

will intensify its support for scientific and technical projects on Technical Textiles”.

ACIMIT will focus on the internationalisation of its textile machinery sector in 2013

The Italian umbrella organisation of Italian textile machinery manufacturers ACIMIT will concentrate its efforts in 2013 on the sector’s internationalisation through promotional efforts and it welcomes quite a number of new members

This focus was approved by ACIMIT’s Board of Directors on November 13, 2012. The planned promotional efforts (technology symposiums) will entail visits accompanied by member firms to Bangladesh, China, Ethiopia, Germany, India, Indonesia, Mongolia, South Africa, Turkey and Vietnam. In turn there are also training courses arranged for foreign operators in Italy. ACIMIT will also be present at Techtexil in Frankfurt next June.

Another highlight of activity in 2013 represents a “Sustainable Technologies” project in India and Bangladesh, with the aim to present “Made in Italy sustainable technologies” in Bangladesh, with communication activities linked to the project taking place both in India and Bangladesh.

Obviously the current economic and financial difficulties in Italy make public funding difficult, but ACIMIT has been working together with the Ministry of Economic Development and the Italian Trade Commission to promote the internationalisation of Italian business abroad, and by providing a promotional plan that suits the needs of a sector where over 80 % of the total turnover derives from foreign markets, specifies Sandro Samoiraghi, ACIMIT president.

ACIMIT is also empowered by a list of new members, namely Barni Lido, BE.MA.TEX, Beschi di Beschi Oscar & C., Bierrebi Italia, Essico, Euro Mec, F.lli Robustelli, Falsetti P. & S., Fimbimatic, FK Group, Gualchieri e Gualchieri & C., JEM., J-Teck3, JTS, Mactec, Magetron, O.M.V, Panter P.T.M.T., Prochimica Novarese, Ramina, Ratti Luino, S.R.S. Spindles

Service, Samatex, Texera, Texilmesa, Texnology, Toscana Spazzole Industriale, Union, Zancaner and Zentex.

British Textiles Intelligence with Chinese edition in cooperation with CNTAC

By entering a cooperation with the China National Textile and Apparel Council (CNTAC), British Textiles Intelligence will publish two editions of Textile Intelligence’s business and market information available to the Chinese fibre, textile and clothing industries

Textile Intelligence was chosen by CNTAC as its partner in recognition of reliability and excellent reputation for delivering already 27 years of well researched industry analysis, expert insight and unbiased strategic commentary on the entire textile supply chain. The two publications are “Technical Textile Markets” and “Performance Apparel Markets”. The announcement was made in the framework of Cinte Techtexil on October 22, 2012 in Shanghai (PRC).

Daily production of 40 tons of fiber in Semnan province

Managing director of Nassaji Kavir Semnan Company announced producing 40 tons of fiber while weaving 9 million square meters of fabrics in a daily basis.

Currently, this unite operates full time with 650 labors and in a 7.5 hectares area.

He pointed that the manufacturing process is according to standards and the consumers can be assured for the quality. It is worth to be mentioned that around 580 individuals working in this organization are educated women.

Meanwhile, following establishment of printing and finishing unites; the owners suppose to develop fabric production quantity. The managing director of Nassaji Kavir stated that development plans needs an investment of 40 million Euros.



performance yarns, SORBTEK®, A.M.Y.R.®, MYNK® UV, REPREVE®, REFLEXX®, MICROVISTA® and SATURA®. Unifi's yarns and brands are readily found in home furnishings, apparel, leg wear and sewing thread, as well as industrial, automotive, military, and medical applications.

Success for Swiss Rieter in Turkey

Rieter's 4000th C 60 card went recently with a golden plaque to Turkish Kipas in Kahramanmaraş

The official ceremony was attended by Hanefi Öksüz, CEO and Ibrahim Gümüşer Vice President of Kipas Holding. Also the Rieter Agency for Turkey, Erbel, was represented and numerous journalists were also present.

Kipas was founded in 1984 and was ever growing – according to in-house information – into one of the largest yarn manufacturers in Europe and the Middle East. Today there are 200000 spindles and 20500 rotors installed on a surface of 200000 m². The production entails yarns from cotton, viscose, linen, polyester and blends thereof in the count range Ne 5 to 150. Kipas relies completely on Rieter machines and considers this as an assurance of high quality yarns. The company operates around 100 C 60s and these cards add to the company's success together with the high production efficiency, high quality and at comparably low operating costs. The basis of the C 60 concept has a working width of 1.5 m and the first machine was launched about a decade ago. It was also a key to further success for Rieter in Turkey.

Rieter with first snapshots from ITME 2012

As we reported before, ITME 2012 in Mumbai, India seems to be a spectacular event and Rieter is the first textile machinery manufacturer to give an impression. Swiss Rieter presented at its booth as sole manufacturer worldwide all four end-spinning systems and demonstrated also its competence across the complete spinning process. It was also the first time that

the J 20 air-jet spinning machine has been presented in India and it has attracted a tremendous number of technical visitors.

As at ITMA Rieter's Comfort of Competence is symbolised again by the comfortable armchair where Rieter customers can sit comfortable and obtain an introduction to the quality of the Com4® yarn brands. Rieter competently supports interested parties in the choice of the right spinning process and a great number of visitors take advantage of this unique and informative counselling by Rieter's technical experts.

Visitors focused with great interest on the brand new E 80 comber with a 43 % larger combing area than the preceding model.

With 500 nips/min it is allowing a production performance exceeding 80 kg/h. This new comber stands for unsurpassed quality and production level with maximum fibre yield. A world première represents the double-head SB-D 22 draw frame without levelling. It combines high quality 1100 m/min production performance with a new innovative can changer for 1000 mm cans in the appreciated high Rieter draw frame quality.

The Future of Technical Textile was subject of a EURATEX convention in Turkey

On November 16, 2012 the first EURATEX Convention on "The Future of Technical Textiles" in collaboration with the Turkish Textile Employers Association (TTEA) took place in Istanbul, Turkey and was attended by more than 300 participants from industry, local ministries, export associations, academics and government agencies

The main topic was the growing role of European Technical Textiles Application, and Halit Narin, President of TTEA stated: "Turkey believes in the future of the textile and particularly in the future of Technical Textiles. Cooperation between the textile industries of the EU and Turkey is paramount. The first convention in Istanbul organised jointly with EURATEX opens auspicious new perspectives. TTEA



World Textile News

Turkmenistan to host international cotton fair in Nov

Karl Mayer completed a successful India ITME. The presence of German Karl Mayer Textilmaschinenfabrik at the recent India ITME in Mumbai (IND) was a full success and all of the exposed machinery and solutions were well received by the visitors. Karl Mayer displayed the third generation HKS 3-M machine (the exhibited machine was ordered on spot and is also a bestseller for the company) and a FL20/1 machine both destined for sari fabrics. Another highlight was the Weftronic® RS for Technical Textiles and the new automatic sectional warper NOM for warp preparation. All these machines met the distinct requirements of the Indian market. The company conducted every day around 36 specific discussions with customers. Some customers from India, Bangladesh and Pakistan placed firm orders. The visitors' interest was focused mainly on direct warping machines, sectional warpers and sizing machines, as well as on warp preparation for the denim area.

14 million plastic bottles recycled and transformed into fibre and clothing

In the first year of its existence Dallas based Haggard Clothing Co. created and sold LK life Khaki products

based upon recycled plastic bottles and transformed into fibre by Unifi, Inc, a diversified producer and processor of multi-filament polyester and nylon textured yarns and related raw materials

LK Life Khaki pants are made with an innovative blend of cotton and REPREVE® fibres. REPREVE is an essential fabric ingredient that contains recycled materials, including plastic bottles. Each pant contains the equivalent of seven recycled plastic bottles, making Haggard the first menswear brand to bring sustainable options to the mainstream market.

According to Michael Stitt, CEO of Haggard the company aimed to reach a younger consumer with the creation of LK Life Khaki line to fit his lifestyle with the added benefit of being eco-friendly. We get not only his attention, but also a larger share of his closet, which is reflective of the significant growth trend that we are experiencing within this brand.

The LK Life Khaki collection was designed to change the way men buy khakis and the line features an array of fits, including slim, relaxed and straight and designed for multiple wearing occasions. Men have shown that they appreciate how these pants can take them from work to a barbeque, a wedding, or even a job interview. The line is available in more than 2200 locations, including department stores in the U.S., Canada and Mexico, as well as online. Other key Unifi brands include, but are not limited to AIO® all in all one



Iranian artwork and unique heritage of Persia to Algerian people.

People in Iran also got an opportunity to see Algerian artwork as the Algeria Handicrafts Week showcasing different artworks of Africa was held at Sa'ad Abad Museum in Tehran, the capital city of Iran, during last year, he added. Having witnessed reigns of several empires and dynasties, Algeria has been a land of origin for several ancient cultures, like Aterian and Capsian cultures.

Textile exports from Turkey's Bursa touch US\$1.5bn

Bursa, the north-western province of Turkey, exported textile and readymade clothing items worth over US\$ 1.5 billion till November this year, according to the Uludag Exporters' Association (UIB) data.

Registering a year-on-year rise of 9.8 percent, the province exported textiles worth US\$ 1.1 billion during the period. However, its RMG exports plummeted by 5.42 percent to US\$ 453.2 million, Hurriyet Daily reported citing the association's data.

Claiming around US\$ 143.07 million worth of province's total textile and RMG exports, Russia stood to be the top importer of these items, while Germany, Britain, Italy, Morocco, Romania, Poland, Spain and the US followed next.

Bursa too just like Denizli, an internal Aegean province, stands to be Turkey's textile production and export hub.

Turkish exporters encountered severe competition from North African firms ahead of Arab Spring, the well-known revolution in the region.

Iranians synthesize color coatings for paper and fabric waterproofing

The Iranian researchers have synthesized polymeric color coatings for waterproofing fabric, paper and construction materials.

The operating manager, Komeil Hamidian told MNA

that they have synthesized waterproof polymer, and added that coatings are polymeric, widely used in waterproofing construction material such as gypts, cement, brick, clay, and concrete.

He also added that these coatings are also used to waterproofing fabric, and that paper and wood can be made waterproof.

"This coating penetrates the surface. Polymeric coating penetrates about 1 micron to surface and coats the surface with added nylon coating, making the surface waterproof," explained Hamidian.

"The polymeric coating is highly resistant to acid and alkaline environments, drastic climatic changes, wear, corrosion, and discoloration," he added.

The operating manager also said that the coating do not bring about changes in texture and color, adding that polymeric coatings are synthesized in different spectrums from colorless layers to layers with different colors, thus making no change in the color of the surface.

Road map of textile industry coordination center is compiling

Dr. Abdolhossein Sadeghi, Secretary of textile industry center, announced the road map compiling according to undersecretary of science and technology.

During seminar of geotextiles applications and processes , Dr.Sadeghi mentioned:" textile industry coordination center in the first step trying to recognize challenges in textile industry and the solutions".

He said:" this center also suppose to offer efficient and new ideas for textile industry and is planing some conferences in this field".

Dr.Sadeghi explained that unfortunately, textile manufacturers concentrate on production process while market, post- production and selling services areas are vacant from textile experts.

Another conference on intelligent textiles will be held by this center in near future.

Iran Textile News

Persian carpets to boost Iran's handicraft exports

Iran's handicraft exports to other nations is likely to post a robust year-on-year rise this year to reach US\$ 1.5 billion by close of the current Iranian calendar year, Director-General of the Cultural Heritage, Tourism and Handicrafts Organization (CHTHO) for Trade Ahmad Balan has said.

Mr. Balan further said that if the forecasts turn out to be positive, it would demonstrate a 300 percent year-on-year rise in the country's handicraft exports, which mainly target Asian and East European countries, FARS News Agency reported. With their unique designs and high-quality, Persian carpets occupy a special place in the extensive list of Iranian handicraft items, and are highly popular.

Iran exported hand woven carpets worth over US\$ 560 million during last Iranian year that ended on March 19, 2012. Noting that Iran is a major exporter of hand-woven carpets, Mr. Mojtaba Feizollahi, Deputy of Iran's National Carpet Center, said the country exports its carpets to over 50 countries, including Japan, Italy and Germany.

Recognized as one of the most unique expressions of the Persian culture, the carpet-weaving art finds its root in ancient Persia.

European nations, particularly, Italy and Germany,

South and Central Africa, China, Brazil and the US are some of the key export destinations for Iranian Persian carpets.

Around 1.2 million weavers in Iran engage in the carpet making art to cater to domestic and international markets.

Around 80 percent of the five million square meters of carpets produced in the country each year are shipped to foreign countries.

Iranian handicrafts on display in Algeria

The 10-day Iranian Handicrafts Week showcasing varied artworks and legacy of Iran started in North African country of Algeria in November.

At the expo, several Iranian handicrafts including carpets, rugs, Persian embroidery, Termeh or special table clothes and Zaridozi are being displayed.

The expo is being organized by Islamic Culture and Communication Organization (ICCO) and Iran Cultural Heritage, Handicrafts and Tourism Organization (ICHTO).

Together with several artisans from Iran and Algeria, Iranian Cultural Attaché in Algeria Seyyed Razi Alamolhoda also remained present at the inaugural ceremony of the event.

At an earlier occasion, the official said the event is looked upon as great opportunity for presenting



dioxide pigment is a harmless white fine powder. When titanium dioxide is reduced to nanometer dimensions, its physical and chemical properties are changing and it is becoming transparent. We can protect our skin at (UPF) rot level by applying nano particles on fabric surface.

- Each year millions of people are dying because of the bacteria and other contagious diseases. But silver is naturally anti-bacterial and antifungal. When nano-silver particles are applied on fiber and fabric, bacteria such as E. Coli are eliminated.

- Clothes with anti-stress property

- Clothes with Aloevera extract and anti-aging properties.

- Clothes with anti-oxidant property

- Clothes with weight-losing property

- Clothes that can even be worn in desert, which reflect the sunlight (coldblack)

What makes Coldblack technology special is, reducing heat accumulation on the applied product and providing protection against the sunlight at the same time. Cloth is providing thermal comfort and protecting the body against UV lights at the same time. It is stated that products on which this process is applied keeps the body 12 OC cooler , and reflects the sunlight up to 80%.

This process does not cause any appearance change for the product. Coldblack application is applied on products that protects people against sun such as clothes, tents, awnings and umbrellas. The purpose is producing products according to hard climate conditions. Coldblack technology is important especially in terms of keeping body cooler. Fat burners and weight loss: Fabrics with this application also helps removal of cellulite. Applied material is thermologic fat burner and weight-loss helper. Easily absorbed by the skin. It moisturizes the skin, gives freshness feeling, increases the oxygen in the body therefore strengthens defense system of the body. It contributes to cell renewal. It makes immune system strong. It helps removal of toxins in the body.

RESULT

Application used on fiber and painted fabric surfaces to be used for clothing production has these advantages:

- Application process can be carried out with current machine park for wet processes. No new investment is necessary.

- Used nano chemicals are environmentally friendly. Most of them can be disintegrated biologically.

- It reduces usage of environmentally hazardous chemicals to minimum.

- It protects fabric's breathing ability.

Surface application does not change basic properties of the product. Trousers are still trousers, but nano particles allow auto-cleaning for them against filth.

Fabrics to be used for nano technology applications are fabrics made of cotton, linen, Polyamide, rayon and polyester.

Bigness of the market created by clothes such as daily clothes, sportswear and uniforms; home textile fabrics such as curtains, pillows, bed linens and carpets; military uniforms and similar products is expected to be more than a hundred billion dollars in 2015 year.

USA, Russia, China and EU countries have invested billions of dollars in these researches. Obtained nano particles are taking part in each field of life.

SUGGESTION

In my opinion, the biggest reason of the current crisis of textile sector is getting stuck in production of classical products. First generation of industrialists in textile sector was the ones who employed engineers and who respected knowledge. Small and medium sized industrialists with artisan origin that entered into sector after nineties saw their company growth as the result of their own skills instead of conjuncture and continued production of products that require no engineering and research. When our rivals produced the same products with lower prices, sector came to a dead end. Sector's salvation depends on production of products with different qualities when compared to rivals, R&D and Product Development researches. In this subject my recommendation for companies in the sector will be having projects produced by high level technical people and getting support from TUBITAK-TEYDEB.

Ekrem Hayri Peker
Chemical Engineer

especially in Asia and Africa because of various viruses caused by mosquitoes, flies, ticks and other insects, and mainly because of malaria disease carried by mosquitoes. Thanks to nano particles bound on fabric with nano technology capsule processes, release of mosquito material that prevents human skin from mosquito bites can be controlled. Each year in our country, tens of people lose their lives because of tick bites and thousands of them are rushing to hospitals.

- Pollen-proof clothes, pollens and dust particles are toothed. They stick on clothes easily and never go away. But we will prepare a film layer on fabric thanks to a nano chemical application. In that way pollen and dusts will not stick on fabric, and be easily removed by a light hand move.

COMFORTABLE CLOTHES

- Sweat-repellent clothes
- Dust-proof clothes
- Training suits giving warmth in winter
- Training suits giving coolness feeling in summer
- Completely stain-proof products
- Clothes with elasticity (izi-stretching) property

Applications carried out with micro capsules providing stretching property: With this process we can increase elasticity of knitted fabrics 20-25%. Lycra-free fabric obtains elasticity thanks to nano polyurethane among used fibers. It provides fabric with a special touch. We can apply this special finish on lycra fabrics. In this way jumping property of fabric and flexibility is much more increased.

This finish prevents deformation if applied on collars, arms and cuffs of t-shirts and jumpers, and increases usage life of the products. Fabric has massaging effect on the body.

Clothes that absorb bad smell:

Special finish removing bad smell: This system works in three different ways. Firstly, it reduces vapor pressure of smells. Then it neutralizes bad smell thanks to its receptor interactivity and stores it. Lastly, environment's air is renewed with a nice smell at very low concentration which is not very evident.

-Clothes whose color never fades, with resistance to sunlight

CLOTHES PRODUCED WITH VITAMIN BASED NANO CHEMICALS PROVIDING SKIN CARE

Clothes with aromatic smells such as rose and lavender.

Vitamin Based Products Providing Skin Care

These capsules are anti-oxidants supporting the immune system and including A,C and E vitamins.

Vitamin C is a basic vitamin we must obtain to protect our body health. This vitamin protects us against toxic minerals. Vitamin E protects youthfulness of our body and is among the most important vitamins to feel young.

Aloevera Microcapsules

Aloevera plant is a rich one in terms of its contents and effects. It moisturizes the skin, makes it reach the natural balance and provides anti-aging effect. It also has anti-inflammatory effect and used for reducing muscle pain.

Body Lotions

These special mixtures created with properties of roses, jasmines, fresh flowers and ylang-ylang plants strengthen the natural balance between the body and mind, and bring the skin to life with moisturizing effect.

Ginseng Microcapsules

Ginseng is the most natural plant known with its regenerative effect. It has properties that reduce stress and muscle pain. It provides body with liveliness. Also it renews the natural immune system.

Lavender Extract Microcapsules

This plant has antiseptic, analgesic and anti-inflammatory effects. It has relaxing and calming properties.

Products That Repair the Irritation Occurring on Top Layer of the Skin

Microcapsules with Lily Smell

It is believed that lily strengthens the memory and helps for a better talking ability.

MEDICAL CLOTHES

- Clothes produced with nano products that block ultra-violet light and protects your skin against UV. Skin cancer is quickly spreading because of global warming and thinning of ozone layer. For human health, we need to protect our skin from UV light. Titanium



fireproof especially for firefighters.
- Underclothing made for soldiers and sporters.

PRODUCTS PRODUCED BY HOME TEXTILE SECTOR

- Pillows, bed linen and bed clothes that have anti-bacterial, stress relieving and treatment properties.
- Filth, water, oil repellent, furnishings and curtain fabrics absorbing bad smell.

NEW STAIN AND STAINLESS PRODUCTS

Latest developments in stain and stain-resistant products field: All newly developed fluorocarbons include PFOA free – perfluoro alkyl acid less than one in a billion. This measure is below the measurable limits. Nevertheless, it is forbidden by American environment protection agency.

Newly produced stainless systems are based on C 6, and work much smarter than fluorocarbons including C 8 phased PFOA.

- Curtain fabrics reflecting the light.
- Curtain fabrics repelling insects and flies.

Considering daily clothes, we can categorize them like below;

PRODUCTS THAT CAN BE DEFINED AS COMFORTABLE Breathing Fabrics:

This application is especially applied to fabrics that require water repellency and breathing properties such as sporter clothes and military clothes. These fabrics prevent water from entering into fabric and take the sweat produced by body outside.

Special Finishing Giving Coolness Feeling:
Includes klitol, squalene, silk protein and erythritol.

Special Finishing Giving Warmness Feeling:

Includes daisy extract and capsicum solution.

- Providing stretching property for clothes without lycra (providing long-lasting permanent flexibility). Elastane-free clothes that tightly-fits the body.
- Products that absorb stain agents dropping on clothes or allow removal by rubbing or removal of stains by first washing.
- Sporter clothes that expel the sweat outside.
- Property of not catching dust and pollen, mentioned for hygienic clothes.

- Training suits that give coolness feeling in summer and warmness feeling during winter.
- Clothes that absorb bad smell in the environment.
- Clothes that hold insects and ticks at the bay.

Nano technological products are now applied for clothes produced for sporters. The purpose is increasing the performance of sporters. It was found that a liquid loss equal to %02 of sporter's body weight lowers the performance of athlete 20% approximately. It was first applied on bike racers. According to researches it was found that the performance of bicyclers during bike races were directly affected by internal and external temperature level of the clothes they wear.

It can be said that after bicyclers, it is the turn of swimsuits worn by swimmers.

Products Developed for Skin Care

These nano particles are created with materials such as aloe extract, squalene, silk protein, ceramide and collagen peptide. As you know the aloe extract has relaxing, moisturizing, anti-oxidant and skin protection properties. The biggest property of silk protein is having moisturizing and skin softening properties. Like collagen peptide it fights against effects that cause skin to get older and moisturizes.

Ceramide: This material used for skin care and moisture control re-shapes skin surface and turns into a silky and soft state. It makes skin look younger and smoother.

Squalene is one of the strongest anti-oxidants obtained from olive. It has high level of penetration ability. It prevents drying of skin, it provides liveliness and flexibility.

These particles are in state of sachets in multiple layers, oil and water based phases.

CLOTHES PROTECTING BODY AGAINST EXTERNAL EFFECTS

- Most widely known commercial application field of nano technology is providing clothes and fabrics with liquid repellency, oil and stain resistance by using nano particles. Created hydrophobic surface is able to make the water drop flow and automatically makes it go away. We can express this as automatic self-cleaning.
- Hundred millions of people are losing their lives

APPLICATIONS OF NANOCHEMICALS

■ SMART CLOTHES

“NANO” means dwarfing in Hellenic language. Nano is a measurement. Nanometer is equal to one billionth of meter.

Whatever their religions, nations and races be, the prospering countries are meeting on one common ground; deceleration of population increase. Their population increase rate is almost non-existing. Rich European countries are solving their required population need by including skillful youth of other countries within their body.

They transferred production of cement, rubber, cable and such sectors which contaminate the environment to our countries, before seventies. Then they added textile paint to these sectors that they transferred from their lands. In eighties, they transferred industry branches such as white goods, iron-steel production and shipbuilding which they no longer wanted to produce and which required qualified personnel to countries like us which was close to their countries or to China who ignored environmental problems. In short, Europe was founded on sectors which contaminate the environment, which have high energy consumption and which require many workers. Increased time of life, increased patient care expenses and climate

change increased the technological improvements used for treatment of old people regarding tools used for daily life, mainly in medical field.

Global warming caused clothes to become thinner. Then nano technologies became widespread and caused these technologies to enter into human lives fast.

After nineties, there were new applications for textile products such as stain and oil repellency, catching fire harder and being crease-proof. In time nano technologies became used for our clothes and daily life products. Researches about new products that could be applied on clothes for military uniforms and sports technologies gave positive result in short time. As the result of these researches, especially clothes began to take part in our daily lives. We can categorize these products and clothes made from these products like this.

PRODUCTS USED BY SOLDIERS AND SPORTERS

- Water and heat resistant tents, clothes that give coolness, warmness feeling which do not show dirt easily and which let the sweat out.
- Anti-bacterial products
- Products that catch fire hard, clothes defined as

