

Five Effective Strategies to Prevent Product Contamination, Safeguard Physical Assets and Reduce Maintenance Shutdowns



Manufacturing food-grade products, pharmaceuticals, or nutraceuticals, while ensuring the integrity of your physical assets requires vigilant measures to prevent product contamination and minimize costly maintenance shutdowns. Superior Industrial Maintenance recommends the following five strategies to strike a balance between corrosion protection, facility maintenance and maximizing production efficiency.

1. Seek a comprehensive corrosion analysis of your entire facility – not just the most immediate challenge.

Larger facilities often have urgent corrosion or repair problems. A comprehensive corrosion analysis summarizes current conditions, ranks them by urgency, recommends solutions and timing for maintenance, and provides budgetary numbers for effective prioritization and planning.

A comprehensive corrosion analysis can save you time and money. It identifies potential areas at risk for product contamination or unplanned maintenance and helps when comparing competing solutions based on your business' needs. Among other things, a comprehensive corrosion analysis:

- Evaluates the humidity, temperature, and cleaning methods used in a facility and recommends the ideal coatings with the longest expected lifespan based on these conditions.
- Looks for standing water challenges or potential mold and bacteria build-up behind walls or at joints and recommends remedies.
- Addresses deteriorating concrete at curbs, walls, secondary containments, and ceilings and provides recommended repair solutions.
- Highlights process piping insulation damage or potential areas where insulation could fall into the product.



- Analyzes the condition of your roof and identifies ways to extend its lifespan without total replacement.

2. Plan for future growth and equipment replacement between maintenance cycles.

Develop a long-term maintenance plan based on the comprehensive corrosion analysis. Prioritize maintenance needs aligned with projected business growth or equipment replacement cycles. This can dramatically minimize your overall costs and prevent re-work.

For example:

- If your business plans call for equipment upgrades with different footprints, drain requirements, or new accessways, scheduling floor covering maintenance to be done at the same time will save you from expensive re-work.
- If your roof needs a lifespan extension, but you expect to replace roof-mounted chillers in the near future, pre-planning could allow roof repairs to be done in a way that enables new units to be installed without penetrating the newly repaired roof.

3. Choose long-term ROI solutions approved for food-grade applications.

Technology is constantly changing, and there are many effective ways to control corrosion and minimize the risk of contamination at a facility. Asking questions and looking for providers who want to partner with you and openly share information about alternative systems is critical to the success of your long-term maintenance planning. However, the old adages “you get what you pay for” and “pay me now or pay me later” often apply when discussing corrosion control.

While the immediate price is always a factor, weighing the long-term durability of any solution against the production costs (i.e., revenue loss) associated with more frequent re-application or repair is an important consideration.

When comparing corrosion control solutions, estimating your Return On Investment (ROI) is best done over 3, 5, and 10-year periods. Some considerations that might apply to your business:

- Are the environmental conditions or the cleaning agents used in your facility detrimental to the life of your current coatings solution? If there were alternative solutions that would extend the lifespan of the coatings by several years, how much would the potential revenue increase be by eliminating one or more planned shutdowns for re-coating?
- Do your forklift or machinery operators tend to damage walls or ceilings, thereby introducing opportunities for contamination? How easy is it to repair the various coatings solutions, and can they be done without shutting down production? Or, how resistant to damage are alternative coatings solutions, and how much would that save over multiple years?

4. Plan maintenance work to maximize your facility’s production and minimize downtime.

Service providers that specialize in fast-track maintenance shutdowns or emergency repairs can offer a variety of solutions that allow maintenance or repair work to be done while your manufacturing production





continues to operate or in incremental stages to minimize your downtime and work around your production schedules.

Some things to discuss with your corrosion control service provider:

- How fast can any specific product cure, and how much surface area is covered in a single shift or a weekend?
- Will we have to worry about volatile organic compounds, overspray, or anything that could affect my raw or finished products?
- How would you work with my schedule to maximize the repairs needed? Are you capable of supplying multiple field crews simultaneously? What work can be done while production is ongoing? What preparatory work do you do on-site, and how will that effect my operations?

5. Partner with an installer with a strong track record of delivering quality, on-time performance.

As in any good purchasing decision, you want to be well-informed and comfortable that:

- You trust the solutions provider.
- The solutions provider has a track record of successfully applying these systems and can support their claims.
- The solution offered is the best decision for your business.
- The price is competitive.

Once you feel comfortable with the above, as part of the buying process,

- Ask to review your solution provider's portfolio and ask for customer testimonials regarding the specific solutions you are interested in.
- Ensure your solutions provider is financially stable and has a long history of performing work in the corrosion control and maintenance industry.
- Ensure your solutions provider has in-house Quality Assurance / Quality Control (QA/QC) capability and applicable corrosion industry certifications.
- Ensure your solutions provider will provide a warranty on the product and labor and that they have the depth or resources, and experience to honor it.

The care and maintenance of your facility are critical to your company's ongoing success. Making informed, well-planned decisions in this area will provide significant cost savings over time, protect your product from contamination or costly recalls, and maximize employee safety and productivity.

Superior Industrial Maintenance, through our Fixxus Division, patented and pioneered the application of a unique polyurea coating solution specifically designed for food-grade applications. With over 35 years of experience, we provide a wide variety of corrosion protection solutions for any substrate. From walls and





ceilings to floors, roofs, process piping repair, insulation, and abatement, Superior Industrial Maintenance and Fixxus can handle all your maintenance needs.

We would love to provide your facility with a comprehensive corrosion analysis or discuss any specific corrosion or maintenance challenges you currently face. Please contact us at <https://gosuperior.com/>.

