monforts

world of textiles india

References Worldwide | **special issue** | www.monforts.com

thermex

monforts

THINKING AHEAD
FOR SUSTAINABLE SOLUTIONS

Econtrol®T-CA

Sustainable technology for the dyeing of PES/cellulose and elastane-based blends. Monforts has developed the Econtrol® process together with DyStar and hence achieved a further worldwide success.
Econtrol® T-CA is a one-bath dyeing process for polyester/cellulose blends - also with elastane - with the matching Thermex range technology.
The dyeing method is based on Monforts Econtrol® Technology hence significant economic benefits and a substantial contribution to sustainable production due to saving of water, energy and chemicals can be archieved. A wide range of colours can be covered.
Outstanding reproducibility from the laboratory onto the production line with good colour fastness.
Simple process route: Padding, Econtrol dyeing, thermosoling, washing. This route represents a significant cost saving compared with the conventional pad-dry - thermosol - pad-steam process.
Ask our technologists. We will be happy to advise you.

Econtrol® is a registered mark of DyStar Colours Distribution GmbH, Germany

A. Monforts Textilmaschinen GmbH & Co. KG
Germany | A Member of CHTC Fong's Group

www.monforts.com

A.T.E. Enterprises Private Limited
A-19, C.T.S. No. 689 Veera Desai Marg.
Mumbai - 400 053
Tel.: 0091-22-66 76 61 00
Fax: 0091-22-2673 2446
e-Mail: monforts@ateindia.com

BLUEcoMPETENCE Alliance Member
Partner of the Engineering Industry Sustainability Initiative

VDMA

GERMAN Technology

A strong partnership

From its foundation more than 75 years ago ATE Enterprises - headed by the Bhagwati Dynasty - has played a key role in the phenomenal growth of the Indian textile sector; proving to be a strong representative and a reliable partner of Monforts.

The strength of the Indian market continues to be technology driven. Monforts plans for the future will see a further strengthening of its teleservice support across the continent for the benefit of its customers.

The new Eco-denim finishing concept with reduced energy consumption is rapidly gaining acceptance in the country. Future market growth is also forecast in the coating sector featuring Monforts range of advanced coating machines.

These exciting developments are set to ensure a further strengthening of the even closer partnership between Monforts and ATE.

Roland Hampel,
Managing Director

BLUeCOMPETENCE
Alliance Member
Partner of the Engineering Industry Sustainability Initiative

Issued by
A. Monforts Textilmaschinen GmbH & Co. KG
Blumenberger Strasse 143 - 145,
D-41061 Mönchengladbach,
Germany
www.monforts.de
info@monforts.de
Editors: Klaus A Heinrichs, John Hooper
Photography: Joem Promotions
Layout & Design: Alan Humphrey

Contents

A win-win partnership

Mr Gurudas V Aras, Director, Textile Engineering Group, A.T.E.

Through its representation of major international machinery manufacturers and the formation of domestic manufacturing operations, the A.T.E. Group has made a crucial contribution to the power of India's textile industry.

With an annual group turnover of over US$100 million and 800+ employees in India, A.T.E. has grown to enjoy a formidable presence in the textile engineering sector, with successful diversifications into print and packaging equipment, flow technology, machine-to-machine solutions and most recently, clean tech.

"A.T.E. was started in 1939 as a company with both social and business goals," said third-generation Head of the Group, Anuj Bhagwati.

"Over the years, we have partnered with the Indian textile industry to reach a leading position."

"We have grown steadily decade by decade. Each of the sectors we serve is critical to sustainable production and also helps users to improve their bottom line by saving costs or improving productivity, including the very latest textile technology."

One of A.T.E.'s most significant partnerships is with Monforts, which has become a household name in the Indian textile industry.

"A.T.E. has played a crucial role in the success of Monforts in India over many years," said Mr Bhagwati.

"In view of our strong domain knowledge of the Indian market, textile processes and sustained relationship with Indian customers, A.T.E. has been very successful in introducing Monforts technology to Indian textile mills."

As the representative in India, ATE has enjoyed considerable success selling Monforts machines to customers with its service team, supported by Monforts, ensuring the machines met the customers' expectations.

It also invested in the training of sales and service staff on Monforts technology.

"Over the last few years, our processing sales and service team across the country has worked hard in transferring the knowledge and know-how of Monforts very effectively to Indian customers," explained Mr Bhagwati.

According to company director, G V Aras, Monforts is continuously updating and introducing new technology to meet the demands of the Indian market.

"It's recently introduced new denim concept with reduced energy consumption, for example, is rapidly gaining acceptance in India. And to meet future demand for coating applications Monforts has introduced a range of advanced coating machines."

"This is why we are successful in gaining the major market share for Monforts in India over competitors. A.T.E. has worked in a true sense as a real partner to Monforts, rather than only as an agent, in the Indian market."

"I am sure that this relationship has created a win-win situation for all concerned, including our customers."

"Given the expected growth in the Indian textile industry, we feel confident about our prospects," Mr Bhagwati concluded.

Mr. Anuj Bhagwati, Head, A.T.E. Groupa

A strong current performance and a bright future in India

The future in India for Monforts has never been better, with the textiles industry in an extremely positive mood on both the domestic and export fronts, and many producers intent on expansion.

According to Hans Gerhard Wroblowski, Area Sales Director for South East Asia, the past three or four years has seen a concentrated burst of sales of Monforts technology in the region.

"For example, typically, efficient teleservice from Monforts is helping our customers to minimize downtimes dramatically."

"The quality end of the textiles production industry has always invested in European technology, in order to secure their own output levels and meet the needs of their overseas and local buyers," he said, adding, "Now, market conditions overseas and at home are such that many textiles producers are expanding their production capacity."

"They are looking for reliability, the capacity to innovate, and above all for the quality they need to compete on the world markets."

He cites growing world demand, changing domestic markets and the increasing quality of Indian production, with many manufacturers in the world-class league and also increasingly adhering to the environmentally friendly production techniques demanded by overseas buyers.

"The textiles sector is the second largest provider of employment in India, after agriculture. The Indian textile industry has strength across the entire value chain. If the present situation prevails, India could achieve between 15% and 20% growth in exports over the next decade," he predicted.

"The potential for denim is especially encouraging."

"Worldwide, the denim market is growing strongly. Domestically, denim forms a relatively modest share of the apparel market, but the growth in the number of shopping malls and in the local and international brands is going to see this share increase."

"We are currently seeing a number of Indian denim producers expanding their production lines," he said.

India has always been a huge producer of home textiles, including bed linen, towelling, table linen, and furnishing fabrics, and a boom in the domestic affordable housing sector is helping growth, along with stronger demand overseas from the leading brand names.

Internationally, consumers are tending towards more frequent changes in home and office décor, and looking out for new and more innovative styles.

"Finer quality cotton and other yarns, better dyes and more creative patterns are all helping to drive this market," he predicted. "Many householders and interior design companies coordinate their colours and fabrics, and so sales to a single customer in the market can be substantial.

"Globally, technical textiles account for more than one third of all textile consumption."

Hans Gerhard Wroblowski,
Area Sales Director, South East Asia

The US, Japan, South East Asia, Middle East and European countries are all major export destinations for India."

According to Hans, technical textiles is another area of the Indian textiles business that is showing great promise, especially since the Ministry of Textiles launched its Technology Mission on Technical Textiles, which is helping to develop world class testing facilities at eight centres across India.

"Globally, technical textiles account for more than one third of all textile consumption."

"Currently, India accounts for only a small proportion, but producers are investing in this sector and projections are that it will grow substantially from now onwards," he concluded.

Nahar Fabrics steps up production capacity

India's Nahar Fabrics No 2 division increase production capacity by 30% with three new Monforts units.

A Montex stenter, a Thermex continuous dyeing range and a Monfortex shrinking unit have been installed in the Fabrics No 2 division of Nahar Industrial Enterprises as part of a strategy to increase production from 1.5 million metres per month to 2.2 million metres.

Nahar Industrial Enterprises (NIEL) was founded in 1983 and is a vertically integrated textile manufacturer with operations ranging from spinning through to weaving and processing. The company is located at Lalru, in the state of Punjab.

Across the entire group, products range from pullovers through to cardigans, shirts, coats, baby suites, shawls, blankets, and knitting wool.

Yarn of all types is used, including woollen, woollen blended, cotton, polyester cotton, other blended, compact yarn, mercerised gassed yarn, and organic cotton yarn.

Mr SS Basu, president of Nahar Fabrics, said that the division has two process units, the first having been established in 1999 and the second becoming operational in 2007.

"Fabrics No 1 unit is producing 2.5 million metres per month," he said, adding "No 2 unit is producing 1.5 million metres, but the capacity of our preparation range is for about 2.2 million metres."

"We have not been able to run at our full capacity before, as we did not have the dyeing capacity.

Mr SS Basu, president of Nahar Fabrics

"This new installation will utilise existing preparation capacity and enable Nahar to increase fabric output by a third."

Munish Kumar, Assistant Manager for Sales at the ATE Enterprises Chandigarh office


monforts

"Installing the Thermex dyeing range, the stenter and the shrinking unit will enable us to reach our full capacity of 2.2 million m within the next 12 months."

Across NIEL there are 550 looms and a modern dyeing house with a capacity of 6 tonnes of yarn per day.

The company's expertise is in 100% cotton and cotton blended fabrics and a variety of weaves, including twills, chinos, gabardines, canvas, tussers, cavalry twills, satins, and broken twills.

NIEL has a deliberate policy of an extremely diverse client base, with no one customer accounting for more than 5% of total revenues. About 60% of production is exported with the remaining 40% for domestic consumption.

The company is an approved fabric vendor for global brands such as Gap, Tommy Hilfiger, Calvin Klein, Ralph Lauren and Marks & Spencer. Domestic brands include Color Plus, Allen Solly, Numero Uno and Louis Phillips.

The Indian army is a major buyer of Nahar's fabrics and garments, as are the armed forces of several other countries. The company is a major supplier of sportswear, and has a growing output of Lycra and technical textiles.

"Apart from our wide range of products, we are always willing to customise products to a client's specific need," said Mr Basu. "Our extra dyeing capacity will open up this possibility for us to an even greater degree."

"We have major markets in Europe, Latin America, South Asia, the Middle East, the Far East and Africa, and we are very much aware that we can enjoy further potential in many of these markets."

Nahar Fabrics uses exclusively European technology, with equipment from Germany, Italy and Switzerland and uses dyes and chemicals from Europe. The company has Thermex, Montex and Monfortex units installed earlier in both of its Fabrics divisions.

"I have been here since 2006, and have been working continually with Monforts machines," continued Mr Basu. "We have always achieved outstanding results. We did not consider investing in any other make of machine for this expansion."

NIEL employs a total staff of about 6000, with the Fabrics No 2 plant employing some 600.

"The energy saving component of the Monforts units was an integral part of Nahar's discussions with us," said Munish Kumar, Assistant Manager for Sales at the ATE Enterprises Chandigarh office.

"Energy prices are rising all the time and, by recycling the heat energy of the Monforts machines, Nahar can achieve energy savings of up to 75% on this part of their production line."

India's first Eco-Line installed by Arvind

Faster production and major savings in energy are being achieved with the new Eco-Line that Arvind has installed at its Ahmedabad mill.

Left: Diwakar Tiwari, Head of Processing; centre: Rajat Passi, Head of Materials, denim and corporate; Aamir Akhtar, CEO of Denim Fabrics

India's largest producer of denim, Arvind Ltd, has installed an Eco-Line denim finishing range at its mill in Ahmedabad as a means of increasing production, reducing energy usage, and responding more quickly to customer requests for specified designs and finishes.

The Eco-Line is the first to be installed at a mill in India, with Monforts Area Sales Director for South East Asia, Hans Gerhard Wroblowski, predicting that Arvind's early investment in this new technology gives the company at least a year's lead ahead of the competition from other Indian mills.

The Eco-Line, which can handle fabric widths of 1800 mm and operate at high speeds of up to 80 m/min, is operating alongside four Montex foam finishing units, which are also able to handle the same width of material.

Arvind is rated in the top three denim producers in the world, and sees great export potential at a time when India's denim sector is approaching an over-supply situation.

Aamir Akhtar, Chief Executive Officer of Arvind Lifestyle Fabrics' Denim division, considers that in India the denim industry is growing at a compound annual growth rate of 13% to 15%.

"We consider this to be a highly significant step into India and indeed into Asia for the Eco-Line. We expect there to be substantial demand when the results on the denim sector become apparent."

V Babu, General Manager Sales, ATE Enterprises Ahmedabad office

Whilst India is one of the major global suppliers of denim fabrics, the country's denim export market share still falls far behind its domestic market, which is 65% of the total production.

Arvind's own export-domestic output is around 50:50, but much of the domestic production is worked up into garments and exported, so distorting the figure: taking that factor into account, Mr Akhtar believes that the export proportion is closer to 60%.

Arvind had been founded in 1931 as a maker of traditional Indian clothing, but in 1984 modernised and brought denim into the domestic market, thus starting the jeans revolution in India.

Today it retails its own brands like Flying Machine, Newport and Excalibur, and licensed international brands including Arrow, Lee, Wrangler and Tommy Hilfiger, through its nationwide retail network.

Ahmedabad has since seen the arrival of several other denim producers, to the extent that the city, which is in the state of Gujarat, in Western India, is regarded as India's capital of denim.

The company has also diversified into other sectors, namely Bottomweight, Shirting and Knit, each of which makes extensive use of Monforts technology.

Mr Akhtar said that Arvind stays ahead of the competition through a policy of design and innovation.

"We have our own major R&D facility, and we eat, think, sleep, and breathe design."

"Encouragement to new ideas can be found at every step of the entire value chain of our denim making processes. It is in our DNA," he said.

"We have fibre and yarn innovators, process innovators, finish innovators, equipment innovators, fabric and garment designers. Quality goes alongside design, and we have a dedicated customer counselling team that continuously resolves any quality issues."

"For all this, we need the best in technology. Having been a Monforts user from the earliest days, we had no hesitation in investing in the new Eco-Line.

"Not only does this make us even more responsive to customer needs and demands, and more creative in our design and production, there is also the very great energy saving advantage and tight control over emissions."

The Eco-Line was manufactured in Germany/Austria and installed by local representative, ATE Enterprises Private Ltd.

C V Babu, ATE's General Manager for sales at the company's Ahmedabad office, said that the Eco-Line system reduces energy losses and energy use, increases thermal transfer and keeps the drying energy on the textile material longer, so that it can be used very efficiently.

"As a result, energy savings of up to 50% can be achieved. Exhaust air energy can also be reduced to a minimum, which has a positive effect on the emission load into the atmosphere," he said.

Arvind has its own waste water plant at the mill estate, and is proud

of the fact that the waste water that has passed through the plant is so clean that fish can swim in it, a tank with live fish being maintained as a demonstration for visitors.

According to Hans Wroblowski, competing companies in India are watching the progress of Arvind's Eco-Line.

"This development has the potential to radically change the Indian denim industry."

He continued, "Although the machine has been installed for only six months, our customer is reporting significant advances in production."

Arvind's current annual denim capacity is 110 million metres, with prominent products including ring denim, indigo voiles, organic denim, bi-stretch denim and fair trade certified denim. This is apart from regular light, medium and heavyweight denims.

They come in various shades of indigo, sulphur, yarn-dyed, in 100 percent cotton and various blends.

"Denim is a great lifestyle product," said Mr Akhtar, who himself habitually wears denim to the office. "It is also tremendously versatile. We are very, very upbeat about our global future."

Monforts - A trusted technology partner of Vardhman Group

The Vardhman Group is one of India's top producers of fabrics and is one of the few vertically integrated fabric suppliers in the country producing fabrics for both tops and bottoms in the apparel segment serving large retailers in the USA, Europe and Asia.
The group is recognised as a consistent quality supplier of yarn and fabric across the globe and achieved a leadership position in various segments of textile value chain in the country by consistently working on technology, human capital and processes achieving world class standard under the visionary leadership of Mr. S P Oswal, Chairman and Managing Director of Vardhman Group.

Sukhwant Singh Bains, centre, and Hans Gerhard Wroblowski, pictured with key members of the new production line team.

Vardhman Fabrics has installed a second production line of three Monforts stretching, dyeing and finishing machines as part of a massive expansion plan across several divisions in the Vardhman Group

Vardhman Fabrics Budhni is a fully vertically integrated unit of Vardhman Group near Bhopal, Madya Pradesh in Central India.

With a weaving capability of more than 180 million metres per year and a processing capacity of over 114 million metres across a wide specialty fabric range, the company intends to expand to meet the ever-growing demand for quality fabrics worldwide.

A world class facility in terms of technology and human resources, created with a vision to produce world class fabrics following the

group's core values and achieving operational excellence in manufacturing with an investment of Rs.1,600 crore (US$23.5 million) spread over 780 acres of land.

The facility has a fully automatic central warehouse and other most modern technologies like R.O. & MEE signifying its commitment towards environmental sustainability.

As a part of technology policy and to achieve operational excellence, Vardhman Fabrics Budhni has been continuously investing in world class technology suppliers including Monforts; installing three Thermex Pad Dryers, three Montex 6500 stenters and two sanforisers in 2008.

Driven by long term relationship philosophy with a trusted supplier, it has installed a second complete new production line comprising a Thermex Pad Dry, a Monfortex 8000 stenter and a sanforiser as a part of the Vardhman Group's strat-


HEADER
T-099

egy for a massive expansion in production output.

The new production line is handling woven and sensitive material, mainly cotton, cotton/polyester, cotton/spandex and 100% polyester.

ATE Enterprises Private Ltd, the Monforts representative in India handled the installation.

The Vardhman Group is again in the midst of expansion and adding fabric processing capacity in both its locations at Himachal Pradesh and Madhya Pradesh.

"We produce world-class textiles and wish to maintain our reputation as a preferred fabrics supplier," said Sukhwant Singh Bains, Vice President for Production at Vardhman Textiles.

He continued, "Our existing Monforts production line helps us to achieve this, and we have been very satisfied. We need technology that can deliver not just state-of-the-art performance but which can perform consistently day in and day out, without the slightest hiccup."

"We are a technology-forward company and a pioneer in bringing new technology into the industry,"

In terms of fabric production, Vardhman exports about 35% of its output and 65% goes to the domestic market. Much of the domestic output however goes to other divisions in the group and to other producers for making into garments for export. The total export figure is therefore closer to 70% serving all major retailers across the globe.


B-422

Covering all bases for new product development

The Advanced Technology Centre in Germany draws on all of the know-how of the company in respect of fabric dyeing and finishing, including denim, coating, elastane treatments, over-dyeing, creating special surface effects and much more; as it celebrates the opening of its new complete coating line.

The latest Monforts coating line has been installed at the company's Advanced Technology Centre (ATC) in Mönchengladbach, Germany, responding to demand from the coating industry and following the acquisition of know-how from coating specialist Timatec.

It accommodates the entire range of Monforts coating options - including magnetic roller coating, knife over air, knife over roller, and printing head coating options such as, for example, magnetic roller coating for lacquering or minimal application.

Other processes include screen printing with epoxy resins, phenolic resins, organic silicones and other reactive resins and, like the ATC's technical textiles line, the range is fully enclosed and equipped for handling flammable solvents.

Options with three lines

With the creation of the ATC - which has involved an investment of over €3 million over the last four years - a new innovation has been created for a global hub providing unlimited options for new product development, with three complete installations making it possible to carry out full production-scale trials.

The ATC also houses a Thermex range for the continuous dyeing of woven fabrics, including the Econtrol® process, consisting of a padder, infrared pre-dryer, hotflue chamber, cooling zone and winder.

A steam generator for the Econtrol® dyeing process is installed, along with utilities such as the expansive colour kitchen and extensive fabric laboratory testing equipment.

"The ATC allows customers to test their own textiles and technical fabrics on Monforts dyeing, finishing and coating machines under fully confidential, real production conditions," said Vice-President of Marketing, Klaus Heinrichs.

"Using the results from these trials, we are also able to make recommendations for improving many fabric finishes. As a global company, Mönchengladbach remains the nerve-centre for what it's possible to achieve with advanced finishing techniques."

"We're talking about setting up and controlling all aspects of the line for maximum efficiency and repeatability."

Knitwear

The Montex 6500 stenter with vertical chain return is designed for the state-of-the art finishing of conventional knitwear.

Knitted fabrics, explains ATC Manager, Fred Vohsdahl, must never be stretched and need to be treated in a relaxed state.

As a consequence, the 2.2 metre wide, four-chamber stenter incorporates a TwinAir nozzle system that ensures the relaxed fabric is kept at a suitable height in between the upper and lower nozzle system, despite 'bowing'.

Exact selvedge control with the minimum pinning in is also extremely important with knitted fabrics.

The line is equipped with the company's Eco Applicator system which eliminates the need for a conventional wet-on-wet padder, instead employing trough and roller techniques to precisely apply the required amount of liquid/coating to the fabric.

This is an extremely flexible unit, allowing finishing agents to be applied on either side of the fabric, or both, and with single or separate finishes.

An obvious example would be the application of a soil or water repellent finish on the face fabric and a softener or water absorption finish to the other side of the fabric.

"Compared with a padder system, the initial moisture content of 60% is reduced to 40% using the Eco Applicator, ensuring a reduction in drying times and reduced energy costs," explained Vohsdahl.

"These are just a couple of the special elements of the line which has been engineered for complete, fingertip control of all working parameters," he added.

"People often talk of the 'recipe' for setting advanced finishing lines, but for me this word doesn't accurately describe what's being achieved and is more applicable to the dyehouse."

"We're talking about setting up and controlling all aspects of the line for maximum efficiency and repeatability."

Technical textiles

Jürgen Hanel joined Monforts as the manager of the company's Technical Textiles business when the ATC was just at the planning stage. He had a number of specific ideas for what the second line dedicated to technical textiles within the ATC should be able to offer.

Firstly, it had to be capable of processing organic solvents, which can often be volatile.

"There was a wariness about organic solvents, but in the end, they're not as difficult to coat on textile substrates as they are on plastic films where they're already widely used, and they offer a lot of possibilities for companies to explore and develop entirely new products - especially in fields such as medical and filtration," he said.

Nevertheless, they do require a highly-controlled and contained environment, and as a consequence, the ATC technical textiles line which incorporates a Montex four-chamber, horizontal chain stenter, is fitted with an explosion-proof coating application chamber.

Every single component within the chamber has to meet the standards of the European Union's ATEX directives for working in an explosive atmosphere.

A range of sensors linked to alarms operate at various levels within the chamber to ensure the specified temperature range is never exceeded and the ventilation adapts accordingly.

Special features on the finishing line relate to further advanced functions - the ability to treat materials not only at temperatures of up to 310°C, but also to be able to treat the top and bottom faces of certain materials at different temperatures within a single pass through the machine.

Separate temperatures

As a consequence, the first two chambers of the stenter are fitted with special, heavy duty TwinAir ventilation motors and separate burners for individual top/bottom temperature.

A temperature differential of up to 60°C can be achieved between the upper and lower nozzles within the chamber.

"There are a lot of applications where employing two separate temperature treatments is beneficial," says Mr Hanel. "For example, floor-coverings - where the textile face fabric is treated at one temperature and the rubber backing at another - as well as PVC flooring employing chemical foams or for materials like black-out roller blinds with heavy backings."

"At the same time, in the pharmaceutical industry there are hundreds of different applications for organic solvents such as antiseptic treatments which have to be treated very carefully and applied at very specific temperatures in order not to destroy their efficacy."

Other materials, such as PTFE-coated filter materials are also applied and then cured at separate temperatures.

Left to right: Jürgen Hanel and Fred Vohsdahl

Stretching

Another key feature is the special stretching device which is capable of pulling ten tons in length and ten tons in width - a huge amount per square metre of fabric and necessary in the production of materials such as woven or 3D knits for high temperature filter media.

"This line has been engineered to provide the ultimate in precision finishing, in order to achieve the standards required by the medical companies, and also the quality standards in place for aerospace and automotive grade materials," Mr Hanel concluded. "Denim manufacturers could find much inspiration from developments in parallel fields such as these, in addition to benefiting from our long experience of denim finishing."

Possibilities

The Monforts ATC offers unlimited potential for textile manufacturers to differentiate their products and benefit from Monforts' vast experience in fields ranging from special coating effects, elastane treatments, the over-dyeing of fabrics and the creation of entirely new special surface effects.

"We are always happy to discuss existing possibilities and also the development of new concepts," says Jürgen Hanel.

Trident expands into bed linen with five new Monforts units

The world's largest producer of terry towelling has opened a new division to manufacture bed linen and installed a total of five new Monforts machines in its purpose-built, greenfield facility.

Trident Group, one of India's biggest producers of home textiles and a world leading maker of terry towelling, has opened a new division to produce bed linen and ordered five new Monforts machines for the facility in Budhni, near Bhopal in Madya Pradesh.

The new bed linen plant was built on a greenfield site adjacent to the Trident terry towelling factory, which also uses Monforts technology; the most recent installation being a Montex stenter in 2015.

For the production of bed linen, Trident is relying on two new Montex 6500 stenters, two Monfortex 8000 Sanforisers, and a Thermex with a CDR Econtrol®.

Each of the machines has been designed to handle an extra-wide width of 3200 mm.

The new machines were manufactured in Germany/Austria and installed by ATE Enterprises Pte Ltd.

According to Chief Executive Officer of the bed linen division, Mr Rajesh Singh , the installation was completed in a remarkably short time.

"Usually, if you are starting up a new factory, there is a considerable amount of time in planning and then installing all the equipment."

"This facility, which is purely for bed linen, came on-line in the shortest time we have ever seen. With five Monforts units being installed, it was a very impressive achievement."

He continued, "By the end of February 2016 we were in full production. Everything went incredibly quickly."

Mr J P Shukia, head of bed linen production, at the display area

Trident Group is a US$ 1 billion Indian conglomerate headquartered in Ludhiana, Punjab. Its flagship company, Trident Ltd, is one of India's leading textile producers and exporters.

Incorporated in 1990 with a modest beginning of 17,280 spindles, the company now exports to more than 75 countries and is especially renowned for its terry towelling, being one of the world's biggest producers.

The new venture to produce bed linen was launched late in 2014, and is intended to consolidate Trident as one of the largest integrated home textile manufacturers in the world.

The company had first moved into Budhni in 2009, when it installed 350 looms for terry tow-

elling. The number of looms was increased in several stages up to 2014, and the total capacity now stands at 360 million pieces of towelling per year.

Another expansion was an open-end yarn-spinning factory that opened in July 2014 with a capacity of 10,000 TPA of cotton open-end yarn.

According to Rajesh Singh the expansion into bed linen represents


135
162


SANFORIZER (2)
101
156

an investment of US$250 million, and has seen the installation of 500 air jet looms.

"Our capacity is around 120,000 metres of bed sheeting fabric, equivalent to 17,500 sheet sets, per day," he added.

"The bed sheet unit is backed by a spinning unit of 190,000 spindles to make the sheeting plant a vertically integrated self-reliant facility manufacturing top-quality bed sheeting products."

Trident now has the capacity for over 45 million metres of bed sheeting.

According to Area Sales Director for South East Asia, Hans Gerhard Wroblowski, the extra width handled by the machines will provide the capacity for extra-large sizes and consequently open greater market potential.

"The weight of the fabric is between 125 and 250 g/m², and with this kind of consistency the specifications fit comfortably into our product range."

"No fundamental changes were needed. We supplied an engineer from Germany to supervise the installation alongside ATE's highly experienced personnel, and consequently everything was completed very quickly."

Mr J P Shukia, head of bed linen production, said that Trident did not contemplate using any technology other than the Monforts units.

"We are very familiar with Monforts through the installations in our terry towelling factory," he says.

"We are intent on producing the highest quality towelling and bed linen products, and we know that Monforts can help us achieve this."

"Along with the Monforts machines we have installed the highest quality air jet looms, continuous dyeing and processing equipment, and fully automatic cutting, stitching and packing machines."

"Everything is geared to extremely high-volume production, and to the highest quality. We are very proud of this plant, which we believe to be the most advanced of its kind in India."

Trident is following the export trail established by its terry towelling division.

The company has a major share in the US towels market and is aiming to leverage this to similarly increase its bed linen business. Trident also sees a lot of potential for growth in the European market, and is also focusing on Australia, New Zealand, Japan, the Middle East and South Africa.

"The extra width of 3200 mm gives added flexibility in product design, while the fabric weight between 125 and 250g/m² covers a broad range of bed linen requirements, thereby opening enormous product potential."

Hans Gerhard Wroblowsk, Area Sales Director for South East Asia

Chief executive officer of the bed linen division Mr S Singh

Himatsingka Linens to double bed linen output with three new Monforts units

Home textiles producer Himatsingka Linens - a division of Himatsingka Seide - is installing three new Monforts machines as part of an expansion that will double bed linen output and see a venture into terry towelling.

Three new machines are being added by India's Himatsingka Seide Ltd to the existing line-up of four Monforts units as the company embarks upon an expansion that will double its output of bed linen, entail a backward integration into spinning, and see its first foray into terry towelling.

The new units include a 10 chamber Montex 6500 stenter, a Monfortex 8000, and a Thermex CDR with Econtrol®; all three units feature a fabric working width of 3200 mm.

All three new machines are German/Austria-built and are being installed by Monforts' representative for India, ATE Enterprises Private Ltd.

Himatsingka is amongst the largest producers of bed linen products in the world.

A vertically integrated home textile company that is engaged in spinning, weaving and finishing of textiles, Himatsingka manufactures, retails and distributes bedding, bath, drapery, upholstery, and lifestyle accessory products.

Its portfolio of brands includes Calvin Klein Home, Barbara Barry, Bellora, Kelly Wearstler, Beekman 1802, Pimacott, Atmosphere and Esprit.

The company operates manufacturing facilities in India, and retail and distribution businesses across North America, Europe and Asia.

Executive Director Vasudevan Veeraraghvan.

Its bed linen unit is located at Hassan, in Karnataka, and its drapery and upholstery unit is at Bengaluru, also in Karnataka.

Executive director Vasudevan Veeraraghvan annouced that the group is doubling its existing sheeting capacity from 23 million metres per annum to 46 million metres.

The company will be installing for the first time 211,000 spindles as part of its backward integration into

spinning, and the entry into the terry towels sector will see it setting up a capacity for 25,000 tons per annum.

"Installation for the new Monforts machines will be completed by the beginning of 2017, and we plan to have reached full production capacity within a year, or at most two years," said Mr Vasudevan.

"We are a long-time Monforts user, and our company culture includes Monforts, so we simply did not consider investing in any other type of machine."

"Our company is solely in the export sector, and we produce high quality branded products. That means we require the best technology."

"Certainly, competition is always very intense, and although our products are price sensitive they are very much in the fine, high quality segment of the markets."

"We expect competition, of course, but we do not fear it because we have total confidence in our production quality and in our very strong distribution."

"The group has always been forward-looking in terms of expanding its product portfolio, acquiring plants and setting up facilities."

"The focus on design, technology and scale has provided highly profitable growth, because although competition is always intense, this has enabled us to maintain our strong market presence," he added.

At the bed linen mill the new units will join two eight chamber Montex 6500 units - one of the units featuring a Montex Thermex condensation unit with two curing chambers being positioned on top of the stenter. There is also a Monfortex 7000 model Sanforiser and a Montex Thermex CDR Econtrol® dyeing range, both with 3200 mm fabric working width.

Himatsingka's first Monforts machine, a Montex 5000, which was installed in 2000, is working in the spun silk division.

"Himatsingka maintains its Monforts units with absolute integrity, using only Monforts components and ensuring that every single replacement or maintenance part has a Monforts sticker," said Selwyn Devaraj, ATE's Senior Manager for Sales at the company's Coimbatore office.

"The Montex 5000, installed sixteen years ago has run almost nonstop since then and still looks like a new machine."

Himatsingka, with a retail network across 22 countries, has been growing at a compound annual growth rate of 15-18% over the last five years, in a tough global economic environment and in a sector that is growing at a CAGR of 7% to 8%.

The company was founded in 1985 and the bed linen manufacturing facility was set up at the Hassan Special Economic Zone, about 200 km from Bangalore, in 2007.

The division was converted from an SEZ into a Domestic Tariff Area in late 2015. With this came approval by the Karnataka government for land on which to build a new spinning plant with an installed capacity of 211,584 spindles, and the sheeting plant that will enhance the group's sheeting capacity from 23 mm pa to 46 mm pa.

The terry towelling project will be the third phase of expansion.

Mr Vasudevan confirmed that Himatsingka is planning to expand its share of the North American market, and is also looking towards growth in Mexico and Canada with its enlarged capacity.

Expansion of sheeting capacity will enable the company to make printed products, which will enhance its fashion bedding shares in the market, and also help Himatsingka to enter into the basic bedding segments where it is currently not present.

The vertically integrated bed linen manufacturing facility is equipped with warping, sizing, weaving, processing, cut and sew and captive co-generation facilities.

At present, before the expansion, the facility has 320 weaving machines and a cut-and-sew capacity for 3.8 million bed sets per annum.

The drapery and upholstery manufacturing operation is equipped with yarn preparation, yarn dyeing, weaving and finishing capabilities. The facility has an annual capacity of 2.2 million metres with 110 weaving machines.

The spun silk division predominantly caters to the niche requirements of the drapery and upholstery manufacturing division and also selectively caters to niche clientele who require high quality spun silk and blended yarns.

Mr Vasudevan said that Himatsingka Seide employs in total a workforce of 5000, of which about 70% are women.

"We have a strong corporate social responsibilities programme, and believe in employing women from the villages to help them improve their standing in life and provide extra income for their families," he said.

"The extra width of 3200 mm gives added flexibility in product design, while the fabric weight between 125 and 250 g/m² covers a broad range of bed linen requirements, thereby opening enormous product potential."

Selwyn Devaral, Senior Manager Sales, ATE Enterprises Coimbatore office

Cost savings for continuous dyeing with Monforts Econtrol® T-CA and Eco-Line finishing

by Hans Gerhard Wroblowski, Monforts Textilmaschinen GmbH, Germany

Monforts Textilmaschinen GmbH has been active in the textile machinery sector since 1884 and has continuously developed - together with well-known industrial partners including Dystar, Acroma, Huntsman and Pleva - new technologies, particularly for continuous dyeing and finishing of woven and knit fabrics

Figure 1- dyeing line

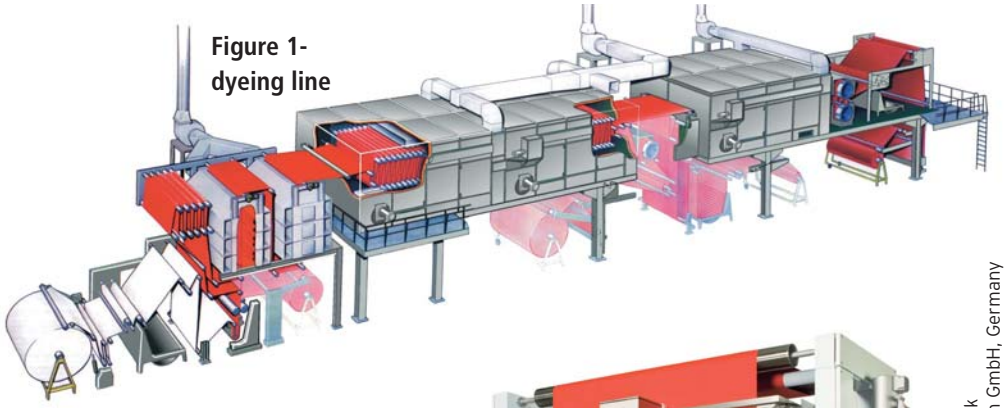


Figure 1- dyeing line

In the century of globalisation, it is more important than ever before, to optimise work processes in the textile industry. Today, attention must be paid to quality and production costs without neglecting environmental aspects. The expected high standard of quality required by the textile market has reached a completely new dimension. This applies to export and domestic markets alike.

Figure 2 - Eco-Line - Eco Finishing

The Eco-Line concept for finishing and dyeing of woven and especially knit goods using Eco Applicator, within the wet in wet technology, is a modern technique which meets these requirements.

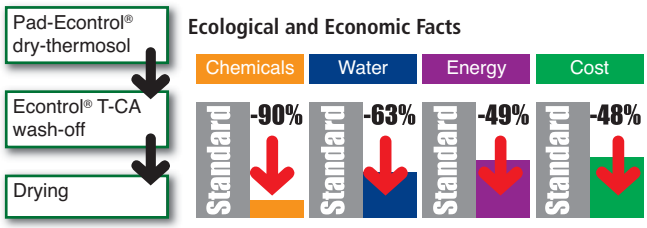
Helping the textile finishing industry to achieve maximum results with the minimum use of resources is absolutely fundamental to the Monforts Eco-Line Concept.

This technique offers sustainable cost savings over a wide range of the production work. It also further improves the quality of the fabric at the same time.

To achieve these goals, 'state of the art' techniques of production and technologies need to be exploited to secure market shares in today's world, plus being able to withstand the pressure of price cutting within international competition.

Monforts R&D offers solutions for new products, new and optimised technologies, opening and creating new perspectives in modern fashion as well as highlighting the needs and demands for sustainable production within the industry.

Econtrol® is a registered mark of DyStar Colours Distribution GmbH, Germany



Graphic results of T-CA and Econtrol®

Dyeing

The Eco-Line Concept together with the further developed and refined process Econtrol® and T-CA Dyeing techniques enables varied colour solutions from light to real dark coloration for knit and woven fabrics.

Eco Applicator for various finishing and dyeing applications.

These techniques and processes offer unique effects - improving colour depth and fastness and assures reproduction of shades (tone in tone)

Typical features of the textile industry's environment are greater challenges but also a lot of opportunities. Machinery manufacturers, have to comply with customers' increasing ecological awareness and have to meet the objectives related to sustainability and environmental protection.

The Eco-Line technology offers a real potential for reducing processing time and costs, and the initial investment outlay of this innovative system can be recouped very quickly.

Figure 2 - Eco line - Eco Finishing

Premier Fine Linens makes first-time investment

Premier Fine Linens, which specialises in ultra-fine cotton textiles, is investing in its first Monforts installation to better control the quality of its output.

Premier Fine Linens (a division of India's Premier Group) under the Chairmanship of Mr R Jagadish Chandran, specialising in 100% fine cotton bed and table linen, is investing in a new Monfortex Sanforiser 8000 and a Montex Thermex Econtrol®; to be installed at its mill in Coimbatore, Tamil Nadu.

Although other divisions of Premier Group are long-time users of Monforts technology, this is the first Monforts installation for the Fine Linen division.

The machines can handle widths of 3200 mm and will typically be handling weights of between 125 and 250 g/m², although heavier fabrics of up to 450 g/m² can also be handled.

Local representative in India, ATE Enterprises Private Ltd, will install the new units.

The new installation will greatly enhance quality control of the production, which is at the very top of the fine quality segment of this market.

Premier Group can date its founding back to 1948, and is consequently one of India's oldest established, as well as biggest, textiles producers. The group is India's largest importer of Egyptian cotton, and also uses the finest American cotton and superfine Indian cottons.

Vice President for Premier Fine Linens, Mr R Mathiyazhagan

Premier Fine Linens was founded 20 years ago and specialises 100% in products made from very fine cotton yarn, which are for export only.

The company operates 375,000 spindles, each of them able to handle the finest quality cotton yarn. Fabric production for its own in-house production and brands is 450,000 metres per month, with another 400,000 metres for contract weaving.

Vice president for Fine Linens, Mr R Mathiyazhagan, said that the division specialises in bed linens made of sateen, dobby, jacquard, percale and yarn-dyed fabrics in a range of thread counts from 200 to 1250, using both plied or single yarns with embellishments like fagotting, marrowing, fancy hems and embroidery.

The dyeing and finishing facilities have a capacity of 1,300,000 metres per month, with yarn-dyeing capacity at 75,000kg. Made-up sheets capacity is 150,000 sheet sets per month.

"We use 100% cotton, organic cotton, Supima and Egyptian and Supima Tencel blend," confirmed Mr Mathiyazhagan.

“Premier Fine Linens offers the finest quality cotton products made in India, and the new Monforts installation will help them achieve even higher and more exacting product standards.”

Selwyn Devaraj, Senior Manager Sales, ATE Enterprises Coimbatore office

“All of our dyeing is done in-house, using organic dyes and low-impact chemicals. We recover, process and recirculate our own wastewater, using 99% of our own supplies.”

“For us, and for our customers, environmental protection alongside product quality sets our standards and we like to think this is a benchmark that few other producers can match.”

Investing in the Monforts technology allows Fine Linens to enhance its own quality control and also its environment and energy savings policies.

“Monforts will also allow us to increase the innovations and product potential that we offer to our customers,” says Mr Mathiyazhagan.

“We can offer better colour control, and improved shrinkage.

“Much of our production is based on producing exactly what the customer wants, to the customer’s demand, and although the specifications are always naturally very exacting, our lead times can mean success or not for the customer’s concept.”

“Not so long ago, lead times of 120 days would be normal. Then it came down to 90 days, then 75 days. With the Monforts installation we can achieve 60 days.”

“The 3200 mm working width also gives us greater flexibility on product development.”

According to Selwyn Devaraj, Senior Manager for Sales at the Coimbatore office of ATE Enterprises, very few textiles mills in India have a Monforts Sanforiser of this specification.

“Fabric shrinkage across this feed size is rare in the bulk market,” he said. “For exceptionally high quality products, this equipment is the top of the range.”

Premier Fine Linens is certified to the Oeko Tex 100 ecological standards for non-use of harmful substances and production under environmentally friendly conditions. The company is also certified under the Global Organic Textile Standard.

Competence in Denim Finishing

monforts

THINKING AHEAD
FOR SUSTAINABLE SOLUTIONS

Proven success.

The Monforts range combinations for denim finishing are now even more cost-efficient and eco-friendly: The Monforts Eco Applicator is now used for liquor application.

Drying, stretching and skewing functions for the denim fabric are performed by a modified Thermex-Thermo-Stretch unit. This configuration allows fabric speeds of up to 40 m/min to be achieved with 14.5 oz/yd² denim on the "single rubber" version.

The "double rubber" version comprises two compressive shrinkage units and two felt calenders in line. Together with the innovative Thermex stretching unit, fabric speeds of up to 80 m/min can thus be achieved with 14.5 oz/yd² denim.

On both range versions, the denim fabric is stretched and skewed far more gently than with conventional range combinations. Ask our denim technologists. We will be happy to advise you.

denimized

A.T.E. Enterprises Private Limited
A-19, C.T.S. No. 689 Veera Desai Marg.
Mumbai - 400 053
Tel.: 0091-22-66 76 61 00
Fax: 0091-22-2673 2446
e-Mail: monforts@ateindia.com

BLUEcoMPETENCE Alliance Member
Partner of the Engineering Industry Sustainability Initiative

GERMAN Technology

VDMA

A. Monforts Textilmaschinen GmbH & Co. KG
Germany | A Member of CHTC Fong's Group

www.monforts.com