

COATER'S CORNER

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Whose powder coating job is it?



Have you ever received a request for quote (RFQ) asking for something to be powder coated black?

Did you know there are more than 500 different choices for black when it comes to powder coating? Actually, I just made that up — could be less, could be more. Not the point.

All powder coatings have varying degrees of color. When a customer simply requests a color, there is a lot of risk involved. This article discusses what you should do when you receive this type of request in order to provide a solution that meets the customer's color expectations.

Why you should not “just coat it black”

Your customer has asked you to “just coat it black.” In hopes of clarification, you ask if you can see a sample of the black the customer has in mind. You receive a PDF of a printout of a photo of a color swatch from a design magazine. You still are no further ahead in giving your customer what they ultimately want because the black sample has taken on a blue pixelated hue. It may prove even more difficult if you are communicating with a fabricator that has been hired by a general contractor working in collaboration with a designer that is trying to capture the vision of the project owner. I won't try to describe all of the possible scenarios that customer coaters experience; this is simply the one that I have the most experience with and believe we (all custom coaters) have the best opportunity to influence.

Color is only one of the issues that we must seek clarification on when evaluating a coating system for our next coating job. Instead of spending the energy trying to determine which is the right black, I believe that our energy is better spent influencing the decision makers — it will make our lives easier, provide a competitive advantage to those of us who seize the opportunity, and ultimately give the end users a product that meets or exceeds their expectations. (Unless the designers screw it up from the beginning; in which case, we did our best.)

Whose job is it anyway?

In today's environment, the powder coater is typically the last or second-to-last person in the supply chain before a job ends up at its final destination. This is depicted in Figure 1. Our goal should be to connect with the owner and/or engineers and designers on the job to influence the specification for the coating system. If done successfully, then the fabricator would be able to provide us with a complete coating specification that would eliminate the ambiguity that so often results in the unfair advantage held by the less considerate job shops that compete solely on price.

The owner of the project generally has a high-level idea of what they want the end result to be. In many cases, the owner will also be the end user. This is important to determine early because you need to know who the key decision makers are when you begin making the case to define the coating system that the job will require. They are also the ones who make the final financial decision, and if wiggle room is needed to get them the coating system they require, you better have a compelling reason.

The engineer and/or designer of the job will typically have a better technical grasp of *why* a coating is required, but do not be surprised if you find yourself explaining *how* powder is electrostatically applied to the properly prepared steel or aluminum substrate. More technical information is useful when speaking with engineers so long as it is directly applicable to the case at hand.

The fabricator can be a great ally in defining the coating system if you have a longstanding relationship with them. Alternatively, they can make it nearly impossible if they are only interested in getting a foot in the door based on lowest cost and then fighting for extras after the fact. The fabricator should also be educated about potential defects that they could inadvertently cause during their processing of the job.

The end user is the one who pays for the whole project at the end and enjoys the benefit of a job well done or suffers the consequences of the job simply being powder coated black. If the owner and the end user are not the same, perhaps warranty claims can be avoided by doing it right the first time, resulting in long-term savings to the project owner.

What we want to know and why we want to know it



If you are able to influence the coating system specification, the following is a useful checklist to help narrow down what coating system is appropriate. (See Figure 2.) If you get stuck during the process of uncovering what the job truly requires, you should get your coating supplier and pretreatment supplier involved to verify that

you are on the right track. In some cases, it may be worthwhile to invite your supplier to the meeting table.

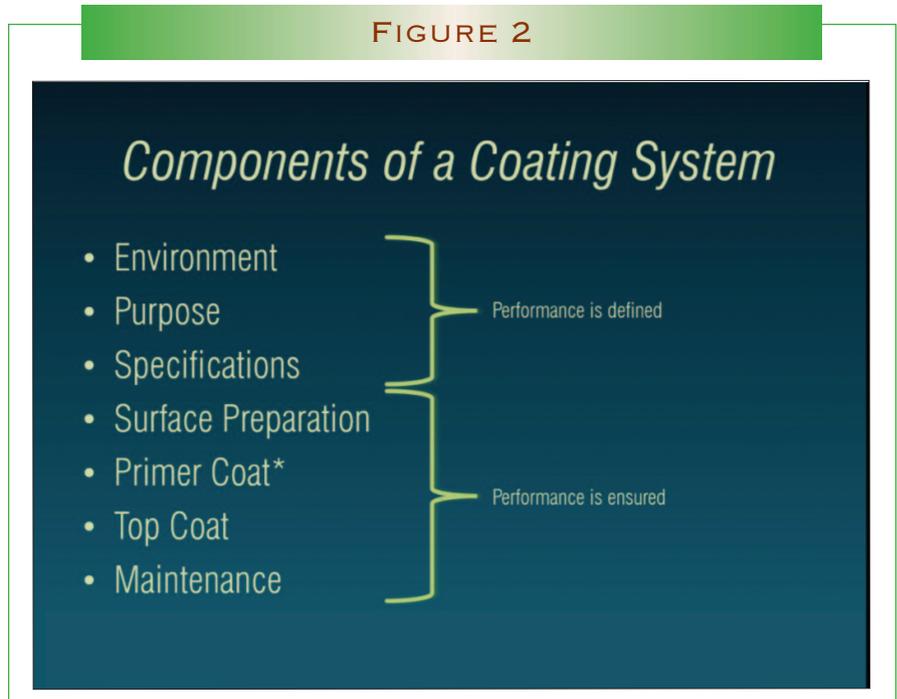
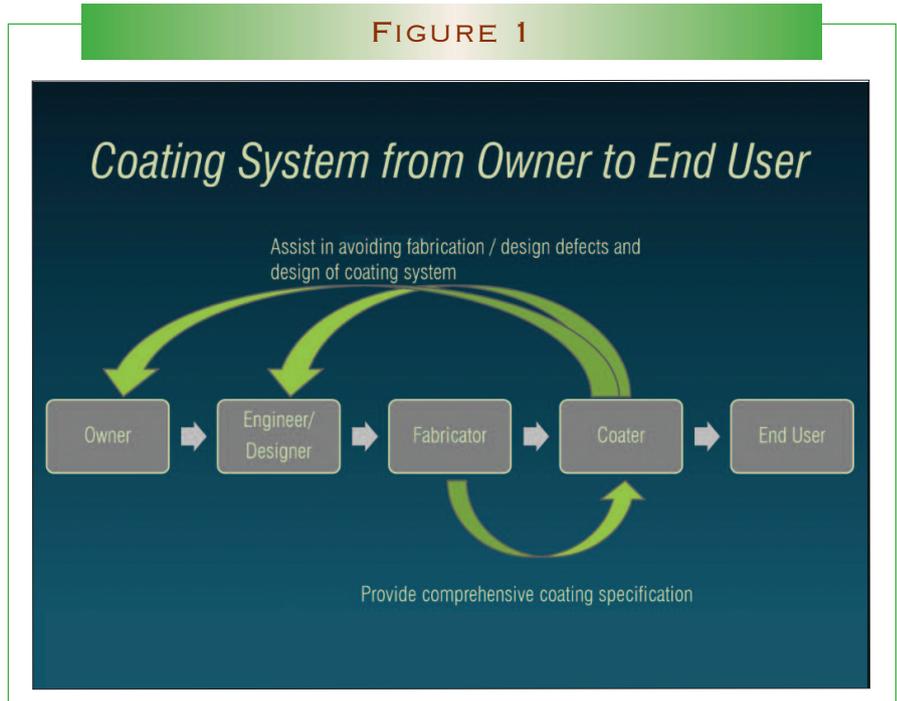
Environment: Where is this powder coating expected to survive? There is a large difference between ocean side and inside. Will it be exposed to chemicals or harsh changes in temperature? What will it come into contact with on a regular basis?

Purpose: Is the powder supposed to simply look good for one season or are you coating something that the customer wants to look good and serve as a railing on their deck for years to come? Is the coating an integral part of a corrosion protection system or is the color the most important thing at the end of the day?

Specifications: Is there any additional information from other standards bodies such as ASTM, AWWA, NACE, or SSPC that we need to consider when doing this job? Is this a liquid standard that we are being asked to match or exceed with powder? Have you received answers to the questions touched on in this article?

Surface preparation: Depending on the answers to the above three categories, and if a standard is not provided by any of the decision makers, then you will have to determine what degree of performance is required and how you can achieve that for the coating. Is a SSPC-SP1 solvent cleaning sufficient to prep the steel for coating or should you be blasting it to an SSPC-SP5 White Metal degree of cleanliness?

Coating system (primer/top coat): Surface preparation factors into the coating system. In this case, what primer coat and top coat does the job require? Should the chemistry of the coating be considered to best suit the desired performance? An example would be using an AWWA C213 / NSF61 approved coating for a pipe lining instead of a hybrid epoxy polyester. Both are available in RAL 5010, but only one will achieve the desired results. Oh—and what color do they really want? Make sure you get a product code.



Maintenance: This is one area that is often overlooked, but I think is worth mentioning. Does your customer need to know how to touch up the coating? Do they understand that it is easier to match liquid to powder than the other way around?

Remind me again — why should we do this?

I strongly believe that when we do our best as custom coaters, we all contribute to improving the standing of powder coating in our marketplaces

and we help our own businesses in the process. In North America, we have a lot of room to grow as the finish of choice, so why shouldn't we try to achieve that goal?

When we fulfill an incomplete request to powder coat something based solely on a color, we do ourselves, our customers, and our industry a disservice by providing something that powder coating is not — substandard. Customers expect us to be the experts, and when they ask for powder coating, it is usually

FIGURE 3



because they want something better than liquid paint but do not know what else to ask for.

By understanding who you need to speak to in the decision making process and contributing to the development of a cohesive coating system for the RFQ, you stand to gain more business as the expert and also weed out your competitors who are likely not reading this column. They are solvent wiping and painting that steel railing that is going near the ocean in a nice polyester-epoxy black. (See Figure 3.) It should look good for about a week!

At the end of the day, if a solvent wipe will suffice and any black will do, just make sure you get it in writing. Or, better yet, send it for liquid coating.

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Editor's note

For further reading, see *Powder Coating* magazine's website at www.pcoat.com. Click on Article Index and search by subject category. To submit a question, click on Problem Solving, then scroll to Coater's Corner.

Chris McKinnon owns Aegis Industrial Finishing Ltd. with his father in Surrey, BC. As a third generation metal finisher (his grandfather started a plating company in 1948, and his father has worked in powder coating for more than 20 years), he is actively developing new markets for powder coating and providing those who will listen a greater appreciation for powder coating. He has an MA in



Business Leadership, holds his NACE CIP Level 3 (#31504), and is a member of PCI's Custom Coater Steering Committee. His company is focused on providing powder coating and abrasive blasting to the local market and specializes in process-driven quality for pieces up to 38 feet by 9.5 feet by 10 feet and 7,000 pounds. If you would like to contact Chris, he can be reached at chris@aegisfinishing.com.

This column discusses problems encountered by powder coaters during the daily operation of their powder coating lines. These are in-the-field experiences from coaters. Its intent is to provide practical information to line personnel who coat all day to help them improve in their work. If you would like to contribute to this column, contact Alicia Tyznik, editor, at 651/287-5620, or email atyznik@cscpub.com.