

Why Color Control is Important in the Paint and Coatings Industry

Color is important

If we see a green banana, we know it's not ready to be eaten. If we see a red light, we are more cautious and stop (or prepare to stop).

On a deeper level,  [color influences our perceptions](#). Color can affect our behavior, including the taste of food or the smell of a flower.

The importance of color in our everyday lives is significant. Color is everywhere and therefore cannot be ignored. We rely heavily on colors to guide us, sometimes unconsciously. That is why it's imperative we get it right. Every time.

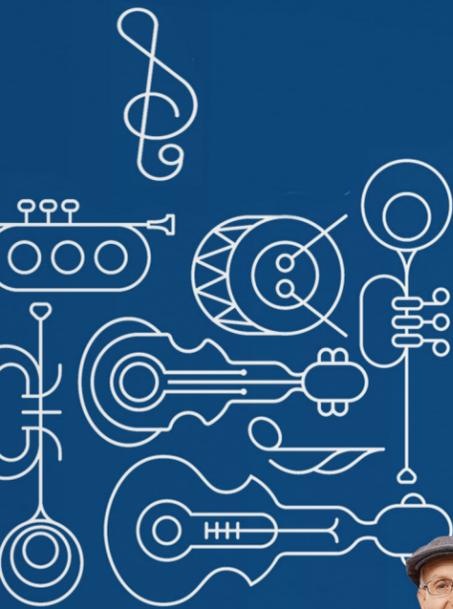


Why is color so hard to get right in any industry?

In the past, we've discussed how [we see color](#), [medications](#) that can affect the way we see color and the [impact altitude](#) and other physical factors have on our color perception.

The condensed version: The color we see depends on the object and how it absorbs/reflects wavelengths. Humans can only see from 400-700 nm on the electromagnetic spectrum. In comparison, dogs can see from 300-700 nm, bees can see from 300-600 nm and birds can see from 350-600 nm.

These seemingly small ranges are still enough to allow us humans to see millions of colors. Yet, many factors can still affect how we see those colors.



Physical factors

external factors

- Light source
- Background
- Altitude
- Noise



Personal factors

internal factors

- Age
- Medications
- Memory
- Mood



Why is this especially challenging and important in the paint and coatings Industry?

Paint isn't just about looking pretty or matching. The color of paint can play an instrumental role in safety, protection of materials, reducing heat absorption, increasing reflectivity, extending the shelf-life of surfaces, and much more. Similarly, coatings help safeguard our cars and houses, protect bridges and tunnels, and even save energy. Therefore, getting paints and coatings exactly right can be a critical element, sometimes even life-saving.

Because of the great variety of ultra-high-gloss and ultra-high-matte coatings, soft and silky effects, and many other types of coatings, it's important to be able to accurately measure and control color and appearance as gloss can differ from product-to-product. When gloss levels differ, companies need to compensate for those differences.

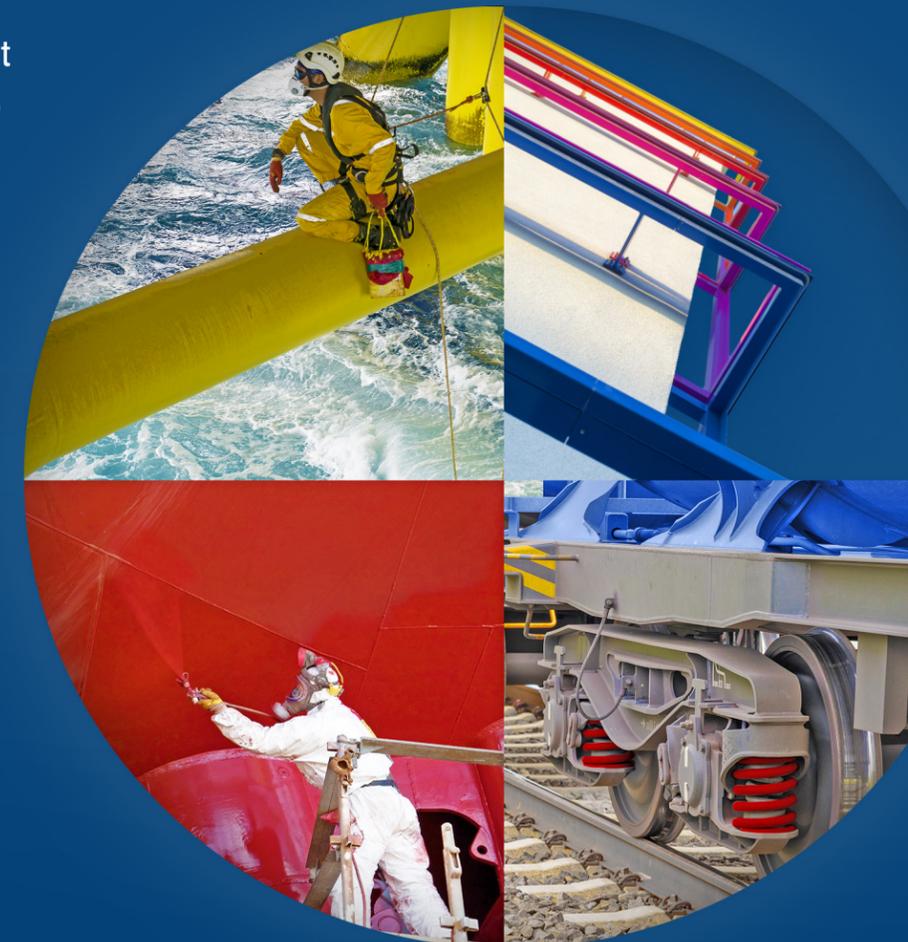
A sampling of paint and coatings applications

Architectural coatings are probably the first association we have when we think of paint and coatings. They're used to decorate and adorn the interior and exterior of residential, commercial, institutional and industrial buildings. In 2015, architectural coatings accounted for [more than half of the paint volume sold in the U.S. alone.](#)

Coil coatings, one of the biggest segments of industrial coatings, are a critical part of the manufacturing process. These are used in automotive materials and domestic appliances, for instance. What's more, coatings can also play a role in reducing heat levels by increasing the reflectivity of roofing materials.

Powder coatings are [having a positive impact on the industry in many ways.](#) Because powder coatings don't require solvents and allow you to reuse/recycle any overspray, they are an environmentally friendly and sustainable option.

Marine coatings are specially designed to be waterproof because of the nature of their use. Typically found on surfaces exposed to water, these are used on watercrafts and marine structures that are in or near water, including offshore oil rigs. Though the marine coatings market has seen quite a significant downturn in the past few years, the repair and maintenance of items requiring marine coatings is helping offset the lack of new builds.



The link between streamlined color control and business success in the paint and coatings industry

Color is different for everyone. Even for color experts. And how we see color can change from one person to the next, and from one day to the next. It all depends on a range of factors, as we discussed earlier. Even the surface of the material can affect the way color is perceived.

That means, gloss, matte or textured products can reflect light differently. That is why it's important to have a system in place to ensure that no matter the individual, the day or the surface, your colors will always be accurate. Not only that, but having a digital system that ensures consistent color takes a lot of guesswork out of the process. Imagine if, instead of shipping samples around the world for verification, at least some review could be performed visually—if not all.



These are the benefits of having a streamlined, digital color management system:



Save money and time

Greater control over your colors means a greater chance of achieving the right color the first time. It also means a reduction in shipping samples around the world for verification. Beyond this, production of physical fandecks is very expensive, and digital, portable and affordable tools like [ColorReader](#) can partially or fully replace this costly process.



Consistent results

Ensure accurate color, no matter the surface



Data stability

Samples can be compared with past results to test the strength difference of pigments, colorants and bases. This ensures consistent delivery of material between manufacturers and customers.



Better communication

When color control goes from subjective to objective, everyone involved in a project has access to the same information, which in turn streamlines the entire process

Datacolor in action

Companies around the world trust Datacolor's equipment and software because it meets the unique needs of the paint and coatings industry.



Industrial coatings provider [NuCoat](#) is able to stay ahead of their competitors by color-matching thousands of custom requests and providing the highest quality color control for their customers.



Canadian company [Rousseau Metal](#) is able to match custom color requests from their clients, and uses Datacolor solutions to approve every batch of paint they receive. This helps avoid potentially costly mistakes, and saves everyone time by streamlining color communication across multiple facilities.



Since 1975, [American Colors](#) has serviced the automotive, plastics and coatings industries around the world. Using Datacolor solutions, they're able to improve speed to market without sacrificing quality.



For [Pison Stream Solutions](#), a high-tech chemical coatings manufacturer within the industrial marine and aerospace industries, accuracy and consistency is of the utmost importance. They need to be able to accurately measure, formulate, store and communicate chemical coating color information across multiple locations.



A word on sustainability

Another benefit of having a digital color management system is less waste. That's good for the environment and good for your budget since it means you can save on material disposal fees.

And with digital color management, you avoid making costly mistakes and producing batches in the wrong colors.

But even if mistakes do happen, digital color tools can help make the most of off-color materials. Found in our Match Pigment software, a feature called "Recycle" lets you re-use materials that are either an incorrect color or simply left over after a job. In fact, some of our customers have seen their color management system pay for itself in a matter of months thanks to this feature. Learn more about Match Pigment's recycle capabilities [👉 here](#).

datacolor 

STREAMLINED PRODUCTIVITY & PERFECT COLORS

REDUCE TIME & COSTS, LESS WASTE

And that's why color is important in the paint and coatings industry

As you can see, color plays a critical role in our everyday lives.

Getting color exactly right can mean the difference between success and failure. But in order to be successful, it's important to understand how color can be perceived differently, how it can affect the use of products, and much more.

For these and many other reasons, having a streamlined and trustworthy system to match color means avoiding as much waste as possible and saving both time and money. All of which are great for the bottom line.

👉 [Visit our website](#) to learn more about how Datacolor supports companies in the paint and coatings industry.



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