

yesterday.

“We mainly depend on the US and Europe for garment export. Now we are looking for new export markets such as Brazil, Russia, Australia, South Africa and South Korea to give a big boost to the apparel industry,” said Jalal Ahmed, EPB vice-chairman.

Apart from these anticipated countries, Ahmed said, India and China are becoming the potential markets for RMG export as the export rates of knitwear and woven items are on the rise.

He looked back to 1980s at the rising stage of the sector saying Bangladesh had to depend on labour, as there was nothing about the backward linkage industry. Now the woven sector represents 40 percent backward linkage and knitwear 60-70 percent.

“It took a long time to reach the apparel industry a global position. The main reason behind the growth is still labour. The world’s apparel buyers are eyeing Bangladesh as the country that is able to supply quality materials timely,” Ahmed said.

Bangladesh got the benefit of the global apparel market after phasing out MFA, and developed countries started rising their labour cost, said Mostafa K Mujeri, director general of Bangladesh Institute of Development Studies, while talking to the news agency.

“We have to make our products attractive to China to take over the opportunity of colossal apparel market. We need to improve electricity, gas and infrastructure facilities to this end,” said Mujeri.

Mustafizur Rahman, executive director of Centre for Policy Dialogue, said the apparel industry has brought a great success to Bangladesh and identified three more reasons behind the success — entrepreneurs, government policy supports and workers.

PAKISTAN - TEXTILE EXPORT EARNINGS TO FALL \$1B

Weak demand and higher output has depressed world cotton prices and will cost Pakistan more than \$1 billion in key textile exports for the fiscal year 2011/12, despite an expected bumper crop, industry officials said on Wednesday.

Textiles and cotton account for nearly 60 percent of Pakistan’s exports and are a major source of foreign

exchange for its fragile economy, kept afloat by an \$11 billion International Monetary Fund loan secured in 2008.

“This year’s textile exports will be between \$12.0 billion and \$12.5 billion, because of the fall in world cotton prices,” Yasin Siddiq, a top industry official, told Reuters.

Despite severe losses to the cotton crop by 2010’s floods, the value of Pakistan’s textile exports in 2010/11 rose 35 percent to \$13.80 billion from \$10.22 billion the previous year, mainly because of globally high cotton prices, analysts say.

Pakistani manufacturers of ready-made garments, valued at \$1.77 billion in exports last year, fear exports will drop further, citing a significant fall in Christmas demand because of cotton price volatility and Pakistan’s chronic energy crisis making foreign buyers reluctant to place orders. The International Cotton Advisory Committee said this month world cotton production would rise 8 percent to 26.9 million tonnes for the year. The extra production is expected to drive down prices. Cotton prices, which doubled and peaked at \$2.27 per pound in the first quarter of 2011 on tight supplies and robust demand, have since fallen to less than half that level, where they remain.

Economic turmoil triggered by the downgrade of the United States by Standard and Poor’s could further dampen world cotton demand. The key December U.S. cotton contract on ICE Futures U.S. dropped 1.92 cents, or almost 2 percent, to end at 95.80 cents per pound on Tuesday, near a 10-month low.

Pakistani analysts, who expect the country’s textile exports to total between \$12.8 billion and \$13.0 billion in 2011/12, say the impact of the turmoil from the U.S. downgrade on Pakistani textile exports would not be much.

“There will definitely be an impact but we need to see what our exports are to the U.S. and Europe,” said analyst Nauman Khan of Toplevel Securities. “It’s mostly home textile and we don’t think it will take much of a hit.”

Pakistan is expecting a bumper crop of more than 15 million bales. Some industry officials say the increased volume will offset some of the negative impact of a price fall.

company Lucintel, and demand for natural fibres and resins will continue to grow rapidly.

The major reasons for using natural fibres are to reduce weight, achieve a better environmental balance, reduce costs and manufacture complex structural elements.

Admittedly, questions have arisen about the cost benefit of natural alternatives and the added challenges of consistency in quality control.

However, it has been convincingly demonstrated by manufacturers and researchers that bio-based material composites can now be produced with major improvements in stiffness and strength.

Fibres such as flax and hemp have already penetrated the automotive industry, the construction industry and the sports and leisure industry, and continued innovation will open up further opportunities.

Much effort has gone into the development of such materials, and their performance has been proved in practice.

In addition, further reductions in cost and weight have been achieved in recent years, especially through the use of compression moulding.

Also, the automotive industry has shown growing interest in bio-based materials and lightweight constructions.

In the next two years, new models with considerably more interior parts made from natural fibre reinforcements will be released on to the market by almost all automotive companies.

New trends are already becoming apparent. Not only do automotive manufacturers want to use bio-based materials, but also they want to show them to their customers.

Up to now, natural fibre construction parts have been hidden. But in the near future, completely new surface effects will appear as natural fibres are used under transparent films or lacquers.

Moreover, environmentally friendly composites which contain 100% bio-based compounds are likely to appear soon in Japanese cars. Such materials will combine natural fibres with a plastics matrix made from a biopolymer such as PLA (polylactic acid) -- which can be derived from

renewable resources such as corn starch or sugar cane -- or from bio-based polypropylene resin.

NEW HANK DYEING UNIT FROM THIES FOR SPECIALITY AND 'HIGH END' YARNS

The new hankMaster yarn dyeing machine offers reduced water and low energy consumption plus flexible loading for specialised and 'high end' yarns in hank form providing optimal treatment and ease of handling.

The new hankMaster hank dyeing unit from Thies Textilmaschinen completes the company's range of yarn dyeing machines. It has been designed specifically for speciality and 'high end' yarns in hank form.

Its uniquely designed liquor flow ensures perfect dyeing for a wide range of hanked yarns including wool, soft and mercerised cotton, and fibres such as viscose, polyamide, silk and high bulk acrylics.

The hankMaster is designed to dye at temperatures of up to 98°C at a starting liquor ratio as low as 1:5 depending on the loading and yarn capacity.

In order to avoid high spots and lustre marks, the hanks are rotated on specially designed rods, each 960 mm long.

The unit can be supplied with 2, 4, 6, 8, or 10 rods each capable of holding a maximum of 10 kg of yarn subject to the volume and type of material.

The maximum hank length is 950 mm. For larger batch size machines, a series of units can be coupled together. The hankMaster is manufactured in stainless steel and also features a centrifugal circulation pump and a cartridge heat exchanger.

A modern industrial pc system controls and monitors the dyeing and finishing processes at all times.

Fully automatic dosing of dyes and chemicals using pre-programmed times and curves is also available with analogue dosing.

BANGLADESH LOOKS TO NEW MARKETS FOR APPAREL

Export Promotion Bureau (EPB) looks to new potential overseas markets for the readymade garment industry to propel the growth of the sector, said a top official



WORLD Textile News

GLOBAL YARN AND FABRIC PRODUCTION FALLS IN Q1

Global yarn and fabric production fell in the first quarter of 2011 compared with the previous quarter despite representing an increase from the first quarter of 2010, according to figures published by the ITMF. Year-on-year global yarn and fabric production continued to grow.

Yarn production fell by 11.3% globally in the first quarter of 2011 in comparison to the previous quarter. The statistics show that in Asia, Europe and South America yarn output fell by 12.2%, 2.6% and 0.1%, respectively, with production rising by 5.1% in North America.

Year-on-year, yarn production rose in North America by 10.2%, in Asia by 6.6% and in Europe 1.3%. Conversely, in South America production decreased by 0.6%, according to the ITMF.

Global yarn stocks increased by 2.0% during the first quarter of 2011 compared to the previous quarter. In North America inventories rose by 11.1% and in Asia by 2%, despite falling 0.3% in Europe.

However, on an annual basis global yarn stocks increased by 7.4%, particularly in South America where they soared by 83%.

The ITMF statistics show global fabric production fell by 11.8% during the first quarter of 2011, when compared with the previous quarter. These statistics have been attributed to a 14.3% and 2% decrease in Asia and Europe respectively, which could not be offset by increased production in North and South America (13.3% and 5.9%, respectively).

In comparison to the first quarter of 2010 fabric production

rose in all regions. South America recorded the strongest increase at 15.7%, followed by Europe at 3.8%, Asia at 3.7% and North America at 3.7%.

Global fabric inventories were up worldwide in the first quarter of 2011 due to higher fabric inventories in Asia. However, in South America, North America and Europe inventories were reduced.

The ITMF study found that on an annual basis Asia, North America and Europe recorded higher fabric stocks, whilst supplies fell in South America.

Yarn and fabric order in Europe rose by 0.3% and 2.8%, respectively, during the first quarter of 2011, compared with the previous one. Year-on-year, yarn and fabric orders in Europe rose by 1.1% and 2%, respectively. In Brazil yarn and fabric orders plummeted by -13.4% and 4.7%, respectively. On an annual basis, orders in Brazil fell by 25.3% and 13.2% .

SALES OF NATURAL FIBRES FOR USE IN COMPOSITES SET TO DOUBLE BY 2015

Sales of natural fibres for use as reinforcement materials in composites in Europe could increase to 40,000 50,000 tons by 2015 compared with 20,000 tons in 2010, according to a report in the latest issue of Technical Textile Markets -- a quarterly publication from the global business information company Textiles Intelligence.

The global market for natural fibre composites reached a total value of US\$2.1

bn in 2010, according to the USA-based market research

containing nanofibers.

"An untextured layer of nanofibers of unique properties like high surface to volume ratio, very little pore size, and high porosity is formed by means of electrofining. The main drawback, however, is its low strength so that it's not possible to use it directly as filter or clothing", Dr. Akbar Khodaparast Haqqi, professor at textile department, Gilan University, said.

"Our researchers decided to join the nanofiber layer to the desired beds by special glue through layer multiplication and produce a composite containing this effective layer. It preserves nanofiber layer against stresses or strikes," he added.

Elaborating on the synthesis procedure, he said, "For the construction of nanofiber layer, we first prepared a polymeric solution of polyacrylonitrile. Then, nanofiber layer was coated on a layer of span bond by electrofining."

"These three layers were placed between two cotton cloths so that the five layers were arranged in cloth-span bond-nanofiber-span bond-cloth order. These layers lastly underwent hot press operation at different temperatures, times, and pressures to have span bond layer melted and act as a glue in joining the nanofiber layer to the cloth."

He reiterated that his research team "managed to represent images of nanofiber layers after the multilayer synthesis by an inventive method".

he urged greater support for the sector.

The official continued that the textile units should raise their production to meet domestic demand.

Renovation

Therefore, renovation of textile factories is of high importance, he pointed out.

Eslampanah described exports of textile products as a major task of Ministry of Industry, Mine and Commerce.

Iran leads the Middle East in the textile industry. The government also plans to renovate leather and footwear industries, he added.

He explained that carpet factories operate with 95 percent capacity while polyester plants only make use of 70 percent of their capacity.

Close to 129 textile factories operate across the country, he noted.

The industrialist listed building and expanding brands in textile industries, phasing out rundown machineries, giving incentives for increasing foreign investment, and supporting textile villages, production consortiums and export-oriented units as the goals and policies adopted to remove the problems facing the textile industries.

Privatization

About 9,500 industrial units are active in the Iranian textile industry, more than 75 percent of which are private.

A very small number of the state-run units of the country are mainly responsible for the setbacks of the sector, however, private Iranian companies are flourishing.

Deputy Minister of Industries and Mines Afshin Roghani said earlier that governmental textile units whose managers lack industrial outlook create a climate in which the textile industry is not viewed positively and people assume that textile industry faces various disorders.

"In fact, it must be asserted that textile industry has no particular problems and the conditions of private textile units are improving," said Roghani.

However, the fact that machineries in textile factories are outdated is an issue on which all officials agree, he said, adding outdated machinery should be renovated at the earliest so that the local textile industry could compete with other countries.

At present 9,500 textile units have permits and are operational nationwide. Of this figure, about 75 percent pertains to the private sector and the remainder is state-run. About 10 state-run textile factories are among units that have the most problems.

IRAN - SUPPORTIVE PACKAGES FOR TEXTILE UNITS

Close to \$1 billion will be allocated for upgrading the production line of textile units, said director general of textile industries of Ministry of Industry, Mine and Commerce.

In addition, close to 5 trillion rials (\$500 million) has been earmarked for easing cash flow of textile, leather and garment industries, Mehdi Eslampanah noted.

Moreover, over \$112 million will be allocated as compensation for the rise in the price of cotton and avert its impact on downstream industries, he added.

On the trend in cotton production, managing director of Cotton Farmers Association said China and the US, as the world's largest producers and exporters of the strategic crop, support the production and export of cotton.

The US, he noted, pays subsidies to cotton growers, since over 53 industries including defense, animal husbandry, textiles, and cellulosic products depend on this crop.

Given the country's favorable climatic conditions for cotton growing and domestic demand for this precious crop,

IRAN Textile News

MIDDLE EAST'S BIGGEST INDUSTRIAL TEXTILES PLANT INAUGURATED

Middle East's biggest industrial textiles manufacturing plant has been inaugurated in Kermanshah city of western Iran.

The facility houses a capacity to produce 15,000 tons of industrial textiles per annum, including polyester, conveyor belt, industrial liners, and tire cord worth around US\$ 100 million.

The plant's production would be able to meet around 33 percent of Iran's present annual demand of 45-50 thousand tons.

Inauguration of the new plant has generated 250 new direct employment opportunities, which is likely to grow to 350 direct and 2,000 indirect employment opportunities in future.

IRAN'S EXPORTS TO ASEAN UP 90%

Iran exported more than 855 million dollars worth of goods to the Association of Southeast Asian Nations (ASEAN) member states in the first three months of the current Iranian calendar year (began March 21, 2011), up 90 percent compared to the same period last year, an official at the Trade Promotion Organization of Iran said.

The TPO Director General of Asia & Oceania Foreign Trade Office, Amir Talebi, added that in the first three months of last year, Iran's exports to the ASEAN member countries stood at 449 million dollars, IRNA news agency reported.

Indonesia, Malaysia, Philippine, Singapore, Thailand, Brunei, Burma (Myanmar), Cambodia, Laos, and Vietnam constitute the ASEAN members.

Talebi also stated that Iran exported 1.060 million tons of goods to the region in the first three months of the current year from 590,000 tons in the same period last year.

Petrochemical products, fruits, carpets, pistachios, foods,

and medicinal plants were the main exported Iranian goods to the ASEAN countries, the official said.

ASEAN spans over an area of 4.46 million square kilometers with a population of approximately 580 million people, 8.7% of the world population.

IRAN'S TECHNICAL-ENGINEERING EXPORTS HIT \$604M

Iran exported 604 million dollars worth of technical and engineering services in the first four months of the current Iranian calendar year (ended July 22).

Belarus, Tajikistan, Azerbaijan and Pakistan were the major destinations for Iranian technical and engineering service, IRNA reported.

Iran mainly carries out road building, construction, and power projects overseas.

According to Iran's Deputy Industries and Mines Minister, Ahmad Khadem-ol Mellah, 66 Iranian industry and mines related companies are carrying out projects in 27 countries. According to the official more than 125 industrial and mining projects, worth some \$3.5 billion, are in the hands of Iranian contractors around the world.

He pointed out that most of the operating firms belong to the private sector.

Iran aims at exporting \$4.5 billion worth of technical and engineering services in the current calendar year.

Iran's technical and engineering services exports reached 3.301 billion dollars in the previous year, showing 7 percent increase compared to the preceding year's figure of 3.083 billion dollars.

SCIENTISTS FIND NEW METHOD TO PRODUCE STRONGER NANOFIBERS

Iranian researchers at Gilan University achieved the technical know-how for manufacturing multilayered materials



A centrally networked recipe database not only saves all of the machine and process parameters, but also the name of the machine operator, the weight of the woven fabric, the production time and all error logs. When it becomes necessary to upload a software update to the PLC, this can be done effortlessly via the Internet using the Telelink interface. Junkers & Müllers have gained the following experiences with the new high-performance washing plant:

“Installation of the plant was completed in June 2009, allowing the commissioning process to start on-time before the end of June 2009. The aim of the project was to drastically reduce consumption data and therefore also costs by introducing an intelligent control technology with integrated consumption data indication.

Since the new system was taken into operation,

there have been no defects in terms of the required washing results, as a result of which it has been possible to completely eliminate the original defect quota of the old open width washing plant, which was primarily caused by the poor washing activity of the outdated washing compartments, which no longer represented the state of the art. In this case, the stated goal of reducing the defect quota by half was far exceeded.

During the commissioning process, numerous trial production runs were set up in conjunction with the chemical industry. Modifications were made to the recipes, which were optimised on the basis of the consumption documentation and the washing results, and as a result the targeted reduction of consumption data (fresh water, chemicals, energy) was also far exceeded. Thanks to the intelligent database structure which is integrated in the plant, it has now become possible to produce a wide range of very different products with varying fabric weights - always using exactly the same quantities of water per kilo of fabric weight, with type-compliant and excellent washing results.

At the same time, a workplace environment was created in the implementation phase which is optimally designed in terms of safety and ergonomic aspects.”

For more information please contact:

Guido Benz
Head of Sales & Marketing
Benninger AG
9240 Uzwil, Switzerland
T +41 71 955 86 02
F +41 71 955 87 47
guido.benz@benningergroup.com
www.benningergroup.com

surrounding area/environment). In this case, the following processes are to be implemented in the washing machine:

- Washing after cold bleaching
- Washing of watersoluble size
- Washing of non-water soluble size
- Reductive cleaning after disperse printing
- Washing of burnt-out articles

The plant must satisfy the currently valid European Machinery Directive and must therefore meet the highest standards applicable anywhere in the world.

In addition, there are a number of additional standards and safety regulations which need to be met: the Machinery Directive (9. GÜSGV), the Equipment and Product Safety Act (GPSG), the Industrial Health and Safety Ordinance (BetrSichV), as well as Directive 2006/42/EC of the European Parliament and the European Council dated 17.05.2006 on machinery, which is also an amendment of Directive 95/16/EC.

Key issues like "crease-free fabric guidance", "low-tension fabric transport", "no lateral drifting of the fabric" and "reproducible processes" all correspond to the current state of the art, and corresponding solutions are implemented in every Benninger plant.

The large number of different chemicals at the front end of the plant enables the customer to apply the optimum quantity of auxiliary materials at exactly the right point according to his portfolio. The special fabric guidance in the first compartment and the required low distance between the rollers counteract the potential risk of creasing. At the same time, the first two compartments with a fabric capacity significantly in excess of 60 m offer sufficient treatment time to allow even more challenging application processes to be successfully implemented.

The next step focuses on the process of washing. In order to achieve consistent washing results at varying production speeds (10–60 m/min),

TurboFlush technology is employed at this stage. The exceptional washing performance - irrespective of the speed is one of the many key criteria of this washing machine developed by Küsters.

Thanks to the short distances between the guide rollers, the exceptional mechanical washing performance has no negative effects whatsoever on the fabric tension; efficient recirculation with more than 500 l of liquor per minute completes the performance characteristics of the exceptional high-performance washing machine.

In order to remove all chemicals from the fabric and render it pH-neutral and free of residues (as required in the specification), the two final compartments house the neutralisation stage with automatic pH-control and a final rinsing bath. As the products of Junkers & Müllers are predominantly synthetic products, vacuum suction systems are used both in the front section (for liquor separation) and before the final squeezer (for high-performance drainage). Inductive dosing lines ensure that the auxiliary chemicals used are metered in milliliter accuracy. This pinpoint accuracy not only protects the environment, but is also beneficial in terms of the variable costs. In order to improve the efficiency with which water is used, the roller vats can be run also with a reduced liquor volume - in this case the required washing liquor is reduced by almost a half. With the aid of a sufficiently high number of rotary sieve filters, insoluble contamination and lint is directly removed from the system. An intelligent particle guidance system also ensures that solid particles collect at a point from where they can be removed quickly and efficiently via spray pipes into the liquor discharge. As a result, extended periods of downtime while the machine is being cleaned can be avoided.

As well as the number of meters of fabric which have passed through, the "brain" of these components (with digital closed-loop drive control and process control) also measures the consumption of electric energy, water, steam, chemicals and compressed air.



Junkers & Müllers: Environmentally Friendly Washing - A Field Report

Guido Benz - Benninger AG, Uzwil, Switzerland

At the start of 2009, the technical textiles specialist from the Lower Rhine region invested in a new high-performance washing range from Benninger AG. With the aid of integrated consumption data indication and intelligent control technology, waste water and energy efficiency can be greatly optimised.

The concepts of the 'water footprint' and the 'carbon footprint' have long since arrived in textile manufacturing plants. While the subject of waste water has long been established as the Achilles' heel of wet finishing, today it is becoming more and more important to consider this subject within the wider context of the full production process. The focus here is on process optimisation, which is mapped via intelligent data management. The result: transparent sub-steps which can be individually adapted to varying situations and conditions. Solving such complex challenges is only possible with close cooperation between the customer and the supplier. In this article, we take a look at how such a

project needs to be implemented; both in terms of the sequence of steps required and in terms of what needs to be covered in each step.

At the start of any good project is a well-conceived requirements specification. This is the same here: everything needs to be considered, including all of the production-relevant parameters ranging from the processes, products and characteristic features, via production safety and automation, preparation/dosing, cleaning and efficiency to closed-loop control parameters and ease of servicing/repairs. Of course, this already raises the bar quite considerably.

From the point of view of the machine constructor, the advantage is that all tasks are clearly outlined, and the dialogue with the relevant contact persons takes place at the same level. On the other hand, the customer can relax in the knowledge that every single point will be meticulously worked through and optimised in the best possible way for the given production parameters (portfolio, space availability,