



PRESENTATION

Session: **Innovative Cotton Products**

Title: **Advancing cotton use through digital design**

Speaker: **Mark Messura**, Cotton Incorporated, Cary, NC, USA

Presentations are available in the conference archive: <https://baumwollboerse.de/en/competencies/international-cotton-conference/speeches/>

Conference Organization

Faserinstitut Bremen e.V., Bremen, Germany. E-Mail: conference@faserinstitut.de

Bremer Baumwollboerse, Bremen, Germany. E-Mail: info@baumwollboerse.de



cottonworks™

**ADVANCING
COTTON USE
THROUGH
DIGITAL DESIGN**





Cotton Incorporated



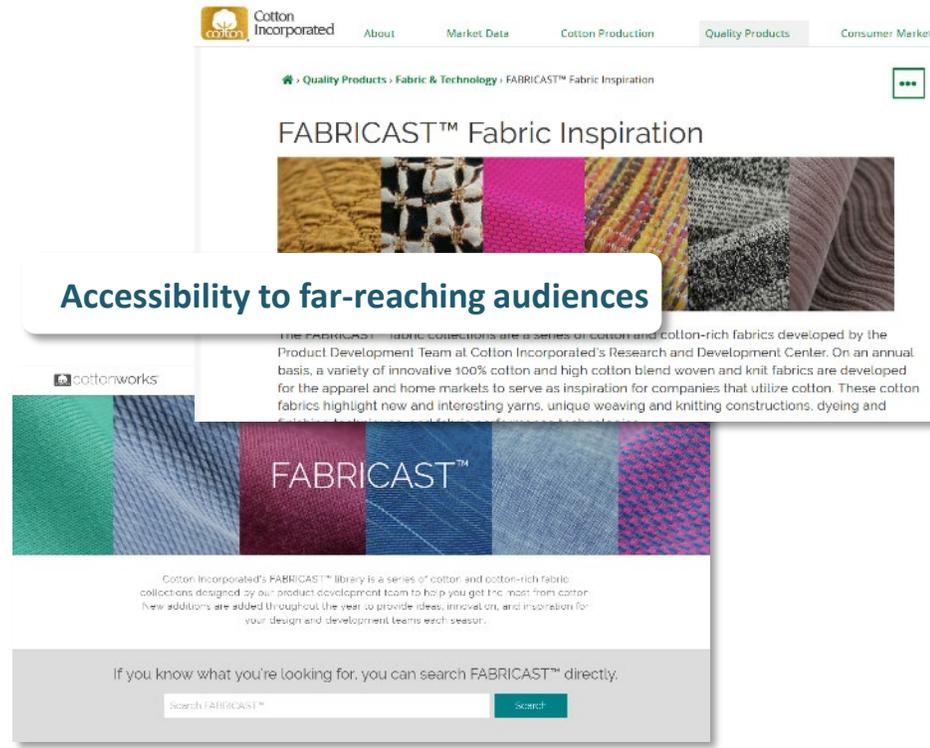
Mission: Improve the demand for and profitability of cotton through research and promotion



FABRICAST™ | Fabric Information System



Innovation to inspire to use more cotton



Accessibility to far-reaching audiences



Incorporating current fashion trends & colors



Collaborating - ongoing research & developments

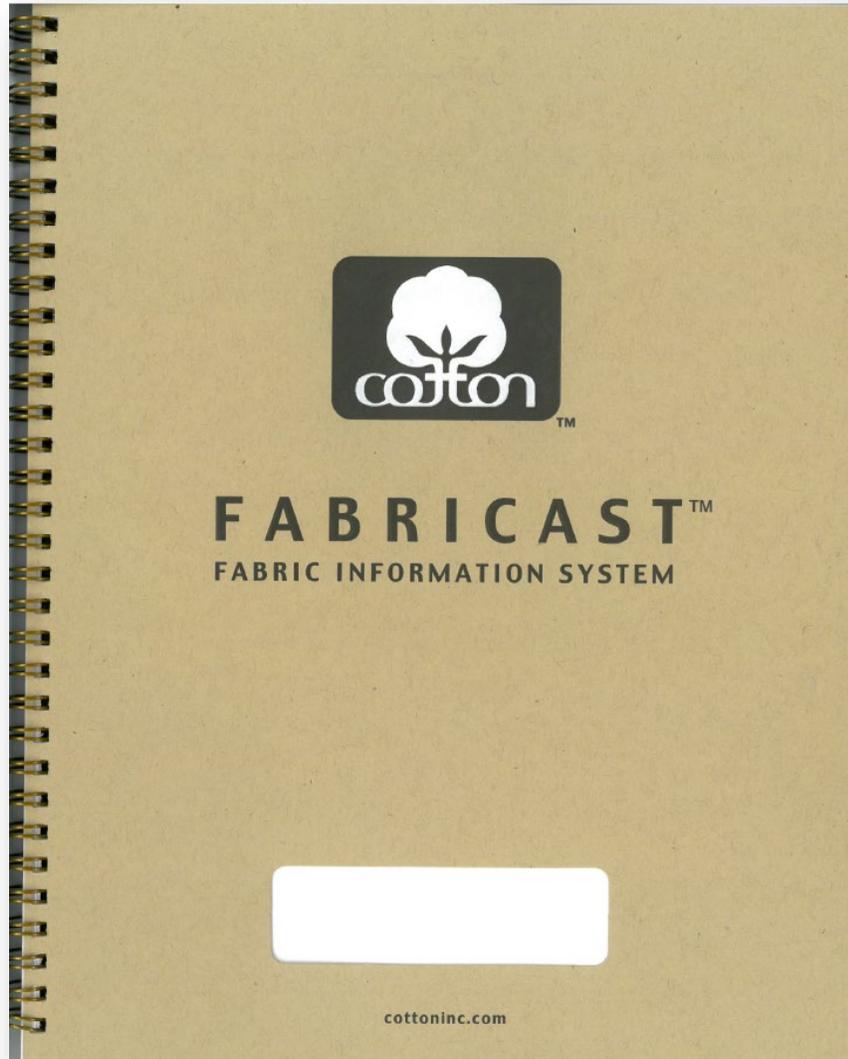


THE FABRICAST™ FABRIC ARCHIVES | Product Development Lab at Cotton Incorporated



There are more than
7,000 fabrics in these
archives

FABRICAST™ SWATCH BOOK



Knit Fabric Project: SK-1838-1S

Fabric: Three End Fleece, Single Knit Fiber Content: 80% Cotton/20% Polyester
Finished Fabric Weight: 9.5 oz/yd²; 322 g/m²

Greige Fabric Specifications

Weight: 8.4 oz/yd²; 285 g/m² Width: 75.5 inches; 192 cm

Machine Specifications

Type: Circular Single Knit Cut (Gauge): 14 needles/inch Needles: 1320
Diameter: 30 inch
Inches/Revolution: Loop 112; Tie 223; Ground 198

Yarn Specifications

30/1 Ne 100% Cotton, Combed, Ring Spun (Tie & Ground Feeds) | 10/1 Ne 50% Cotton/ 50% Polyester, Open End (Loop Feeds)

Dyeing & Finishing Specifications

Inverted. Bleached in a soft-flow jet. Dyed in a soft-flow jet with disperse and reactive dyes. Slit. Dried open width in a relaxation dryer. Finished with STORM COTTON™ Formula on a tenter frame. Brushed on Lafer brushing machine. Napped and sheared. Steamed and dried on a tenter frame.

Finished Fabric Specifications

Test	Method	Result
Weight	ASTM D3776	9.5 oz/yd ² ; 322 g/m ² ; 14.2 oz/lin yd; 443 g/lin m
Width	ASTM D3774	54.2 inches; 138 cm
Water Repellency, Spray	AATCC 22-2005	100
Burst, Inflated Diaphragm	ASTM D3786	98.5 psi; 679 kPa

Comments

3x1 Random Loop Set-Up

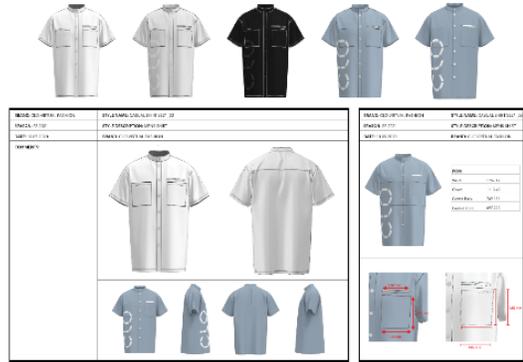
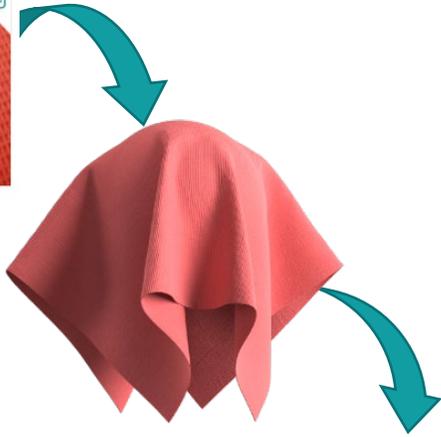
A CDA is required for information to be shared on Cotton Incorporated's proprietary technology.

STORM COTTON™ Technology






7109-2
Wovens
Comfortable & Cozy
3D Digital Fabrics



THE FUTURE OF COTTON 3D IN THE FASHION INDUSTRY

Adoption of 3D technology is transforming the fashion industry, increasing efficiency and creating new experiences across the supply chain.





7114-2B
Seersucker



Digital sample made in
CLO3D



Physical Sample by Studio
317

THE FUTURE OF COTTON **3D IN THE FASHION INDUSTRY**

Simulations of products that
reduce the need for samples and
long lead times for design



THE FUTURE OF COTTON

Cotton Incorporated's DIGITAL FABRIC INITIATIVE

Creating digital twins of innovative cotton-rich fabrics, available for free download in the Digital Fabric Library.

Advancing Cotton Use Through Digital Design



Industry collaborations to maintain fiber leader role in digital space such as:

- Integration of digital garments into trend forecasting with denim & activewear
- Mill fabric collections
- Garment collections with design houses
- Workshops and events with key partners such as the *Interline with Adobe Substance*



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APRIL 21, 2021 9:43AM ET

Browzwear, Cotton Inc. Collab on Sustainable Digital Fabrics

By Arthur Friedman



Browzwear x Cotton Works

CREDIT: Courtesy



THE FUTURE OF COTTON MOVING FORWARD DIGITALLY

The future of the fashion and textile industry is digital. Cotton will continue to be an invaluable resource.

Download from cottonworks.com.

Advancing Cotton Use Through Digital Design

Supplier Collaborations:

- Download fabric files
- Create virtual designs
- Commercialize fabrics
- Market to brand customers





THE FUTURE OF COTTON
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