



Case Study



Hoses That Last in Demanding Applications

How one paper mill reduced their hose run rate costs and realized a 300% extension of hose life



Customer Challenge: Hose Failures Resulting in Unplanned Downtime

Industrial hoses play critical roles, yet many manufacturers lack clear specifications and policies concerning hose selection, installation, inspection, and maintenance.

- Specified hoses often perform sub-optimally and fail prematurely
- Hoses are often improperly routed and use incorrect end connection
- Hoses are not checked regularly for wear to keep workers safe and costs controlled

Industrial professionals require access to high-quality hoses available in a variety of materials and performance ratings, as well as insight on proper hose usage and upkeep.



The Solution: Swagelok® Hose Mapping and Related Advisory Services

Swagelok offers durable, long-lasting hoses with the pressure ratings, materials of construction, and flexibility to help keep team members safe, equipment online, and operations profitable. Our Swagelok-certified hose advisors can help you select optimal hoses for your applications, troubleshoot your hose problems, and teach you how to properly maintain your hoses to maximize fluid system performance.



The Results: Cost Savings Identified

Two areas were found where a potential hose failure could result in an unplanned outage which would require a shut down of the entire machine. **Taking proactive measures to address these failure points helped avoid an estimated 3 hours of unplanned downtime, equating to approximately \$150,000 in savings.**

To learn how Swagelok Evaluation and Advisory Services can benefit your facility, complete our [Service Request Form](#) or contact us directly to consult with an expert.

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The Stakes

Unplanned outages at a paper mill can pose significant risks impacting all facets of the business:

Operations

- Production loss can lead to missed quotas and delayed deliveries
- Equipment damage resulting from sudden stops, especially if systems aren't properly shut down
- Process disruption leads to material waste or may require reprocessing

Finance

- Lost production time directly impacts revenue
- Emergency repairs are often more expensive than planned maintenance
- Restarting equipment can spike energy usage leading to increased costs

Safety & Environmental

- Unplanned outages increase the risk of hazardous working conditions, compromising worker safety
- Sudden shutdowns can lead to containment failures
- Disrupted processes may release pollutants if environmental controls are affected

Compliance

- Delays or quality issues can harm relationships and brand reputation
- Failure to meet environmental or safety standards during an outage can result in fines or legal action

Our Process

Unit Evaluations

Swagelok Alabama spent over 80 hours performing an onsite inspection of hoses to evaluate installation, document issues, provide part numbers, and map locations for all hoses.

Actionable Reports

The Swagelok team documented locations, fluid parameters, and specifications for each hose, as well as areas for improvement, including a list of materials to stock for future maintenance.

Prioritization of Repair

Hose issues were broken into four categories based on severity of the finding, showing the number of issues documented for each category.



Improve Hose Safety & Lower Plant Cost

Avoid dangerous situations and downtime while improving plant efficiency by following these three recommendations for industrial hose safety.



Properly Match Hose Type to the Application

In cases of high demand, make sure your hose specifications for pressure, temperature and chemical compatibility are up to date and inspected regularly.



Proper Hose Routing and Storage

An error Swagelok field engineers see frequently is allowing a hose to hang vertically from a horizontal end connection. Another set of common installation errors results from improper hose length.



Proper Hose Maintenance

Based on the hose type and its use, hoses should be checked and replaced at certain regular intervals. Don't wait until there is a problem or a dangerous leak before inspecting your hoses.

This data represents an actual report, however, total savings will vary based on number of leaks, size of leaks, orifice size, cost of electricity, operating hours and other factors.

The data displayed here does not take into account maintenance costs as a part of total savings.