

Weaving Color and Appearance in Textiles

Color Lifecycle Solutions for Textiles

Color is a Difference Maker

Whether establishing a new product line, a new brand logo, or a new fashion accessory, color has the power to illuminate, excite and engage... to create a lasting impression that separates your product from the pack. It is, for many, the defining element of your brand and product personality. Defining your color and ensuring its accuracy every time it appears is fundamental to long-term success.

X-Rite is a global leader in quantitative color measurement and visual color analysis. We pioneer innovative solutions that are scalable from a single location to a global, multifacility enterprise. The results are improvements in productivity, time-to-market, profitability, and a sustainable process that reduces overall footprint on the planet.

X-Rite's product portfolio offers solutions that communicate color accurately throughout the entire product development process. Ultimately, accurate color measurement produces numerous immediate and long-term benefits, including:

- Quickly respond to trends,
- Meet brand partner quality expectations,
- Eliminate off-color shipments and rework,
- Reduce product waste,
- Achieve sustainability initiatives, and
- Seamlessly manage the color process throughout multiple locations and a global supply chain.



Ensuring Color Consistency in a Global Market

Color and appearance are critical for product success. From the clothes and shoes we wear to the carpets and rugs we walk on to the curtains that provide shade in our homes, we select and purchase textile products based on color and appearance. For the textiles industry, this means getting color right is as important as selecting the right color. Whether you are an apparel brand, cut and sew vendor, dye house, or digital printer, we have the tools you need to:

1. Concept and quickly communicate seasonal color palettes to internal stakeholders and supply chain partners.
2. Ensure color cohesiveness in cross-merchandised product categories.
3. Accurately visualize color and appearance characteristics both physically and digitally within 3D software, to expedite product development and reduce oversampling.
4. Optimize textile formulation with software that can accelerate color development through better first match performance and with fewer correction steps.
5. Specify and deliver color quality throughout your textile supply chain by using a range of stand-alone and inline color measurement technologies.
6. Visually assess color against standards under the proper lighting conditions.

Complete Solutions to Define, Communicate, and Control Color

Instrumentation:



Benchtop Sphere Spectrophotometer

Measure solid color and enables reflection and transmission measurement across transparent and translucent materials.



Benchtop Non-Contact 45:0 Spectrophotometer

Perform instrumental quality control on multi-colored samples to quantify the true color.



Handheld 45:0 Spectrophotometer

Calibrate and profile wide and grand format printers to capture more color data on hard-to-profile materials for a more accurate profile.



Handheld Sphere Spectrophotometer

Increase consistency and production efficiency to deliver confidence when comparing tolerances at any stage of production.



Inline Solutions

Monitor product color during production to alert operators as soon as color moves out-of-spec.

Software:



Formulation Software

Yield better matches in fewer steps and with fewer corrections through the industry's smartest formulation engine.



Quality Control Software

Ensure consistent color throughout the supply chain through adaptable and configurable software options.



Profiling Software

Produce the most accurate color profile for your printer, ink, and substrate combination to produce repeatable and accurate color.



Digital Standards

Specify and communicate color standards digitally via an AxF file to all global supply chain stakeholders.



Instrument Performance Software

Verify and optimize performance of color measurement devices and reduces variance among instruments.

X-Rite and Pantone are transforming textile color workflows by advancing color communication, innovating color capture, accurately visualizing appearance characteristics, and integrating color measurement and production solutions that the entire supply chain can easily adopt.

Visual Assessment:



Light Booth

Replicate almost any lighting environment to visually verify color accuracy and integrity.



Visual Assessment Tools

Evaluate an individual's ability to discern color through easy-to-administer tests.



Fit-to-Finish Rooms

Evaluate color in a custom fit-and-finish room under controlled lighting to ensure all materials retain color harmony.



Color Guides

Aide in the design process with color-on-paper fan decks and guides to facilitate color inspiration and coordination.





What our customers are saying....

“ Having a reliable portable instrument like the X-Rite Ci64UV that we can use throughout the plant to confirm color accuracy at all stages of production has made a significant difference to our business.”

**— Anthony Guarriello,
PRESIDENT, ULTIMATE TEXTILE INC.**

Digitize many aspects of a color program with solutions for textile color measurement:

													
Brand	✓	✓				✓		✓	✓	✓	✓	✓	✓
Dye Houses	✓	✓		✓		✓		✓	✓	✓		✓	✓
Vendors	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓
Digital Textile Printing			✓	✓		✓	✓			✓	✓	✓	✓



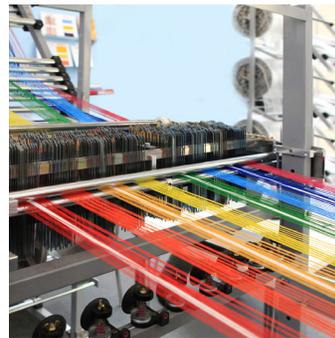
Brands:

Define and communicate your vision for color across all product categories.



Dye Houses:

Optimize formulation to support lab dip execution and scale to control color throughout bulk production.



Vendors:

Ensure color cohesiveness of all incoming raw materials and components to confidently deliver the quality and aesthetic expectations of the brand.



Digital Textile Printers:

Match multiple printers to achieve consistent, repeatable color from printer to printer, regardless of manufacturer, print process, or material.

Brands

Manage Color from Concept to Consumer

To meet shifting consumer trends and manage sustainability initiatives, brands must produce colors quickly, accurately, and with little waste. X-Rite and Pantone offer complete solutions to help streamline color development to shorten time to market, reduce waste and rework, and build a more sustainable process.



Design

- Specify color standards with associated digital values
- Achieve colors across a range of materials
- Process color data to provide optimal initial color matches



Specification

- Specify color standards with associated digital values
- Eliminate color miscommunication with spectral data
- Improve approval processes across multiple substrates



Quality Control

- Evaluate submissions from the supply chain to enable real-time color harmony
- Provide actionable data to drive process improvement
- Reduce human error and waste due to rejects and rework



Dye Houses

Optimize the Use of Dyes

To help dye houses create, formulate, and match color palettes, X-Rite offers a complete suite of color matching and quality control solutions for accurate color analysis and cost-efficient color formulation. Using spectrophotometers and software, dye houses can simplify the formulation of master standards, optimize the use of dyes, reuse leftover materials, and reduce approval cycles.

Formulation

- Simplify the formulation of master standards
- Optimize the use of dyes
- Reuse leftover materials and reduce approval cycles



Quality Control

- Monitor color quality in real time
- Provide actionable data to drive process improvement
- Share data with customers to validate performance



Visual Quality Control

- Standardize lighting and viewing conditions
- Reduce human error and waste due to rejects and rework
- Shorten time to market



Vendors

Continuously Monitor Color

Maintaining consistent color can be challenging in today's complex global textile supply chain. The right technology enables vendors to deliver on brand color quality expectations, minimize errors, and improve efficiencies by reducing rework and waste. X-Rite provides offline and inline color measurement technology that delivers quality statistics proactively and, in the case of inline solutions, can avoid color issues before they are even visible to the human eye.

Quality Control

- Perform incoming quality checks on products, like rolls of fabric
- Manage shade sorting from multiple suppliers in a more efficient manner
- Monitor color in real-time and identify color issues during production so dye corrections can be made before the back is finished



Visual Quality Control

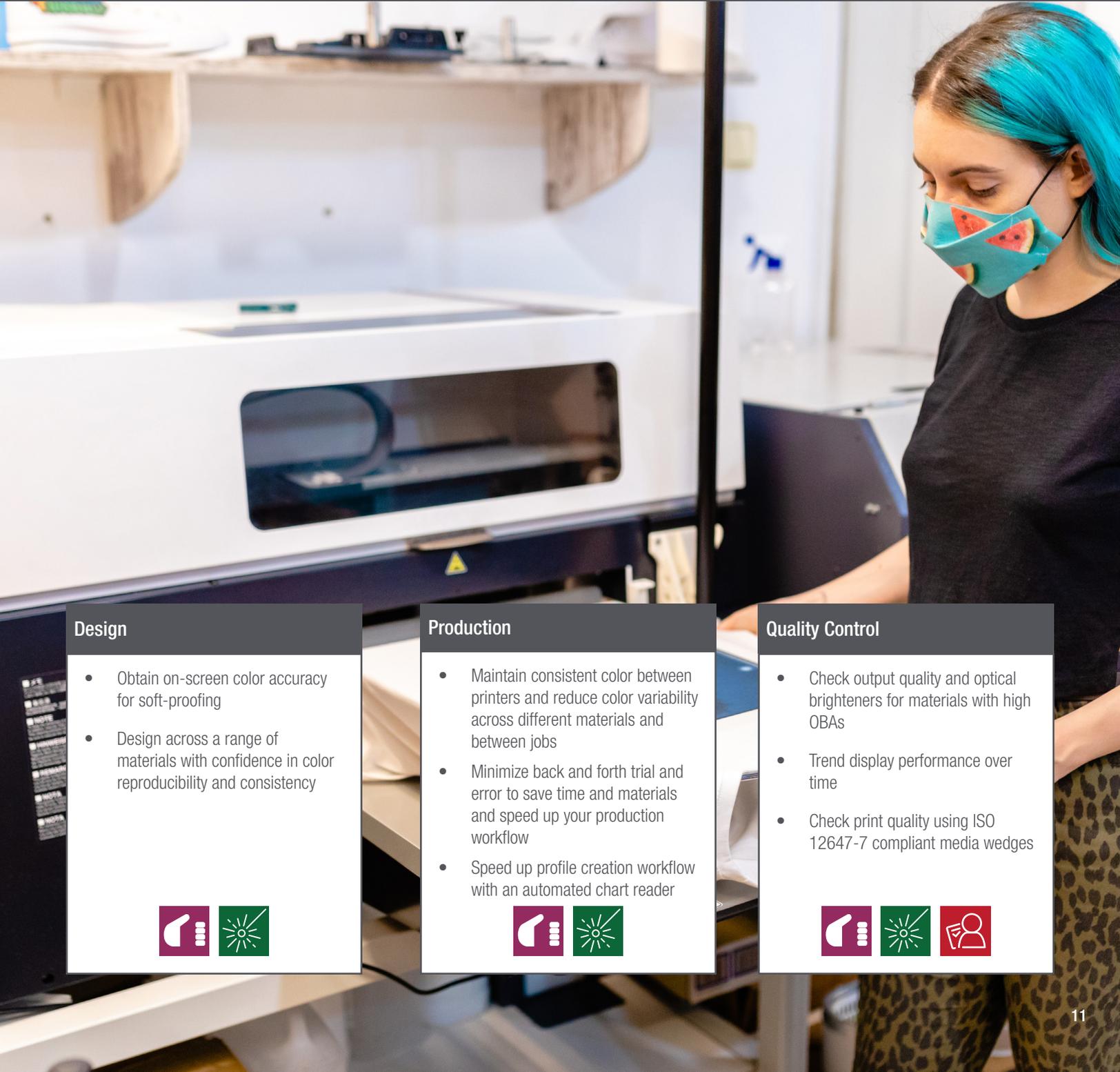
- Reduce human error and waste due to rejects and rework
- Shorten time to market
- Improve overall product quality



Digital Textile Printers

Create Profiles for a Wide Variety of Fabrics

The advent of digital textile printing is disrupting the way fabric and apparel producers work. Although digital print technologies utilize more durable inks and offer higher reliability, longer print life, and overall cost savings and efficiency, these changes also mean print shops must adjust the way they operate to remain competitive. Using X-Rite profiling technology, digital printers can create more accurate color profiles on a broad range of textile materials, including organic, synthetic, weaves, and sublimation sheets, for fast production with less wasted time and materials.



Design

- Obtain on-screen color accuracy for soft-proofing
- Design across a range of materials with confidence in color reproducibility and consistency



Production

- Maintain consistent color between printers and reduce color variability across different materials and between jobs
- Minimize back and forth trial and error to save time and materials and speed up your production workflow
- Speed up profile creation workflow with an automated chart reader



Quality Control

- Check output quality and optical brighteners for materials with high OBAs
- Trend display performance over time
- Check print quality using ISO 12647-7 compliant media wedges



Why Partner with Us?

Simplify Your Partnerships with One Global Color Partner

Managing a global supply chain is complicated. Cut down the number of vendors you work with by partnering with X-Rite and Pantone for all your color needs. We provide comprehensive solutions to help inspire, design, collaborate, formulate, and produce your color accurately and efficiently.

Minimize Risk & Protect Your Investment

We want your X-Rite investments to help you be as productive as possible, which is why we offer a variety of support, training, consultation, and service options to help you maximize performance.

Service Care Plans

To achieve the highest color accuracy, you must maintain your color tools. Our Service Care Plan options help ensure your device continues to operate at peak performance to help you get the most out of your investment. maintain certifications, and reduce production downtime.

Assessment Services

Our Color Experts are available to consult with you and ensure your organization has implemented the necessary technology, processes, and expertise to optimally manage color.

Color Education and Training

Invest in your most important asset – your people. Our color education and training services are customized to fit your needs, schedule, and budget. From introductory classes to advanced applications, our extensive offerings span every learning style to help you improve your color knowledge and ensure your workflow is the best it can be.

Options:

- Custom Color and Workflow Training
 - » Remote
 - » Onsite
- Consultation and Audit
- Seminars
 - » Classroom
 - » Online Self-Paced Courses

