

**TAIPEI INNOVATIVE  
TEXTILE APPLICATION SHOW  
2017 台北紡織展  
OCTOBER 16-18**



**TAIPEI NANGANG  
EXHIBITION CENTER  
台北南港展覽館1館**



## Discovering a New Future for the Textile Industry

Innovation and Evolution; Focusing on Smart Textiles, Sustainability, and Functional Applications

Taiwan's textile companies are taking steps to secure a greater global market share using new technologies to produce high-tech, innovative, quality textiles. The 2017 Taipei Innovative Textile Application Show, sponsored and organized by the Ministry of Economic Affairs' Bureau of Foreign Trade and the Taiwan Textile Federation, focused on smart textiles, sustainable environmental protection, and functional applications. This twenty-first edition of the three-day show attracted over 36,000 buyers as well as purchasing representatives from over a hundred major international brands and generated nearly US\$65 million in sales opportunities.

People across the globe have witnessed the exceptional performances put in by athletes during major international sporting events such as the Olympic Games and Summer Universiade. The performance of Taiwan's textile industry, which provides many of these athletes with comfortable and functional apparel, has been equally outstanding. Many international brands came away from these sporting events with an excellent impression of the Taiwan textile industry's capabilities and future prospects, and decided to attend TITAS 2017 to explore Taiwan's high-tech textiles. Chang Cheng-tien, Chairman of Taiwan Textile Federation notes that 383 exhibitors from eleven countries and regions took part in this year's show, resulting in the biggest show to date. The main attraction of the show was the high-tech array of smart, sustainable, functional textiles.

### An Unrivaled Event A Stage to Present Taiwan's Textiles to the World

Many distinguished local and international luminaries from the industrial, government, academic, and research sectors attended the opening ceremony of the show. Guests included Bureau of Foreign Trade Director General Jen-ni Yang, 2017 Summer Universiade gold medalists Yang Ho-chen, Hsu Kai-kuei, and Lee Chia-hsin, and ultramarathon runner Kevin Lin, who all toured the booths to experience Taiwan's outstanding textiles for themselves.

Representatives of leading textile companies who came out to support the show included Far Eastern New Century Chair Douglas Hsu, Eclat Textile Company CEO C.H. Hung, Tex-Ray Industrial Company Chair Ray Lin, New Wide Group General





Manager Angela Chuang, and Tri Ocean Textile Company General Manager Jammy Huang.

The main themes of TITAS 2017 centered on smart textiles, sustainable environmental protection, and functional applications. BOFT Director General Jen-ni Yang stated that the Taiwan textile industry's advantages are its complete supply chain and its emphasis on quality, sustainability, and innovation. As a result, more and more orders are coming in from international brands, and exports are expected to increase.

FENC Chair Douglas Hsu affirmed the competitiveness of Taiwan's textile industry, pointing out that it shed its image as a sunset industry a long time ago and is now in a state of continuous growth. Hsu believes that this strong performance "is the result of the hard work of textile manufacturers, as well as endeavor from TITAS." The technology and innovation that have become the hallmark of Taiwan's textile industry were fully on display in the textiles at this year's show.

### **Seizing Advantages Taiwan's Textile Industry Creates New Prospects through Innovation**

Following a dozen years of hard work, Taiwan's textile industry transitioned from fibers, yarns, fabrics, auxiliary materials, and accessories to post-treatment processing, technology acquisition, research and development, and cross-industry integration. The industry fully utilizes Taiwan's technology and innovation capabilities to produce a new generation of high-tech textiles that have captured the attention of leading global brands, many of whom now send purchasing reps to the textile show every year. Taiwan Textile Federation Secretary-General Justin Huang says that recent trends in the industry mean there is tremendous

potential for the smart textiles exhibited at this year's show. For example, FENC, Tex-Ray, and Fu Hsun Fiber Industries Company have developed multiple applications for smart clothing and smart textiles such as Nano fabrics with sensing capabilities and electrical conductivity that can accurately measure heart rate and physiological parameters and which can be used for personal healthcare or to monitor the performance of athletes.

In recent years, climate change has caused extreme weather, which in turn has led to environmental degradation. This has led to an increasing emphasis on green consumption, which emphasizes environmentally friendly manufacturing and waste reduction. Global brands are also joining the movement, and zero emissions and sustainable textiles have become mainstream.

This is why Libolon exhibited its Ecoflying closed recycling system and Tri Ocean Textile Company showed its 100% environmentally friendly Dreamfel® yarns at TITAS this year, while New Wide Group has invested in eco-friendly manufacturing processes.

Functional textiles with outdoor clothing, sports, and fashion applications were also featured. Examples include Eclat Textile Company's elastic knit fabrics, Everlight Chemical Industrial Corporation's digital printing technology for outdoor textiles, and DingZing Advanced Materials Inc.'s high-functioning, breathable, waterproof and wear-resistant membrane available in a variety of colors for use in outdoor and sport textiles.

All of these products are the result of innovations by Taiwan textile manufacturers, and they made a big splash at the show, generating a huge number of sales and garnering high praise by attendees.



### Boldly Breaking New Ground

#### Incorporating Innovation Carving Out a Niche with Smart Textiles

Technological innovation and smart products have revolutionized the textile industry, and smart textiles and clothing have become a central focus of development for the textile industry in Taiwan. At the 2017 textile show, FENC's Hsu proudly introduced DynaFeed, a smart garment system developed by his company. FENC spent two years adjusting and improving the system and integrating it with the Internet of Things to create even more uses. In just one example, DynaFeed has sensors that can sense muscle contractions and then use reverse conduction to relax muscles. The system has applications in sports, health management, and physical rehabilitation. During the show, FENC signed cooperation agreements with American sportswear brands and Swiss medical electronics companies that will allow their smart clothing to be mass-produced and sold on the market.

Tex-Ray is another firm that focuses on smart textiles. Tex-Ray has worked with global companies such as Nike and Calvin Klein in the past. It has offices all over the world, and is known for its comprehensive, vertically integrated supply chain and its many patents. In recent years, the company has dedicated itself to developing a base of functional clothing that can be transformed into smart clothing when combined with integrated electronics and backend service applications. These products have been well received by the market. Tex-Ray Chair Ray Lin says their smart clothing will be widely used in athletic training, outdoor leisure activities, and telemedicine in the future. Anyone from athletes to senior citizens to infants can make use of it, and the company is on the front lines of helping everyone to lead a smarter life.

City Bright is a company that offers smart temperature control systems. In a happy accident, researchers at the company tried applying battery materials to fabric threads to generate heat, and stumbled on a new possibility for researching a special fiber instead. After several years of development efforts, City Bright

came up with a tough thermal material that can be sewn onto insulating materials. This, combined with its proprietary smart push button, allows people to stay warm with the tap of a finger. The garment can also be linked to a smartphone app to monitor temperature and available power.

The textile industry has developed many other pioneering products this year, including numerous smart textiles. New applications have been introduced, such as a product capable of detecting urine and notifying nurses to facilitate sheet changes for sickbeds. Smart clothing designed with senior citizens in mind measures heart rates and monitors blood pressure and blood sugar levels. The Taiwan Textile Research Institute believes smart clothing technology will be widely used in the healthcare industry in the future, as the possibilities are limitless.

### A Single-Minded Pursuit

#### Technological Innovation Putting Sustainable Environmental Protection into Practice

Climate, ecology, and other environmental issues have become a central focus of the entire world in recent years. Taiwan's textile industry has been extremely successful in achieving sustainability and eco-friendliness.

The relationship between man and the sea is a close one. However, every year, countless discarded plastic products end up in the oceans. FENC, NGO Parley for the Oceans, and sportswear brand Adidas have teamed up to collect plastic bottles dumped in the Indian Ocean, convert them into polyester flakes and use them to produce high quality yarns for the manufacture of environmentally friendly sneakers and sportswear. This is one example of sustainable, eco-friendly innovation. FENC has also developed waterless dyeing technologies that replace water with carbon dioxide to save dwindling water resources. These actions not only save resources, but also reduce hazardous wastewater discharge and lessen harm to the environment.





Grand Textile Company is a firm equally dedicated to protecting the oceans. This year, it teamed up with an American NGO to convert ocean-borne waste into textiles. The company has already received many orders for these textiles. Grand Textile Company started out as an original equipment manufacturer, but managed to make a name for itself through investment in innovative research and development. Its innovations in the area of functional fabrics include the ultra-cooling technology of Stone Cold®, with its extraordinary hand feel, and Coffee Charcoal®. The company is especially proud of its Color Max dyeing technology, which is more environmentally friendly than other types of dye manufacturing processes due to its use of steam.

Intense market competition inspired Libolon to develop eco-friendly fabrics and use them to secure business opportunities. At the 2017 textile show, the company showcased its Ecoflying recycling and reusing system. The Ecoflying program implements eco-friendly concepts in all areas, from the products themselves to recycling technologies to internal affairs. Libolon started off as a manufacturer of ultrathin fibers. Since then, it has begun using recycled plastic bottles to make its RePET® recycled polyester yarn and Ecoya® yarn. Libolon's production processes do not require any excess dyeing or finishing treatments, thereby saving energy, reducing the use of chemicals, and lowering carbon dioxide emissions and wastewater discharge. These products demonstrate the company's commitment to sustainability, environmental protection, and the development of a circular economy.

Tri Ocean Textile Company's Dreamfel® performance polypropylene filament (PP filament) is an eco-friendly, breathable fiber. It has enjoyed a unique status in the market for many years, as the production process uses a low-temperature, low-consumption method and dye-free wastewater is produced. Moreover, the filament decomposes naturally. Clothing made from the fiber is lightweight, quick drying, water repellent, and moisture resistant with superior heat retention. It is also skin-friendly and easy to clean with excellent colorfastness and strong

chemical resistance. In fact, Dreamfel® can be considered the world's most eco-friendly fiber. To increase its competitiveness, Tri Ocean continuously invests in research and development and collaborates with creative and cultural goods companies to use polypropylene in the making of canvas bags and other products. New Wide Group, which excelled at forming alliances in the textile industry to stamp out competition in the past, has more recently achieved great success in linking upstream, mid-stream, and downstream supply chain partners to meet the demands of customers and diversify its products. It also develops cross-border coalitions to create strong, strategic business partnerships. This year at TITAS, it demonstrated its commitment to environmental protection, resource integration, and sustainability in its "It's the Only Earth We Got!" exhibition. The main products on display included Eco-Poly, OP dope dyed yarn, Cooling, Cocona coconut fiber, and other eco-friendly materials.

In its early years, Ho Yu Textile supplied ramie fiber, cellulose acetate, and linings. It has since entered the fashion and outdoor sportswear sectors, manufacturing textiles for suitcases, bags, ready-made clothes, and industrial uses. Ho Yu has made an all-out effort to develop eco-friendly products. During the past several years, it has concentrated on developing solvent-free polyurethane dispersion (PUD) products and developing green manufacturing processes.

Knitwear manufacturers have jumped on the bandwagon as well. Kingwhale Corporation is a producer of circular-knitted functional fabrics. A responsible corporate citizen with strong environmental and humanitarian commitments, Kingwhale produces L.I.T.® (Low Impact Technology) fabrics that combine energy savings with environmental protection. The technology effectively reduces the amount of water, electricity, and dye required for the dyeing process. Be Be Cotton Knitting Company has promoted the production of natural dyes for many years. It is currently building a dye factory that meets environmental standards by reducing energy consumption and carbon emissions, thereby establishing a more sustainable fabric manufacturing process.

## Discovering a New Future for the Textile Industry



Every year, Sunny Special Dyeing and Finishing Company seeks to achieve greater efficiency in the use of resources in its manufacturing processes and add on more eco-friendly manufacturing facilities. It is also devoted to developing a durable water repellency processing technology that minimizes the use of chemicals. SolaPel is the company's latest ultra-durable water repellent technology. It effectively repels water even after twenty-four consecutive hours of laundering, the equivalent of 120 machine washes. The technology allows the textile surface to retain its outstanding water repellent quality. Meanwhile, Singtex Industrial Company uses recycled coffee grounds to produce coffee yarn by extracting the oils from spent coffee grounds to make fabric, which in turn can be used to produce eco-friendly clothing.

## Research and Development Efforts

### Innovation as a Personal Experience Creating a Full Range of Functional Applications

Smart fabrics and sustainable eco-friendly textiles are not the only hallmarks of Taiwan's textile industry. Textiles from Taiwan also boast many functional applications, which were on full display at the show.

Eclat supplies several well-known international brands with professional-grade, elastic, functional knit fabrics and apparel. This year, it let its knitted products speak for themselves. Its display focused on three themes: Relax, a promotion of relaxation through comfortable tactile sensations; Connect, high-performance fabrics for outdoor use that are windproof and water resistant; and Play, jacquards in a multitude of kaleidoscopic patterns for people who know how to enjoy life.

DingZing has responded to the surge in popularity of outdoor activities and increased demand for sporting equipment with brightly colored, eye-catching apparel and products. It recently

expanded into the high function finished fabrics sector with the development of Duopel. Duopel membranes are printable materials that can be produced in many colors, and are waterproof, breathable, and wear-resistant. Moreover, they can be incorporated into other fabrics to create fashionable and colorful outdoor clothing and sportswear.

All of us come into contact with a variety of textiles in our daily lives, including some that lie right against our skin, making some people question whether the chemicals employed in manufacturing the textiles used in clothing, towels, cushions, and sofa covers are safe. Everlight got its start as a color chemical manufacturer. This year, it developed a new line of reactive dyes for cotton. Everlight General Manager Dr. Chen Wei-wang says this new line of reactive dyes can be used on all types of cotton fabrics, is fade-resistant, and can be produced in many colors. The dyes are also safe for the skin, as they are produced in eco-friendly process under the highest safety standards. As such, they can put consumers' minds at ease.

Yi Jinn Industrial Company is one of Taiwan's top three textured polyester yarn manufacturers, with product lines that include elastic yarn, composite yarn, functional yarn, and eco-friendly fibers. The company does constant research and development and incorporates new methods and materials to upgrade its innovative products. For this year's show, Yi Jinn showcased the raw yarns produced by its subsidiary Hung Chou Fiber Industrial Company, its own textured yarns, and fabrics from the Kwang Ming Silk Mill Company. These products highlighted the company's strengths and the benefits of cross-sector integration.

The increasing popularity of outdoor leisure activities and sports in recent years has led to the development of completely new textiles. Fu Hsun Fiber Industries supplied sportswear to volunteers and athletes during the 2017 Summer Universiade in Taipei, gaining very positive media exposure. At the Textile Show, the company introduced its exclusive, second-generation unidirectional moisture transport technology. This technology





quickly wicks away the sweat produced during sporting activities, keeping the skin dry. Meanwhile, Grandetex Development Company has developed RICH-y®, a new synthetic yarn for maximum comfort during sports activities. The yarn has anti-UV, anti-bacterial, anti-odor, and wicking properties, thereby greatly reducing body odor.

Solis Fabric Technology is a company that incorporates design trends into functional applications in the production of all types of outdoor apparel and sports and performance fabrics. It has moved away from traditional design concepts to embrace innovative, forward-looking products and services. Yu Yuang Textile Company manufactures textiles, offers dyeing and finishing services, and produces ready-made clothes. The company showcased exquisite jacquard designs and colorful printed patterns at the show that respond to consumer demand for smaller volumes and greater diversity. WidePlus International Company is a performance fabric manufacturer whose textiles contain a blend of natural and synthetic fibers that allow them to combine function with fashion.

Premiere Fashion Corporation specializes in developing high value-added textiles. Its fabrics are lightweight and windproof, and great with temperature retention. Moreover, its innovative 2.5 inner layer coating provides a buffer and reduces skin irritation, thereby creating a more comfortable sporting experience. GET-Green Energy Corporation's EnAir® high-tech insulating cotton simulates the hollow structure of polar bear hair. It retains warm air in the fiber layer, thereby providing maximum thermal insulation and flexibility.

A-Plus Chan Chia Company made a name for itself with just one piece of cloth. The company started out as an original equipment manufacturer, then diligently researched the properties of source materials and invested in technology to develop a double-sided, highly elastic knitted fabric that firmly established its reputation in the international market. It has not stopped innovating since. Its fabrics contain no OP yarn, yet still have the high elasticity

that OP yarn offers. A-Plus Chan Chia's highly elastic fabrics feel rich and are able to quickly resume their normal shape, making them a favorite of customers.

The Taiwan Garment Industry Association leads the garment industry supply chain delegation to join the many excellent manufacturers at TITAS. Its presence highlighted the allure of fashionable ready-made clothing and the soft power of athleisure wear.

Other exhibitors included the Industrial Technology Research Institute, the Southern Taiwan Textile Research Alliance, the MIT Underwear Innovation Alliance, and the Taiwan Technical Textiles Association, as well as twenty member companies of various research organizations and industry associations, some engaged in aspects of textile production such as spinning yarns and synthetic fiber manufacturing, spinning and weaving of wool, silk, or other fabrics, knit fabric production, and printing and dyeing of silks and cottons, and others involved in garment manufacture, including sweaters, hosiery, gloves, towels, non-woven fabrics, and millinery items. Their presence added substance and diversity.

This year, an impressive number of foreign exhibitors gathered here at TITAS. The majority of foreign exhibitors were from Japan, South Korea, and China, while Sweden, the United States, India, Switzerland, and Germany were represented as well. The Czech Republic's Association of Textile, Clothing, and Leather Industries (ATOK), the foremost enterprise association of the Czech Republic's textile, apparel and leather sectors, joined the festivities for the first time. The organizers scheduled a round table conference during the show to pave the way for cooperation opportunities and exchanges between Taiwanese and Czech companies.

Clearly, TITAS is an important force that injects the textile industry with a new dynamism and continuously propels it forward.





# Multiple International Brands Under One Roof Leads to Countless Buying Opportunities

Over 100 International Brands Invited to Taiwan Participate in Textile Buying Fair

Taiwan's textile industry is known worldwide for high-tech, innovative textiles that are smart, sustainable, and functional. It continues to attract the interest of international brands. This year the show specially organized a textile buying fair to serve as a procurement platform between Taiwanese textile firms and international brands, and to link up small and medium enterprises with international companies.

Buyers from over a hundred international brands in twenty countries were invited to. More than a thousand one-on-one business meetings were held over the course of the three-day show between these purchasing reps and some two hundred Taiwanese exhibitors, opening up countless opportunities to make sales.

### A Seal of Approval from Global Sportswear, Outdoor Clothing, and Leisurewear Brands

Numerous global sportswear, outdoor apparel, and leisurewear

brands attend TITAS every year. A phenomenal number of sales result from purchasing meetings and one-on-one negotiations between buyers and exhibitors.

"It was worth the trip, no matter how far the distance!" was the sentiment of Adidas' general manager of raw materials development, who traveled to Taiwan all the way from Brazil to attend the show for the first time. She was extremely impressed with the scale of the show and the business negotiation arrangements. As Brazil's sporting goods market is very competitive, she was seeking innovative, high-tech, cost-effective textiles. She also invited Taiwan's textile industry to join Adidas in exploring business opportunities in Brazil.

Black Diamond Equipment is a leading American manufacturer of climbing and mountain sports equipment. Its product designers have made many trips to Taiwan, including repeat visits to TITAS to explore the latest trends in innovation and creativity and to seek new opportunities for cooperation. Japanese apparel manufacturer Mitsui Bussan I-Fashion Ltd. is another company





that has taken part in numerous purchase meetings in recent years. Mitsui Bussan says that over the years, TITAS has assisted numerous Taiwanese textile firms in expanding their market influence and developing highly functional, innovative, fashionable yet reasonably priced products that have been warmly received by young people.

Meanwhile, British outdoor clothing manufacturer and supplier Craghoppers has always paid close attention to the latest developments in textiles. The company's business development manager traveled to Taiwan to attend the show, and was very happy to see so many applications, noting that they will be very helpful in upgrading the quality of his Craghoppers' products in the future.

### **Attracting International Baby and Children's Products Brands with Non-Toxic, Eco-Friendly Materials**

To ensure Taiwan's textile industry does not miss out on the business opportunities in the infant and children's markets due to its own declining birthrate, TITAS invited purchasers from overseas baby and children's product brands to visit Taiwan. Norwegian children's furniture and accessories manufacturer Stokke AS designs products that create safe and comfortable environments for children. As such, the procurement of safe, environmentally friendly, non-toxic materials is extremely important to the company. The company's product designer praised Taiwan's textile designers, saying that the biggest advantage of Taiwan's manufacturers is their ability to supply top quality, customized, functional fabrics quickly.

Okaïdi is a French children's clothing and educational materials brand. The company has a deep sense of corporate social responsibility, and attaches great importance to children's issues

and environmental protection. As such, it is very careful about what types of materials are used to make its products. Okaïdi's procurement personnel were seeking new materials and concepts at this year's show, and expressed their desire to work with other like-minded suppliers to create a new future together.

### **Innovation and Ingenuity Bring International Fashion Brands on Board**

The fashion industry has begun to incorporate performance fabrics into designs. Many important international fashion labels such as British brand Burberry, U.S. labels Coach, Ralph Lauren, and Perry Ellis, and Chinese brand Ellassay - all came to Taiwan to place orders at the show.

Ellassay has worked with Taiwan's textile industry for over a decade, thanks to the industry's top quality, unique finished fabrics such as jacquard weaves, embroidered fabrics, and lace. It believes the industry enjoys impressive advantages in the design and development of performance fabrics, which differentiate Ellassay's products and help them to catch the eye of urban women.

The purchasing representatives from these international brands spent the three-day show shuttling back and forth between the booths of Taiwanese firms to learn about all of their products and services. They purchased a wide range of textiles—waterproof and breathable, bonded, coated, down-proof, lightweight, moisture absorbing and wicking, quick-drying, and blended fabrics, as well as knits and functional fabrics, and even zippers, buttons, and ribbons.

In the future, Taiwan's textile industry will continue to develop the innovative technologies, flexible services, and eco-friendly sustainability that give the industry its dynamic, competitive edge, and make it a player on the international stage.

## Exhibitors

Exhibitor	Company	Share%	Booth	Share%
Domestic	345	90%	731	93%
Foreign	38	10%	58	7%
Total	383	100%	789	100%

## Exhibits

Product Category	company	Share%
Apparel Textiles	160	42%
Trimmings & Related Products	56	14%
OEM/ODM Apparel & Accessories	48	12%
Textile Machinery	35	9%
Upholstery & Industrial Textiles	25	7%
Fibers, Filaments & Yarns	25	7%
Dyes & Additives	11	3%
Textile Inspection & Certification	6	2%
Related Products & Services	17	4%
Total	383	100%

## Purchasing Products

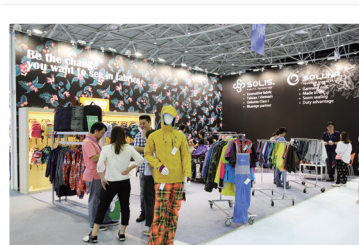
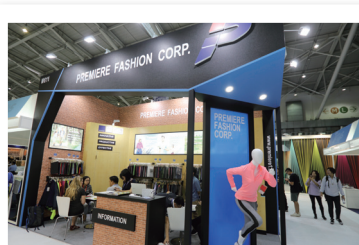
Product Category	Share%
Apparel Textiles	62%
– Functional Fabrics	21%
– Fashion Fabrics	15%
– Fibers	14%
– Yarns	12%
Industrial Textiles	7%
Home Textiles	6%
Ready to Wear & Sweater	6%
Trimmings & Related Products	5%
Textile Machinery	4%
Accessories	3%
Nonwoven Textiles	3%
Inspection & Certification	3%
Others	1%

## Visitors

Visitor	Number	Share%
Domestic	29,520	82%
Foreign	6,480	18%
Total	36,000	100%

## Top Ten Visiting Countries

1.Taiwan	6. South Korea
2.China	7. EU
3.Hong Kong	8. Thailand
4.Japan	9. Vietnam
5.U.S.A.	10. Sri Lanka





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經濟部國際貿易局  
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主辦單位 Organizers



中華民國紡織業拓展會  
Taiwan Textile Federation



中華民國對外貿易發展協會  
Taiwan External Trade  
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