

# X-Rite Color Management Solutions for Paint and Coatings



## Bring Your Color to the Highest Level

Color is an essential component of the paints and coatings industry, it surrounds us in our daily life; car manufacturing, household products, furniture, buildings and more. The challenges of ensuring color quality and consistency across the supply chain remains, in addition the demand for custom color is now higher than ever before.

To address these challenges, X-Rite a global leader in quantitative color measurement and visual analysis, offers solutions that communicate color accurately throughout the entire process. Ultimately, accurate color measurement produces numerous immediate and long-term benefits — cost savings through reduced product scrap, minimal production downtime, elimination of off-color product shipments and rework, seamless management of the color process through a global supply chain or multiple locations, and the prevention of bid list exclusions because of poor quality ratings.

**Defining your color and ensuring its accuracy by improving your productivity, reducing time to market and increasing profitability.**

## The Right Color at the Right Time

Coatings protect, identify, and define nearly every aspect of our lives. Bridges. Furniture. Signs. Buildings. Cars. Aircraft. Everywhere we look we see coatings in use...and we see color at work. Color is essential component of the coatings industry, and getting it right is as important as getting the right color. There are a number of key issues to consider when communicating coating color.

**Design and development:** Whether designing a corporate image, a new protective system for municipal infrastructure, or signs for a city or village, color is a critical element of the development process. Colorimetric measurement provides the needed consistency from initial design, through prototyping, to finished product.

**Coating system consideration:** The extensive variety of coating types — from varnishes to hi-solids to powders — requires a measurement system that ensures color consistency in each application. Instruments and techniques that measure the same colors in these different formulations offer time- and process-saving solutions.



**Material consideration:** Just as coating formulations differ, so may the materials on which they're applied — wood, metals, plastic, and variations of each may be integrated in a design or product. Each has a different composition that may require a different coating system to achieve a color match. Accurate color standard and measurement tools are necessary to achieve these matches.

**Formulation harmony:** In-plant formulation technology requires non-contact batch analysis to ensure color integrity. Automated In-line color analysis systems ensure objective measurement and process continuity.

**Application methodology:** Aerosols, electrodeposition, UV cures — each requires a different chemistry. Color analysis tools ensure that colors remain consistent regardless of application.

**Multiple source uniformity:** Coatings may often be produced at different plants, or even by different suppliers, before becoming part of a supply chain. A precise color program — for manufacturers and applicators — avoids mismatched colors and costly mistakes.

Color measurement technology is a common-sense approach to improving quality control



# Monitoring Color Every Step of your Process

## Software Applications



### **Color iQC Color Quality Control Software**

A flexible, job-oriented software package that streamlines color measurement, reporting and recording to maintain a centralized, cost-efficient process. Whether in the lab, in production, or in finished goods, Color iQC adapts to your workflow to make color fast and easy.

### **Color iMatch**

Match more samples from opaque to transparent or from coatings to plastics to textiles. Multiple match engines provide more color formulation latitude. Available in a choice of three versions to optimize formulas for cost and color accuracy and make best use of lab resources.

### **ColorDesigner+**

ColorDesigner PLUS expedites and refines the paint selection process, eliminating wasted effort, needless formulation errors and connects to any paint dispenser. It also allows you to mix your customer's color in the paint product they want. With one efficient package, your paint department becomes a color design center.

### **NetProfiler3**

An exclusive advance in color measurement, NetProfiler enables customers to exchange spectral color data with confidence. By minimizing the variance between color measurement data — either from one instrument to the next or from one year to the next — NetProfiler controls the critical variable in managing the color reproduction process.

## Portable Instruments



### **Ci6x Serie Series of Portable Sphere Spectrophotometer**

The Ci6x family of handheld spectrophotometers — is a performance-driven solution for managing color at any stage of production, and gives manufacturers a whole new level of confidence in their color data, regardless of where or when the measurements are collected. The Ci6x Series creates opportunities to develop a consistent color monitoring program, efficiently manage process quality control, and reduce operating costs.

### **MA68II Multi-Angle Spectrophotometer**

The ultimate portable, multi-angle instrument for accurate measurement of metallic, pearlescent, and special effect finishes. It's the accepted standard of the global automotive industry.

### **900 Series Portable 0/45 Spectrophotometer**

A series of 0/45 handheld spectrophotometers designed to address a wide range of industry specific color needs, ensuring consistent color quality in the plant, laboratory or field.

### **Ci51 Handheld Spectrophotometer**

A versatile instrument for reliable retail paint matching applications on a wide variety of sample sizes, shapes, textures, and opacity levels. The unit can be used as a tethered handheld device or mounted for small footprint benchtop use. A NetProfiler3-enabled system ensures consistent, precise performance.

### **RM200QC Portable Spectrocolorimeter**

The X-Rite RM200QC Imaging Spectrocolorimeter bridges the gap between color appearance and material color — from incoming material batches to outgoing product shipments — in an elegant, portable unit that fits comfortably in your hand.

## Benchtop Instruments



### **Ci7600 & Ci7800 Benchtop Spectrophotometer**

The new X-Rite Ci7800, used as the master instrument, and the Ci7600, the cost effective compatible version spectrophotometers represent a quantum leap in producing and maintaining high value color measurement data throughout the entire color supply chain. Unlike any industrial spectrophotometer before them, the Ci7800 and Ci7600 sphere spectrophotometers, in conjunction with X-Rite Color iControl software, can be adapted to fit into any color supply chain (including those anchored by instruments from other suppliers).

### **Ci4200 Compact Benchtop Spectrophotometer**

A reliable and accurate benchtop spectrophotometer that serves as the foundation for operations seeking to establish a color control program or one looking to improve an existing program that currently relies on non-spectral devices or visual inspection pass/fail methods.

## Non-Contact In-Line Solutions



### VeriColor Spectro

The VeriColor Spectro is a cutting-edge, non-contact spectrophotometer that delivers in-line, non-contact, absolute (L\*a\*b\*) color measurement and identification.

### TeleFlash 445

An On-Line color and gloss measurement device for the coil and coating industry. It provides non-contact and reproducible measurements at a safe distance to the coil, even under adverse production conditions. It also allows for color adjustment with a high degree of accuracy permitting the effect of the coating process on color and gloss.

### VS450

VS450 is a non-contact 45/0° geometry benchtop spectrophotometer designed for color and gloss measurements on many types of wet and dry samples including paints, powders and plastics. It includes an integrated gloss sensor providing 60 degree correlated gloss values, and has a versatile form factor, which simplifies measurements on two and three-dimensional objects.

### ERX50 Non-Contact Spectrophotometer

color and optical brighteners are measured separately and controlled independently. Same as in the lab: Stable color measurement data also when basis weight changes. Only the opacity changes. Most importantly, ambient light, web speed and normal flutter do not influence the accurate measurement results.

## Visual Products



### SpectraLight QC Lightbooth

Consistent quality control in color-critical product categories is finally possible thanks to SpectraLight QC. This holistic visual color assessment system starts with state-of-the-art light sources capable of meeting practically any brand owner specification.

### Judge® II Color Viewing Booth

A patented seven-phosphor design that provides the closest match to natural daylight available in a fluorescent source.

### Harmony Rooms

Sometimes referred to as fit and finish areas, these custom-designed viewing rooms simulate the consumer experience and allow for the evaluation of final product for color harmony between parts and components coming from multiple vendors.

### Munsell Color FM 100 Hue Test

The Farnsworth-Munsell 100 Hue Test from Munsell Color is the industry standard for determining color discrimination and identifying color deficiencies. This portable, 15-minute test and scoring software analyze how accurately your visual evaluators see color.

## PANTONE® Solutions



### PANTONE® Cotton Chip Set

The most versatile two book set. Chromatically arrange 2.5 cm x 2.5 cm removable cotton chips in all the 2100 Fashion + Home Colors. Ideal for creating color palettes, mood boards and presentations. With PANTONE COLOR MANAGER SOFTWARE for digital design.

### PANTONE® Nylon Brights Set

Featuring 21 of the most important bright shades, 3.2 cm x 10 cm Nylon swatches conveniently packaged on a single ring. With PANTONE COLOR MANAGER SOFTWARE for digital design.

### PANTONE® Color Specifier and Guide Set

Containing all 2100 colors arranged by color family, chip book in paper format, with companion color guide is ideal for Fashion accessories, home furnishings, paints, interiors, color cosmetics and other non-fabric material. With PANTONE COLOR MANAGER SOFTWARE for digital design.



Given the broad nature of the coatings industry, it is difficult to incorporate universal color standards into coating production and application. At the same time, industrial coatings are approaching \$10 billion in annual sales. This, given the increasingly competitive nature of the global market, would suggest that any time- and cost-efficient solutions would be welcome.

Color measurement technology is one such solution— a practical, common-sense approach to improving quality control, reducing waste, and increasing overall efficiency.

**Consider just these few advantages:**

- Eliminate common visual errors caused by inadequate lighting or human estimate
- Integrate consistent, precise color quality control into your operation
- Reduce scrap and rework caused by mismatched colors
- Achieve color harmony among locations and suppliers
- Compile data for quality analysis and production review
- Reduce production time
- Improve quality analysis and overall control

**Non-Contact In-Line Solutions.** Used directly in-line, ranging from economical color verification systems to robot-based multi-angle devices to ensure color quality.

**Portable Instruments.** Convenient, hand-held units that allow real-time color measurement anywhere in the process. This avoids the need to take samples — and waste material — as well as reduces waiting time.

**Benchtop Instruments.** Primarily used in the central lab for validation of incoming goods. They are also often used for research projects and where special requirements exist, such as the need to measure transparent products or confirm the whiteness control of UV-including materials.

**Software Applications.** Instrument functionality is enhanced by adding formulation, quality control, profiling functions, color matching, or color management packages. Web-based editions are also available for server-based environments requiring simultaneous data viewing and communication around the globe.

**Visual Products.** X-Rite offers two daylight simulation technologies – SpectraLight filtered tungsten halogen technology for critical color decisions, and seven-phosphor fluorescent technology for relative color assessment. Both offer unparalleled precision, enabling your entire supply chain to deploy lighting products and complementary calibration services for maximum reliability and effectiveness.



**X-Rite Services, Extended Warranty and Premium Support**

Drawing on our extensive experience in the world of color, X-Rite offers the right level of services on-site or online, to support and nurture your business. Extend beyond the one year warranty with our extended warranty. With our full service contracts you can ensure your devices are well maintained, with X-Rites Annual Five Point Checkup, uniquely developed to keep devices performing to original specifications. With 12 global centers we make it even easier for customers to reach us. X-Rite Graphic Arts Standard (XRGAs) conversion helps bring color standards and measuring consistency into the business. With our consultative approach we work to evaluate how best to integrate XRGAs into your business offering you a higher consistency and reliability in your processes now and into the future.