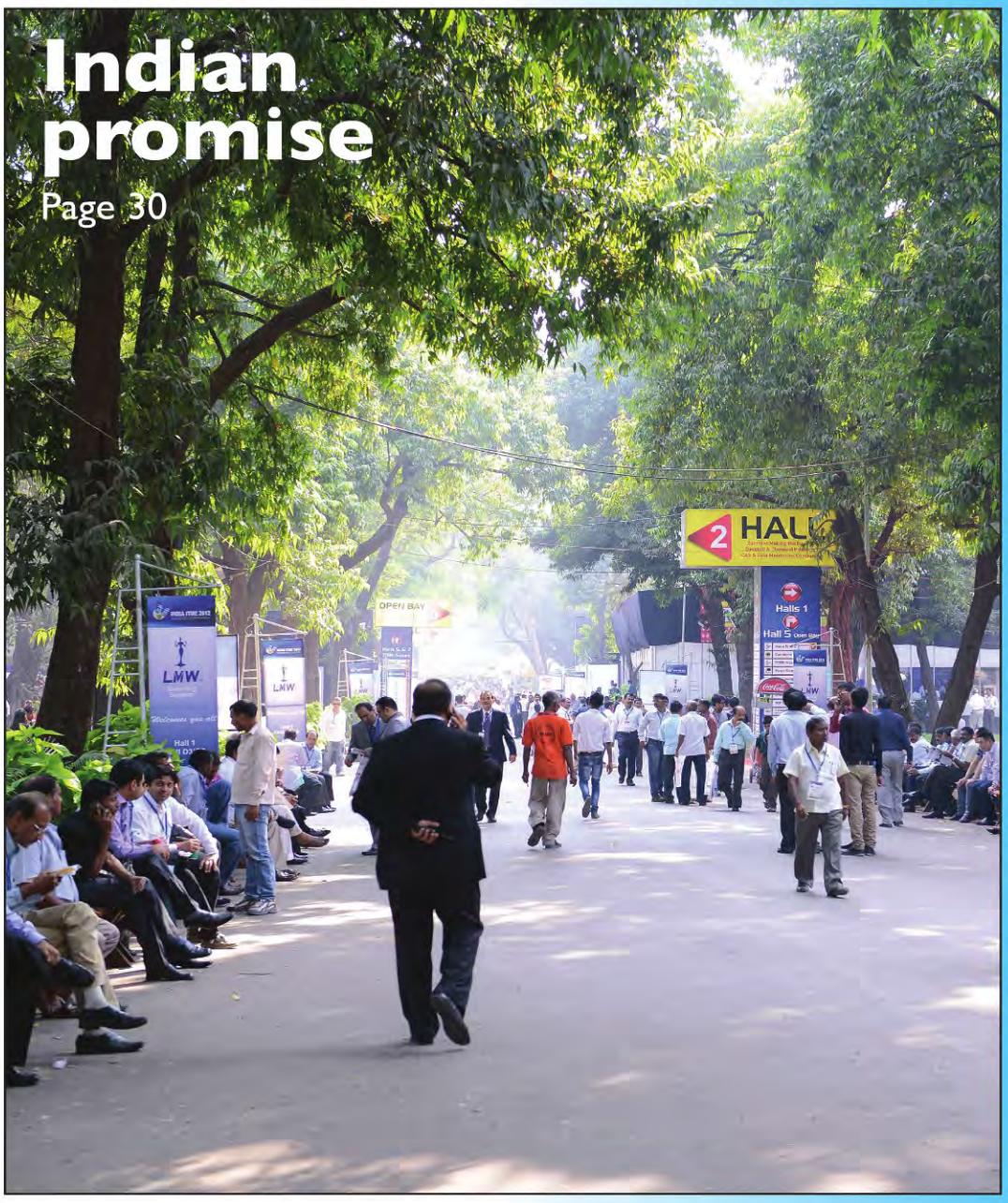
TM Textile Month International

The International Textile Magazine

Issue 6: 2012

www.textile-month.com



Indian promise

Page 30

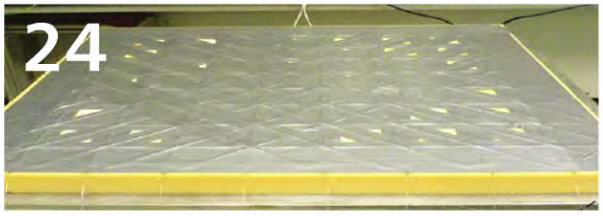
Published by WTiN

Features

Ukraine industry struggles 18
The Ukrainian textile industry suffers the effects of illegal imports and a lack of desire by workers to forge a career in the traditionally low paid industry. However, the government is beginning to take steps to improve its competitiveness. **Eugene Gerden** reports

Natural selection 21
Major industries are beginning to explore the potential of natural fibre fabrics in new composites. **Adrian Wilson** reports

Magic carpet 24
A team of UK researchers are investigating the potential healthcare benefits of sensor technology being used in carpets to track people's movements. **David Stevenson** reports



Ethical thread 27
Active in the industrial, technical, embroidery and consumer sewing thread markets, one US-based company with manufacturing facilities around the world, is working hard to bump up its ethical and environmental credentials. **John McCurry** reports

Largest ever ITME 30
India ITME, held in Mumbai in December, attracted many visitors and exhibitors, with strong interest in the technology on display

Ethical thread

Active in the industrial, technical, embroidery and consumer sewing thread markets, one US-based company with manufacturing facilities around the world, is working hard to bump up its ethical and environmental credentials. **John McCurry** reports

American & Efird, or A&E as it is more commonly known, is one of a handful of current US textile companies that can trace its heritage back more than a century. A global sewing thread manufacturer, A&E is based in Mount Holly, North Carolina and has more than 30 manufacturing operations worldwide, including several joint ventures. A&E is the largest thread manufacturer in the US, the second largest in the world behind Coats.

A&E, which was founded in 1891, is entering its 122nd year of operations. The company has achieved many milestones during those years, including:

- First company in North Carolina to mercerise yarn;
- First in the US to produce fine count/two-ply spun nylon;
- First textile company anywhere to match colours by computer.

A&E has four business areas: industrial sewing thread, technical textiles, embroidery thread and consumer product thread.

Mr Hatton says the embroidery business is fragmented, but a very important sector to the company. It has experienced some growth although the industry as a whole has been moving towards screen printing or sublimation.

"You can never get the look of an embroidered garment through screen printing," says Mr Hatton. "We now have a lot of customers who are not only producing garments, but taking it all the way through the embroidery."

The technical textiles market is significant for A&E. Mr Hatton says demand on the wire and cable side is growing as the demand for broadband continues to grow as more people are streaming video. Automotive business continues to be strong, he says.

"On the industrial sewing thread side, we continue to do very well. We continue to see growth and opportunities as people start to look deeper into the supply chain. They want to see that their fabric and trim suppliers are reputable."

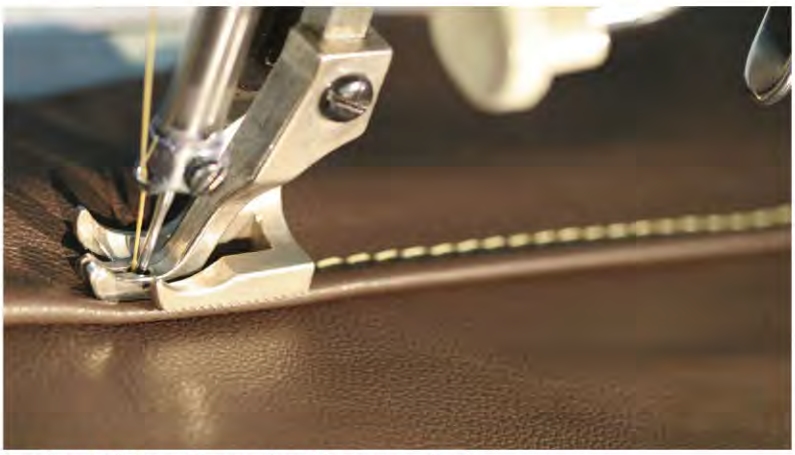
Mr Hatton says the technical textiles market is significant with wire and cable business growing due to demand for broadband around the world. The automotive side continues to be strong, he says.

The consumer thread business is a small, but growing sector for the company.

A&E has been a long-time participant and leader in the sustainability movement. In 2005, the company enacted what it calls its ten "Threads of Sustainability" programme as a guideline to approach environmental issues. The threads are:

- Global carbon footprint;
- Water conservation and recycling;
- Energy conservation;
- Sustainable packaging;
- Recycling and waste reduction
- Sustainable products;
- Global environmental, health and safety and social responsibility;
- Supply chain sustainability;
- Eco-driven product stewardship;
- Eco-driven education and involvement.

"We originally outlined our goals because we believed it was the right thing to do," says Mark Hatton, A&E's marketing director. "We didn't want to wait to be required to do something that we know is the right thing to do. In many instances, we have been asked to help our customers develop or improve their own sustainability programmes.



American & Efird manufactures thread for many applications

We've hosted meetings where we have shared some of our strategies with customers."

A&E recently issued its second sustainability report, which highlights the progress the company has made in its facilities around the globe. The study analysed the actual results of all of global yarn spinning and dyeing and finishing facilities in which A&E has ownership. A&E uses critical data to scrutinise its engineering protocols, equipment specs and emerging technology, with the express purpose of upgrading systems and continuing its trend in greenhouse gas emission reduction.

"We're proud that our latest sustainability report shows greater cumulative results from the impact of our efforts and investments," says John Eapen, vice president, environmental, health & safety/sustainability at A&E, when the report was released.

"We're particularly proud of our zero liquid discharge plant in Perundari, India and our 50% recycle/reuse facility in Dongguan, China."

A&E follows the American Apparel and Footwear Association (AAFA) standards. The AAFA's Restricted Substances List (RSL) provides guidelines for chemicals and substances, which are restricted or banned in the production of home textile, apparel and footwear products. This list is revised twice a year and reflects international chemical and substance restrictions.

A&E has several joint ventures around the globe and all have significant ongoing sustainability efforts. These include a JV with Vardhman which operates a plant in Perundurai, near Tirupur in Tamil Nadu, India. Vardhman A&E Threads opened during the first half of 2012 and has achieved one of the world's only known zero liquid discharge (ZLD) sewing thread dye houses. The proprietary technology used in the process ensures that heat is recovered, reducing energy demands. Water consumption is reduced and no liquids are discharged as a result of the process of dyeing sewing threads.

The plant uses a biological system to treat water used in the manufacturing process. The treated waste water passes through a quarts filter before the ultra filtration occurs, removing all suspended materials. The water then goes through a series of pre-treatments before going through the reverse osmosis process to remove the organic colour. A&E says that the water saved annually at the plant could provide 15.5 million people in India with water for a day.

American & Efird's zero liquid discharge dyehouse based in India

The reverse osmosis process helps save water at American & Efird

A&E's sustainability report shows that the company has reduced its greenhouse emissions by more than 9% over the past six years. It has also launched a paperless invoicing programme currently available to customers in the US. A&E says this service allows its customers to assist with reducing the energy demand and CO_2 generation created by transporting printed invoice statements via regular mail.

Recycling is another major initiative. A&E currently recycles 91% of the waste generated in its US plants. The company has also saved more than 557 million gallons of water over the past six years, the equivalent of 2.1 million cubic metres of water. A&E attributes its water conservation success to technological developments. The company has achieved a significant drop in water consumption by using stand wash processing rather than running washes and lower liquor ratio dye machines.

All four of A&E's plants in India have rainwater harvesting systems with systems planned for the company's facilities in Sri Lanka, Bangladesh and Europe.

Also during the last six years, A&E has saved more than 85 million kilowatt hours of electricity. The company attributes that success to recovery of heat from hot dye house wastewater and the use of high-efficiency lighting.

On the health and wellness side, A&E organised a medical camp for employees at Vardhman A&E in Ludhiana, India. Vardhman also initiated a reforestation initiative in which it planted 435 trees last summer.

A&E is also in the process of developing a reforestation plan in Costa Rica. A tree nursery is being developed on the grounds of the company's plant there.

A&E was owned by the Ruddick Corporation from 1968 until late 2011 when it was sold for $150m to KPS Capital Partners, an investment group. Ruddick's primary business was in grocery stores. Hatton says the transition has been smooth.

"We made our customers aware that it was a corporate carve out, not the normal equity purchase," says Mr Hatton. "We were a profitable business that was very healthy. KPS has been fantastic to work with. One of the first things they did was to purchase the shares of our joint venture partners in Sri Lanka and Bangladesh. They are interested in the profitable growth of our company and they support the management team that is here."

KPS's other holdings include companies in automotives, steel manufacturing and a brewery.

A&E currently operates 31 plants, which includes joint venture operations in Brazil, China and India. The joint venture in India is with Vardhman Textiles, one of the largest textile companies in that country. Over the last several years, A&E has grown through acquisitions, acquiring such companies as Ludlow, Robison-Anton and Synthetic Thread, all well-known manufacturers of industrial sewing thread, technical textiles and embroidery yarns and thread.

Although it started in North Carolina, A&E is a global company with plants located around the world to serve its customers. The company is in a good position to observe industry trends, which included the movement of some apparel business back to the Western Hemisphere in recent months.

"We did see some business come back to the Americas, but it has been in Central and South America," says Mr Hatton. "It hasn't come back in the magnitude that many people predicted it would, but our businesses in the Americas have strengthened. We have dyeing and finishing capabilities in Costa Rica as well as the Dominican Republic as well as service operations throughout Central America."

Last year, A&E launched its THREAD (Technology to Help Reduce Early Apparel Demise) marketing campaign, an effort aimed at promoting the use of the company's thread to apparel firms.

"We are continuing to sign up members," says Mr Hatton. "It's a tongue-in-cheek approach to something that is sometimes seen as mundane in the apparel and design industry. We have taken the approach that we can make it more exciting. We like to say that thread is what holds it all together. A bad choice of thread can ultimately compromise your garment."

Mr Hatton says the THREADS programme has become popular around the world and its list of members continues to grow. **TMI**

Digital textile

Launched in 2004, Digital Textile is the world's first magazine dedicated to textile applications in digital inkjet printing and covers all key markets, including fashion & home, flags & banners, T-shirts and carpets.

Subscribe today to make sure you receive your regular update from the digital textile printing.

It's easy to make sure you never miss an issue.

Call now on +44 (0)113 203 1276
or email Sue Pritchard at spritchard@wtin.com

International Dyer is available in printed and digital format and is published 10 times a year.

Published by WTiN

© Copyright World Textile Information Network Ltd 2012. All rights reserved. WTiN and World Textile Information Network are registered trademarks.

www.wtin.com