

COLOURizd™

QuantumCOLOUR for Yarn

**Radically innovative,
sustainable alternative
commercial technology
for coloring cellulosic
and synthetic yarns**

98%

Reduction
in Water
Consumption

0%

Zero
Wastewater
Discharge

73%

Reduction
in Carbon
Footprint



No Harmful
Chemicals

50%

Reduction
in Energy
Consumption



Significant
Cost Savings



The QuantumColour Solution:

Sustainability With No Compromise



Beauty

Fabrics made from QuantumCOLOUR yarn are beautiful, strong and soft, with the cozy feel of well-loved garments.



Quality

Chosen by the world's leading apparel retailers, QuantumCOLOUR yarns and materials are fade-resistant and stronger than conventionally-dyed alternatives.



Savings & Sustainability

QuantumCOLOUR's patent pending technology dramatically reduces water, chemicals, and energy requirements, in both the coloration and finishing stages of production.

Strong & soft

QuantumCOLOUR is an additive process that actually increases yarn weight. Our proprietary technology makes the yarn stronger, to minimize defects and increase yield. It also creates a soft feel that consumers love.

Reduced pilling

Unlike traditional dyeing and finishing processes, which weaken and break yarn, QuantumCOLOUR preserves and improves yarn strength. Without broken fibers, pilling is improved, especially with regenerated cellulosic fibers.

Fights wrinkles

Fabrics made from QuantumCOLOUR yarn are naturally resistant to wrinkling, making them easy to live with and travel-friendly.

Color that stays put & stays true

QuantumCOLOUR yarns won't bleed their colors onto adjacent materials. Their full vibrant hues stay true for more than thirty home washing cycles and are bleach-safe.

What You See Is What You Get



COLOURizd injects pigment and a binder into a yarn fiber bundle to create a beautifully colored yarn.

COLOURizd yarns have a beautiful look, ranging from almost solid to a heathered appearance to fully washed down. **The appearance of the final fabric is determined at the yarn coloration stage**, which is a significant advantage over traditional dyeing methods that require post-dyeing treatments to achieve the desired look.

Production-Proven

The culmination of over 10 years of research and investment, QuantumCOLOUR for yarn meets the rigorous goals of industrial manufacturing with its game-changing 5-step process, simplifying and streamlining the 30+ steps of conventional dyeing.

QuantumCOLOUR systems for yarn are currently running in high volume production, with capacities of 26,000Kgs to 96,000Kgs of yarn per month.



Greige Yarn

Yarns are not scoured or bleached prior to coloring



1

Wet Out

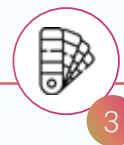
Proprietary wetting agent with 99% efficiency of use



2

Color Diffusion

Patent pending yarn coloration



3



5

Package Winding

Yarns can be delivered on beam for weaving or wound on tubes



4

Dry

Drying & curing of colored yarn

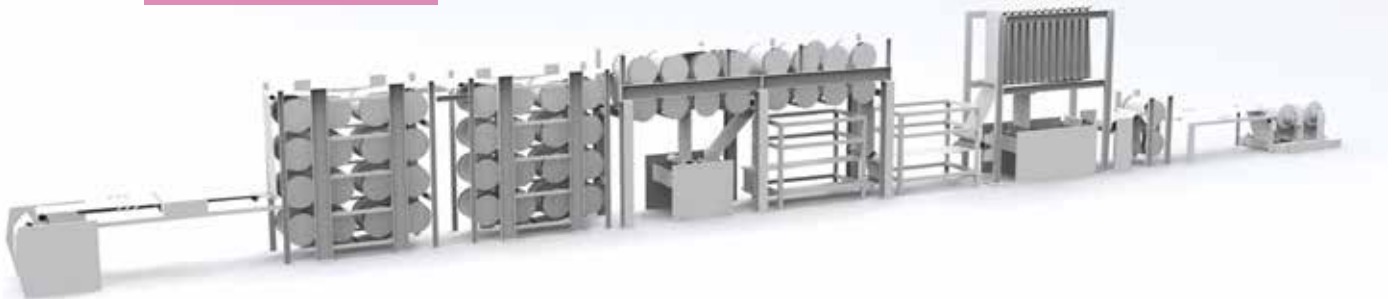
Unlike the 30+ steps involved in conventional dyeing, the uniquely efficient QuantumCOLOR process requires only 5 steps to achieve its beautiful and long-lasting results, saving time and money.

Supply Chain Flexibility

Because the patent pending QuantumCOLOUR technology needs no special building, boiler, or wastewater treatment facility, you can put the coloration process wherever it makes the most sense for your business.

QuantumCOLOUR's low water and power requirements make it an ideal choice for locations with limited resources or stringent environmental laws.

Put The Yarn Coloring Step Where It Works Best For You



Spinning facilities

QuantumCOLOUR's revolutionary «dry» process lets you color yarn without access to large amounts of water or energy. So coloration can happen immediately after yarn is spun, with no need for a separate «wet process» supplier.



Weaving or knitting facilities

Stay optimally flexible and on-trend by stocking greige yarn at your weaving or knitting plant and coloring it as needed, for a versatile, just-in-time supply of the exact colors the market wants.

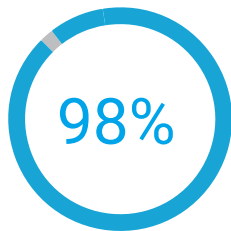


To supplement or replace conventional dyeing equipment

Need more coloring capacity but don't have enough water or energy infrastructure to expand your current operation? QuantumCOLOUR systems can go where traditional systems can't -- while protecting the planet and saving you money.

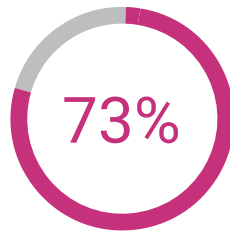
Radically Sustainable

Our processes have been independently verified by Peterson/Control Union and scrutinized by industry leaders. Fabrics and yarns created with QuantumCOLOUR coloration technology qualify for the highest-level environmental certifications.



Water Savings

COLOURizd has approached the textile coloration process from a new and disruptive perspective, one that challenges existing paradigms, enables a dry and non-polluting factory environment, and eliminates costly and time-consuming finishing steps.



Lower Carbon Footprint

Our customers (and brands) are urgently seeking ways to manufacture apparel and home products while reducing their environmental impact. Using QuantumCOLOUR equipment can help to embed sustainability into products, improving competitive differentiation and enhancing public image.



Reduction In Energy Use

The cozy, informal and comfortable pre-washed look is a desirable appearance that is targeted by many brands and represents the bulk of fabric created for the casual market in both home and apparel. Before QuantumCOLOUR, it also represented a wasteful and polluting manufacturing process -- but no longer!

Delivering Better Results

For the planet, the market, and your bottom line

Compared to conventional fiber-reactive dyeing processes, QuantumCOLOUR for yarn is efficient, economical, environmentally friendly, and effective -- producing high-quality beautiful results that consumers love.

Fiber Reactive Yarn Dye

Process

30+ steps
 30 chemical classes (some toxic)
 Wastes up to 60% of chemicals used

Environmental

Significant infrastructure requirements
 Limited location options
 Generates polluted wastewater

Results


Up to 8% yarn strength decrease
 Up to 5% decrease in yarn volume
 Variable color outcomes
 Fading, fabric weakness, and defects
 Pilling issues on regenerated cellulosic
 Not bleach-safe
 Wrinkle-resistance requires additional treatment
 Color bleeding

QuantumCOLOUR for yarn


5 steps
 3 chemical classes
 (all bluesign® & ZDHC approved)
 Highly efficient (98%) chemical use

Low water and energy requirements
 Locate anywhere
 Zero effluent & zero wastewater

Up to 8% yarn strength increase
 Up to 10% increase in yarn volume
 Excellent shade matching and reproducibility
 No shade band variation
 Meets or exceeds industry-standard fastness and performance requirements
 Fewer defects and reduced pilling
 Bleach-safe and inherently wrinkle-resistant
 No color bleeding



The game-changing COLOURizd
QuantumCOLOUR coloration system for
yarn is available now for shipment to
manufacturers worldwide.



COLOURizd™

Contact us

to learn how our radically
sustainable technology can
meet your needs.

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