



### Emtec Electronic Gmbh Germany A New and Objective Method to Measure the "Softness" of Textiles

The softness of textile products becomes more and more important. Studies have shown that the softness of textile products – especially of those, which get in direct touch with the skin – is one of the most important quality parameters for consumers worldwide. The most common way to measure the softness of textile products is the hand test. These hand tests are very subjective and thus not reliable. Humans are influenced by their daily mood, personal and market specific preferences, the culture etc. Because of this, one and the same tester might rate one and the same sample differently on different days. To avoid the disadvantages of such hand tests, the use of an objective testing

device is necessary. The company emtec Electronic from Germany will introduce its emtec TSA – Textile Softness Analyzer at the TITAS 2016. In the hygiene paper industry the equipment is used for about ten years now and became an industrial standard. This TSA measures the three basic parameters that determine the human hand feeling. These three parameters are the real softness (coming from the fibers), the roughness (coming from the surface profile / surface structure) and the stiffness (coming from the fibers, production technology etc.). For more information please visit the Booth N727.



### PT. Sen Lu Indonesia

#### Doped Dyed Yarn is the Highlight

PT Sen Lu Indonesia is a spinning factory with main product yarn, established on 1997, located in Bandung, West Java, Indonesia. It sells the product to domestic and export market. The company can produce the product with good and stability of quality because continuous hard work and support from trained employees, and of course the support from its valuable customers. The company developed many kind of new product, which is the various yarn

they produced. One of their products that going to be proudly introduced is doped dyed yarn, the process on machine to become finish goods (fabrics) very short, because no need to dye and the color will not faded. Moreover, new products from the company included Open End (OE) Yarn with ne range from 3'S/1 to 30'S/1, Spun Yarn with ne range from 7'S/1 to 30'S/1 and Ne range from 10'S/1 to 30'S/1. For more information please visit the Booth M1119.

### Kiryu-City Gunma Japan

#### Protein from Silkworm Cocoon Comfortable and Safe to the Skin

This year, four entrepreneurs in Kiryu-City Gunma Japan, promote its traditional and famous Kiryu Fabric once again in TITAS 2016. Kiryu fabric has been an important center for silk textile manufacturing, for over 1300 years. The Kiryu fabric is made of protein extracted from silkworm cocoon and

apply it on the coating of fabric, making fabric more comfortable as well as protective to skin. Additionally, this technology can be also applied on the cosmetic products. The companies showcase the up-to-date weave and dye products to TITAS. For more information please visit the Booth M529a.

### Cstar International America

#### A Leading Heat Transfer Applications Provider

Cstar International Inc. is a leading provider of products for a range of heat transfer applications. With over 10 years of manufacturing experience, the company offers knowledgeable and competitive services to customers worldwide.

Cstar offers a range of services from custom designs to final product. Its professional design team is available to recreate custom design within 24 hours without any additional cost. The minimum order for custom order is only 24 pieces. For more information please visit the Booth M528a.

### Murata Machinery Taiwan

#### Expanding Latest VORTEX Yarn Technology

Murata Machinery Taiwan, Ltd. is known for manufacturing textile machinery, which is also a provider for yarn spinning and synthetic fibers. To satisfy needs from the daily necessities to high-end products.

which uses an air vortex to spin out the yarn. Fibers formed by these air flows possess a unique structure, and this provides the yarn with a wide range of functionalities like a less hairiness, resistance to pilling and superior moisture absorption. Today many apparel brands are creating new value added products made possible by VORTEX. For more information please visit the Booth N503.

At TITAS 2016, Murata will demonstrate the infinite possibilities in its lineup of textile machinery and continues to evolve as a leading innovator in the industry. VORTEX yarn is a technology



TAIPEI INNOVATIVE  
TEXTILE APPLICATION SHOW  
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Day 3  
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## Purchasing Business Meetings In-depth and Enlarged Business Opportunities for mutual Exhibitors and Buyers

TITAS is an important platform that can pair both exhibitors and buyers, and creates many business opportunities especially suited to small and medium sized enterprises as well as large businesses. The purchasing business meetings of TITAS 2016 bring mutual benefits of furthermore in-depth and enlarged business chance, for Taiwan exhibitors in particular. To organize the annual TITAS exhibition

more than 155 different Taiwan textile firms were consulted. Special trips were also made to international brands and retailers in Germany, UK, Sweden, Switzerland, Italy, Czech Republic, France, Norway, Holland, Russia, America, Canada, Brazil, Japan, South Korea, Hong Kong, China and New Zealand, Australia. This year's exhibition will feature more than 19 countries and regions and represent a total of more than 100

brands with important procurement projects including breathable waterproof products, laminating, coating, moisture wicking, blended fabrics, environmentally friendly materials, and knitted or woven functional fabrics. Also there will be companies focusing on necessary accessories such as zippers, buttons, ribbons and other products. Meanwhile, those sustainable textiles and, moreover, smart textiles on

the spotlights of TITAS 2016 are the focus of international buyers in particular. Each year, TITAS plays an important role in pairing fabric manufacturers with the brands that make use of innovative and functional fabrics. To learn more about this important purchasing business meetings, please visit the TITAS website at www.titas.tw.



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## Under Armour

### Taiwan: A One-Stop Shop for Clothing Manufacturers

Taiwan is a One-Stop shop for clothing manufacturers, offering innovative products and solution-oriented research, design and development programs, according to Under Armour, one of the top young and sportswear brands visiting the TITAS 2016.

The company, who produces their apparel in Taiwan, said ease of business makes up for the fact that the cost of doing that business might be a little higher. From basic accessories to high tech – Taiwan has everything they need. Under Armour is among a large number of buyers in Taiwan to meet representatives from the textile industry who are showcasing their products. In between meetings with textile mill owners, that success came from a culture of risk taking and the “go-getter” management style of their CEO Kevin Plank, a former athlete who started the Baltimore-based company in 1996.

Most famous for its HeatGear® T-shirt, designed with moisture-wicking performance fibres, the company prides

itself on its use of intelligent textiles to improve athletes’ performance. This also includes the ColdGear® range to control body temperature. The company’s future looks equally innovative as it moves further into the world of the Internet of Things – with plans to create a range of aesthetic and functional clothes – a sort of “new cool” in sportswear, with prints that changes color according to the weather and “athleisure” wear that allows modern comfort without having to break a sweat.

There is also a drive towards more interactive sportswear with better yarns and fibres, that perform better and interact differently with each other such as the already available Under Armour heartbox, a wristband which measures heart rate and temperature. The company, which has seen phenomenal growth in the past 20 years, feels that it is still on the right track and that intelligent textiles are the smart way to go.

## Woolrich

### Sustainability Through Quality

Management mindset and production line processes must come together to create an eco-friendly, sustainable climate for doing business, a Woolrich representative said. This fits in well with the theme of the 2016 TITAS Show of climate-smart, sustainable and intelligent textiles.

This commitment towards sustainable and eco-friendly apparel is why the Pennsylvania-based company, established in 1830, recently became a bluesign® member. For Woolrich, knowing what is happening down the supply line is a crucial part of their product. The bluesign® system was established in 2000 to set standards to ensure holistic safe textile production.

The outdoor clothing company lives by its core policy of quality of life. This is why it buys textiles from Taiwan despite the fact that its clothing mills are situated elsewhere (75% in China). Cutting edge innovation, consistency of production and a solution-oriented research, design and development approach allows the company to provide high quality products to their consumers.

And the future looks good, too as Woolrich plans on combining its Italian and US brands (John Rich and Woolrich USA) into a more international brand. This bodes well for Taiwan textiles suppliers and serves as motivation to continue on this innovative path.

## Arc'teryx of Canada

### Sticking to Quality and Durability over Fashion

The Arc'teryx Group of Canada has maintained direct business dealings with textile suppliers in Taiwan for over a dozen years, and the partnership is much longer when including the earlier period of indirect contact. The extended history and extensive contact prove durable and mutually profitable relationships for both sides.

A senior executive of Arc'teryx said he and colleagues have kept abreast of the latest developments in Taiwan by making frequent visits to business partners and the Taipei Innovative Textile Application Show (TITAS).

He said that there is a growing market trend for companies to produce fashionable textile items, but Arc'teryx believes that one of the best benefits for consumers is to purchase more durable products that can last for many years rather than acquiring the seemingly

chic and trendy articles that have to be replaced or recycled sooner.

Arc'teryx gives stress on higher-end products with greater performance and sustainable functions instead of commodity textiles at lower prices. This conforms to the strategy of supporting the thriving environmental protection and carbon-reduction campaigns, he added.

Major markets for Arc'teryx include North America, Asia Pacific, and Europe with Asia registering accelerated expansion due to rising incomes and popularity of outdoor activities.

He acknowledged significant progress made in Taiwan.

However, he suggested that there is always room for improvement for Taiwan when compared with Japanese counterparts, although prices quoted in Taiwan are highly competitive while Japan continuously boosts imports of materials like from Taiwan.

## Vigilante Phoenix Leisure of Australia

### Urging Greater Supply Flexibility

Vigilante Phoenix Leisure Group of Australia has been a leading supplier of a full range of products for outdoor and leisure activities. In addition to the continent of Australia and offshore islands, Vigilante Phoenix is also a major supply source for overseas markets, including New Zealand.

Companies in the group, including Vigilante, have established outstanding reputation for brands like BlackWolf and Vigilante plus other brands like Rossignol Ski and KEEN footwear.

Taiwan suppliers have played a major role in helping Vigilante Phoenix attain the goal of focusing on quality and innovation, according to a representative visiting the TITAS 2016. She said Vigilante Phoenix sets its sights on innovative materials and products with wider applications and stronger performances.

Vigilante Phoenix has shown strong interest in new materials presented by Taiwan manufacturers, including

“Fleece” that can increase the warm temperature up by 50% while the color of sportswear can change when the hotness fluctuates, she said. Recognizing Taiwan’s capability of maintaining strong R&D achievements and rolling out new products, she urged textile companies to offer greater flexibility by accepting smaller orders for a wider range of products.

More suppliers in Taiwan can also consider establishing manufacturing operations in nearby mainland China, just across the Taiwan Strait for the competitive advantages of lower labor costs, and saving unnecessary cross-border duties and slashing extra time caused by transshipments. She explained that Taiwan companies’ expansion to China will help buyers and distributors cut costs and more flexibly meet the demands of customers by speedy deliveries to market.

## Millet Mountain Group

### Nature is the Best Product

Based in the Alpine town of Annecy, the French Millet Mountain Group has naturally come to specialize in apparel and equipment for mountaineers. From the company headquarters located at a height of 600 meters, “we have a magnificent view of the mountains”, said a Millet representative at TITAS 2016.

Apart from backpacks, ropes, sleeping bags and other accessories, the company specializes in jackets and pants, for which it has been relying on Taiwanese suppliers for a long time. They are the most technically advanced in Asia. The Japanese are also very good, but more expensive – so we prefer the Taiwanese.”

When visiting them, she said, the company is happy to see progress in the area of sustainability, for example when it comes to wastewater treatment. Eco-

friendly production will remain the most important trend: “Maybe two years ago, some suppliers here were not able to adhere to the bluesign® principles that we signed up to, but now they are.” One thing Millet is proud of concerns the production of waterproof textiles without potentially harmful chemicals known as PFC. “We decided to move directly to PFC-free impregnation methods, although we wouldn’t have had to.” After all, tiny pieces will fall off the garment and end up in nature – the very places that Millet employees see when they look out of their windows.

Their customers place less importance on wearable technology and integrated sensors, she said. Mountaineers expect technology in their equipment, not in their garment: “They want the experience of being close to nature; they don’t need to be connected all the time.”

## GOLDWIN Looking for New Kinds of Fabrics

For 40 years, Japanese sports equipment manufacturer GOLDWIN has been representing the American mountaineering brand THE NORTH FACE. Far from just marketing imported goods, they are producing their own product lines for sale in Japan and South Korea. Their representative at TITAS showed particular interest in new developments in the field of water-repellant fabrics. “We are looking for fabrics that are stretchable as well as waterproof”, he said. Because in Taiwan, the many textile manufacturers have specialized in order to serve different functions, he expressed confidence that “you can find what you

want” here.

Another thing that he keeps his eyes open for are new developments in wearable technology. GOLDWIN already offers runners’ underwear with integrated pulse sensors that transmit vital functions to the user’s smartphone display. However, “people still need to get used to the idea”, the representative said. In a few years, however, he expects that there will be sports jackets and other apparel constantly measuring body temperature, automatically adjusting it by means of heating and venting. Right now, he said, “our engineers are doing research on that.”

## COLMAR of Italian Sport

Eco-friendly, innovative, and safety conscious, Colmar is a company on the frontlines of the movement to bring garment manufacturers, textile producers and smart-tech together, a representative of the Italian sport e Internet of Things will be more than just a buzzword to market fashion products, the company said.

The family-run company is especially

known for its brand of cutting edge ski-wear. Preparing for the future, the company has been moving into the field of high-tech apparel and into a future where the Internet of Things will be more than just a buzzword to market fashion products. This is the future but it is going to be expensive to develop this kind of intelligent garment,” Colmar said.

Using high-tech in textile and garment

## The North Face

### Control Pollution at Textile Mills in Taiwan

Controlling pollution at textile mills in Taiwan is necessary to ensure a sustainable and eco-friendly environment for textile manufacturing in terms of the Paris Agreement which enters into force in November this year, a representative from The North Face said at TITAS 2016.

The San Francisco-based company said one issue they have encountered at some of the mills in Taiwan was the degree of chemical pollution during manufacturing. For The North Face, a leader in the field of sustainable textile manufacturing, this poses a problem. But the company uses its own system of quality control, called Chemiq, to minimise chemical pollution at mills. This is similar to the bluesign® system to

which many textile companies adhere.

The North Face uses mills in Taiwan, Korea, China, Japan and Vietnam and yet, despite the downside, the island offers advantages that the other countries don’t; like better innovation and longer term research, design and development plans. The country is also able to consistently mass produce, while at the same time offering smaller scale high end production.

On the issue of smart-technology, The North Face said while on the cards, it is still in its infant stages. “We want it smart from the yarn up. We do not want to make fashion statements; we want to be able for it to improve performance and enable the wearer.”

## MAMMUT of Switzerland

### High Satisfaction with Taiwan Suppliers

MAMMUT Sports Group AG based in Switzerland has been highly satisfied with business partners in Taiwan concerning product quality, prices, delivery, and communications. To meet growing market demand, Mammut continues searching for new products and TITAS 2016 presents an excellent opportunity, said two representatives from the group.

For the current visit to Taiwan, they are particularly interested in locating high-tech fabrics for processing into apparels for outdoor and mountaineering enthusiasts. More fashionable outdoor garments with lightweight materials have gained increasing popularity in recent years. But Mammut will never

compromise on the quality, toughness, and comfort functions of the products, they emphasized.

In addition to continuously upgrading technology and quality, they suggested that Taiwan companies make investments in acquiring certifications from inspection and testing agencies to ensure the healthiness of product materials and manufacturing operations. Seeking customers’ feedback also helps suppliers develop proper items for the market, they added.

After building a reputation for ropes, belts, and nettings, Mammut has been on a fast track to expand to other fields, including garments, bags, and footwear for outdoor pursuits.

### On the Frontlines of Smart-tech

production is a perfect example where industry players could cooperate across fields. It might not necessarily be sustainable, though, due to development cost. Colmar is already producing garments that are able to repel water and conduct electricity and heat, linking these garments with the IoT.

It is also a leader in using graphene in its ski-wear and golf shirts. In fact, it

was the first clothing manufacturer to use this graphite derivative in its sportswear. Printed onto the inside of the garment, graphene is able to conduct heat or cold, it is anti-bacterial and anti-odor, all to enhance the performance of the wearer.

The company is also moving into other smart-wear areas and is looking at developing ergonomic safety ski-wear.