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### Weavers worried over acute shortage of textile workers

Marriage and festival season are weighing heavy on powerloom weavers in the country's biggest man-made fabric hub in the city. They are facing acute shortage of textile workers even as there is an increase in the demand for fabrics, including saris and dress materials.

Most of the migrant textile workers from Bihar, Uttar Pradesh, Andhra Pradesh and Orissa have not returned from their home towns after the expiry of their leaves.

Industry leaders say at least 30 per cent of workforce is yet to return. The weavers have been forced to cut down on fabric manufacturing due to shortage of workers.

Ashok Jirawala, president, Federation of Gujarat Weavers Association (FOGWA), told TOI, "Many workers had gone to their home towns a month ago to attend marriages. The weavers are worried should they not return how will they cope up with the situation. The demand for saris and dress material is good compared to last year. Shortly industry will face shortage of fabrics due to workers' issue."



The powerloom industry employs around 5 lakh workers. Around 3 crore metre of fabric is weaved per day by 6.5 lakh powerloom machines in the city.

Rakesh Patel, a weaver in Katargam, said, "Of the 80 textile workers in my unit, only 40 are working. Rest have gone to their home towns. Majority of my workers are from Bihar. I have tried to contact them but have not been successful. I am worried as the order book is increasing and I am facing shortage of workforce." [1.]

### Differences hit textile industry operation

SURAT: A fight for supremacy is on between two textile segments in the country's biggest man-made fabric industry. Traders have unanimously decided not to pick up finished fabrics from Thursday from the units of textile processors after their refusal to collect unfinished fabrics from the textile markets due to traffic issues.

Power loom weavers deliver grey fabrics to textile markets, which are picked up by textile processors. The finished fabrics dyed and printed by the textile processors are delivered to the textile traders. Market sources said grey and finished fabrics worth Rs 150 crore are dumped in the 140



textile markets, housing over 55,000 textile shops, every day. These are transported to the textile dyeing and printing mills for final finishing. Once the finished fabrics are ready, the textile processors deliver the goods to the markets again.

The textile processors had asked their transport contractors a few days ago not to pick grey fabrics from the market after tempo drivers complained of traffic issues and action by traffic police on the busy Ring Road area.

Angered by the decision taken by the textile processors, the Federation of Surat Textile Traders Association (FOSTTA) convened a special meeting of the presidents of all the 140 textile markets and decided not to accept the delivery of finished fabrics from the textile processors.

Sanjay Jagnani, president, FOSTTA, said, "We have given an ultimatum to the textile processors. If the processors are facing any difficulties, they should have consulted us. Not a single trader from any of the markets will accept finished fabrics from processors from Thursday."

A South Gujarat Textile Processors' Association (SGTPA) office-bearer said, "The tempo drivers are fined by the traffic police. We will find some solution to the issue soon."[2.]

### Uttar Pradesh seeks textile and clothing export boost

The chief minister of Uttar Pradesh state in India, Akhilesh Yadav, has told just-style that his government wants to spur future expansion in clothing and textiles through major infrastructure investments.

Speaking at a private event late last week in the state capital Lucknow, Yadav said the city's strong textile finishing industry has been hamstrung by poor links to India's export gateway ports.

"My government is building world class highways and trying to get the new Mumbai-Delhi freight rail corridor extended to Uttar Pradesh," said Yadav.

Uttar Pradesh is known for Zari-Zardozi and Chikan style embroidery products, which bear an official Geographical Indicator tag validating their origin as Lucknow. Silk products from Banaras and carpets from Bhadohi and Mirzapur are other well-known exports from Uttar Pradesh.

The state government repays up to 25% of local exporters' freight charges to Indian gateway ports via inland container depots or container freight stations, subject to a maximum US\$92 subsidy per standard 20-foot (6-metre) oceanic shipping container. Exporters sending air cargo receive a subsidy of up to 20% of freight charges to the gateway airport, subject to a maximum of US\$3,700. For sending samples overseas, exporters can claim 75% of the cost of air freight in subsidy. [3.]

### West Bengal textile policy will help sector grow, say chambers

With the Mamata Banerjee government in West Bengal coming up with a draft textile policy to attract investment to revive the sector, leading industry lobbies have expressed hope that the policy roadmap would help the industry to grow significantly.

States like Maharashtra and Gujarat unveiled their new textile policies in 2012 to woo investors.

"A policy was necessary. It will surely help Bengal's textile sector grow rapidly. The roadmap is also expected to ensure a higher contribution from the state to the country's textile sector in the days ahead," Bengal National Chamber of Commerce and Industry (BNCCI) secretary DP Nag told IANS.

"The sector has a lot of potential in terms of employment generation," Nag observed.

Addressing the media at the state secretariat here, Chief Minister Mamata Banerjee Saturday said the draft textile policy was ready.



The state government has uploaded the draft policy on its websites and invited suggestions from various industry bodies as well as business community.

Welcoming a textile policy for the state, FICCI said many of the suggestions of the chamber were reflected in the draft policy being issued by the government for comments.

"West Bengal has a long history and tradition in textiles, but there was a need for a policy roadmap which will revive, modernise and broad base the state's textile industry and integrate it with the global market," said FICCI senior vice president Sidharth Birla.

As other states had come up with very competitive textile policy and attracted significant investments as a result in the last few years, it was important that Bengal also came up with an ambitious policy to attract investments, Birla said in a statement. [4.]

## Karnataka plans Rs 1,000-cr mega textile park

The Karnataka government plans to set up a 1,000-acre textile park at a cost of Rs 1,000 crore in the Assembly constituency of Gurmitkal in Yadgir district, state's Textile Minister Baburao Chinchanasoor said today.

The state's Textile Department would submit a proposal to the Karnataka Industrial Areas Development Board to earmark 1,000 acres of the total 3,500 acres acquired for industrial development for the proposed project at Kadechoor, he told reporters here. The proposal, which is expected to generate 5,000 jobs when implemented, would be placed before the Cabinet soon for approval, Chinchanasoor said.

He also said that based on the growth prospects of the textile sector and after studying the textile policy of neighbouring states, a draft textile policy for Karnataka for the period 2013 - 2018 has been prepared. [5.]

### Textile park to come up at Kadechur

Minister for Textiles, Ports and Inland Water Transports Baburao Chinchansur on Tuesday said that a textile park would be set up on a 1,000-acre plot at Kadechur in Yadgir district with an investment of Rs. 1,000 crore for which the Karnataka Industrial Area Development Board (KIADB) had been asked to release land.



Speaking to presspersons here, Mr. Chinchansur said that the park would be developed on an international model.

He said that KIADB had 3,500 acres of land under its control in Gurmitkal constituency, in which Kadechur falls.

#### New textile policy

Mr. Chinchansur said that the earlier textile policy had expired on March 31 last and a new one would come into force shortly. A draft policy had been presented to the government for approval, he said.

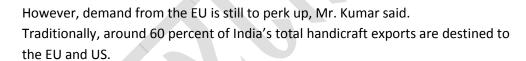
The Minister said that textile parks had been proposed in Gulbarga, Bellary, Tumkur, Chickballapur and Belgaum districts. [6.]

## India's handicraft exports rise 13% on US demand

Owing to recovery in demand from the US market, India's handicraft exports surged 13 percent to US\$ 256.8 million in April this year, as against April 2012's US\$ 227.16 million, Export Promotion Council for Handicrafts (EPCH) data shows.

The items that posted positive export growth during the month includes hand printed textiles and scarves, whose exports grew by about 10 percent year-on-year, and shawls as artwares by 29.3 percent year-on-year.

Alongside revival in demand from traditional markets like the US, producers are also receiving good number of orders from new markets like Latin America, Africa and China, EPCH Director Rakesh Kumar said, according to SME Times.





In fiscal 2012-13, India successfully achieved its handicraft export target of US\$ 3.3 billion. [10.]

### Karnataka govt will not ban Bt cotton: Minister

The newly-formed Congress government in the southern Indian state of Karnataka is in favour of allowing farmers to make their choices on the use of genetically modified (GM) crops like Bt cotton, Agriculture Minister Krishna Byre Gowda has said

Bt cotton was introduced some 15 years ago in Karnataka and it has since then helped the state's farmers to increase their output. As of today, about 90 percent of the cotton acreage in the state is under Bt cotton.

Meanwhile, Dharwad and Raichur based agricultural universities are working to improve the quality of Bt cotton seeds,

Economic Times reported quoting PTI.

The government is set to provide seeds and fertilizers to farmers and has stocked the requirements in lines with the Agriculture Department's consumption estimations of around 1.07 million quintals of seeds during the 2013 Kharif season, the Minister said.

Also, against estimated requirement of 2.4 million tons of fertilizers, the government has stocked 900,000 tons of the same, and would continue to refill the stock, he added.



The state government has also constituted a special squad to trace the elements instigating artificial shortage of seeds or fertilizers through hoarding, Mr. Gowda said.

He advised the farmers to avoid excessive use of urea just due to its low-cost availability, as this may adversely affect the soil's fertility.

He said though there are several farmer-centric schemes, rather than trying to implement them all, the state government would only focus on some selected ones. [11.]

#### Karnataka govt prepares draft textile policy 2013-18

The newly-elected Congress government in the southern Indian state of Karnataka has prepared a draft textile policy for the period 2013-18, state's Textile Minister Baburao Chinchanassor has said.

Speaking to reporters in Bangalore, the Minister said the draft textile policy has been prepared after studying the textile policies of the neighbouring states and on the basis of the growth prospects of the textile sector in the state.

Mr. Baburao also informed that the state government is planning to set up a mega textile park on 1,000 acre of land at Gurmitkal in Yadgir district. He said a proposal would soon be forwarded to the Karnataka Industrial Areas Development Board asking it to sanction 1,000 acres of the total 3,500 acres of land acquired by it for industrial development at Kadechoor.



The proposed textile cluster would involve an investment of Rs. 10 billion and on completion would generate 5,000 new jobs, the Minister said.

He said the mega textile cluster project would soon be placed before the Cabinet for approval. [12.]

#### **Exporters Log Out Of Cotton Market**

Cotton prices remained unchanged on the back of domestic buying support.

According to traders, exporters were out of the market and only south Indian mills were active in the market.

Gujarat Sankar-6 cotton was traded at Rs 37,200-37,500 a candy of 356 kg. Mill delivery price was Rs 37,700-37,800 . V 797 cotton A grade was offered at Rs 27,000-27,300.

Kapas or raw cotton marginally increased by Rs 5 to Rs 950-992 for 20 kg and Kadi delivery kapas at Rs 975-995.

#### LOW ARRIVALS

About 12,000 bales of 170 kg each cotton arrived in Gujarat and 33,000-34,000 bales arrived in India.

Arrivals were reported lower in most of the markets due to hot weather.

A Rajkot-based cotton broker said: "Demand is reported to be good from South Indian spinners, while North-based mills are inactive. Ginners' selling is restricted to lower stocks."

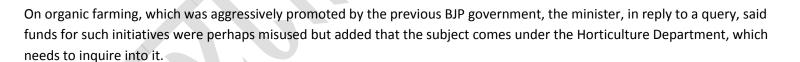
Cotton 29 MM (3.8+ micronaire) was at Rs 37,500-38,000, 29 MM (3.6 micronaire) Rs 36,500-37,000 a candy in Maharashtra. [13.]

#### Karnataka Has Open Mind On GM Crops

The government has an open mind on the issue of genetically modified crops, and favours giving options for farmers to make informed choices, Agriculture Minister Krishna Byre Gowda said today.

He said Bt cotton, first introduced in the state some one-and-half decades ago, has definitely benefitted farmers to improve yields in an eco-friendly manner. "That's why farmers have adopted it." As much as 90 per cent of farmers in Karnataka are using Bt cotton seeds.

Agricultural varsities in Dharwad and Raichur are presently working on improving the Bt cotton seeds. "We must keep our minds open," Byre Gowda said when asked to spell out the new government's stand on GM crops. "We must give him (farmer) the options; let him choose."



The minister said the government has geared up to supply seeds and fertiliser to farmers. Agriculture department has estimated that for the 2013 Kharif season, about 1.07 million quintals of seeds would be needed, which had been stocked. As against the requirement of 2.4 million tonnes of fertiliser, the government has a stock of 900,000 tonnes, which would continuously get replenished, he said.

The minister advised farmers not to over-use urea just because it was cheap saying such an approach would bring down the soil fertility. A special squad has been formed to crack down on elements who seek to create "artificial shortage" by hoarding, he said.

Byre Gowda also said though there are many schemes for farmers, the government would focus on those identified among them, rather than trying to implement all of them. [15.]

#### Indian Cotton Seen Steady-To-Lower; Demand Weak

Cotton prices in India are expected to be steady-to-lower next week due to sluggish demand from millers, tepid exports and sales from government reserves. Buying by local millers have declined in the spot market due to the poor quality of supplies, traders said. Daily cotton supplies have been around 60,000 bales. The Cotton Corp of India (CCI) would conduct auctions on Monday, Tuesday and Wednesday of every week with around 20,000-25,000 bales to be offered in a single sale.

It is likely to release 250,000 bales in the domestic market. India has started selling cotton from government-controlled stocks as it tries to protect domestic textile mills from costly imports, but traders said sales have so far been limited because of high prices. "Cotton is expected to trade weak because exports are not supportive. A pick-up in US plantings is also seen weighing on sentiment," said Ambika T.B., an analyst at Karvy Comtrade.

The May cotton futures contract ended steady at 17,940 rupees per bale of 170 kg each on the Multi Commodity Exchange. "The cotton market is almost steady due to lack of demand from millers and weak yarn exports. Supplies coming in the local market are of poor quality," said Arun Dalal, a trader from Ahmedabad. On



Friday, the most-traded domestic spot Shankar-6 variety rose 100 rupees to end at 37,000 rupees per candy of 356 kg each, data from the Cotton Association of India showed. India's cotton production is estimated to be 34 million bales in the current crop year. In New York, the most active July contract on the Intercontinental Exchange was up 0.06 percent at 86.08 cents per lb. [16.]

#### **Reliance Restarts Crude Unit**

India's Reliance Industries, the world's largest refiner, has restarted a 330,000 barrels per day crude distillation unit (CDU) on Monday following a shutdown last week for maintenance, traders said.

The privately-run refiner operates two refineries in Jamnagar on the Arabian Sea with a total capacity of 1.24 million barrels per day (bpd). The CDU which was shut last week was located in the older, 660,000 bpd refinery.

"The shutdown should have taken place before it sold a June naphtha cargo last week," said a trader. Reliance had on May 16 sold 55,000 tonnes of naphtha for June loading from Sikka to Chevron. Reliance's naphtha exports so far this year averaged about 72,000 tonnes a month from January to May versus 113,000 tonnes during the same period in 2012. [14.]

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#### Pricing a major challenge in e-commerce - experts

Pricing has become a major challenge for e-commerce companies, with the companies unable to arrive at the right price line for their products and services, said e-commerce experts who spoke at Evolve, a two day summit on retail and e-commerce organized by Sir M Visvesaraya Institute of Management Studies and Research (SVIMS), a leading Mumbai-based business school, that concluded here on May 17.

Mr. Jerry Rao, e-commerce expert and Chairman, Value and Budget Housing Corporation, said, pricing is currently a major challenge in e-commerce. The e-commerce companies charge any rate today for their services, which may be too low or too high.

According to Mr Rao, there needs to be more research and studies conducted to arrive at a standard pricing mechanism for different kinds of e-commerce products and services. "Should an e-commerce arm of a retail company sell its products at lesser rate compared to products sold out of its physical outlets is



still a dilemma. The retailer could pass on the benefits he saves on rentals, staff and AC, to his e-commerce customers. However, this could also have a demoralizing impact on its retail employees. Similarly, how much a telecom company should charge its customer for using specialized calls like knowing Rahukalam or astrology is still unclear. Should it be one rupee, five rupees or ten rupees."

According to Mr Jerry Rao with the advancement of technology, availability of real time data will enable services with time-bound requirement of a five Star hotel or an airline to fill the unoccupied suits or business class seats through innovative concepts like last moment auctions, targeting the right customer profile. This technology to predict consumer interest is gradually moving into physical retail space. Iris screening technologies are being used to study the time spent by a particular consumer at various spaces of the super market, time spent in searching spots of her interest, products her interest, which could be utilized by companies for prediction of her interests and engagement with her of.

According to the Internet and Mobile Association of India, the e-commerce market in the country expanded from Rs.8,146 crore in 2007 to Rs.45,000 crore in 2011.

In 2011, Indian retail market was about \$470 billion and is expected to touch \$675 billion by 2016. By 2020, the traditional and organized retail industry industry is expected to touch \$1.3 trillion.

Dr BR Manjunath, Director General, SVIMS said the companies need to invest a fair share of time and resources to study understanding the customers preferences, as customization of products and services has become too critical today.

According to Nitin Mukadam, founder, localbanya.com and CRM expert, Customer Relationship Management aided by data analytics is going to be the game changer from now. Technology will enable procurement of timely data based on the choices of the customer, which can be effectively used for customer engagement leading to customer loyalty.

According to Mr Mukadam, the technology is growing in such a way that it is today able to exactly predict what the customer is planning to buy, which section of an e-commerce site she visits often, what are her areas of particular interests etc. E-commerce companies could utilize this knowledge for customising its services for this particular consumer. According to Mr Mukadam, an e-commerce company could build right data-bases by extracting intelligent data from google analytics, incentivize the customer to register and then later engage customers in constant dialogue and foster customer communities through social media.

Mr Rahul Jagtiani, Founder, Plush Plaza, India's home décor site said that e-commerce and social media is making it easy for the start-ups to gain visibility. "New Search engine optimization and search engine marketing models, social media sites and You

Tube are enabling new entrepreneurs to gain maximum visibility in no time. These advantages were never there for a generation back entrepreneur," said Jagtiani.

Mr Kartik Jain, Vice-President, Infibeam, a leading e-commerce site said that the emergence of social-cloud-mobile media is enabling e-commerce companies to give multiple services to different vendors on a cloud-based model. The cloud-based model is negating the need for multiple server farms and at the same time enhancing the scalability and efficiency of services. [21.]

#### Indian govt vouches support to apparel exporters

Vouching support to the domestic apparel industry to boost their exports, the Government of India has said that issues like that of credit availability and skill development would soon be addressed.

The issues were raised during an inter-ministerial workshop held with Cabinet Secretary Ajit Kumar Seth in the Chair, Economic Times reported quoting PTI.

Updating the Cabinet Secretary regarding their issues during the meeting, the apparel exporters highlighted several issues like high rate of interest, dearth of skilled workers, high cost of raw materials, heavy customs duty on synthetic fabric and stringent labour laws, which according to them are a hindrance to the industry's growth.

Mr. Seth assured that the Government is determined to help the export sector, including the garment export sector, and it would do all that is necessary. He gave an assurance that the Government will address issues like skill development, improving operations of scale and developing consensus on amendments in labour laws and import duties.

Hit by sluggish demand from key western markets, apparel exports from India fell by about 6 percent year-on-year to US\$ 12.9 billion during last fiscal. The EU and the US, the key traditional export markets for Indian apparels, jointly procure around 60 percent of India's overall apparel exports.



Given the low demand from key markets, India's domestic apparel sector has been pushing for fixing the import duty on synthetic fabric for the entire 12th Five-Year plan at 5 percent against the existing 21 percent.

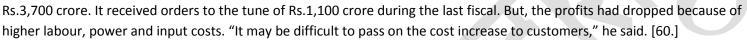
Commenting on the cost of credit, the Apparel Export Promotion Council (AEPC) Chairman A Sakthivel noted that it is too high at 12.5 percent, and hence there is a dire need to reduce this rate and fix it at 7.5 percent for the sector. [20.]

#### LMW plans to expand in China

Textile machinery manufacturer Lakshmi Machine Works (LMW) plans to expand the range of products manufactured at its subsidiary LMW Textile Machinery (Suzhou) in China.

Director (Finance) R. Rajendran told *The Hindu* here on Thursday that the China subsidiary had made profits this year because of better price realisation. The manufacturing facility was functioning out of a ready-built factory now and land has been allotted to have its own premises. LMW would invest totally \$12.5 million in China, and the subsidiary would meet the remaining expenses for expansion through loan or internal accruals.

In India, the textile industry was seeing revival and the company had orders for





### Textile traders oppose FOSTTA's decision to end agitation against textile processors

SURAT: President of the Federation of Surat Textile Traders Association (FOSTTA) and its office-bearers have come in the line of fire from the textile traders for changing the decision of not accepting the deliver of finished fabrics from the textile processors on Thursday.

Textile traders said that the FOSTTA had informed the traders in all the 140 textile markets in the city for not accepting the finished fabrics supplied by the textile traders starting from Thursday after the transporters refused to pick up unfinished fabrics from the markets.

Sources said the textile processors affiliated to the South Gujarat Textile Processors Association (SGTPA) had informed their transporters some 10 days ago for not picking up unfinished fabrics from the textile shops due to the harassment of the traffic cops and the lack of parking facilities in the markets.

It was when the transporters refused to pick up the unfinished fabrics from the textile shops, the tradres approached the FOSTTA office-bearers and unanimously decided that they will not accept the delivery of finished fabrics supplied by the textile processors starting from Thursday.

A textile trader asking anonymity said, "At the time when still the transporters are not picking up parcels from the textile shops, the FOSTTA office-bearers have decided to wind up the agitation. This is not the right approach and that the FOSTTA leaders must protect the interest of over 55000 textile traders". [78.]

### Rising Mercury Hits Cotton Crop In Punjab, Haryana

Extreme hot weather is affecting cotton crop, especially late-sown in both Punjab and Haryana, say farmers and experts. There are reports of burning of crop leaves in many parts of the major cotton growing districts in the two states where it is a major kharif crop after paddy and basmati and account for nearly 12-13% of India's total output of the fibre crop.

Farmers are reporting burning of cotton leaves due to higher temperatures, which are hovering around 45 degrees celsius in the region, from Abohar, Muktsar, Bathinda and Mansa districts of Punjab. In Haryana, farmers from Sirsa, Hisar and Bhiwani have cited the same problem especially for cotton which was sown in the past 7-10 days.

"Now when the temperature has crossed 46 degrees celsius, cotton crop has been hit hard as the leaves are burning. We fear that the leaves may start getting curled, which affects the ripening and germination process," said Buta Singh Burjgill, chief of farmers' group Bhartiya Kisan Union (Dakonda).

Farmers are worried rising temperatures along with lesser availability of canal water may have an adverse impact on the growth of crop, which is at leafing stage now. "We need to irrigate the fields regularly in order to save our crop from burning. If such weather conditions persist a little longer, it may affect the growth and productivity of cotton. Extremely hot weather at the flowering stage may even lead to wilting," said Ajay Singh Godara, a farmer from Hisar district in Haryana.

"The scorched and withered cotton leaves are making farmers pray for weather to tame its fury," said an aggrieved Karnail Singh, a farmer from Muktsar. He said farmers have to spend a lot on buying cotton seeds particularly the genetically modified BT Cotton, which is growing in over 90% area in both Punjab and Haryana.

"I am worried that we may have to sow the crop again, if weather continues to be scorching. This will raise the production cost and seeds may not be available easily now," said Baljinder Singh Kotbhara from Talwandi Sabo area of Bathinda.

Another farmer from Bathinda, Mohinder Singh, said cotton fields with burned leaves and parched surface can be seen all over the cotton belt of Punjab.

Noted farm economist and marketing consultant, Punjab State Farmers Commission, P S Rangi admitted that weather conditions are not suitable for the growth of cotton in the major crop-growing districts. "There are reports of burning of cotton leaves in the areas where the crop has been sown late. But it is too early to say if it will lead to crop failure," he said.

While the farmers are worried about the impact of rising temperature on the crop, officials and traders say the impact on cotton due to adverse weather conditions may be minimal. Rakesh Rathi, president, North India Cotton Association, said burning of cotton leaves during summers is a common problem. "Though the temperatures are extreme this time, it may not cause much damage to the cotton crop. There are reports of burning of cotton leaves, but the situation is not alarming," said Rathi while allaying fears of farmers that the crop may be hit by scorching sun.

Meanwhile, the officials from the Punjab agriculture department said cotton has been sown in over 4.8 lakh hectares in the state till Thursday, which was 4 lakh hectares on the corresponding day in 2012. Area under cotton crop for the 2013-14 marketing season is estimated to be around 5.8 lakh hectares in Punjab. [76.]

### Rise in illegal textile processing units in Erode

The district has been witnessing a fresh spurt in the establishment of unauthorised textile processing units.

The absence of effective monitoring by the Tamil Nadu Pollution Control Board (TNPCB) and the district administration has encouraged persons to establish illegal processing units near waterways and rivers in the district.

"The increased flow of toxic, untreated effluents in the waterways indicates that more units have come up in the district. We have found many units functioning in the surroundings of Erode and Bhavani towns," Tamil Nadu Farmers Association district secretary T. Subbu says.

#### **Demolished**

Officials from the board themselves found five unauthorised units operating in Veerappan Chatram and Choolai areas, a few days ago, and demolished them.

"This confirms that the district continues to be a safe haven for the polluting industries," Mr. Subbu points out.

A few months ago, the district administration managed to bring down the pollution level to a significant extent by launching a series of drives to demolish unauthorised units and shutdown the approved ones that were found polluting the water sources.

Later, the officials failed to monitor the textile processing and tannery industries. "In the last six months, officials from the board and the district administration had not initiated any sustainable efforts to identify and demolish the unauthorised textile processing units. Only when complaints pour in from farmers, officials wake up and initiate a drive. Demolishing just five units will not solve the problem. Officials have to identify all the illegal processing units and close them permanently. Besides, criminal action should be initiated against managements of the units," demands Kalingarayan Pasanga Sabhai president V.M. Velayudham.



#### **Committee**

Though the district-level committee formed based on the orders of the Madras High Court directed the board several months ago to register criminal case against those operating illegal processing units and those renting their lands to set up such units, officials from the board had not registered a single case till date.

"By not registering a case, officials of TNPCB demonstrated their total lack of commitment towards controlling pollution," Mr. Subbu alleges.

Board District Environmental Engineer G. Gopalakrishnan, however, denied the allegations and said that it had been watching the activities of the industrial units closely. "We have controlled the polluting industries to a greater extent," he said. [79.]





















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32	Fiber giant Invista to display at Galleria Intima 2013

### Rajesh Pratap Singh collaborates with Shingora textiles

Ace designer Rajesh Pratap Singh has collaborated with textile brand Shingora to launch its fall-winter 2013 collection.

The special luxury collection will be created by the designer, and manufactured by Shingora to cater to men and women. It will be launched before the onset of winter this year 2013, said a statement. A few pieces from the collection will also be retailed at premium luxury retail destinations in India as well as abroad.

Singh was also recently roped in as the first ever wool ambassador for India by Woolmark, an internationally known textile fibre brand. A popular designer, he has earlier showcased his collections on international runways in Paris and Milan. He is also the associate design member of Fashion Design Council of India (FDCI), India's apex fashion body. [7.]



## Designer Rajesh Pratap Singh — India's first wool ambassador

Designer Rajesh Pratap Singh — India's first wool ambassador — talks about his ongoing journey to redefine the fabric for summer

With the heat picking up pace in most parts of India, it seems like an unlikely time to talk about wool, but that's exactly what India's noted designer is looking to change. We meet Rajesh Pratap Singh in what is arguably India's woollen capital, Ludhiana, on a fiery May afternoon. designer, who is also the country's first Woolmark ambassador (Singh took on the role earlier year), has embarked upon a journey to explore the fibre and its potential. It started with his Autumn-Winter 2013 collection, which was showcased at the Wills Lifestyle India Fashion Week in March this year. The collection proved Singh's expertise in textile engineering, as he

The this

explored various techniques of wool such as felting, knitting, patchwork appliques and subtle

embroidery. "Though it's not the first time I have worked with wool, its versatility always surprises me. In my new role, I am getting to learn a lot more about the wool fibre and its characteristics," said the designer.



His association with Woolmark has got him in touch with the Ludhiana-based Shingora Textiles. A key player in the shawl industry, Shingora — led by its CEO Amit Jain — retails not only in India but also in Germany, Holland, Switzerland and Japan. The company is also a premium producer for luxury brands and private labels such as Armani, Polo Ralph Lauren and Paul Smith. Pratap and Shingora have now joined hands to roll out a luxury line of wool and its blends with natural fibres.

The premium collection will be launched in August with an eye on the international market. "We have been experimenting with wool, blending it with other natural materials. It requires a lot of technical know-how to get it right," said Singh, who is looking to break away from wool's conventional usage. "For one, it's no longer just a cold weather material. Its natural breathability and

temperature regulation, combined with new manufacturing methods, makes it ideal for warmer seasons and environments," said Singh.

For someone who comes from Rajasthan, the hottest part of India, Singh is keen to tap the insulating properties of wool. While he remains tight-lipped on his engineering experiments, he does talk about working on light-weight wool and a denim finish in wool, for use in summer. "I am all for sustainable fashion at the grassroot level. There's nothing better than using natural fibres such as wool, cotton and linen," said Singh, adding that all over the world, fire-fighting garments are being increasingly made from wool blends. "It works as an insulator. Also, the natural elasticity of wool fibre resists creasing and bagging," he added.

He is closely associated with Indian fabric mills and has had developmental and research based collaborations with some of them. "My experimentation with textiles spans the high-tech as well as low-tech in terms of manpower-intensive handloom weaves," said Singh, who will showcase the results of his Ludhiana project at the Paris Men's Fashion Week later this month. "The collection includes accessories such as scarves and some structured pieces as well," said Singh. He will also present a show at the Royal Textile Academy of Bhutan next month. [8.]

#### **Apparel Brand Basics Life Eyes Pan-India Presence**

Chennai-based men's apparel retailer Basics Life is stitching plans to expand its presence to the north with outlets in Delhi and NCR early next year.

It is aiming for pan-India presence in a couple of years.

Next month its 100th exclusive brand outlet will open in Chennai. By January, it plans to roll out outlets in Delhi and NCR, followed by Gujarat, Madhya Pradesh and Bihar.

Currently, the brand operates 99 exclusive stores in the South and Maharashtra, with Tamil Nadu alone having 49 stores.



It is also present in all major departmental stores in the South.

Basics Life has three sub-brands in its portfolio – Basics 029, casual wear targeted at age group 20-40, Genesis formal wear, and ProBase for the younger customers (14-21). It also has a line of accessories such as socks, belts, bags and sunglasses.

Started by brothers Hanif and Suhail Sattar, Basics Life opened its first store in 1992. Fifty of its 100-odd stores have come up in the last three years.

By the end of the financial year, Basics Life aims to have 125 stores. In three years, it wants to operate around 200 stores, across the country.

"We prefer to saturate each market and not spread ourselves too thin," says Suhail Sattar, co-founder, Hasbro Clothing, which owns Basics Life. Being present online, across basicslife.com and multi-brand channels such as Myntra and Flipkart, has helped familiarise the brand countrywide, he adds.

Hanif Sattar says it is also important to stay relevant – at the right place with the right fashion.

In the coming years, there will be more space for brands such as ours which offer a complete lifestyle experience with apparel and accessories.

The brand, with a turnover of Rs 135 crore, places itself in the 'value-for-money' category with a price range of Rs 399-2,000. [18.]

#### Dress in style with Disney & Marvel's trendy adult tshirts

This summer add some cool style to your wardrobe with the trendy Disney & Marvel's t-shirts collection.

This fashionable collection of t-shirts for adults, inspired by Disney's classic characters and Marvel's iconic Super Heroes, is now

in the market and is designed for both men and women.

While the Disney range will display the classic characters of Mickey and Friends, the Marvel range will exhibit the Super Heroes Iron Man, Spider-Man, The Avengers, Hulk and more. Available in chic designs the high quality and eye-catching graphics will certainly appeal to the avant-garde fans. The collection is available in polo and round neck styles and teams perfectly with denims or shorts, paired with worn out canvas shoes, and even blazer for a smart casual touch.



Disney products are available across over 100,000 retail touch points in India. Disney Consumer

Products (India) continues to focus on broadening its distribution by expanding product reach beyond large cities through existing licensees and retail relationships.

Working with over 140 licensees across categories, Disney's retail presence, such as the unique "store-in-store" concepts in prominent retail outlets such as Lifestyle and Hamleys in Mumbai, Sapphire in Bangalore, Landmark Stores, deliver a broad range of products and continue to reach more and more consumers across the country. [22.]

## Franchise India opens new office in Indore

Franchise India, Asia's largest integrated franchise solution company since 1999 has launched its new office at Eighth Floor, Metro Tower, Near Vijay Nagar Square, A.B. Road, Indore.

Sonya Chowdhry Grover, Director, Franchise India Brands Ltd. Said, "The purpose behind creating an independent new branch is to offer maximum business opportunities to the investors and guiding them on day-to-day basis." We are delighted to open up in Indore and with this new wing we want to create an awareness regarding all the new offerings and services that will help businesses grow and expand."



This office will help the various companies in expanding their size in the market by attracting more customers; widening the scope of their business opportunities and thus fuelling the growth of the companies by enhancing their profitability on a sustained basis.

#### **About Franchise India:**

Franchise India is Asia's largest integrated franchise solution company since 1999, with an absolute authority on Franchising, Licensing, Retailing, Real estate and Marketing. The company has consulted several major brands over these years. With its strategically formed divisions, Franchise India has created its own niche as the pioneers of franchise industry and a small business authority. [23.]

#### Yebhi.com launches 30 virtual stores across India

Yebhi.com, India's leading online fashion and lifestyle shopping portal, has launched another game changing initiative - Virtual Stores across Café Coffee Days where customers can buy products from a virtual wall.

They have started with 30 Virtual Stores across two cities – Delhi and Bangalore. Customers can view, choose and buy from a large range of products like apparels, shoes, accessories, mobiles and home products.

The idea is to make shopping really simple, quick and easy. The virtual stores feature pictures of merchandise from the Yebhi.com website, with each having a corresponding QR or NFC Code – two of the latest technologies.

Customers can select any item by scanning the QR code or tapping on the NFC code via their smartphone, they will be taken to the Yebhi.com website, where they can buy the item which will then be delivered to their doorstep. The icing on the cake is that customers will get an instant discount of Rs200 if they buy at Yebhi's virtual store.



Manmohan Agarwal, Founder and CEO, Yebhi.com said: I am extremely proud of the great work the Yebhi team has done to launch this idea in the CCDs across India. We are always looking to make the shopping experience easier and more convenient for our customers and the introduction of the virtual store is a great achievement. This is a real triumph for the Indian ecommerce industry as it continues to be at the forefront of technological innovation.

Nikhil Rungta, Chief Business Officer, Yebhi.com added: "This is an exciting opportunity for Yebhi.com to directly communicate with our customers. We have always changed, evolved and designed our offerings to suit the demands and requirements of our customers.

"Today, Indians living in big metros are very busy and this initiative offers them an opportunity to shop while they chill. We settled on outlets near corporates and youth hangouts as customers who come here have time on their hands and money to shop. With the Virtual Store, we are taking online shopping to next level by touching base with our customers and allowing them to shop from anywhere, at anytime." [24.]

#### Portfolio 2013 from Pearl students exceeds expectations

Pearl Academy, India's leading design, fashion and business institute closed the two-day annual property – PORTFOLIO'13 with exhibitions which manifested captivating creations of the graduating batch.

The show focused on work done by the Communication Design, Interior Architecture Design, Textile Design and Fashion Design batches.

Mr. Sharad Mehra, CEO, Pearl Academy, said, "PORTFOLIO 2013 has exceeded the expectations that we have from our students. Our mentors are constantly working with the students to achieve a high level of academic excellence which has become synonymous with Pearl. We are proud to have successfully organized a show at this level." The final day of PORTFOLIO'13, began with the inauguration ceremony by ace designers Mira and Muzzafar Ali. "Portfolio is an excellent way of showcasing work and connecting with audiences. We are to see the budding talent and are thrilled to experience the deft craft exhibited.

"Communication designs students have put together some commendable projects and we would be ecstatic to see these coming alive", they added. The opening ceremony entailed a colossal exhibition and a series of ramp-shows.

Work of meritorious students was commended with an award ceremony which was witnessed by industry leaders and Guests of Honor Sunil Sethi, Vineet Bahl and David Abraham.



The students engendered some breathtaking designs inspired by Narnia, Ganjifa- an art practiced in Orissa, ying yang and exotic insects among many others. The show also saw some interesting pieces by the Communication Design batch. The students of this batch reflected work inspired by pressing issues that are faced by the Indian society in a sensitive manner.

Mr. Sunil Sethi, President-Fashion Design Council of India, said, "I am delighted to have experienced fresh new insights from the promising students of Pearl. Platforms like Portfolio make our work as industry players easy as we are always looking for new talent which would fit well with our brands."

Mr. David Abhraham, Creative Director-Abraham & Thakore, said, "It was a pleasure being a part of this event. Portfolio exceeded expectations with designs which left us spell-bound and wanting more."

Vineet Bahl, renowned Fashion Designer, said, "As a designer I look for people who understand fashion and justify their theme. Portfolio was a refreshing experience since these students surpassed the common standards."

The second day of PORTFOLIO'13 brought forth creativity of students from uniquely structured courses like Fashion Design, Communication Design, Interior Architecture & Design and Textile Design through a colossal exhibition and a gala ramp show attended by major players of the fashion industry such as Rahul Misra, Ranna Gill, Pawan Sachdeva, et al.

Sunil Mehra was recognized for his contribution towards 'Menswear couture in India'. "This award is an inspiration for all to come up here someday, so this is not just for me but for all of us to share", he added. [25.]

### Subhash Ghai & Neeta Lulla to open fashion school

Thinking of fashion as a career option? You no longer need to look at Paris or Milan for a formal education. Two legendary game-changers in their respective industries, Subhash Ghai and Neeta Lulla, have joined forces to create a revolutionary fashion school, the Whistling Woods – Neeta Lulla School of Fashion (WWNL) in India.

Spearheaded academically by Neeta Lulla and featuring a guest faculty of renowned fashion industry greats, the WWNL aims to create the next generation of fashion designers and fashion industry professionals. The WWNL will commence classes in August 2013 with admissions opening in the second week of May 2013.

Speaking at the formal launch, Subhash Ghai, Founder and Chairman- Whistling Woods International said "Fashion has always played an integral role in films. Through fashion, characters come alive before the camera.

"Neeta Lulla who has spent so many years with the

industry has continually strived to grow the field of fashion, both within the film industry and outside of it. I'm delighted that Whistling Woods is partnering with her to create the Whistling Woods – Neeta Lulla School of Fashion".



Courses run will be a Diploma in Fashion Design (1-year) and an Advanced Diploma in Fashion Design (2-years). Students will undergo a rigorous and thorough curriculum designed under the tutelage of Neeta Lulla and adhering to the high academic standards set forth by Whistling Woods.

The WWNL School of Fashion will also be bridging the gap between industry and academia by bringing on board an Advisory board consisting of industry specialists, guest & visiting faculty from the industry. The institute also plans to invite globally renowned teachers from Europe's finest fashion schools and the global fashion industry to deliver guest lectures.

Neeta Lulla, winner of four National Film Awards for Best Costume Design, who has partnered with Whistling Woods International as the Dean of the WWNL, said, "When I started out in the fashion industry, there were limited options available within fashion education in India but today, it gives me great pride to announce our school of fashion that will train fashion aspirants to excel at the highest levels. I could not see a better fit than Whistling Woods to partner with and to launch a structured comprehensive School of Fashion and I'm thrilled to be working with Subhashji and his institute for the same."

Ms. Meghna Ghai-Puri, President-Whistling Woods International said "We're very excited to be launching the fashion space. This is something we've wanted to do for a long time and we couldn't have found a better partner. Whistling Woods has always been the best platform for industry aspirants. With the launch of the Whistling Woods – Neeta Lulla School of Fashion, we are reinforcing our commitment to developing local talent in all spheres of the thriving Indian fashion industry."[26.]

### NTC reveals winners of 'Young Designer Hunt'

Plethora of designers from across the country was competing for this dream destination. However, only the most promising among them could make it and become the winners of NTC's Young Designer Hunt.

In the Grand Finale held at the Ocean Pearl Retreat, the young finalists competed with great zeal and zest. In an atmosphere surcharged with the spirit of competition, they delivered their finest performances in the Personal Interview and on the spot assignment across 5 categories viz. Apparel, Accessories, Home Décor, Furniture, Handicrafts & Heritage.

These were personally evaluated by India's ace global designer Shri Raghavendra Rathore and his team, who also reviewed the

portfolios of finalists.

"The final performance of contestants was so good, and so full of promise, it was tough selecting the winners", said Shri Rathore. He and his team scrutinized each work, and interviewed the finalists before declaring the winners in each category.

Shri Rathore also observed that, "Youngsters in our country are hard working and dedicated towards their work. They just need accurate motivation so that their talent can be channelized and they are all set to amaze the fashion world." All the winners of NTC Young Designer Hunt have the privilege of being personally trained by Mr. Rathore, besides a contractual employment for a year with NTC's Brand India.



Congratulating the winners, Ms. Zohra Chatterji, Secretary, Ministry of Textiles, Government of India, said, "The creativity of indian minds is well recognised the world over. We need to encourage and give wider exposure and opportunities to our budding young fashion designers in the growing domestic and international market. I congratulate the winners of this competition and wish them a bright future in creative design. I also look forward to many more useful initiatives by the NTC for the growth of the Textile Industry especially in the area of marketing and brand promotion in the days to come".

Presenting Trophies and Certificates to the winners, Shri Ramachandran Pillai, the Chairman & Managing Director of NTC, was extremely pleased when he said, "The NTC Hunt has given the young designers a dream opportunity not only to showcase their talent in the competitive textile industry, but also to be personally trained by Shri Raghavendra Rathore, and to work on NTC's Brand India."

Earlier, on 26th December 2012, National Textile Corporation Limited (NTC) announced the biggest search for the most promising designers across the nation, which was a part of its strategy to promote NTC's new global retail offering: Brand-India. The hunt was inaugurated in a ceremony by Shri Anand Sharma, the Hon'ble Union Minister of Commerce, Industry & Textiles.

The primary aim of the Hunt was to attract promising talents hidden in every nook and corner of this country, identify and bring them to the limelight by providing them with the best training, great mentorship and a global exposure to designing.

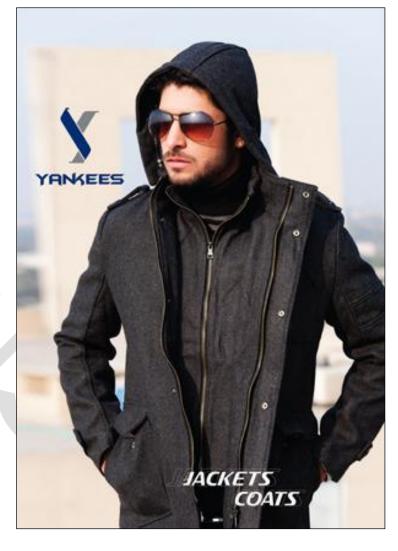
And it is for this purpose the NTC signed up Shri Rathore – the man from Jodhpur who has set the global ramps on fire with his ubiquitous Bandhgala and heritage styling. Shri Rathore and his team of panelists reviewed the Forms that poured in from across the country and shortlisted the candidates for the Grand Finale. [27.]

#### Yankees expects price correction due to excise removal

The removal of excise duty on readymade garments has gone down well with brand Yankees. It expects to take advantage of the removal of duty and also of the overall positivity in the industry. "Since stocks are depleted, there will be good orders. Also winters should arrive on time and be of some intensity. We would like to grow by 25 percent by March 2014. Some price correction of about three percent is also inevitable because of excise withdrawal. This would have been more if raw materials were not so expensive," opines Amit Sabharwal, Director, Yankees Knitwear.

Elaborating on the trends and styles that would work this winter, Sabharwal says, "Since winter has a trend of arriving late, I think sleeveless or Nehru jackets will play a major role this time since they are fashion products. They allow free body movement. A Nehru jacket can be worn to a party or as routine wear. Sleeveless jackets are worn by women too. Cotton or nylon sleeveless jackets are also in. This year jackets will have bright colors and innovative designs."

Yankees was launched in 1979 and it started with T-shirts, tracksuits, windcheaters and jackets. "We supply these to Maharashtra and the South. We were not present in the North at all. In 2000, we focused on jackets and casual coats. That was when we decided to focus on the North. This was a challenge. The first ave come a long way," Sabharwal explains talking about the brand's journey so far.



Now Yankees collection is retailed in: Uttar Pradesh, Delhi, Punjab, Jammu Kashmir, Chandigarh, Madhya Pradesh, Chhatisgarh, Rajasthan, Haryana, Uttaranchal and Northeastern India. "We want to add Bihar to our network. We are in 400 MBOs including StanMax, C&M, Goenka, Bindal and Biglife Ritu Wears," he adds.

The brand manufactures jackets and casual coats for men. While sleeveless jackets sell between Rs 1,795 to Rs 2,395, other jackets are in the price-band of Rs 2,495 to Rs 3,295. The target age group is 20 to 50 years. Sabharwal says that in future he may introduce a range for teens. [28.]

### Loungewear: The emerging category that's attracting brands



As the Indian knits industry continues its growth story, loungewear is fast taking centre stage. The category is poised to take up a big chunk of the overall knits industry. Many brands are realizing its potential and venturing into this space for fast forwarding their business. As Geeta Singh, Director Chic Carissimo points out, "The consumer is more aware and evolved. They travel around the world and are aware of the latest fashion. Media exposure is another advantage. All these factors have contributed significantly towards the

evolution of this segment." The idea of loungewear came in with the need to offer outfits that are not only comfortable but also allow one to indulge in a relaxed manner. Today, it has become a lifestyle statement which is practical and comfortable at the same time. "Earlier people used to mix and match their nightwear or loungewear as they were not aware about of the existence of a separate category," explains Aditya Marwaha, Director-Marketing of Kanvin.

"Loungewear is an extension of intimate wear. It saw real growth only in the year 2000. Initially there were very few players, as the market was not big. Currently the turnover in the industry mainly comes from intimate wear," reveals Harshad Thakkar, Managing Director of Valentine. Thakkar adds, "Volumes are big mainly because these are sold in sets, the pricing is also higher i.e. the basic MRPs are higher. If the MRPs are higher, the turnovers are big compared to other garment categories." Experts say, loungewear has seen 15 to 20 percent consistent growth across categories.

Loungewear is all about pampering oneself. One of the biggest challenges being faced by brands is changing consumer mindset as people are hesitant to spend on something they generally wear at home. "Loungewear is about tops and lowers, so it doesn't come cheap. Controlling MRPs is the biggest challenge. So we try to keep prices attractive," opines Hitesh Ruparelia, Director, Sweet Dreams Lounge.

"Mix and match is another issue as the top and bottom both are different and so the supply definitely has a surplus. So they are always under margin pressure. Apart from lower margins and inventory surplus faced by brands, changing



fashion is another challenge," Thakkar points out. Singh feels rigid labor policies too many taxes and regulations impact the price. Indian consumers being price conscious, look for value for money products, which leads to price barriers owing to competition from branded and unbranded players in the market. But despite the bugbears, loungewear brands are looking to spread their retail footprint. Brand Valentine for example, plans to roll out its exclusive outlets after its public issue. [29.]

#### Westside goes for a revamp and adds more private labels

Tata Group's, Trent that operates Westside retail chain, one of India's largest and fastest growing store chain is revamping the business. As Gaurav Mahajan, CEO Westside India, says, "Westside is progressing very positively and we are going through an aggressive exercise of revamping our stores." Apart from revamping and creating a conducive environment for its customers, Westside is also looking at launching an array of in-house brands and private labels. "Private labels and in-house brand format have really worked well for us. There is also lot of activity in launching in house brands. So we as a retail house shall focus on launching a lot of in house brands in many categories. We have seen good traction in sales and customer response to these," adds Mahajan.

Launched in 1998, the Westside has numerous departments to meet the varied shopping needs of customers. These include men's, women's and kids' wear, footwear, cosmetics, perfumes and bags, household accessories, lingerie and gifts. The company runs 72 Westside departmental stores across Indian in cities like Ahmedabad, Bengalore, Chandigarh, Chennai, Delhi, Gurgaon, Ghaziabad & Noida, among others. It hopes to expand rapidly with similar format stores that offer a fine balance between style and price.

However Mahajan says they are not going for a change in brand positioning, "We are in the business of fashion, in this business you constantly need to keep your product relevant and keep moving forward and keeping pace with the consumer and its changing preferences. So I would not call it a change in the positioning of the brand. But there is a lot of focus on the fashionability of our products and the quality of the products and the environment we provide in store."

Talking about the retail spread Mahajan opines, "We have a wide footprint and are present in major markets. We are going aggressively to Tier II, III cities.



Although we already have a sizeable footprint in these cities we are just multiplying our presence in some metros and going in to each of the new markets within these metros." Currently Westside has 72 stores and there are about 8 to 10 planned for this financial year.

Talking about what lead to this revamp Mahajan explains, "India is a dynamic market where the consumer is constantly evolving. And we being in the market for a long time work hard to remain close to our consumers. In the business of fashion, a brand needs to constantly stay relevant to its consumer. So we feel the revamp will help us come closer to our customers."

While private labels have worked well for Westside, Mahajan says they plan to extend this to other categories especially beauty and kids' wear, which are strong category within Westside. [30.]

### After IPO, Valentine plans aggressive expansion



"We are the first loungewear brand to launch a public issue. We have seen a good response for our IPO. On the first day itself the rate for listing was 20 percent higher. Our HNI portion was oversubscribed by two-and-a-half times and many Bollywood celebrities participated in our IPO," explains Harshad Thakkar, Managing Director Valentine. The company is now looking at aggressively expanding its retail presence apart from launching an e-commerce platform.

Elaborating on the plans for the brand, Thakkar says, "After our public issue we plan to roll out exclusive brand outlets. Now, we have 13,000 MBOs and LFS all put together. We plan to open 10 stores in Mumbai, after the first 10 stores in Mumbai, we shall look to expand to other markets."

Valentine brand was launched in 1999. Thakkar says, until 1995 there was no industry for loungewear in India, people just mixed and matched and wore whatever they found. "The relax wear clothing line was developed after the economic boom in India, people had higher disposable income they have started spending more on leisure clothing. Before there were not many players in this industry but now we have seen that many knitwear players are expanding their product portfolio," he adds.

The current styles in ladies consist of long tops and pajamas. In men's lounge wear, mostly stripers with bottoms are doing well. Colours in toddler wear are brighter, while the men's line has sober colors. The main fabric used in this category is largely cotton and knits; wovens are not even one percent in the industry.

"Our latest collection has all these elements; we have a theme every season. The winter collection has more of track suits. We are also launching travel wear this season. We have seen that the tourist industry in India is growing and we have observed that the consumer wants to wear something different than the regular stuff that they wear for



traveling. The designs are close to the outerwear, the colours are fresh and bright. Capris and shorts form a major part of the collection. We shall launch this in mid-May and this will hit the stores by August," tell Thakkar.

"We had a modest start with about Rs 28 lakh, turnover that year. And every year we are growing at 130 percent. Last year, we did business worth Rs 102 crores," he sums up. [31.]

### Luxury finds new address in Chennai

Chennai is the latest stop for global luxury giants, who are settling on the city's retail space in a big way. From Jimmy Choo, Furla, Louis Vuitton, Burberry, Etro to Canali, brands have found a place in Express Avenue, Phoenix Mall or Bergamo in Chennai. Over a dozen global labels are now available in standalone stores or multi-brand fashion outlets of the city.

Chennai has been quick in adapting the modern forms of retail. Spencer's was the first large-scale mall in India. Saravana Stores is one of the first value discount stores and Chennai followed the concept of department stores much before the other metros did. And global brands are keen on entering the city also because shoppers from Madurai, Coimbatore and other southern cities have weekend homes in Chennai.

Growing awareness about fashion and increasing spending powers along with status consciousness is pushing the customers to grab the premium labels. Earlier, affluent families from the south did not believe in spending but the new generation is keen of showing off the labels they own. [32.]

### Erke enters India through Rajasthan and Punjab

Erke, a leading sports brand known worldwide for its quality products recently entered India in the first phase of its planned pan-India launch. The company has placed its sportswear at leading retailers in Delhi/NCR, Punjab and Rajasthan.

Established in 2000, Erke specializes in manufacturing performance based sports shoes, apparel & accessories. In the last decade, Erke has positioned its brand as one of the most famous sports brands, specially known for tennis shoes, apparel and equipment. With more than 8,000 Erke brand stores in more than 40 countries, the company aims to be one of the leading sportswear brands in the world.



Erke's theme is youthful and it draws inspiration from the morning sunshine. The sportswear range features style, performance, comfort and endurance. The apparel and footwear are designed according to the latest international trends with technology beyond comparison. Within the year 2013-2014, the company aims at making the entire range of Ekre sportswear available in most of India's cities. [33.]

## Woodland to open 50 exclusive Woods stores

Woodland plans to launch 50 Woods stores in 2013-14 with an investment of Rs 75-100 crores. Woods, launched six to seven years ago, has a range of products, including formal shoes, women's footwear, bags and accessories. Apparels — mainly highend fashion wear and party wear — will also be launched soon under the brand.

Earlier, the company only ran its flagship Woodland stores, where it also stocked Woods products. Woods, a fashion label, was launched in India in the late 1990s but was soon withdrawn. The company re-launched the brand in 2007, which now gets 70 percent of its sales from women customers. Apart from the 50 Woods stores, the company plans to open 60-70 Woodland stores at an investment of roughly Rs 150 crores.

Woodland has been steadily growing its retail reach in the India market. It will invest over Rs 100 crores on opening 70 to 80 exclusive stores next year. It hopes to garner revenue worth Rs 850 crores this fiscal and touch Rs 1,000 crores next financial year. [34.]



#### Future Group to launch World Market in Bangalore

Future Group, together with joint venture partner Fung Capital of Hong Kong, is all set to open its first cash and carry store in India in September. Future Group, along with Fung Properties and Bangalore-based real estate developer Sattva Group, are launching World Market near Bangalore. The store will be called World Market and is intended to replicate Dragon Mart of Dubai and Yiwu of China. The cash and carry store in Bangalore will be about 1 million square foot.

"Work is on to get both the real estate and the back-end ready soon. The World Market will have 400-500 square feet shops which traders can own and run," said a source with direct knowledge of the development. "The idea is to provide a one-stop distribution channel for all shopkeepers'



needs in a transparent and modern retail set-up unlike the cramped wholesale markets that exist now." Future Group will be leveraging Hong Kong-based Li & Fung's sourcing capabilities for procuring merchandises. Incidentally, Li & Fung holds a 26 percent stake in Future Group's logistics business Future Supply Chain.

Fung Capital, the private equity investment arm of the families of Victor and William Fung, owns 26 percent stake in the joint venture, with Biyani holding the remaining stake. [35.]

### Mauritian brand IV Play plans India entry

Mauritius apparel brand IV Play will soon be launched in the country. IV Play is a fashion brand for men, women and children launched in 1994 by Mario Guillot, a French designer. He fell in love with Mauritius and made it his home. It is a fast-selling brand with five stores in Mauritius where it is placed with the likes of Calvin Klein and Diesel.

Chennai-based entrepreneur Vijay Jhaver has bagged the licensing rights to manufacture and distribute the brand in India. The collection offers quirky, bold fashion like jeans in colours such as red and orange. Even the trims and buttons being used are unusual.

Jhaver is in talks with a couple of departmental stores to launch the brand in July with men's and women's wear in Chennai first, followed by Bangalore, Chandigarh and Ludhiana. IV Play hopes to compete with brands such as US Polo, Benetton, Jack and Jones and Levi's. T-shirts will be priced at Rs 700-1,200, jeans at Rs 2,800-4,000 and shirts at Rs 1,400-2,200. Jhaver has also tied up with vendors in Tirupur, Chennai and Bangalore to source the clothes. His company, Mess Age, is also supplying products to the Mauritian stores.

The company opened a store in Mumbai last week and plans to open in Hyderabad and Chandigarh too. About 3,000 customers thronged the store on the first day. That is a big draw for a niche segment currently valued at Rs 2,500 crores but estimated to grow to 6 billion dollars (Rs 32, 562 crores) by 2025 in India. [36.]

#### All for women empowerment

What do designers Kallol Datta and Arjun Saluja have in common with artist Anjolie Ela Menon? All three are part of the Resist Art Show, a travelling exhibition aiming to create awareness of gender inequalities and abuse of women. The exhibition pairs works of art with fashion. It has already gone to Mumbai, New Delhi and Chennai. Artists don't protest on the streets but take popular culture in the form of fashion, and then subvert it.

In New Delhi, the exhibition also had an element of performance art. When guests walked in, the first thing they saw was a woman walking the tightrope wearing an Anju Modi outfit. In Mumbai, the performance art was a piece called Betwee n the Alter and The Butcher by artist





Puneet Kaushik, showing a woman trapped between carcasses of dead animals and an altar. It was meant to illustrate how women in South Asia are treated either as goddesses or as meat, with no space to just be human.

A collaboration between Datta and Saluja featuring a transgender model was the novelty factor of the Mumbai chapter of the exhibition, while singer-actress Monica Dogra played the central figure in Kaushik's installation. [37.]

### Malaika Arora Khan forays into fashion designing

After successfully donning several hats as Bollywood's item girl, TV judge, film producer and model, Malaika Arora Khan is all set to debut as fashion designer with e-commerce platform the closet label. com. Currently she is shooting a campaign for her soon-to-debut online fashion label. Though people advised her to start a maternity line after her son's birth, when the holding company, Label Corp proposed a clothing line, she jumped at the idea.

And though audience and people associate her with a sexy and fashion diva image, she wants to design clothes that would suit every shape and size rather than making clothes for model-like figures. The red halter swimsuit, for example, comes with ruched detailing along the sides to disguise stubborn tummy fat. The lounge wear – floor-skimming skirts and hot shorts in jersey – feature reinforced panels that suck in muffin tops and love handles. Then there's a cotton night shirt featured which is tailored crisply enough to double up as a tunic by day. A black maxi dress metamorphoses for every occasion with a clever juggling of accessories, which are also part of the line. [38.]



#### Max to increase store count

Max Fashions, which is best known for its affordable fashion for women consumers, is aggressively expanding its distribution network. Out of the 80 stores it has, 18 are franchise stores. It's looking to expand to five or six cities in each state, and is opening one new store every 20 days. The retailer is also teaming up with e-retailers such as Hoopos, Babyoye, Fashionara and Flipkart to expand its reach. It uses a mix of stores in malls and standalone stores on high streets, to reach its target audience.

Max caters to the fashion needs of women aged 25 to 35 years, earning Rs 25,000 to Rs 50,000. And the secondary audience is younger girls aged 14 to 20 years. What lures the girls is that the clothes are pocket friendly, and also marketed through social media. The average ticket size of purchase for this segment is about Rs 1,200.

Max is the largest value fashion brand in the Middle East with over 200 stores across 15 countries. It is the international value fashion brand of the Dubai-based Landmark Group. The brand was launched in the UAE in May 2004. It came to India in 2006, offering apparels, footwear and accessories for women, men, children. [39.]



#### Havaianas now retailing in Delhi

Popular Brazilian footwear brand Havaianas has opened its first retail space in India at the posh Select Citywalk Mall in New Delhi's Saket District Centre. Since February this year the brand was available in India through its official website and other outlets.

The ground floor space is not exactly a store, more like a few walls decorated with multi-coloured flip-flops from the latest 2013 collection for men, women and kids. The collection also includes party and beach wear flip-flops featuring Pac-man, neon accents, animal prints, patterns of palm trees and other fun graphic designs.

Havaianas has ruled the rubber flip-flop industry for close to five decades now, but here's a factoid you may not have known. Academy



Award nominees are gifted exclusive Havaianas models and have turned fans out of Blake Lively, Keira Knightley and Jennifer Lopez. With prices starting at Rs 750, the flip-flop staples are affordable, heat, water and odour resistant. In other words they are good for Indian summer and the monsoons months.[40.]

#### Kevin Pietersen is the face of Citizen in India

Japanese watchmaker Citizen has made English cricketer Kevin Pietersen its brand ambassador in India. Citizen aims to enhance image and visibility in India to grow its business in the country.

Pietersen is the company's brand ambassador in various countries, including England and the Middle East. The company is looking at various other measures as well, including introduction of new products, to enhance its brand value in the country. It is also looking at the shop-in-shop concept to promote the brand, over and above the 600-plus points of sale and 20 exclusive showrooms.

Citizen currently has around 50 shop-in shops across major cities in India and the plan is to add about the same number in the near future. Currently, it is focusing on major cities but going forward would also look at Tier II cities. The Japanese firm, which sells around 600 models of watches in India, expects its Eco drive range of watches to propel its business in the country. Earlier this range was just 20 to 30 per cent of its revenues, now it has become more than 60 per cent.



Citizen, a 3 billion dollars (Rs 16,215 crores) company, launches around 50 to 70 new models in the country every year. [70.]

#### **Texprocess with sourcing hot spots**

Top sourcing countries will be making presentations at the ?Source it? procurement area during Texprocess, Leading International Trade Fair for Processing Textile and Flexible Materials, in Frankfurt am Main from 10 to 13 June. Among the nations taking part will be Bangladesh, Bulgaria, Bolivia, Egypt, Hong Kong, Lithuania, Peru, Poland, Portugal, Romania, Senegal and Vietnam with their national associations and selected manufacturing companies. Centrally located in Hall 5.0 and surrounded by the sewing and joining product groups, ?Source it? gives visitors the chance to find out more about the apparel industry, the technical expertise, the infrastructure and the circumstances prevailing in the individual countries. Moreover, it is possible to make contact with exhibiting companies via the itex-apparel sourcing system online-business portal during the runup to the Texprocess.

A spacious lounge in the source-it area offers an ideal setting for meeting and exchanging information with business partners and colleagues. Trade visitors who register at the contact bourse will not only be able to find new customers but also enjoy a free drink at the bar.

In addition to ?Source it?, the Texprocess Forum in Hall 4.0 will also offer insights into procurement subjects of topical interest. Top speakers will discuss aspects such as risk minimisation, sourcing with verified suppliers and evaluation processes for a successful sourcing strategy. Details of the current Texprocess Forum programme and further information about Texprocess and ticket sales can be found on the internet at www.texprocess.com. [42.]



### Benetton's successful India sojourn

India is now the biggest retail market for Benetton outside Europe. Its stores in Tier II and III markets do as well as those in Mumbai and Delhi. Benetton started in India with a franchise model but its growth took off after 2004 when it started a wholly owned subsidiary. The brand has more than 600 stores (both stand-alone and departmental stores included) in the country and its turnover in India crossed Rs 1,000 crores in 2012-13.

The core Indian customer of Benetton is between 18 to 32 years, younger than the brand's average global clientele and belongs to the middle and upper middle class. Benetton offers easy-to-style, qualitatively consistent, high-street fashion. Color is encoded in Benetton's DNA, and Indians are naturally drawn to color. Colored denims, a big trend this summer, have been flying off the shelves in India. Customers associate Benetton with cool classics and wearable, comfortable fashion at reasonable prices.



Benetton was known earlier for its controversial ads like a nun kissing a priest, a young man who had died from AIDS, a white baby suckling at a black breast, a pack of open condoms among others. [41.]

### Globe to add new range for infants and toddlers

Citing a vacuum in the branded kids' wear segment, Globe Kidswear from the house of Tech Midas Retail increased its production strength by 300 percent compared to last year. This was done to meet the growing demand. Now the company plans to launch Baby Globe label offering full range for infants and toddlers.

Taking about the brand's USP, Rohit Mohanty and Balasubramaiam, Co-founders, Tech Midas Retail explain, "We have tried from day one to make Globe kidswear an LFS friendly brand. This means we offer best and fast service with high quality merchandise at affordable prices to our LFS partners. We bring in fresh new styles every month across categories based on seasonal plan. Working on this simple strategy we have grown 130 percent, year-on-year for the last four years."

With few major brands vacating retail opting out from this space, Globe Kidswear decided to make the most of this opportunity. "We plan to scale up within our resources. With more than 80 LFS and 10 EBOs in our network, we are planning to explore the EBO vertical in mid-size cities this year. In the next 2-3 years, we wish to increase our EBO presence to 50 and LFS to 200," explain the duo divulging details on the retail expansion plans.

The product line includes T-shirts, shirts (full and half), denim and cotton cargo trousers, 3/4th Jamaicans, shorts and relaxed wear (sports and night wear) for boys. Girls wear includes dresses, party wear dresses, tops knits and woven, denim trousers, caprices and relaxed wear (sports and night wears) apart from knitted slacks and tights. For the forthcoming festive and winter season, the brand plans to introduce a range of colour trousers and denims, ethnic range for girls and party wear and relaxed wear for boys and girls also in addition to its current categories.



"As per our plan we are set to touch Rs 10 crores target this fiscal. Our focus has always been to achieve brand positioning in the available formats rather than spreading width. However, there is organic growth by default in all the LFS formats we are present in. Apart from this we are sincerely working towards our EBO vertical. We have Rs 20-23 crores on the cards," the duo sum up. [69.]

## Dinesh Manchanda opens showroom in Delhi

Fashion designer Dinesh Manchanda has launched his first showroom called 'Satyam Shivam Sundaram' at Pitampura in New Delhi. Spread over 3,800 square foot across two floors, the store stocks party wear dresses, indo-western suits, printed fabrics, saris, high-end lehengas, bridal saris, and extended anarkali suits.

Though Manchanda wants to extend the store space and product offerings, he doesn't intend opening more showrooms this fiscal. However, he would launch more stores in cities such as Ludhiana, and Ahmadabad after two years. He also plans to launch a men's designerwear after a year.

Satyam Shivam Sundaram targets middle class women between 18-40 years of age. His current high-end collection includes extended anarkalis, floor anarkali suits, ready-to-wear drapes, concept sarees, printed fabrics, kaftan tops, pre-bridal dresses, and bridal lehengas. Starting at Rs 1,000, Manchanda has his own designing and manufacturing team. [75.]

#### eBay India appoints Latif Nathani as new MD

eBay India has announced Latif Nathani will now lead the company by taking over the position of former eBay country manager Muralikrishnan B. "After eight years at eBay India leading product, category and marketing as well as the last two years as Country Manager, Muralikrishnan B is stepping down to pursue entrepreneurial opportunities and a new career.

Nathani, the new ebay Managing Director will serve the company from July 1, 2013. Muralikrishnan will be transitioning his responsibilities by the end of the quarter to explore the entrepreneurial opportunities outside of eBay. Joined in 2006, he served the company by variety of leadership roles, most recently as Sr Director–Marketing & Product Management.

On taking over the new role Latif said, "I am excited about leading the thriving eBay India business which is an industry market leader in India ... The marketplaces business model fascinates me and I look forward to steering the talented Indian team to even greater heights."



With over 22 years of extensive experience in building and leading high performance global business, engineering and marketing teams, Nathani has worked with companies such as Microsoft and Symantec. He also led a consumer incubator for Microsoft India, headed Global Product Marketing for Symantec's Norton business and was co-founder of eMemories.com. [71.]

#### Niki Mahajan focuses Indian textiles

Fashion designer Niki Mahajan, who is committed to the cause of reviving Indian textiles and crafts, is making efforts to take India's indigenous crafts to the global platform. She is presently working to revive the almost extinct craft of Lucknow — Badla, which is an old embroidery where the metal is first stretched for long to get very thin, paper kind density.

The strip of metal is then passed thr ough flames to get different colours and then cut into very fine wires. These metal wires are then inserted in the fabric and beaten with a tiny hammer for hours and then embroidered. Considering the amount of time that goes into it, there are just a handful of badla craftsmen left in Lucknow. To revive the glory of this beautiful metal embroidery, Mahajan has set up a unit in the Nawabi city where she has employed the people associated with this craft and has been successful in revival of this art.



The designer is also known for her revival of block printing and has blended the craft of designed blocks with the art of cloth printing. Having learnt about block printing, she now has artisans that design especially for her design house. Mahajan's block printed garments now adorn numerous high-end retail outlets all over the world like Anthropologie, Isetan, Bloomingdales, Harvey Nichols, United Arrows, Fred Segal to name a few. [72.]

#### Mumbai Angels invests in Yoga Smoga

Angel network Mumbai Angels has invested in Yoga Smoga, a yoga-inspired athletic apparel and accessories company founded by US-based Indian- entrepreneur Rishi Bali. This is the fifth international investment for the Angel group. Yoga Smoga was founded in 2010 as a designer and manufacturer of athletic clothing.

Mumbai Angels, along with a group from the US has invested around Rs five crores in the company. The company has developed a high technology fabric that is a mix of Supplex, a synthetic fabric that is stretchable and fast-drying, and Lycra. The company also claims to have used nano technology to ensure moisture management, which makes their workout clothes dry quicker.

The firm launched its online store earlier this year and intends to launch an offline store in the US. Founder Bali is a former Goldman Sachs employee, who had earlier started an early-stage venture fund Bali Investors Group. The Angel network's previous international investments



include Silicon Valley based 5D technology solutions provider ScreamPoint, data-driven search marketing venture NetElixir and fashion portal targeted at NRIs, Exclusively.in, which was acquired by Myntra last year. [73.]

#### **Shoppers Stop debuts in Chandigarh**

Departmental store chain Shoppers Stop has opened its first store in Chandigarh's Elante Mall. This is the retailer's 56th store in the country spread over 52,000 square foot, space across three levels, the outlet stocks national and international brands such as Nautica, Vero Moda, Forever New, United Colors of Benetton, and Being Human. It also offers in-house labels like Stop, Kashish, Life, Haute Curry, Elliza Donatein, inSense', iJeanswear, Mario Zegnoti, and Vettorio Fratini.

Speaking after the inauguration, Govind Shrikhande, Customer Care Associate & Managing Director, Shoppers Stop, said, "Our entry into Chandigarh marks a new milestone in our two decade journey of success and accomplishments in the retail landscape of India. Chandigarh is fast growing into a fashion hub and we are positive that our presence will transform the fashion retail landscape of the city. We already have stores in Amritsar, Jalandhar, and the Delhi-NCR region with an existing sizeable base of loyal customers in Chandigarh who travel to these stores. This existing catchment of customers is indicative of their desire for a superior shopping experience. We are positive that our patrons in Chandigarh will find Shoppers Stop to be the ultimate fashion and lifestyle destination."



Cosmetics and fragrances, personal accessories such as watches, sunglasses, handbags, artificial and fine jewellery, and women's ethnic wear is available on the ground floor of the store. The first floor stocks ladies' western wear and men's wear]while the second level displays kids wear and toys and houses Mothercare and HomeStop. [74.]

#### Fiber giant Invista to display at Galleria Intima 2013

INVISTA, world leader in fibers returns again to India's biggest intimate apparel sourcing fair Galleria Intima, India's Only Sourcing Fair for Intimate Apparel Professionals is back with its much-anticipated 'Round Two: Goa' at the Grand Hyatt on the 23rd and the 24th of August 2013 and will bring together some of the biggest players in the intimate apparel industry both

exhibiting as well as visiting this prestigious event.

industry insights and new ideas," said an INVISTA insider.

While many new entrants are expected, last year's exhibitors swarm in to revisit the show. Revisiting the fair to exhibit their state-of-the-art innovations, INVISTA will return after witnessing its great success last year. INVISTA is one of the world's leading manufacturers of polymers and fabrics - company that is always at the top of its game when it comes to innovating integrating the latest technology to deliver high performance polymers and fabrics, their most renowned product undoubtedly being LYCRA fibers.

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APPAREL
PROFESSIONALS

www.galleriaintima.com

Acting upon the tremendous response from last year-where they showcased some of their latest products in collaboration with some of their key customers such as PS Fashions and Abhay Group-INVISTA is once again prepping up for its very own stall where it will showcase its latest nylon, spandex and fiber products. "After a fruitful experience last year, we are looking forward to participating at Galleria Intima again this year. It is a great platform for all stakeholders within the industry including mills, brands, retailers and designers to come together and share

#### What can visitors expect?

"Guided by INVISTA's philosophy to delight the end-consumer and our deep understanding of the apparel industry, we will be showcasing our latest innovations- LYCRA BEAUTY fabric, Easy Set LYCRA fiber, COOLMAX fabrics and LYCRA FREEF!T fabrics. We have seen a rise in demand for LYCRA fiber products over the previous years and through these innovations we aim to further add immense value to our customers", explained Varun Kapoor, Segment Marketing Manager, South Asia of INVISTA. [77.]

# technical textile





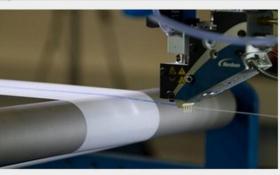


























## headlineइ- technical textile

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#### NTT partners with Xolve to set up development program

NTT Carbon Fiber Group proudly announces that is has reached an agreement under NDA with Xolve Inc. to set up a joint development program using KORE carbon fibers, carbon nanotubes and Xolve's grapheme masterbatches.

NTT Carbon Fiber Group intends to develop with Xolve three main projects under the R&D business area, with the purpose to create innovative for the design, production, product support and services devoted to aerospace applications, with special hard environmental conditions needs. Xolve will provide full support during the development phase, working to combine Xolve technology to the TTT technology of NTT Carbon Fiber Group under this program.

"Our proprietary low-cost graphene production and dispersion technologies allow us to enhance numerous attributes throughout the resin matrix", says Miguel Mireles, the Vice President of Business Development at Xolve. "We are confident that our technologies combined with NTT Carbon Fiber's capabilities will allow us to provide additional multiple attribute improvements in many industries including aerospace, marine, automotive, and sports."



#### Strategic aspects

The selected aerospace programs selected for this joint development are the front-end of a future deployment of graphene in industrial applications, other than aerospace.

Mr. C.H. Bosch from the R& D Business Area of NTT Carbon Fiber Group has recently confirmed: "Our idea is to develop prepregs, within our KOREPreg line, tailored for special applications. The goal is to obtain products purposed to extreme environments, using carbon nanotubes and graphene. Xolve reveals to be the best candidate, since their technology allows a very regular graphene foil and we expect its dispersion in resins to maintain a regular performance."

As usual this is an investment in technology we make according our commitment to the continued technical and commercial development to improve our global performance, as well as operating investments to serve the market in the long term. NTT Carbon Fiber Group maintains a long term outlook on its opportunity to collaborate with Xolve and its proprietary masterbatch dispersion technology. Its potential is to extend the development specifically created for the aerospace industry to other industries, among which we can count NTT Carbon Fiber Group's projects in the high performance sports, as well as in the marine field, and in the automotive.

Both Xolve and NTT Carbon Fiber Group will receive benefit out of this joint research by further innovating and developing new composites for the benefit of customers in many different market segments.

Several new programs are currently being planned or developed by various NTT Carbon Fiber Group customers worldwide. The Xolve, NTT Carbon Fiber joint development will provide future state-of-the-art, efficient prepregging solutions focused initiallyin the aeronautic and aerospace segment. [43.]

#### Teledyne bags composite manufacturing accreditation

Teledyne CML Group (CML), a division of Teledyne Brown Engineering, Inc., announced that it has received Nadcap composite manufacturing accreditation AC7118 PAR Rev C.

The accreditation applies to CML's new composites facility which was officially opened in October 2011 by HRH the Duke of York. The scope of the approval includes prepreg lay up, NC ply cutting, autoclave curing, NC machining, trimming and drilling.

"We are pleased to have received accreditation and are committed to producing the highest quality composite parts for all of our customers," said Geoff Stewart, managing director of CML. "Nadcap accreditation underlines that commitment and provides CML with a highly-recognizable discriminator in the aerospace manufacturing industry."



CML received the AC7118 Rev C accreditation after passing a rigorous Nadcap audit. The Nadcap accreditation, along with its AS9100 Rev C accreditation, underlines CML's commitment to the highest quality standards and positions the company to capitalise on the growth in use of composites, particularly within the aerospace industry within which it primarily operates. "Achieving Nadcap is no easy task. Nadcap accreditation is one of the ways in which the aerospace industry identifies those who excel at manufacturing quality product through superior special processes. Companies such as Teledyne CML work hard to obtain this status and they should be justifiably proud of it," said Joe Pinto, Vice President and Chief Operating Officer at the Performance Review Institute, the not-for-profit organization which administers Nadcap.

"PRI is proud to support continual improvement in the aerospace industry by helping companies such as Teledyne CML be successful and we look forward to continuing to assist the industry moving forward."

#### **About Teledyne CML Group**

Teledyne CML is a wholly owned subsidiary of Teledyne Technologies Incorporated based in Thousand Oaks, California. CML manufactures machined, composite and fabricated components and assemblies for aerostructures and aircraft systems on a wide range of civil and military fixed and rotary wing aircraft. Its Composites Division operates from a 6000 square metre purpose built, state-of-the-art facility in Brombrough, Wirral, England. Its Machining and Fabrication Divisions operates from a facility in nearby Birkenhead.

#### **About Teledyne Brown Engineering**

Teledyne Brown Engineering, Inc. is a full-spectrum engineering and advanced manufacturing company with operations in the United States and the United Kingdom. The company provides engineering services, engineered systems and manufactured products to the space, defense and energy markets. Teledyne Brown provides full lifecycle development from concept definition to production and operations.

#### **About Nadcap**

Created in 1990 by SAE Inc., Nadcap is administered by the not-for-profit Performance Review Institute. PRI exists to advance the interests of the mobility and related industries through development of performance standards and administration of quality assurance, accreditation, and certification programs as well as related activities for the benefit of industry, government, and the general public. PRI works closely with industry to understand their emerging needs and offers customized solutions in response. [44.]

#### Gurit congratulates Aston Martin on its centenary year

Gurit, a leading global manufacturer and supplier of composite materials, engineering, tooling, parts and systems and thus a leading manufacturer of carbon fibre based Class-A composite body panels for the automotive industry, is proud to congratulate its first automotive customer and technology development partner Aston Martin on its centenary year.

Gurit has been developing technical solutions for composite automotive systems with Aston Martin since 2003 and has been supplying Aston Martin with Class-A composite body panels since 2007 for the DB9, DBS, V12 Vantage Volante models and, most recently, the Vanquish.

The Vanquish is the flagship of a superlative Aston Martin range. With carbon fibre body work, manufactured by Gurit, sculpted to aesthetic and aerodynamic perfection, it defines a new breed of Super Grand Tourer. Gurit manufactures the carbon fibre based Class-A composite front wings, bonnets, door skins, complete body sides and boot lids.



Martin Starkey, Managing Director at Gurit Automotive, comments: "Over the last 100 years Aston Martin has established a well-deserved reputation for innovation and engineering excellence in the design and manufacture of its cars.

"The team at Gurit is extremely proud of what Aston Martin has achieved, especially in more recent years, with its use of advanced Class-A composites and we would like to take this opportunity to congratulate Aston Martin on this important milestone in its history. The striking design of the Vanquish, combined with extensive use of advanced composite Class-A body panels is a real testament to what can now be achieved."

Gurit has been supplying leading automotive OEMs since 2007, from its automotive composite parts production facility based in Newport (Isle of Wight, UK). Originally established to supply Aston Martin with carbon fibre panels for the DBS, the strength of Gurit's technology combined with the sustained performance of the facility were key factors in Gurit securing further OEM programmes in 2010, 2011, 2012 and 2013.

The development of innovative technology is the defining strength of Gurit and is enabled by the unique understanding of composite materials, structural design and materials processing. This knowledge base provides the capability to formulate, design, prototype and manufacture fully assembled, primed and coloured exterior body panels. Gurit – Delivering the future of Composite Solutions! [45.]

#### HB Fuller offers low odour adhesives for hygiene market

H.B. Fuller Company, a leading supplier of adhesives to the hygiene market has introduced two families of nonwoven adhesives to meet the growing demand for lower odor construction adhesives as well as enhanced supply.

The company's offering of hot melt adhesives now includes Full-Care 5650 and Full-Care 5300 for construction applications. Both products build upon H.B. Fuller's 10 year history of delivery in polyolefin technology, now offering even more supply assurance due to a platform approach from more available sources.

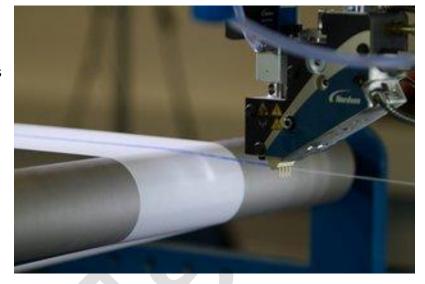
"H.B. Fuller has a legacy of bringing innovative solutions to the hygiene market," said Heather Walch, North American business director for nonwovens hygiene at H.B. Fuller. "We added two new offerings to our Full-Care line of construction products because we saw gaps in the marketplace where improved odor, higher performance and further cost in use were needed."

Full-Care 5650 offers customers low odor combined with robust cost in use and provides added flexibility across a wide variety of substrates. Full-Care 5300 has been developed for the lowest odor combined with significant improvements in bonding

performance to enable potential lower add-ons. In addition, H.B Fuller has introduced Full-Care 8500 for elastic attachment and stretch laminates. Full-Care 8500 is a hot melt adhesive offering increased choice to customers with demanding elastic attachment and stretch laminate applications. Balancing robust performance with outstanding economics, the adhesive provides great bonding in high stress applications and a lower total cost of ownership.

#### **About H.B. Fuller Company:**

For over 125 years, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve



products and lives. Recognized for unmatched technical support and innovation, H.B. Fuller brings knowledge and expertise to help its customers find precisely the right formulation for the right performance. [46.]

#### Indorama to set up bicomponent fibre plant in Thailand

Thailand-based Indorama Ventures Public Company Limited, the world's leading vertically integrated polyester chain producer, in collaboration with Denmark-based FiberVisions, a global leader in developing, manufacturing and marketing polyolefin staple fibers for nonwoven applications, is planning to set up a bicomponent fibre plant in Rayong, a city located in the east coast region of Thailand.

"We are going to build a brownfield bicomponent fibre factory within our current Indorama Polyester Industries plant," a company spokesperson told fibre2fashion.

According to the company representative, the plant will have the capacity to produce 14,500 metric tonnes of bicomponent fibres annually which will be used in the hygiene industry.

"The construction of the building will start this year and the plant is scheduled to begin its operations by first half of 2015," he informs.

When asked about the reason for setting up the bicomponent fibre factory, he says, "Our company is aware that there is growing demand for bicomponent fibres in Asia."

Bicomponent fibres are mainly used in advanced applications, including medical textiles, geotextiles, package textiles, industrial textiles, automotive textiles, protective textiles, etc.

IVL is the second-largest PET producer in North America and the largest in Europe. Besides PET resin, the company also produces fibers and yarns from polyester and polyolefins in the United States, Germany, Denmark, Ireland, China, Thailand and Indonesia and last year the firm entered the oxides and glycols business in Texas, US. [47.]

#### PurThread product finalist in ATAs medical category

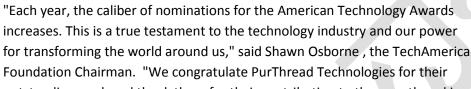
The antimicrobial textile technology being developed by PurThread Technologies is a finalist in the 2013 TechAmerica Foundation American Technology Awards (ATAs) in the categories of Health & Medical Technologies and Advanced Manufacturing.

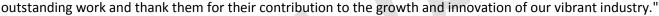
The life science and performance fabric firm is dedicated to developing textiles to reduce the bioburden in the patient

environment. The ATAs cross the technology industry to recognize products

and services, like PurThread's high-performance textile.

"At PurThread, we are working hard to develop high-performance antimicrobial medical and consumer textiles that are comfortable, resist stains and odor-causing bacteria, as well as improve the patient environment. "In fact, our hospital privacy curtains are the only ones that have been successfully tested in a clinical setting through a randomized controlled trial," said Bill O'Neill, PurThread VP of Infection Control Applications. "It's such an honor to know that the TechAmerica Foundation recognizes this and has named us finalists for two categories in the American Technology Awards."







The awards are awarded on the basis of a thorough evaluation by industry experts and technology leaders.

The winners will be announced at the Technology and Government gala dinner, the premier Washington, D.C. technology networking event, bringing together hundreds of industry and government leaders to celebrate the technology industry. The Technology and Government Dinner will be held at the Ronald Reagan Building in Washington, D.C., June 20, 2013.

#### **About PurThread**

PurThreadTM Technologies Inc., an emerging leader in antimicrobial textile technology and scientific research, is dedicated to developing continuously active soft surfaces that have shown a measurable difference in reducing bioburden in clinical environments. PurThread products range from healthcare textiles, such as privacy curtains, sheets, scrubs, blankets, and lab coats, as well as a range of freshness products for other markets such as the military, emergency first responders and performance athletic wear. [48.]

#### Metso to supply tissue production line to Indonesia

Metso will supply a complete tissue production line for PT. Suparma, Tbk., in Indonesia. The new tissue machine will be installed at the company's mill in Surabaya. The start-up of the machine is scheduled for 2014. The value of the order will not be disclosed.

The new tissue line will fulfill PT. Suparma, Tbk's ambition to produce environmentally friendly products of highest quality in a cost-efficient way.

"As a tissue producer since 2007, we have utilized 96 percent of our existing tissue machine capacity which forces us to install a new machine in order to develop our market. We decided to place an order with Metso because quality is essential for and we believe that Metso have an advanced technology that will certainly produce a high-quality tissue product," says Lanny Bernadette, Director, PT. Suparma, Tbk.



"We are impressed by the product performance obtained by the existing tissue production line, also supplied by Metso, in the past. PT. Suparma, Tbk. has highly skilled personnel and well organized production systems and we are happy to support their efforts to supply high-quality tissue to the Indonesian market," says Ingmar Andersson, Vice President, Sales, Asia, Paper business line, Metso.

The order is included in Metso's Pulp, Paper and Power second quarter 2013 orders received.

#### **Technical information**

Metso's delivery will comprise a complete high-speed tissue production line featuring an Advantage DCT 100 tissue machine equipped with an OptiFlo headbox, a Metso cast iron Yankee cylinder and an Advantage AirCap Yankee hood. Metso will also supply a part of the stock preparation equipment.

The delivery will include basic engineering for the new tissue machine and services for installation and start-up of the machine.

The new line will have a width of 2.75 m and an operating speed of 1,600 m/min. It will add another 25,000 tonnes per year of bathroom tissue, towel grades and diaper tissue to the company's existing production for the Indonesian market. Raw material for the new production line will be virgin fiber and recycled fiber.

PT. Suparma, Tbk. was founded as a paper and board producer in 1976. The company established their first tissue machine in 2007 and are today a well-known supplier of high-quality board, laminated wrapping kraft and tissue paper for the Indonesian market as well as the Asian, Australian and African market. The company employs 1,800 people and produces a total of 190,000 tonnes of paper per year. PT. Suparma, Tbk. is registered on the Indonesian Stock Exchange.

Metso's pulp, paper and power professionals specialize in processes, machinery, equipment, services, paper machine clothing and filter fabrics. Our offering and experience cover the entire process life cycle including new production lines, rebuilds and services.

Metso is a global supplier of technology and services to customers in the process industries, including mining, construction, pulp and paper, power, and oil and gas. Our 30,000 professionals based in over 50 countries contribute to sustainability and deliver profitability to customers worldwide. [49.]

#### Quick-Med bags contract to create wound healing technology

Quick-Med Technologies, Inc., a life sciences company that is developing innovative technologies for the healthcare and consumer markets, announced that it has been awarded a contract by the U.S. Department of Defense for research on the "Development of Technologies to Control Scar Contracture after Burn Injuries."

NIMBUS technology was competitively selected for this award under the Small Business Innovation Research (SBIR) program of the DoD Defense Health Program (DHP). The SBIR program, established by the U.S. Congress, supports scientific excellence and technological innovation through the investment of federal research funds by competitively awarding contracts on the basis of scientific merit and commercial potential.

The Phase I objective of this research is "to design a new innovative technology to intervene during the wound healing process, including inflammatory, proliferative remodeling stages, to attenuate/control scar contracture and retain skin aesthetics following deep tissue burn injuries."

The Phase I research contract is valued at about \$150,000. Work starts immediately and expected to take about 6 months. Follow-on phases of the award can bring the total close to \$1M, and will develop the proof of concept to commercial readiness.



and/or

value

"We are very pleased to have been competitively selected for this important advanced research program into dressings that can speed wound healing," said Bernd Liesenfeld, Quick-Med's President. "This award is a further validation of our NIMBUS antimicrobial technology platform and will enable us to continue our development a series of products that accelerate wound healing and help prevent microbial contamination."

The new research contract builds on Quick-Med's prior work developing a dressing that was shown to speed healing of vesicant (blister) injuries caused by chemical weapons (sulfur mustard gas).

This previous research, which was conducted under Phase 1 and Phase 2 SBIR awards from the US Army, was presented at the 2011 Annual Meeting of the Wound Healing Society, where it received the top prize for Industrial Research and Development.

This new award permits Quick-Med to extend that research to more directly address unmet commercial needs in treatments for the approximately 2.4 million thermal burns occurring annually in the US, with a dressing designed to reduce scarring and contracture in healing of severe burns. Part of the research will be conducted at the University of Florida's Institute for Wound Research.

"The NIMBUS super-absorbent polymer technology allows Quick-Med to develop a unique dressing that provides antimicrobial protection for the wound while also acting to minimize scar tissue formation, and inhibit matrix metalloproteinases to block contracture of tissues," said Professor Greg Schultz, Director of the Institute for Wound Research at the University of Florida. "This unique combination therapy should speed healing and reduce contraction of severe burns in our wounded warriors. It would also have extensive application for civilians with large burns." [50.]

#### EC approves merger of Ahlstrom's division with Munksjo

Ahlstrom, a global high performance fiber-based materials company, announces that the European Commission has approved the combination of Ahlstrom's Label and Processing business and Munksjö AB. The combination makes Munksjö Oyj a new global leader in high-quality specialty papers.

With this approval, Ahlstrom and Munksjö are initiating the final steps of the closing procedures of the first phase of the transaction, in which LP Europe, the European part of Ahlstrom's Label and Processing business, is combined with Munksjö. The completion is expected to take place on May 27, 2013 at the latest. The clearance from CADE, the Brazilian competition authority, has been received already.

The approval is subject to the divestiture of Ahlstrom's abrasive paper backings and pre-impregnated decor paper

lines in Osnabrück, Germany, to a third party. Ahlstrom has started to prepare for the divestiture process and is looking into different alternatives to divest its abrasive backings and pre-impregnated decor paper businesses.

The divestment process does not prevent Ahlstrom from closing the first phase of the transaction, the combination of Ahlstrom's Label and Processing European business (LP Europe) with Munksjö, on May 27, 2013 at the latest. Ahlstrom shareholders who hold shares in Ahlstrom or have purchased Ahlstrom shares prior to the close of trading today will receive new shares in Munksjö Oyj as a demerger consideration in the LP Europe Demerger. [51.]

#### Glatfelter completes acquisition of Dresden Papier

Glatfelter announced that it completed the previously announced acquisition of Dresden Papier GmbH from Fortress Paper Ltd. for €160 million (U.S. \$210 million) subject to a post-closing working capital adjustment.

Dresden Papier, based in Heidenau (near Dresden), Germany, is the leading global supplier of nonwoven wallpaper base materials.

Nonwoven wallpaper offers superior performance and characteristics such as dry strip-ability, higher tear resistance, and no material shrinkage or expansion

when wet. As a result, nonwovens are increasingly the product of choice for wallpaper installers and design professionals in Europe, with significant growth potential in Asia.

"This acquisition adds another industry-leading nonwovens product line to our Composite Fibers business and we believe the global nonwoven wallpaper market will continue to grow at a compound annual growth rate of at least 10 percent," said Dante C. Parrini, chairman and chief executive officer.

"This acquisition will also provide additional operational leverage and growth opportunities for Glatfelter globally, particularly in large markets such as Russia and China, and other developing markets in eastern Europe and Asia."

Glatfelter financed the acquisition through a combination of cash on hand and borrowings under its existing revolving credit agreement. The acquisition is expected to be immediately accretive to earnings by approximately \$0.25 per share on an annualized basis. [55.]

#### Geosynthetics demand to be driven by construction sector

The geosynthetics market has grown massively over the past few decades -- even during periods of uncertainty such as the recent global economic downturn -- and industry analysts and manufacturers of geosynthetics expect growth to continue. Growth in demand will be driven primarily by large-scale construction projects in developing countries.

The use of geosynthetic products in transportation infrastructure is also likely to grow rapidly in developing countries due to the large number of highways and railway lines which are being built in these countries.

Significant amounts of geosynthetics are also used in landfill -- and the landfill market is likely to grow at a fast pace due to environmental concerns and a desire among authorities in developing countries to adopt modern landfill designs.

Large scale infrastructure developments are taking place in China, India and Russia, and environmental protection regulations and building



construction codes are evolving in these countries. As a result, these markets are expected to be where the strongest gains will occur in the near future.

China will be the dominant market because of the amount of available land in the country, the size of its population and the number of large scale infrastructure projects which are under way and planned for the future. In fact the increase in demand in the Chinese market is expected to account for almost half of the increase in global demand.

Growth in the geosynthetics market will also be driven by increased market penetration in developed countries.

Although the North American market has reached maturity, growth will come from new building regulations and environmental protection regulations, which make the use of geosynthetic products mandatory in certain projects.

Western Europe and Japan are comparable to the USA in terms of the level of maturity of their respective geosynthetics markets, as well as the type of regulatory environment.

Manufacturers believe that growth will stem from innovations, better marketing of geosynthetic products, sales promotions and improved manufacturing processes.

Growth will also come as manufacturers and distributors of geosynthetics continue their commitment to educating key market influencers -- such as civil engineers who specify the materials used for civil engineering projects -- on the benefits of geosynthetic products. [52.]

#### Sinterama to present whole product portfolio at Techtextil

Sinterama, European leader in the production of coloured polyester threads and yarns, will present its whole product portfolio at Techtextil, the most important international trade fair in the technical textiles market.

From 11 to 13 June in Frankfurt, partner firms of the group from Biella will present their most innovative ranges. These include the Newlife platform which covers both the clothing part with Saluzzo Yarns (formerly Filature Miroglio and now part of the Sinterama group) as well as furnishing and automotive.

Because of its exclusive performance, Newlife has been singled out as a partner by many leading textile and high tech clothing firms, who have chosen it for their collections.

**Lafuma (F)**: for this brand leader in the outdoor sector, whose core business comes from a love of mountains and nature, Newlife is the 'natural' choice for its Eco Life Parka line. Presented for the first time at the latest edition of Ispo last February in Munich, this outdoor range, ideal for everyday wear, is made in a Frantissor fabric in 100% Newlife (tm).

**Graf (CH):** this important Swiss brand, specializing in the production of ice skatesartistic and hockey - and sports equipment has integrated its product range with a brand new line of techno sport apparel and presents an anti-bacterial outfit in Newlife, developed in cooperation with Secchiari



**Klopman International:** European leader in the production of workwear and protective fabrics and casual clothing, has chosen Newlife yarns which endow fabrics with a natural feel and look as well as good breathability. At Techtextil they will present a fabric made in 96% Newlife and 4% Negastat, with anti-static properties.

Newlife is also the choice for Pieffe Sport's high performance work socks. For many years this Italian firm has been producing technical socks in innovative fibres, worked by state-of-the-art machines. The choice fell on Newlife with Odour Control characteristics thanks to an activated carbon-based additive inserted during the spinning stages. Result: these socks guarantee easy breathability, without nasty odours. [53.]

#### Kimberly-Clark bags six awards at Effie Awards

Kimberly-Clark Corporation was awarded six Effie Awards including one Gold, two Silver and three Bronze for its 2012 commercial programs for Depend, U by Kotex and VIVA brands at the 45th annual North American Effie Awards last night in New York.

The company and its Depend brand were also recognized on the North American Effie Effectiveness Index Rankings; Kimberly-

Clark as the No. 2 most effective advertiser and the Depend brand as the No. 3 most effective brand in North America in 2013.



The Effie Awards, which have honored marketing effectiveness since 1968, have come to represent one of the highest honors in the field of marketing and advertising. This year's North American Effie Awards encompass 50 categories, including the specialty Health, GoodWorks and Media Awards, and the Global and Shopper Effie.

"Given that this award recognizes ideas that build business, Kimberly-Clark and its agency partners are honored to be recognized by the Effie Awards for our work on Depend, U by Kotex and VIVA," said Clive Sirkin, Chief Marketing Officer, Kimberly-Clark.

"We, along with our agency partners, are especially proud of how we are building our brands and remain committed to keep raising the bar. We are proud and appreciative — but never satisfied! This makes us more hungry."

#### Kimberly-Clark and its agency partners won Effie Awards in the following categories:

#### **Beauty Products & Services:**

Silver Effie Award for U by Kotex "Break Up" commercial program. Agency partners included Ogilvy & Mather and OgilvyAction; Organic, Inc.; Marina Maher Communications LLC; and Mindshare.

Bronze Effie Award for Depend "Great American Try-On" commercial program. Agency partners included Ogilvy & Mather and OgilvyAction; Organic, Inc.; Marina Maher Communications LLC; and Mindshare.

#### **Healthcare** — **OTC**:

Silver Effie Award for Depend "Great American Try-On" commercial program. Agency partners included Ogilvy & Mather and OgilvyAction; Organic, Inc.; Marina Maher Communications LLC; and Mindshare.

Bronze Effie Award for U by Kotex "Break Up" commercial program. Agency partners included Ogilvy & Mather and OgilvyAction; Organic, Inc.; Marina Maher Communications LLC; and Mindshare.

#### Renaissance:

Gold Effie Award for Depend "Great American Try-On" commercial program. Agency partners included Ogilvy & Mather and OgilvyAction; Organic, Inc.; Marina Maher Communications LLC; and Mindshare.

#### **Household Supplies & Service:**

Bronze Effie Award for VIVA "VIVA Towels Take a Stand with Mike Rowe" commercial program. Agency partners included StudioCom, TRIS3CT, OgilvyAction and Mindshare.

Earlier this year, Kimberly-Clark was awarded a Gold Effie at the Shopper Marketing Effie Awardsfor Depend "Great American Try-On" in the Manufacturer: Loyalty, Awareness, Sales or Trial category, as well as a Bronze Effie in Canada for "Great American Try-On," with additional PR support by Ketchum. [54.]

#### Warwick wins \$94.3M body armour contract

New Hampshire, USA based Warwick Mills, a manufacturer of technical textiles for protective gear has won a \$94.3 million contract from the U.S. Army for concealable body armour and vests.

Local media reports say the contract is the largest in the recent history of Warwick Mills, according to president and chief engineer Charlie Howland, who joined the company in 1991.

The New Hampshire Union Leader reports that Howland led the company's shift from textile production to high-performance flexible composites for a range of industries, including military, public safety, industrial, aerospace and marine.

"He predicted that Warwick, with 130 employees, would hire additional workers to meet the production demands, but he could not say how many or when," the report said.

"It will be uneven," he said. "It's an open-ended term and an open-ended quantity. So although it's a fantastic top number, it would take the Army many years to procure that much material."

The company is also building a biomass energy plant to increase its production capacity. Warwick was among five companies bidding for the work in a process that took more than two years, with two rounds of testing by the military before the final award, Howland said.

The multi-thread products are designed to protect against bullets or shrapnel, as well as spike or knife attacks. "That's something we've been working on for 20 years," Howland said. "Warwick has been investing in technology and products for doing this for a very long time and has been selling this technology internationally for years." The new contract is a big breakthrough in the domestic market for the company, which has sold primarily in the European market for years.

Holland described the bidding process as fully competitive,

but the ability of the Warwick material to protect against multiple threats made the difference. "Many of the competitors tried to do it, but they didn't have 20 years of experience," he said.

The company is working with the military on designs for female personnel, which should be completed in about nine months. According to the company website, Warwick Mills, incorporated in 1888, is now the oldest operating textile mill in New Hampshire. [62.]



#### Industrial nonwovens interest at IDEA

Oerlikon Neumag reports it was "extremely happy" with the three lively trade fair days at the recent IDEA13 in Miami. The company says the general trend at the hygiene dominated nonwovens trade fair was the growing interest in nonwovens for industrial applications from visitors and exhibitors and in keeping with the trend, it exhibited its solutions for technical spunbonds.

"Spunbonds are increasingly being used as a cost-efficient alternative in technical applications such as roofing and geotextiles," the company said. "In addition to the classical major markets for geotextiles and construction textiles in North America, for instance, promising growth rates are expected particularly in emerging economies and emerging industrial countries due to numerous required general construction and civil engineering measures."

"Oerlikon Neumag's spunbond plants for technical applications are veritable space miracles and excel with a significantly higher

throughput for comparable operating widths."

#### Global airlaid capacities well-utilized

However, concrete sales discussions were not only conducted regarding technical spunbonds. Oerlikon Neumag's meltblown and airlaid technologies also proved to be extremely popular. Oerlikon Neumag unveiled to airlaid manufacturers, who are currently said to be operating at full capacity, its brand new forming head at this year's IDEA. The new technology is said to ensure even greater homogeneity in the case of extremely thin materials and as a result of specially-guided air flows, the forming head guarantees extremely even laying of the fibres at production speeds of up to 500 meters per minute.



#### Meltblown spinning beam for retrofitting

With regard to meltblown solutions, Oerlikon Neumag placed the focus of its information at this year's IDEA on meltblown spinning beams as quality-determining components in SMS (spunbond-meltblown spunbond) systems. This option enables the cost-efficient upgrading of existing systems, hence offering nonwoven manufacturers access to highly-profitable markets with particularly demanding quality standards such as those specializing in automobile applications, medical or industrial products.

#### **Tangible technology**

With its virtual reality show, the Neumünster-based systems builder provided visitors with information on its entire nonwovens manufacturing portfolio. For some years now, the company has been focusing on virtual reality with the objective of showcasing the complexity of the systems for its customers.

"This kind of presentation still remains hugely popular among our customers", is how Ed McNally, Sales Director Nonwovens at Oerlikon Neumag, sums up the virtual reality show. "We can provide a detailed insight into the systems technology, something that our customers love to take advantage of." [63.]

# research & innovations















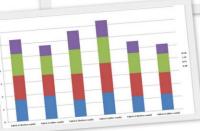




























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### headlines- research ह innovations

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#### Let there be light from textiles

A fabric that generates electricity on its own? It may seem unbelievable but it's true for a student of MTech Textile Technology from Veermata Jijabai Technological Institute has actually invented something like this. Hrishikesh Kirkire has attempted to develop a solar cell fabric using the dye sensitised solar cell technology under the guidance of his professors VD Gotmare and DV Raisinghani.

Kirkire made use of textile materials/technology to develop a solar cell that is flexible and which can bring about a revolution in the photovoltaic industry. It can allow portable use of solar power for military applications. Soldiers need electricity for portable devices in remote areas, to power mobile and stationary electronic devices to

communicate, cool and heat, etc.

"It's like living in a tent house whose roof is made of a fabric that generates electricity by tapping solar energy. Converting a fabric into a solar cell is a unique concept that can be put to several uses," says Kirkire.

The idea was born out of the fact that there has been continuous reduction of fossil fuel resources, stringent restrictions on greenhouse gas emissions and a growing demand for energy which in turn has increased the need for highly effective and inexhaustible energy sources.

"Solar cells or photovoltaic cells that transform light, usually sunlight, into electric current, is one of the cleanest power-generation technologies. Solar energy offers the advantages of a large reserve, sustainable utilisation and environment-friendliness," he says.



Since many textile products like awnings, canopies, tarpaulins, etc. when in use are exposed to the sun and the ability to harness energy would prove to be a very important value addition. It also provides a platform for finding out creative ways of harnessing power to resolve the burning issues of energy crises worldwide.

According to Gotmare, who is professor-in-charge for the whole project, "The project encompasses a unique concept of a woven anode made from very thin filaments (brass wires) precoated with photovoltaic material before weaving. The idea is to focus on increasing the efficiency of the cell by making use of less raw materials and at the same time preserving the flexible nature of the cell."

"The greatest challenge while developing such a product is selecting the right material since textiles are generally not resistant to very high temperatures nor are they completely inert to chemicals," says Kirkire.

"Textile construction is important since it affects not only the physical and mechanical properties of the fabric but also the performance of the solar cell. Woven fabrics are generally considered the best because they possess good dimensional stability and can be constructed to give the desired flexibility. Moreover, the yarn paths in woven structures are well ordered. This makes the design of woven fabric based electrical circuits," adds Kirkire.

DV Raisinghani, another professor, who is also associated with the innovation, says, "Although many methods of producing flexible solar cells are available their applicability with textiles needs to be established. The commercial viability of these products with respect to economic aspects and durability are also major concerns."

As the concept has been proved viable, the team is working to develop a prototype of the same. However, sponsorship will be a big challenge for them. "Corporate sponsorship will help in conducting trials and in the mass production of the product. Considering its usability, it will go a long way in solving problems of electricity generation in remote areas. We hope by the time our prototyping stage is over, we will get some industry support," says Kirkire. Besides Gotmare and Raisinghani, another professor P Bhargava and a senior research associate Pragyensh Kumar from IIT Bombay have also made significant contribution to this innovation.

Team: 1 member

Background: Textile engineering

Focus Area: Development of a fabric-based solar cell

Outcome/impact: Used dye sensitised solar cell technologye to dveloped a fabric-based solar cell

What next: To develop its prototype

#### 'Solar power is poised to take a prominent position globally'

Vijay D Gotmare is currently working as an associate professor and head of the textile manufactures department at VJTI, Mumbai. His research areas includes, utilisation of textile waste through chemical modification, eco-friendly textile fibres and processes, green technology, high-tech fibres, bio-technology applications in textiles, technical textiles. Talking about the significance of fabric-based solar cell, he says, "With concerns about rising oil prices and climate change spawning political momentum for renewable energy, solar electricity is poised to take a prominent position globally. Solar energy, with many advantages is no doubt preferred. Solar cells that are used to convert solar energy to electricity are being developed rapidly. With increasing textile applications in architecture and civil engineering, developing flexible solar cells is the need of the day," he says.

This innovation was quite a challenge as making textile fibres conductive is a task in itself, he adds. [9.]

#### NITRA instrument to assess performance of blackout fabrics

To assess performance of blackout fabrics, NITRA has developed first-of-its-kind instrument, to accurately measure light & heat cutting ability of all types of fabrics.

It has different sources of light with varying intensities to simulate both natural and artificial lights.

The instrument is also capable to test the degree of blackout by varying RH to simulate out-door conditions.

With the help of specially developed software, the instrument measures at one second intervals the cutting efficiency of test specimen for both light (% lux) and

heat (% OC). As per requirement, results are displayed either in the form of Excel sheet or graph.



The instrument is also suitable to measure color fastness to light using MBTF lamp. For further details, please contact. [17.]

#### Invista to display eminent innovations at Lycra Rendezvous

After getting a great response in the first two editions, INVISTA, one of the world's largest integrated producers of polymers and fibers is all set to bring the third edition of the much awaited 'LYCRA RENDEZVOUS' to Bangalore on 6th and 7th June, 2013 at Vivanta by Taj.

The two day event would outline the eminent innovations in the denim and intimate apparel segments, showcasing products highlighting INVISTA's key technologies- TOUGH MAX LYCRA fabric, LYCRA FREEF!T fabric and LYCRA Beauty fabric.



INVISTA as the innovation leader in the textile industry

offers a platform to combine the best brains in the industry to devise solutions that can fuel the growth of Indian apparel industry.

Andrew Evans, Managing Director - South Asia, INVISTA, says, "The Indian textile industry has become very dynamic over the period of years. When consumers choose apparel, they look for more than the latest designs.

They want garments that fit right, feel comfortable, and are made for long-lasting style and performance. INVISTA Apparel meets this demand by providing quality fibers and fabrics to many of the most influential fabric mills, garment makers, brands, retailers and designers in the world. We are showcasing our new innovations like TOUGH MAX LYCRA fabric, LYCRA Beauty fabric and LYCRA FREEF!T at the LYCRA Rendezvous in Bangalore and are looking forward to a great event."

With denim being the prime focus for the first day, INVISTA will recreate the magic of grunge look of stretch denims with TOUGH MAX LYCRA fabric. The various presentations and seminars throughout the day will highlight why TOUGH MAX LYCRA fabric is designers dream.

INVISTA will showcase how a designer can create enchanting designs on TOUGH MAX LYCRA fabric with lasers and finishes and delight their male consumer. INVISTA will also be introducing a new LYCRA brand fiber type 166L, an upgraded spandex which will be really beneficial to mills with its increased tenacity for improved break performance, resistance to chlorine during bleaching, high recovery power after aggressive finishing and heat setting performance.

Day 2 of LYCRA Rendezvous will revolve around the themes of shaping, moldability and comfort and will focus on intimate apparel industry and will focus on LYCRA Beauty fabric for shapewear, which is a fast growing category – both in volume and consumer relevance.

INVISTA conducted a global consumer study that confirms that nearly all women (93%) show interest in the shaping attribute when purchasing intimate apparel. Whatever their age or body shape, women want truly performing garments without compromising comfort, that they can wear on special occasions or every day, year-in, year-out.

LYCRA beauty fabrics are engineered to meet extremely demanding standards that can create new solutions for shapewear that satisfies the expectations of this changing category.

To improve comfort of cotton underwear users INVISTA will also be launching LYCRA FREEF!T fabric, which it has developed after a global cross gender consumer study led by Strategic Insights and analysis of 300 commercial garments around the world. Underwear made with LYCRA FREEF!T fabrics offers improved comfort, breathability, no ride-up benefits to consumer.

Speaking on the development Kim Chi Phung, INVISTA's new underwear global segment leader said "INVISTA was surprised to identify such a gap and problem in the underwear market, and we have spent time and resources in the past years to fill this gap with a proprietary test method, which is part of a new quality standard specifically engineered for low LYCRA fiber content fabrics blended with natural fibers that go into underwear.

"We are raising the bar in the underwear industry to bring the end-consumers more comfortable and longer-lasting underwear, and we're very excited about what this will mean for the market. With this, underwear has become a new strategic marketing focus for us."

#### About INVISTA:

INVISTA is one of the world's largest integrated producers of polymers and fibers, primarily for nylon, spandex and polyester applications. INVISTA's global businesses deliver exceptional value for customers through technology innovations, market insights and a powerful portfolio of global trademarks. [19.]

#### Voith develops new line of high-quality fabric dryer

Evaporite, a new product line of high-quality dryer fabrics, is the newest innovation Voith has brought onto the market. Maintaining drying efficiency and sheet runability through the life of a dryer fabric is a key cost driver for the performance of a paper machine. The Evaporite dryer fabrics impress with their outstanding durability and efficiency, their contamination resistance and easy cleaning.

They feature the new "CleanWeave" design and "SynStron" material which has a significantly higher durability than conventional polyester yarns.

The open structure, low yarn cross over points and minimum internal void volume are unique to the "CleanWeave" structure and thus reduce contamination of the fabric. Effective evaporation is therefore ensured over the entire service life of the fabric.

Moreover, the compact fabric structure makes cleaning of the surface a lot easier either when manually cleaning or with online cleaning systems such as DuoCleaner Express from Voith.

EvaporiteHigh is also part of this product line. This dryer fabric design is characterized in particular by an increased open surface and a high degree of web contact. All Evaporite dryer fabrics ensure efficient runability thanks to their "CleanWeave" fabric structure.



Voith Paper is a division of the Voith Group and the leading partner to and pioneer in the paper industry. Through constant innovations, Voith Paper is optimizing the paper manufacturing process, focusing on developing resource-saving products to reduce the use of energy, water, and fibers.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 42,000 people, generates € 5.7 billion in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe. [59.]

#### Intelligent textiles help prevent pressure ulcers

Research being presented at an influential patient experience summit demonstrates improved patient outcomes in the prevention of pressure ulcers with the use of Wellsense's M.A.P, the first-ever continuous bedside pressure mapping system. The research is the subject of a poster presentation at the 4th Annual Cleveland Clinic Patient Experience: Empathy and Innovation Summit at the Bank of America Conference Center in Cleveland on May 19-21.

The study, "Enhancing Patient Experience by Optimizing Patient Repositioning through Biofeedback," showed that peak pressure was significantly lowered when caregivers used the visual aid of the M.A.P to reposition patients.

The M.A.P pressure sensing mat is made of an intelligent textile which constantly measures pressure from thousands of discrete points.

The variations in pressure across a patient's body are depicted on a monitor, using a color scheme to help caregivers visualize high (red) to low (blue) pressure points, which enables them to easily identify and minimize areas of high pressure. The M.A.P serves as a supportive tool for caregivers by providing live, visual feedback as they reposition patients.



"This research confirms that pressure ulcers are indeed preventable with the right kind of technology," said Dr. Ronald G. Scott, lead study author and Director of Wound Care at a North Dallas Long Term Acute Care Hospital. "The use of visual biofeedback has a clear benefit to patient care and safety, as caregivers can be confident that they are effectively repositioning patients to help prevent the occurrence of pressure ulcers."

This research highlights the role biofeedback plays in effective patient repositioning, comfort, caregiver satisfaction and effectiveness, and pressure ulcer prevention. Biofeedback is a process that enables an individual to learn how to change physiological activity for health and performance improvement.

The aim of the study was to provide caregivers and patients visual feedback in locating where pressure exists between the patient and the support system using the M.A.P. First, caregivers were asked to reposition a patient without visual aid. After the patient had been repositioned, caregivers were shown images of where pressure still existed, and then readjusted to limit peak pressure.

#### About the M.A.P

The M.A.P is the first-ever, clinically proven, continuous bedside monitoring system that detects and depicts the variations in pressure across a patient's body, to aid in the prevention of hospital acquired pressure ulcers.

Used on any existing bed, the M.A.P enables caregivers to visualize real time pressure distribution data to guide effective patient repositioning. The M.A.P live, color feedback empowers caregivers to easily identify early warning signs of risk to patient safety and has a demonstrated ability to improve upon a facility's pressure ulcer prevention program efforts.

#### **About Wellsense**

Wellsense was founded in 2009 to commercialize medical applications of a smart textile technology. The company's founders and management bring a strong track record of innovating and commercializing breakthrough technologies in consumer electronics and wound care. Wellsense USA Inc. and Wellsense Technologies, Ltd. are subsidiaries of Enhanced Surface Dynamics, Inc., a privately held company. [56.]

#### Students develop waterproof fabric that whisks away sweat

Waterproof fabrics that whisk away sweat could be the latest application of microfluidic technology developed by bioengineers at the University of California, Davis.

The new fabric works like human skin, forming excess sweat into droplets that drain away by themselves, said inventor Tingrui Pan, professor of biomedical engineering.

One area of research in Pan's Micro-Nano Innovations Laboratory at UC Davis is a field known as microfluidics, which focuses on making "lab on a chip" devices that use tiny channels to manipulate fluids.

Pan and his colleagues are developing such systems for applications like medical diagnostic tests.

Graduate students Siyuan Xing and Jia Jiang developed a new textile microfluidic platform using hydrophilic (water-attracting) threads stitched into a highly water-repellent fabric. They were able to create patterns of threads that suck droplets of water from one side of the fabric, propel them along the threads and expel them from the other side.



"We intentionally did not use any fancy microfabrication techniques so it is compatible with the textile manufacturing process and very easy to scale up," said Xing, lead graduate student on the project.

It's not just that the threads conduct water through capillary action. The water-repellent properties of the surrounding fabric also help drive water down the channels. Unlike conventional fabrics, the water-pumping effect keeps working even when the water-conducting fibers are completely saturated, because of the sustaining pressure gradient generated by the surface tension of droplets.

The rest of the fabric stays completely dry and breathable. By adjusting the pattern of water-conducting fibers and how they are stitched on each side of the fabric, the researchers can control where sweat is collected and where it drains away on the outside. Workout enthusiasts, athletes and clothing manufacturers are all interested in fabrics that remove sweat and let the skin breathe. Cotton fibers, for example, wick away sweat — but during heavy exercise, cotton can get soaked, making it clingy and uncomfortable.

A paper describing the research was published recently in the journal Lab on a Chip. The work was funded in part by the National Science Foundation. [57.]

#### K-C introduces new wiping solutions for aviation sector

To address the unique needs of the aviation industry and help workers perform more productively and efficiently, Kimberly-Clark Professional is introducing a line of aviation-certified wiping solutions that meet the requirements of Aerospace Material Specification (AMS) 3819C (Aerospace industry requirement) and Boeing Material Specification (BMS) 15-5F (Boeing). Kimtech Wipes for aviation are specifically engineered to perform in all areas of Original Equipment Manufacturing (OEM) and Maintenance Repair Operations (MRO) operations — including paint surface prep, engine maintenance and general-purpose cleaning.

These application-driven solutions are designed to deliver superior cleaning, improve operational efficiencies, reduce turn-around time, and maximize productivity while meeting the precision standards and requirements of the aviation industry. "Aviation industry workers must have the best wiping tools available to make sure every job is done right the first time," said Marianne Santangelo, go—to-market leader, Manufacturing, Kimberly-Clark Professional.

"Our goal is to provide them with a comprehensive range of customized tools that reduce waste and costs and increase efficiency. This supports our vision of creating Exceptional Workplaces that help keep workers healthier, safer and more productive."

Kimtech Wipes for aviation are available in four categories: Abrasive Wipes, Surface Preparation Wipes, Cleaning Wipes and a Wet Wipe System. The products also feature an intuitive, alpha-numeric, performance-tier identification system with visual cues that make it easier for technicians to identify the right product for the task. The new aviation-certified wiping solutions include:



Kimtech A2 Aviation Abrasive Surface Preparation Wipes — Specifically designed for abrasive aviation surfaces, these durable wipes are ideal for use on riveted metal surfaces. They reduce the risk of contamination even when used on rough surfaces and can be used for pre-cleaning, degreasing, solvent wiping and excess sealant removal.

Kimtech P2 and P3 Aviation Surface Preparation Wipes — These wipes deliver precision performance via an advanced material that enables optimum linting and extractable control. They are highly absorbent and deliver excellent cost-in-use for critical wiping tasks.

Kimtech C2, C3 and C4 Aviation Cleaning Wipes —Kimtech Cleaning Wipes are an easy-to-use, Lean manufacturing cleaning solution for general wiping needs. They are aimed at reducing waste, costs and contamination while enhancing productivity. A lower-cost alternative to reusable rags, these wipes can be used for overall general cleaning, post-paint stripping and wiping, water-rinse drying, solvent wiping, excess sealant removal, oil and grease cleaning, and tool wiping.

Kimtech W Aviation Wet Wipe System — This air-tight, sealed system reduces waste and improves performance by offering more controlled dispensing of disposable, pre-saturated wipes.

The technology offers many benefits over bucket or decanter systems, including reductions in solvent loss from evaporation, reduced waste from wipes drying out, and reduced worker exposure to Volatile Organic Compounds (VOCs). The product comes with a guarantee of 20 percent reduction in solvent usage.

#### **Full Line of Aviation PPE and Safety Solutions**

In addition to the Kimtech Wipes for Aviation, Kimberly-Clark Professional offers a complete range of personal protective equipment (PPE) and other innovative solutions for the aviation industry, including apparel, protective eye wear, gloves, respirators, hearing protection, and welding helmets and equipment. The product bundle helps support a safe work environment by protecting what matters most — people — as well as providing comfort to help increase compliance.

#### **About Kimberly-Clark Professional**

Kimberly-Clark Professional partners with businesses to create Exceptional Workplaces helping to make them safer, healthier, and more productive. Key brands in this segment include: Kleenex, Scott, WypAll, Kimtech, and Jackson Safety. Kimberly-Clark Professional, located in Roswell, Ga., is one of Kimberly-Clark Corporation's four business sectors. [58.]

#### Cornell students bond fabrics using sound waves

When Cornell University fashion design students were assigned to create open-jacketed suits from fashion fabrics, the added challenge was to use Sonobond's SeamMaster High Profile ultrasonic 'sewing machine' to develop original fabrics for the blouses or tops beneath.

With the Sonobond machine enabling students to streamline cutting, embossing and creating other decorative effects normally achieved through traditional time and labour intensive methods, the results were spectacular.

I'm continually amazed at how students produce original and imaginative designs by combining the SeamMaster's different pattern wheels with a variety of fabrics to achieve precise and beautiful three-dimensional effects," says Anita Racine, Ph.D., senior lecturer for the Fashion Design program at Cornell.

This year, each of the 14 sophomore fashion design majors in the semester-long, intermediate-level patternmaking course used the SeamMaster to create a yard of one-of-a-kind fabric for their final project designs.

#### Creating unique surface designs

Ultrasonic bonding occurs when high frequency electrical energy – converted to acoustical, mechanical vibrations and channelled through a horn – creates a rapid heat build-up at the material contact point. This causes the material to melt and fuse between the horn and rotating pattern wheel of the bonder. For successful ultrasonic bonding, fabric must be at least 60% synthetic.

According to Sonobond, students appreciate the creative and functional versatility of the SeamMaster machine, which operates like a typical industrial sewing machine but does not require thread or adhesives. Pattern wheels can produce different effects ranging from a feminine, to a modern or edgy look depending on a fabric's sheerness, drape and surface characteristics without worry of fraying or unravelling.

#### Unique fabrics bonded by sound waves

Before developing yardage for their designs, each Cornell student received a two-hour basic training and practice session on the Sonobond SeamMaster High Profile Ultrasonic Bonder, which is most often used to assemble functional apparel – primarily medical or protective garments – and industrial products. Students went on to experiment with a variety of pattern wheels and fabrics, producing 30 different samples.

In creating fabric for this year's final project, one student used several pattern wheels to produce abstract 'scalloped' pieces in tri-coloured satin twill fabrics. The pieces were then layered for a three-dimensional 'confetti' effect, attached to fusible webbing and covered with sheer organza to soften the overall look.



Another student used three pattern wheels to make a unique blouse fabric: one to fashion ribbon strips, a second to create delicate cutwork, and the third to straight-stitch the pleated cutwork in place. The ribbons were then hand-woven through the cutwork to achieve a multi-layered effect.

#### Non-traditional sewing techniques in fashion design

Cornell fashion design students were first introduced to the Sonobond machine in 2007. Prior project assignments have included using the SeamMaster to assemble two-piece cocktail and evening ensembles, as well as fibre and wearable art designs.

Sonobond says the SeamMaster has now proven so useful and has been so enthusiastically received by students – who now refer to using the machine as 'Sonobonding' – that it's a continuing feature of the intermediate-level patternmaking course.

It's also used by upper class and graduate students, as well as faculty members, for fashioning functional or decorative details – for example, spaghetti straps, appliqués, decorative flowers and pin tucking – assembling active wear and other apparel, and finishing garment edges, especially voluminous hems on sheer fabrics.

But students find it most helpful for stretching their imaginations in creating decorative surfaces and edgework. One student commented, "As a designer I find the most powerful massages in artwork and fashion are those found in the details. The Sanahard mashing he

messages in artwork and fashion are those found in the details. The Sonobond machine helps me to focus my attention on details."



Students' designs created with the SeamMaster are shown in the annual Cornell Fashion runway show, placed in various gallery displays, and entered in design competitions that encourage the use of innovative technologies. The students' SeamMaster-created final projects will also become part of their professional portfolios for seeking industry internships and positions after graduation.

#### Workhorse with fashion flair

Even after six years of use, Cornell's SeamMaster has consistently been a low-maintenance, high-production machine requiring only simple routine check-ups by the Fiber Science & Apparel Design department's lab technician. Plus, to students' benefit, the department now has 30 SeamMaster pattern wheels, some of which were developed exclusively for Cornell by fashion design faculty working with Sonobond engineers.

"With each new pattern wheel added to our collection, the creative possibilities of this machine are vastly expanded. The potential is clearly endless," says Dr. Racine. She notes, "We enjoy producing new fabric designs with the SeamMaster and have coined a new word. When reviewing prospective fabrics for designs, we ask, 'Is it Sonobondable?'"

Sonobond is a leader in the application of ultrasonic welding and bonding technology. In 1960 Sonobond, then known as Aeroprojects, received the first patent ever awarded for ultrasonic metal welding. During the intervening 53 years, Sonobond has earned an outstanding reputation for its pioneering work and quality-engineered products. Today, Sonobond manufactures a complete line of ultrasonic bonding and welding equipment for a wide variety of customers in the automotive, appliance, electrical, HVAC, ballistics, aerospace, filtration, medical, and apparel industries. [64.]

#### On the winning road with X-BIONIC

Earlier this year when 4,662 innovative products from 1,865 inventive companies competed for one of the world's most treasured design prizes, the *red dot* - X-BIONIC, the high-tech sportswear brand won double honours in Essen.

The innovative Swiss company was able to convince judges with its latest technological invention and won an award for its Precuperation/Recovery Shirt & Trousers and a second award for its Precuperation/Recovery Socks. Both products aid sports performance and muscle recovery through the application of compression.

In only a few years X-BIONIC, which is based in Wollerau in the Swiss canton of Schwyz, has won more than 390 renowned international awards and top test ratings.

The company claims to have "innovative technology that enhances performance, gives you endurance, and makes you simply superior."

X-Technology, the Swiss think tank, brings together biologists, sports scientists, engineers, bionics experts and professional athletes to develop innovative solutions that are revolutionizing the world of functional sportswear. Creative, interdisciplinary processes, combined with scientific research have led to the development of the performance-enhancing brands X-BIONIC, X-SOCKS, X-NUTRIO and APANI.

#### Regeneration during sleep

A good example of how the brain of Professor Bodo W. Lambertz, chief and

head engineer of X-Bionic, ticks, is the development of the award winning

project *Energetic and Mental Precuperation/Recovery*. The starting point for the assignment was the alluring idea of using the entire period during which a person is asleep to regenerate the human body's bio-physiological system.

Professor Lambertz' team succeeded in developing special sleepwear, which applies compression in a strategic way on specific muscle zones to exploit the natural movement of the body during sleep and thereby stimulate the nerves, and by alternating cycles of tension and relaxation, to massage the body, including the deeper regions.

The effect in athletic terms, X-BIONIC says, is impressive. Muscle fibre retains its flexibility while at the same time the blood vessels, lymph system and neuro response system are perceptibly regenerated – without the subject having to make any effort. In Professor Lambertz' view, "This is the perfect sleepwear for regeneration after sporting activity and during long-haul business trips."





#### X-SOCKS

Since the first generation X-SOCKS were developed in 1997, X-Technology has been characterized by unique innovative craftsmanship leading to functionality that still changes the world of sports apparel and the number of international patents (60 plus 200 design patents) for technologies shows how much innovation and technology can be found in X-SOCKS.

The Advanced Foot Protection System – a targeted protection and support system for the feet – is specifically conceptualised for different sports and guarantees every pair of X-SOCKS will effectively protect and support athletes' feet.

#### Turning sweat into energy

X-BIONIC products act as intelligent interfaces between an athlete's body and its environment. To enhance physical performance X-BIONIC uses innovative technologies that positively influence the muscles, nerves, body temperature and physical cooling system.

Like the X-Bionic technology which utilizes sweat as a coolant, keeps the body temperature stable and taps into previously unused reserves of potential strength - *3D-BionicSphere System* leaves a thin film of moisture on the skin without the body sensing wetness and *SweatTraps* then transport excess sweat, allowing it to evaporate, and then dispose of it via thermal dynamics.

"All that remains is a comfortable, thin, cooling layer of moisture. Of course - no sweat, no cooling. In freezing temperatures the entire system of channels functions as insulator in both rest and recovery phases. In this way the athlete avoids the risk of over-chilling during activity," X-BIONIC adds.

The wide product range of X-BIONIC offers specialized solutions for a wide variety of sports, applications and types of athletes. To perfectly adapt to specific user needs and weather conditions, all X-

BIONIC components work together as a versatile multi-layer system – the patented SYSTEMGEAR.



#### Where there is imagination, there is possibility

In the development process, Professor Lambertz always bears in mind the athlete and his or hers current and future living environments and needs. In order to develop a new and coherent clothing concept with the right solutions capable of meeting future requirements, he tries to anticipate how the world and athletes' needs will change.

He identifies, analyzes and comprehends the relationships between the most diverse factors of influence and develops relevant and attractive proposals that the client can profit from. One result of this work is the *Effektor*technology, whose *Partial Kompression* has proven to improve athletes' muscle performance and stamina.

When developing, the X-Technology team headed by Professor Lambertz, relied on both highest theoretical expertise and deep practical knowledge of performance sports. The new SMC-Technology (Specific Muscle Control) works to create evenness in imbalanced musculature with its asymmetrical compression, supporting active muscles and producing overall balance – the perfect clothing for asymmetrical sports.

Having done an impressive job of proving that the X-Technology system with its X-BIONIC Effektor Technology (proven and tested by: CeRISM, EMPA, SportsScience, Universitites of Vienna, Münster and Dortmund) works, the focus is always on one thought - How can X-BIONIC optimally support the body under particular demands?

#### Apani - as pure as nature intended

"With APANI, Professor Lambertz changed another time the whole world of clothing – he made merino wool intelligent," X-BIONIC says. The intensive cooperation between designers, engineers, model makers and customers results in a product that is thoroughly considered from all different perspectives.

Through many years of interdisciplinary experience, X-Technology has built up extensive know-how in many different areas. With APANI, Professor Lambertz created products combining natural materials and their bionic functions with patented revolutionary technology.

"Wool cannot cope with sweat. It soaks up sweat and becomes heavy and unpleasant to wear. Sheep don't sweat. People do. APANI makes wool intelligent, by integrating extra functionality," the company says. "Patented machines are used to knit a three-dimensional fabric from Merino wool. Sweat gets processed. APANI makes clothing that is fully functional.

# The future holds no mysteries. We already see it in our labs According to X-BIONIC, three dimensional fabric engineering, adaptive materials and hybrid structures are just the beginning and will be followed by innovations in micro and nanofibres. The company says that in the future, sports clothing will not just be worn, it will be applied – like an app for the athlete's body, communicating with it and supporting every activity in an optimal fashion. Temperature, blood pressure and pulse sensors along with differential sweat monitoring will enable even more effective performance enhancements.



#### Think further, invent smarter

X-BIONIC says that, whilst big companies prefer marketing instead of research, X-BIONIC is driven by the passion of its development and design teams. "They create solutions that deliver measurable key performance advantages and are redefining the ways they think about high performance sportswear, picking up many international awards for the leading edge X-Technology innovations along the way," the Swiss innovator concludes. [65]

#### Innovative mattress offers dust mite protection

#### Jana Bukolovska reports

Laboratory tests concluded by the Hohenstein Institute, Germany, have revealed that a new *Wellmed* dust mite protection mattress can help those suffering from household allergies. "For the first time ever, this offers the hope of a good night's sleep for around 5 million people suffering from a house dust allergy in Germany – completely without side effects," the Institute revealed.

#### **Innovative**

Integrated textile heating elements allowed the test mattresses to be heated to 55 °C (131 °F) three times a week in order to eradicate the existing mites that are most likely to be found in heading because of t

existing mites that are most likely to be found in bedding because of their need for moisture to survive.



Professor Dirk Höfer, the inventor of the dust mite protection mattress, believes the permanent effect of the technique has been proven: "The average useful life of a mattress is 10 years. We used the results of the field study to project the allergen exposure for this time period. Even then, it will not reach the sensitization threshold for the patients."

#### **Effective and convenient**

A group of 20 house dust allergy sufferers received new Wellmed mattresses in 2011, supplied by the Institute and the bedding retailer Gailing in Ludwigsburg. Throughout the testing period half of mattresses were heated using the new technique. An objective of the study was the amount of allergenic dust mite faeces found in the mattresses and examined by Dirk Höfer and his team.

The first check already showed the difference between the two groups, revealing minimal traces of allergic dust mite faeces in the test group as compared to the placebo group.



The same tendency was observed after 24 months, with 28 times more allergens found in the placebo group. "In absolute terms, the allergen content for the users of the periodically heated special mattresses had increased only marginally during this period, proving that dust mites had been unable to settle permanently."

The test sleepers were also found to have "enjoyed lasting improvement of their allergy problems".



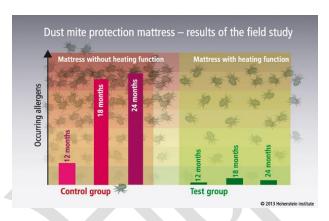
#### **Home Fever**

In UK by 2011 it was estimated that more than 12 million people were suffering from an 'allergy to their own home', according to the UK Allergy national charity report.

The report showed that more than half of respondents suffered from house dust mites and 58.9% of allergy sufferers found their symptoms were worse in the bedroom.

Household allergies that may lead to asthma symptoms are difficult to control.

Highlighting the problem area in the controlling measures for the mattresses that are usually recommended to be changed after 8-10 years, Hohenstein Institute commented: "...the options were previously limited to chemical substances or tightly sealed and therefore not very breathable mattress covers. Both are certainly not good starting points for a restful night's sleep."



#### **Safety First**

A special power adapter produced by the German company Rist Transformatorenbau GmbH ensures that the electronic smog does not create any health problems to the mattress users and textile heating elements from Roma-Strickstoff-Fabrik Rolf Mayer with low-voltage power also guarantee that no electric shock and no interfering electrical fields are created. [66.]

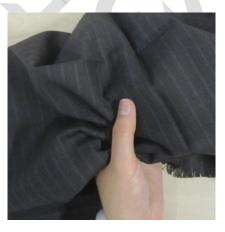
#### Objectively evaluating fabric handle

The UK's University of Leeds has developed an innovative system for the objective evaluation of fabric handle, which uses established and proven test equipment underpinned by scientific principles, which account for key material properties. A prototype of the Leeds University Fabric Handle Evaluation System (LUFHES) is available for evaluation purposes and examples of the functional roles that the system can perform in characterisation of fabric properties include:

- Quantification of fabric handle including softness and sponginess
- Discrimination of fabrics in terms of tactile comfort
- Benchmarking of fabrics in terms of their handle
- Replacement of less reliable (subjective) fabric hand assessment



#### **Technical features**



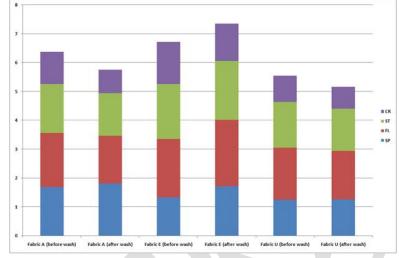
"Currently people assess and discriminate fabrics based on their subtle sense of forces and energy consumed during various fabric deformation processes produced by the human hand," explains the University's commercialization partner Danny Connaughton of ConnauTech Ltd.

"Using this as a basis, the innovative system mimics the fabric deformations - but in a more controlled way. This allows objective characterisation and discrimination of fabric handle which can be related to fabric hand for all of the deformations including compression buckling, shear, stretch, smoothness and texture."

#### **Benefits**

The Leeds University Fabric Handle Evaluation System (LUFHES) is said to offer a number of commercial and technical benefits including:

- Quantitative and objective characterisation & benchmarking of fabrics
- More consistent and reliable results when compared to fabric hand
- Increased garment sales (particularly on-line)
- Relatively low cost
- Simple to use and to understand the results



#### **Test data**

- Data comparisons have been carried out for the objective and subjective evaluation methods (the latter using a panel of
  experts commonly employed by the garment supply chain) which confirm that the objective method meets the stringent
  requirements of garment suppliers and their customers. The objective data were also found to be more consistent and
  reliable.
- Using the LUFHES prototype, data have been generated to evaluate the handle of a wide range of different materials including nonwovens, knitted and woven fabrics as well as paper and cling film. These data demonstrate very clear discrimination of each material in terms of the main fabric handle indices adopted by the system: Fabric Crispiness (CR); Fabric Stiffness (ST); Fabric Flexibility (FL); Fabric Sponginess (SP); Fabric Softness; Fabric Formability; Fabric Smoothness; Fabric Surface Texture Features.
- The subtle difference between fabric handle before and after washing is of interest to garment suppliers, fabric endusers and the laundry industry. The effect of washing conditions on various fabrics has been evaluated and the results for three cotton fabrics are illustrated. [67.]

#### Nonwoven adhesives offer low odour solutions for hygiene

H.B. Fuller Company, a leading supplier of adhesives to the hygiene market has introduced two families of nonwoven adhesives to meet the growing demand for lower odour construction adhesives as well as enhanced supply.

The company's offering of hot melt adhesives now includes Full-Care 5650 and Full-Care 5300 for construction applications. Both products build upon H.B. Fuller's 10 year history of delivery in polyolefin technology, now offering even more supply assurance due to a platform approach from more available sources.

"H.B. Fuller has a legacy of bringing innovative solutions to the hygiene market," said Heather Walch, North American business director for nonwovens hygiene at H.B. Fuller. "We added two new offerings to our Full-Care line of construction products because we saw gaps in the marketplace where improved odour, higher performance and further cost in use were needed."

According to the company, Full-Care 5650 offers customers low odour combined with robust cost in use and provides added flexibility across a wide variety of substrates. Full-Care 5300 has been developed for the lowest odour combined with significant improvements in bonding performance to enable potential lower add-ons.

In addition, H.B Fuller has introduced Full-Care 8500 for elastic attachment and stretch laminates. Full-Care 8500 is a hot melt adhesive offering increased choice to customers with demanding elastic attachment and stretch laminate applications. "Balancing robust performance with outstanding economics, the adhesive provides great bonding in high stress applications and a lower total cost of ownership," the company says.



For over 125 years, H.B. Fuller has been a leading adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products. Recognized for its technical support and innovation, H.B. Fuller aims to bring knowledge and expertise to help its customers find precisely the right formulation for the right performance. With fiscal 2012 net revenue of \$1.9 billion, H.B. Fuller serves customers in packaging, hygiene, general assembly, paper converting, woodworking, construction, automotive and consumer businesses. [68.]

thank you,

Email: textileweekly@gmail.com

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Kindly provide your valuable suggestions for our improvement.

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