



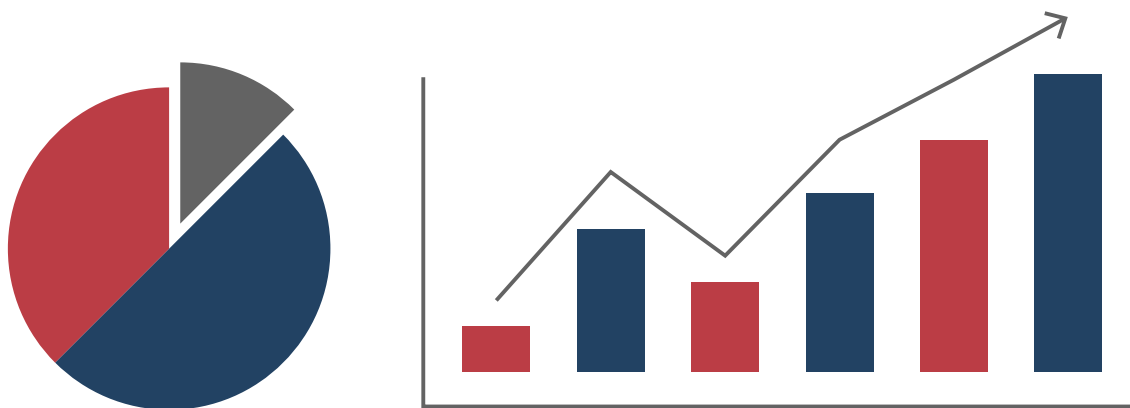
YOUR GUIDE TO A PAINLESS PAINTING PROJECT

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A successful coatings project involves so much more than just paint. When done well, an industrial coatings job is a comprehensive process, beginning with a budget and an accurate assessment of the job to be done, and continuing all the way through regular inspections and scheduled maintenance. Here are a few of the core services that we know from experience improve the performance of our products and the experience of our customers.

Devising an industrial painting budget

There's a lot to consider when managing an industrial facility. Regularly scheduled maintenance, repairs, coordinating with vendors, managing employees, the list is seemingly endless. Most of these tasks are line items on a budget. But regularly scheduled painting is something that's sometimes left out. This can lead to surprise costs and lost opportunities for savings.



A few factors that affect budget

A well thought-out budget depends on a number of factors. The substrate being painted, and the stress that the coating is regularly exposed to will determine what sort of product is needed. If you've handled painting decisions before, you may already have an understanding of what you need. But what if a less expensive product can meet your needs? What if a more expensive product will reduce costs in the long run?

Accessibility and containment are some site-specific factors that should be taken into account. Staging equipment, mechanical lifts or cranes will increase the amount that should be set aside for the project. Containment will be more important near schools and residential areas compared to industrial parks, which will be reflected in the overall cost of the project.

When it comes to choosing an applicator, options range from small startups to highly professional organizations that regularly undertake multi-million dollar projects. Which one you choose will depend on the size of your project, budget and who you've

worked with in the past. But project managers trying to save a few extra bucks on this phase of the project should be aware that improper surface preparation or a shoddy application can seriously shorten the lifespan of your coatings system.

Quality control and quality assurance are closely tied to contractor selection. A trusted applicator should be able to handle the QC, but the owner needs an effective QA specialist. If the organization doesn't employ someone capable of performing these services, consider seeking outside help and carve out some space for it in the budget.

Finding efficiencies

Considering what you're already doing is a smart way to go about planning a painting budget. Could you create some efficiency in your existing coatings maintenance process to cut costs? Is your maintenance process strategically designed?

Take a project manager that applies a two-coat system every five years, for instance. Each time his asset, let's call it a large storage tank, is repainted, he pays for labor, staging, containment, etc. The actual paint accounts for only a small portion of that budget, usually around ten percent of the total cost.

By spending five percent more and adding a third coat to the system, its service life can be extended for another five years. Even if labor for the additional coat adds a further five percent to the total cost of the project, the owner still realizes 90 percent savings by skipping the five-year recoat. Spending a little more on the product helps cut costs like labor and staging from your painting budget.

Creating efficiency may also mean reexamining the product you're using. Facility managers often purchase the same product over and over again, simply because that's the way they've always done it. But investing in a more durable paint upfront may lead to painting less often, resulting in net savings on painting costs. Buying in bulk from a single supplier is also a great way of generating savings.

The benefits of on-site coating inspection services from a NACE-certified professional



Some industrial painting suppliers offer “failure analysis services.” If one of their products has failed at a customer’s site these companies will visit your facility, take a few photos and analyze the conditions that may have caused their product to fail.

This approach seems a bit backwards. These sorts of (costly) blunders can often be avoided by evaluating site-specific coating stressors before a system is in place. Paying attention to a particular site’s susceptibility to corrosion and other environmental factors can help to avoid these breakdowns. Some of the big-box retailers don’t place any emphasis on this type of service. We think it’s smart, and can hopefully make “failure analysis” unnecessary.

A preemptive approach

Building relationships is good business, and on-site surveys are a good practice for making these connections. By offering no cost, no commitment asset evaluation services, suppliers are able to shake hands with potential customers before they decide to buy.

After a purchasing decision is made, a supplier familiar with the particulars of a customer’s site can then design a product with those needs in mind. A petrochemical facility in St. Louis and a fleet of tugboats in New Orleans will have drastically different

coatings needs. Understanding those needs is key to offering expert advice and crafting a product that performs.

Recommendations for choosing a coating system, plans for proper quality control and quality assurance during and after the application process, and advice on devising maintenance programs to lengthen the life of your coating system all require a thorough understanding of site-specific needs.

There are some firms that exist solely to provide these on-site surveys and asset analysis but, as a result of this being their core service, they charge heavily for it. These firms also may have arranged to receive a commission from an applicator in exchange for recommending their services, which could lead to an ill-suited partnership.

What to expect from an on-site analysis

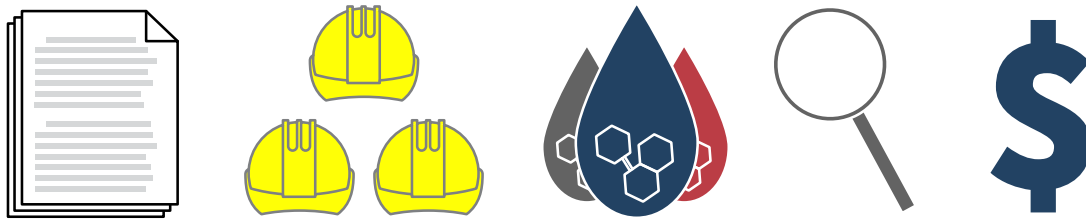
Whether it is the core service of a company or not, there are a few things you should expect from a thorough asset analysis. Inspectors should have certifications from professional organizations. NACE and SSPC are well respected within the industry. Coating inspection services offered by NACE-certified professionals are a good bet.

A report, complete with write-ups of the findings, photographs to accompany those findings, and detailed recommendations on how to proceed at different price points should be included. It is a good sign if these findings are being compiled using some industry respected documentation software.

Facility managers should be able to use this report for budgeting or to better understand what type of work can be accomplished at a given price point. An asset analysis also provides the basis for devising a long-term maintenance plan for the site. This takes budgetary guesswork out of the equation when considering the future costs of facility upkeep. For this reason, these reports are also often useful in justifying to superiors spending on coatings improvements.

Five keys to crafting successful painting programs

Designing and implementing a painting program can be a daunting task. Many owners and facility managers are unsure of even the first steps to take. In this post, we focus on some essential aspects of a successful painting program and offer advice for how to proceed with each.



Specification

Identifying and prioritizing the work to be done is the first step. Next, clearly describe the scope of work in a specification document. This should describe the following: staging, surface preparation, application, clean-up and quality control documents.

This document should also list any special circumstances, such as testing old paint for heavy-metal content and testing the interior surfaces for chlorides prior to the application of a new lining system.

Contractor Selection

Basing the selection of a contractor entirely on “lowest price” bid is risky business. Many times, what starts out to be a low price quickly balloons with extra charges and delays in completion. Consider the following factors when choosing a contractor:

- **Expertise** - Does the contractor have experience with this type of work? One contractor might be fine for painting piping, but does

not have the necessary experience for interior tank linings.

- **Management** - The estimator in the office may be very knowledgeable, but how does that translate to field-level management?
- **Equipment** - Is the technology up to date and are workers comfortable using it? Equipment that is in disrepair has the potential to cause delays in the field.
- **Manpower** - Is it sufficient to complete the project, or will the contractor be scrambling to make new hires?
- **Product knowledge** - Are the contractor and his workers familiar with the coatings that are specified for the job? Do they have an understanding of the latest coatings technologies?
- **Relationship** - How well do the owner and contractor work together?

Coating Selection

Many of the coatings available today can appear quite similar. It's often difficult to distinguish a quality coating from an average one simply by reading the data sheets.

Unfortunately, many manufacturers are more interested in quantity than quality. Even leading manufacturers are leaving the research and development up to someone else, choosing to duplicate or "knock-off" the formula of an existing coating. Often these reformulations are made with inferior resins and cheaper fillers and extenders. The result is a coating that looks similar to another, but with different performance standards.

In most cases, it's best for the owner or manager to rely on an expert that they trust. This coating expert should be knowledgeable in all aspects of the industry and be

able to provide options and expected results for each of these options. It's usually best if the owner relies on this expert to write, or at least assist in writing, the project specification.

Inspection

Inspection is a very important component of the success of any coating project. Quality, thorough inspection of a contractor's work can be the difference between a service life of few years or many.

Whether the inspection is done in-house or by a third-party, ensuring the job adheres to the standards of the specification is the ultimate goal. In some instances, the contractor provides his own inspector to maintain a daily log, but the owner should always have a quality control backup to verify the readings. Much like the selection of the contractor, the selection of an inspector should be based on knowledge, experience, availability and cost.

Cost

Cost is something that should be discussed at the beginning of a project. If there are multiple ways to approach the job, then budget numbers should factor into decision-making.

The owner may want the longest lasting paint job available but lack the room in the budget for that option. In order to get the highest quality job, the work may need to be spread out over a longer period of time.

In the end, an owner should have three questions for every option offered by a contractor: How much corrosion protection, for how long and at what cost?

The importance of having a coatings maintenance plan

The facility managers we see operating without an industrial coatings maintenance program tend to be those who have never been burned by not having one. It's telling that those who have encountered problems from expecting coatings to outperform their service life don't make the same mistake twice.

Neglecting the coatings that protect your assets from corrosion and other damage means gambling in a high-stakes game. Here we'll take a look at the most common reasons for not having a proactive maintenance plan in place, and how that will come back to hit owners and facility managers right in the wallet.

Playing with fire

Many owners aren't considering a plan for coating maintenance right from the outset. The last thing on an owner's mind when moving into a new facility is the day the coatings will outlive their service life. But having a plan in place before that day comes can save a lot of headaches, and money.

Other times, high turnover within a corporation leads to the organization losing track of when a facility's coatings should be undergoing maintenance. These organizations often find themselves operating without a coating maintenance plan, instead only handling issues as they arise. This process continues until a proactive manager comes along and wonders if there is a way to address problems periodically or incrementally to avoid having to replace equipment or undergo large-scale facility overhauls.

The burn

By not maintaining the coatings that protect their assets, owners and facility managers invite the sort of damage that can get expensive. Take the all-too-frequently true example of a neglected bridge. It receives a three-part, zinc epoxy urethane coating with an expected service life of 25 to 30 years. Now imagine funding for the scheduled maintenance falls through and the bridge's coatings system is not revisited until it is deemed “structurally deficient” years later.

By now, corrosion has led to significant structural damage. Significant portions of the structural steel need to be replaced. New members must be fabricated to complete the rehab. Significant costs are added in the form of repairs, material and unplanned downtime. Only then is the whole bridge ready to be blasted and repainted.

As coatings wear off, corrosion begins to attack the asset. Once this process is underway, assets are continuously devalued until they eventually need to be replaced. Having a maintenance program in place to properly protect your assets is a great way to ensure this process never gets started.

Financial concerns are just one aspect of a failed coatings system. Neglected coatings can also pose serious safety risks. Bursting pipes, structural collapses, explosions and the like are some of the catastrophic repercussions of a poorly maintained asset. While a new coatings system may not be the remedy for serious structural damage, a maintenance plan will often lead to the discovery of such an issue. The damage can then be addressed properly before an accident occurs.

The payoff

If pushing your coatings beyond their service life is a risky gamble, investing in a coatings maintenance plan upfront is a safe investment. Unfortunately, many owners and facility managers are under the impression that a maintenance plan will automatically involve sinking a boatload of money into their facility all at once. This misunderstanding keeps them from acting on developing a program for their facility.

When properly thought out, a maintenance program doesn't need to work this way at all. Under the right direction, the plan will align with the owner's budget and goals.

This happens by approaching maintenance in two steps. Immediate problems (such as a leaking storage tank) are dealt with immediately. Secondary problems (such as fireproofing an entire facility) are then scheduled out over the course of the plan. This way, the cost of the plan is absorbed over time and the huge expense of a total asset failure is avoided.

About US Coatings

US Coatings is a leading provider of high-performance coatings and linings. We custom tailor our products to fit the needs of clients across a wide variety of markets, and we pride ourselves on offering superior customer service through the duration of the job.

Founded in 2000 in St. Louis, Missouri, US Coatings has grown from a two-man operation to a company doing business all over the country and with close connections spanning a vast number of industries. Despite this success, we're committed to remaining nimble enough to be able to take on any coatings challenge, large or small. We still make all of our products in-house, from formulations we own to new products designed by our technical R&D department.

Where some of the big-box stores pull a product off the shelf and wave goodbye after checkout, US Coatings is focused on building relationships with our customers through our consulting services. We're here before, during and after the sale with personalized attention to your project that our competitors can't match.

More than just purveyors of paint, we take collaborating with our customers seriously, providing superior service throughout the course of your job.