

Technology for the challenges facing the textiles, apparel, and luxury goods industries:



Traceability and safety

Traceability and tracking of luxury goods; anti-counterfeit systems; manufacturing process control and logistics; procurement management



High-value-added products

Performance improvement (waterproofing, mechanical strength, heat performance); integration of ICTs and new capabilities; reliability





User experience

ICTs and new capabilities; interactivity; the Internet of Things; user-centered design; interactive packaging



Mass personalization

Custom design; continuous product design; information logistics; customer feedback management



Bio-based and other new materials

Materials recycling; new-materials manufacturing, supply, and transformation processes



Assembly techniques and processes

Cost control; new assembly techniques and processes; integration of fragile materials; quality control and tracking



CEA Tech can help the following businesses:

- Businesses in the apparel industry
- Designers and other creative professionals
- Luxury goods companies: wine and spirits; hospitality; automotive; yachting
- Textile manufacturers

Here are some of the ways CEA Tech can support your development:





Sensor systems and integration

Traceability; measurement of structural constraints and deformation (such as for yacht sails); instrumented textiles to monitor parameters like temperature and moisture; monitoring of parameters for wines and spirits

Energy solutions

Custom-conformable batteries (for timepieces, leather goods, etc.); power supplies for integrated electronics; heated seats and garments

Materials and processes

Performance enhancing surface treatments; materials grinding and recycling; integration of anti-counterfeit systems

Characterization

Characterization of new textiles; physical and chemical characterization of surface properties; materials composition

Non-destructive testing

Quality control of textiles; seam controls for engineered textiles; control of parts for fine timepieces

ICTs and ambient intelligence

Connected and communicating surfaces; geolocation; digital services (e.g. "quantified self"); interactive environments

Lighting

Furniture and interior decorating; illuminated textiles for security and signage; integrated illuminated microsystems for visual effects

Data analysis and expert systems

Social networks for continuous design and quality control; quality feedback for procurement (inventory optimization)

НМІ

Interactive furnishings and fixtures; handwritten sketch, note, and drawing digitization capabilities for designers

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