAuMA

Finally, for your consideration, **here's the wide array of Swagelok Low-E Valves** for optimized fluid-system safety, performance, and efficiency:

Monoflange

Ball

Block & Bleed

Bleed

Needle

Rising Plug

Manifold

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