Spend Time Establishing a Hose Maintenance Plan, Save Substantial Operating Costs

An effective Industrial Hose inspection schedule keeps you safe, efficient, and profitable.

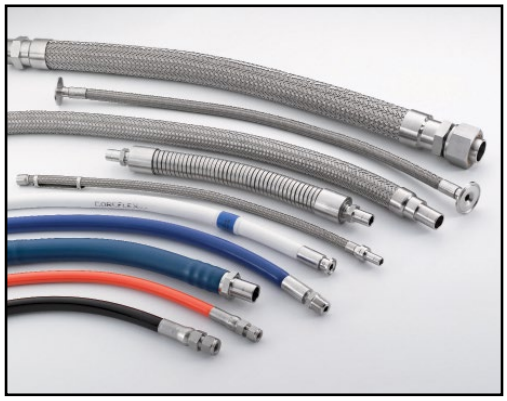
It's not always easy to know when to replace your hoses in your fluid-system applications. If you wait too long, you run the risk of system failure; changeout too early, you can lose valuable uptime and money.

Solution:

A comprehensive Hose Maintenance plan that delivers information on each hose used within your plant or facility: service life, when installed, when last inspected and how frequently, location of replacement hoses, operating pressures, necessary movement… Developing such a schedule may not be easy and will take time… but will provide significant cost-saving benefits.

Steps:

1. Know Your Hoses



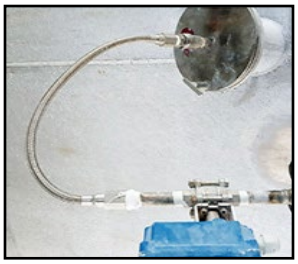
Conduct a full site audit to identify and tag every hose in use. Note the hose type, part number, process fluid involved, pressure/temperature ratings, and vendor name and contact information. In your chart, log each hose's size, length, core material/construction, reinforcement layers, end connections, mounting, cover type, operating conditions, cleaning procedures, and the exact date the hose was installed and due to be replaced. This centralized hose data repository also helps you realize a far more overall efficient operation.

2. Track the Lifecycle of Each Hose

Stay on a strict schedule of regular hose inspections, according to the guidelines provided by your hose supplier. Look closely for signs of wear: scrapes, cuts, corrosion, kinks, and deterioration…these are all indications the hose likely needs to be replaced. If a hose fails during operation, document each critical detail: where on the hose it failed, the severity of the break, and how was the hose mounted.

3. Eliminate Hose Strain

When performing an inspection while hoses are operating, note any conditions causing major strain. Are your hose rubbing against equipment, experiencing pulsing, exposed to heat sources…? Common culprits: Hose is twisted on bent in more than one plane; Hose is bent beyond its recommended radius, Hose is bent too close to its connections; Hose length is too short, resulting in impulse strain; Elbows and adapters are not used to relieve strain on horizontal end connections.



Twisting a hose or bending it on more than one plane

4. Know if a Protective Cover is Needed

For example: A thermosleeve effectively guards a hose from weld splatter and resists UV light effects; a fire jacket provides excellent insulation from internal fluid temperature extremes; a spiral guard retards abrasion; and an armor guard or a spring guard protects against kinking and abrasion. Make sure to carefully check each cover's safe temperature ranges and primary usage before selection.

Cover fraying and needs replaced

5. Follow Inspection and Replacement Protocols

Even after you determine your changeout intervals, continue to periodically inspect your hoses to ensure that system changes have not placed additional strain on your hoses.

6. Scrutinize Your Data

It could become necessary to adjust your inspection/replacement intervals (as you continually analyze your charts) for safety and/or budgetary reasons. Perhaps even perform a destructive test to learn if you replaced a hose too early or too late. Data review will also tell you that a routinely troublesome hose might require a different style for longer life in your application.

Inspect hoses

7. Make Sure to Keep Spares

Once you finalize your replacement intervals, you can more confidently order/inventory replacements, especially for hoses that are critical for safety and process applications, those that are most likely to fail, and those that are difficult or timely to source.

Support:

Swagelok Pittsburgh | Tri-State Area conducts a comprehensive **Hose Advisory Service** to assist you with establishing a hose maintenance schedule. In addition, we offer a half-day Swagelok Hose Safety Essentials course to help your technicians and engineers learn how to ideally select, store, and size hoses by application and operating conditions.

For more information, visit www.swagelok.com/en/blog/industrial-hose-maintenance-plan-save-plant-thousands

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