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Textile Trends

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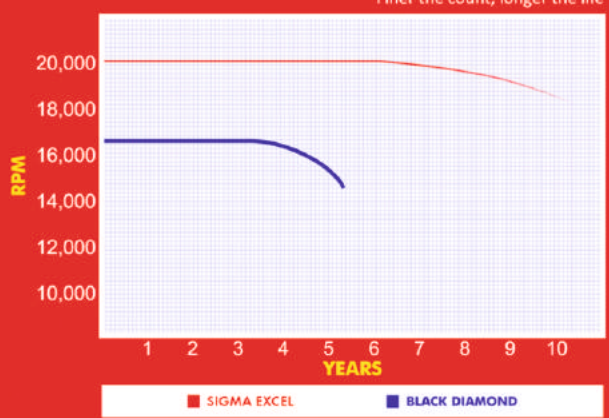

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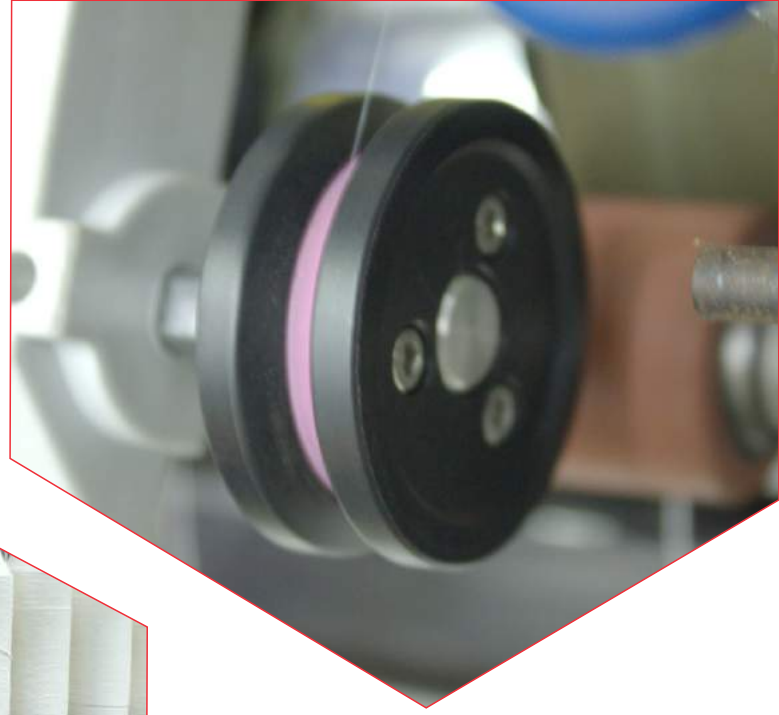

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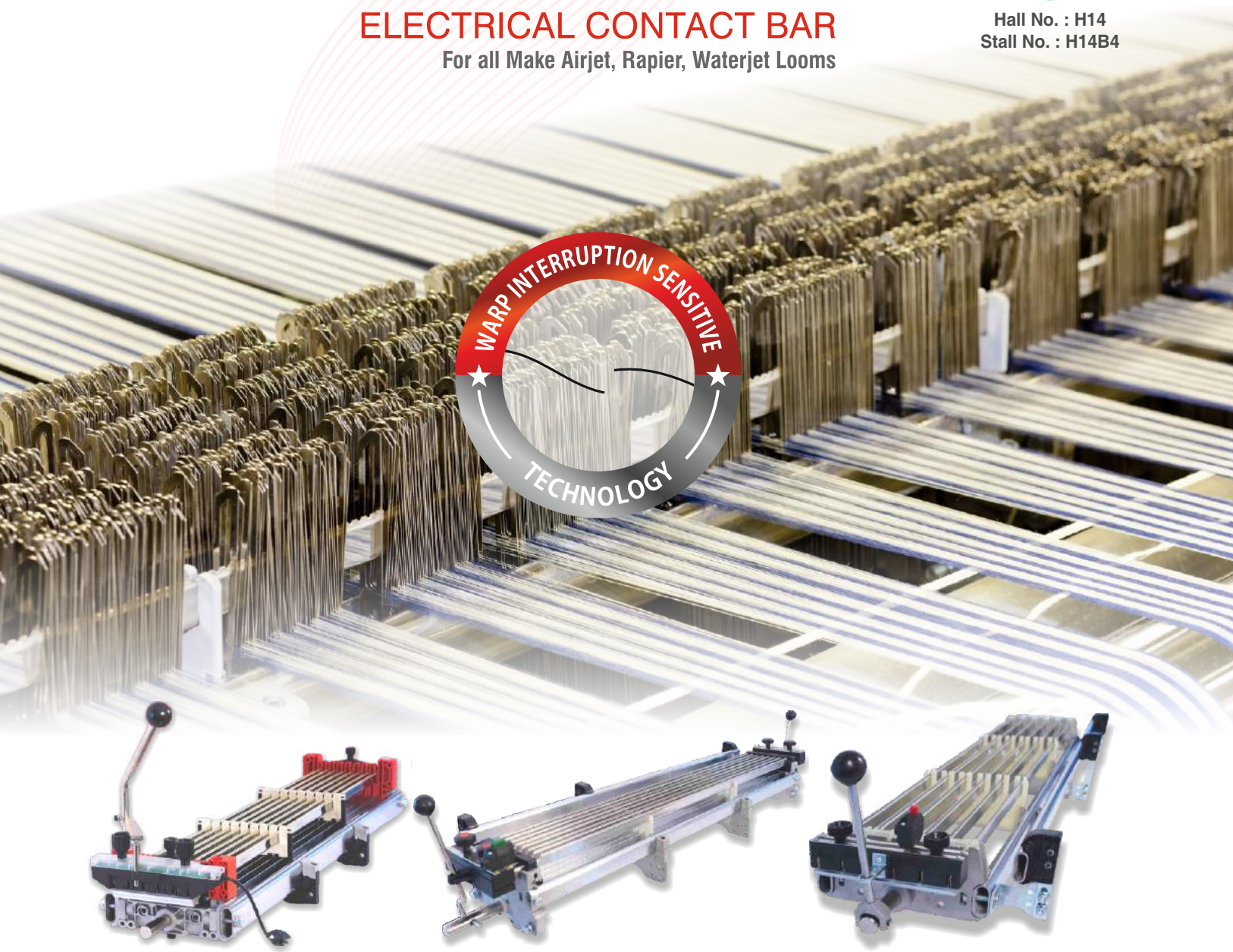

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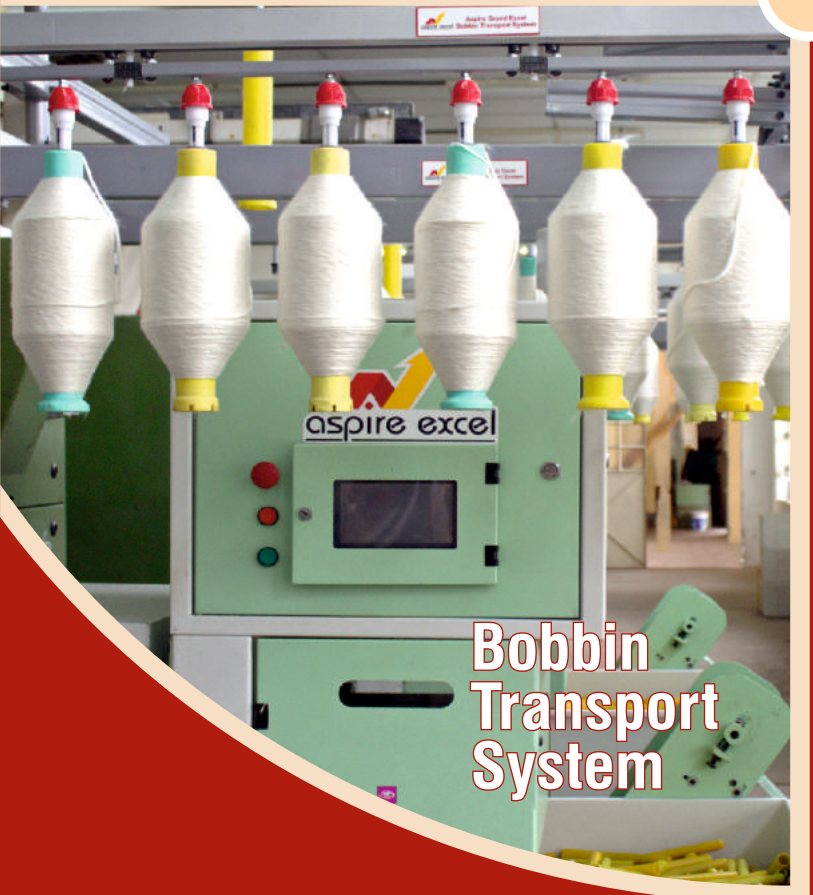

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EDITORIAL

The Sarees are a subject still engages so many Indians

The attire that attracts millions of Indian women from ancient time is sarees. It bears the symbol of adaptability, artistic skill and regional pride, all these embodied in its 6- yards length. Each saree is an article of faith for its weaver as well as its wearer, so presumptions and discrepancies are to be avoided, but this is not always possible. It was evident in the event of swear-in occasion at President Droupadi Murmu. She wore an Odia saree 'Phoda Kumbha(Temple) border' but not from her native Santhal region in the state.

In case of wearing saree, it is stating fact that the timeless sarees continue to hold on Indian women's hearts. It is worth restating President Murmu is in pole position to be in India's next high profile handloom saree trend setter. She clearly prefers classic Odia saree to the distinctive checked Santhali one.

Given the bewildering diversity of Indian Handloom Weaving and artisanal printing traditions, it is not wondering that very few (lay) sarees wearers are aware of regional distinctions. However information is now more easily accessible, for which thanks to social media saree groups. Today, few famous revivalists are taking the project what resurrects classic design like Kanjivaram; this project did keep the sarees from falling into neglect in the first few decades after independence. Now, there are a reassuring number of textile revivalists working with weavers across India to marry contemporary design with classic staples. That is why saree remains a leaving concept for millions of the Indians—from the humblest to the snootiest.

Synthetic and powerloom sarees have a critical role as they keep sarees affordable for many who otherwise may have abandoned them for cheaper alternative generic clothing in past 75 years. Handloom sarees are at a make & break stage in their long and eventful journey, with the pandemic that put economic pressure on weavers and wearers, and modern exigencies challenging the saree's versatility. Technology and design will play a crucial role in preserving the saree as leaving legacy and controversies like the Santhali saree–or–not issue also prove it is still taken very seriously!

US job growth more than estimated in October, but unemployment rate up at 3.7%

US employers hired more workers than expected in October, but a rise in the unemployment rate to 3.7% suggested some loosening in labor market conditions, which would allow the Federal Reserve to shift towards smaller interest rates increases starting in December. Nonfarm payrolls increased 261,000 in October. the labor department's closely watched employment report showed recents. Data for September was revised higher to show 315,000 jobs added against 263,000 as previously reported. Economists polled by Reuters had forecast 200,000 jobs, with estimates ranging from 120,000 to 300,000. The unemployment rate rose to 3.7% from September's 3.5%. Average hourly earnings increased 0.4% after rising 0.3% in September—likely boosted by a calendar quirk. Wages rose 4.7% y-o-y in October after advancing 5.0% in September as last years's large increases dropped out of the calculation. Other wage measures have also come off the boil, which bodes well for inflation. Job growth has averaged 407,000 per month in 2022 compared with 562,000 in 2021. Economists polled by Reuters had forecast 200,000 jobs, with estimates ranging from 120,000 to 300,000. Still, the labor market remains tight, with 1.9 job openings per unemployed person at the end of September. The Fed of late hiked rate by another 75 basis points and said its fight against inflation would require borrowing costs to rise further, but signaled it may be nearing an inflection point in what is the fastest tightening in 40 years. ❐

UK economy contracts at start of a feared long recession

Britain's economy shrank in the three months to September at the start of what is likely to be a lengthy recession, underscoring the challenge for finance minister Jeremy Hunt as he prepares to raise taxes and cut spending shortly. Economic output shrank by 0.2% in the third quarter, less than the 0.5% contraction analysts had forecast in a Reuters poll, data showed recently. But it was the first all in gross domestic product since the start of 2021, when Britain was still under tight coronavirus restrictions, as households and businesses struggle with a severe cost-of-living crisis. Britain's economy is now further below its pre-pandemic size – it is the only Group of Seven economy yet to recover fully from the Covid slump – and is smaller than it was three years ago on a calendar-quarter basis. The Resolution Foundation think-tank said that although the fall was smaller than investors had feared, it left Britain on course for its fastest return to recession since the mid-1970s. Its research director James Smith said the figures provided a sobering back drop for Hunt's November 17 budget announcement, when he will try to convince investors that Britain can fix its public finances – and its credibility on economic policy – after Liz Truss's brief spell as prime minister. "The chancellor will need to strike a balance between putting the public finances on a sustainable footing, without making the cost-of-living crisis even worse, or hitting already stretched public services," Smith said. Responding to the data, Hunt repeated his warnings that though decisions on tax and spending would be needed. "I am under no illusion that there is a tough road ahead – one which will require extremely diffcult decisions to restore confidence and economic stability," Hunt said in a statement." But to achieve longterm, sustainable growth, we need to grip inflation, balance the books and get debt falling," he added. "There is no other way." The Bank of England said of late that Britain's economy was set to go into a recession that would last two years if interest rates were to rise as much as investors had been pricing. ❐

German economy registered unexpected Q3 growth but inflaton climbs to 11.6%

Germany staved off the threat of recession in the third quarter with unexpected growth but the economy remained in choppy waters as high inflation driven by a painful energy

standoff with Russia surged, data showed recently. Consumer prices, harmonised to compare with other European Union Countries, were up 11.6% on the year in October, the federal statistics office said. Analysts polled by Reuters had forecast 10.9%, unchanged on the previous month. The Ifo economic institute warned recently that the full effect of inflation had not yet reached consumers, even as its survey showed a slightly lower number of companies in Germany planning price hikes in October. Economists said inflation was likely to stay in double-digit territory for some time, keeping pressure on the European Central Bank to continue raising interest rates after it hiked them to their higest level since 2009 of late. "It is not yet clear that inflation has speaked, even if-the recent decline in market prices for natural gas has raised hopes for this," said Thomas Theobald of the IMF institute. A plunge in energy imports from Russia following the invasion of Ukraine has sent energy prices spiralling in Germany, pushing inflation to its highest rate in over 25 years while fuelling concerns of a potential gas shortage this winter, even with storage facilities filled to near capacity. ❐

China's economy suffered a broad slowdown

China's economy suffered a broad slowdown in October as factory output grew more slowly than expected and retail sales fell for the first time in five months, underscoring faltering demand at home and abroad. The world's second-largest economy is facing a series of headwinds including protracted Covid-19 curbs, global recession risks and a property downturn. In a sign of persistent weakness in sector, data recently also showed property investment falling at its fastest pace since early 2020 in October. The downbeat data poses a challenge for Chinese policymakers as they steer the $17 trillion dollar economy through choppy waters, following recent moves to ease some Covid curbs and give financial support to the struggling property sector. "October activity growth broadly slowed and missed market expectations, pointing to a weak start to Q4 as a worsening Covid situation, prolonged property downturn and slower export growth," analysts at Goldman Sachs said in a note. Industrial output rose 5.0% in October from a yer earlier, missing expectations for a 5.2% gain in a *Reuters* poll and slowing from the 6.3% growth seen in September, data from the National Bureau of Statistics (NBS) showed of late. Retail sales, a gauge of consumption, fell for the first time since May, when Shanghai was under a city-wide lockdown. Sales dropped 0.5%, against expectations for a 1.0% rise and compared with a 2.5% gain in September. Covid outbreaks widened across the country in October, disrupting the pandemic-sensitive services sector, including the restaurant industry. China's catering revenue slumped 8.1%, down sharply from a 1.7% drop in September, NBS data showed. In reponse to the weak data, investment bank JP Morgan revised down its year-on-year GDP forecast for China in the fourth quarter to 2.7% from prior 3.4%. ❐

Inflation touches New Record in Europe, Slowing Economy

Inflation hit a new record in the 19 countries that use the euro currency, fuelled by out-of-control prices for natural gas and electricity due to Russia's war in Ukraine. Economic growth also slowed ahead of what economists fear is a looming recession, largely as a result of those higher prices sapping European's ability to spend. Annual inflation reached 10.7% in October, the European Union's statistics agency, Eurostat, reported recently. That is up from 9.9% in September and the highest since statistics began to be compiled for the eurozone in 1997. Natural gas prices skyrocketed in the wake of the invasion of Ukraine as Russia throttled back pipeline supplies to a trickle of what they were before the war. Europe has had to resort to expensive shipement of liquefied gas that come by ship from the US and Qatar to keep generating electricity and heating homes. While liquid gas succeeded in filling Europe's storage for the winter, the higher prices have made some industrial products such as steel or fertilizer expensive or simply unprofitable to make. ■

Core infra sector surges 7.9% in September

Eight Core Infrastructure industries grew 7.9% in September, against a revised rate of 4.1% in the previous month, which was a seven month low. The improved performance in September was driven by decent growth in the production of cement, coal and electricity, showed the industry ministry data released recently. The fertiliser sector recorded double-digit expansion for a second straight month in September, ahead of the peak Rabi sowing season, while steel output, too, rose 6.7% against 5.2% in the previous month. In fact, the capex push in recent months, especially by the central government, drove up the production of cement and steel, analysts said. Importantly, as Indian Ratings principal economist Sunil Kumar Sinha pointed out, on a seasonally adjusted basis, the month-on-month growth in the eight core sectors turned positive after a gap of four months in September ; the output in September was 1.7% higher than the August level. Moreover, core sector index grew 5.6% in September from the pre-pandemic level (same month in 2019), against a contraction of 0.8% in the previous month. However, crude and natural gas output continued to shrink, by 2.3% and 1.7%, respectively, in September. Also, given the roller-coaster ride in recent months, a credible industrial recovery is yet to take firm roots. With the base effect again turning somewhat unfavourable in October and unseasonal rains having played havoc in some parts of the country, some of the infrastructure sectors may have been hit. Consequently, core sector growth in October may turn out to be slower than the September level, some analysts said. Power generation witnessed a muted growth of 2.8% until October 30 from a year before, while the coal sector activity may have moderated during the month. It may weigh down the core sector growth to about 5% in October, according to Sinha. Nevertheless, thanks to the 40.3% weight of the core sectors in the index of industrial production (IIP), the IIP, which contracted for the first time in 18 months in August, will return to growth in September. Commenting on the improvement in the core sector performance, commerce and industry minister Piyush Goyal tweeted : "A reason why India is being called a global bright spot is the strength of its core industries." The data showed the output of cement, coal, fertiliser and electricty witnessed impressive double digit growth in September – at 12.1%, 12%, 11.8% and 11%, respectively. Refinery product grew 6.6%, againt 7% in August. Bank of Baroda chief economist Madan Sabnavis said, at 9.6%, the cumulative growth in the eight core infrastructure industries in the first half of this fiscal is impressive, as it comes over a high base of 16.9% in 2021. "More importantly, leaving out the oil and natural gas industries, growth was impressive in the other six sectors," he added.

India picks up concerns over rising trade deficit with South Korea

India has raised "serious" concerns over the growing trade deficit with South Korea, which stood at about ₹9.5 billion in 2021-22, an official statement said recently. The issue came up for discussion during the 9th round of the India-Korea comprehensive economic partnership agreement upgradation negotiation, which was held in Seoul on November 3.4. The two sides underlined the need to have negotiations and are foward -looking and outcome-oriented. During the meeting, sub-groups on trade in goods, services, rules of origin and investment held discussions. ❐

October exports contracts 16.7% imports surge 5.77%

Engineering goods, a mainstay of India's exports in recent years, shrank more than 21% to $7.4 billion. The Ministry stated that the $2 billion drop "includes steel and its products", signalling that the export tax on iron and steel is hurting these exports. Exports from major job-intensive sectors such as readymade garments and gems and jewellery also shrank more than 21%, while cotton yarn, handlooms and handicraft products almost halved from a year earlier. Commerce Secretary Sunil Barthwal said the October trade data was impacted by the Deepavali, Dussehra festive period as factory workers tend to go on leave and production drops. "Over the last two years, I have seen there is a $4 billion

gap in the trade between the pre-Diwali and the Diwali period, as exports drop and demand for imports rises," he said. "This is a seasonal blip ... We will assess whether this is a trend that will persist after looking at how November trade numbers turn out," he said, stressing there was no need to be "overly depressed" about the gloomy global trade forecast from W.T.O of just 1% growth in world trade in 2023. ❐

India will become as a strongest economy with 7% growth in FY23 : EAC-PM member

Amid fears of the world slipping into recession, India will perhaps emerge as the strongest major economy with 7% growth rate in FY23, Economic Advisory Council to the Prime Minister (EAC-PM) member Sanjeev Sanyal said. Sanyal observed that India can grow at 9% in an external conducive environment like in early 2000s when the global economy was growing. "We are clearly entering an environment where many countries around the world will be facing much slower growth or even slipping into recession. This is due to a combination of factors ranging from tighter monetary policy to higher energy costs, as well as disruptions caused by the Ukraine war," he told recently in an interview. The World Bank on October 6 projected 6.5% growth rate for the Indian economy for 2022-23, a drop of one percentage point from its June 2022 projections, citing deteriorating international environment. "Under those circumstances, India's performance will stand out as being perhaps the strongest of any major economy in the world with around 7% GDP growth rate in current fiscal year nonetheless,''Sanyal said. He emphasised that the cumulative impact of supply side reforms over many years by the Modi government has meant that India's economy is currently much more flexible and resilient than it used to be. Sanyal noted that if India gets an external environment like the one it had during 2002-03 to 2006-07 when the global economy was growing, global inflationary pressures were muted, then its economy is capable of delivering 9% growth. "But obviously, we are not in that environment right now. So given that situation 7% GDP growth rate is a good performance," he said. The EAC-PM member however cautioned against pushing growth unnecessarily "when the highway has so many bumps and hurdles in the way". The Reserve Bank of India recently slashed the growth projection to 7% for current fiscal year from the earlier forecast of 7.2%, citing aggressive tightening of monetary policies globally and moderation in demand. On the Indian rupee touching a history low in early october Sanyal said, "I don't think we should get too fussed about looking at just the dollar INR exchange rate." According to Sanyal, there is obviously a very sharp strengthening of the US dollar against all currencies and in that circumstance, the rupee actually is appreciating against all currencies except dollar. Noting that the central bank is correct in allowing the rupee to find its level while at the same time using the reserves to smoothen the volatility, he said" the central bank should not defend a particular level, it should however, use its reserves to control volatility. Recently, RBI governor Shaktikanta Das said that the central bank has zero tolerance for volatile and bumpy movement in the rupee and added that the RBI actions have helped in its smooth movement. Asked whether high inflation will become the norm in India, Sanyal said India is facing fairly special circumstances where global inflation is clearly very high. ❐

Economy appears to be resilient, on road to 7% growth

With headline inflation beginning to show signs of easing, the domestic macroeconomic outlook appears to be resillent and on course for about 7% GDP growth in the current fiscal, though India is still sensitive to global headwinds, RBI officials wrote in an article in the bulletin. The authors, led by RBI Deputy Governor Michael Debabrata Patra, also said the outlook for the global economy remained clouded with downside risks. Global financial conditions had been tightening and deteriorating liquidity was amplifying financial price movements, they added. Markets are now pricing in moderate increases in policy rates and risk-on appetite has returned. In India, supply responses in the economy are gaining strength, the authors noted in the article published in the latest RBI Bulletin. ■

Apparel retailers up beat as in-store sales back in vogue

Apparel retailers saw their cash registers ringing for the second consecutive quarter, aided by strong festival demand and the reopening of offices, as people thronged physical stores to shop after two years of the Covid pandemic.

Aditya Birla Fashion and Retail, Trent, Shoppers Stop, Arvind Lifestyle, and TCNS Clothing Company saw their revenues hitting an all-time high in the September quarter. Others witnessed their sales growing in double digits during the quarter.

"The September quarter saw the highest-ever quarterly revenue for the company at both standalone and consolidated levels. This was driven by an aggressive network expansion, a strong e-commerce performance, and new category expansion and by encouraging performance during EOSS (end of season sale) and early festive season," Jagdish Bajaj, CFO of Aditya Birla Fashion and Retail, told investors after its results.

He said the strong comeback seen during the April-June quarter in the offline channel continued in the July-September quarter, indicating the return of the market to pre-Covid scenarios.

During the quarter, the company's revenue hit a high of ₹3,075 crore.

Trent also saw its sales hit an all-time high in the quarter as its retail store chain Westside witnessed like-for-like growth at 20 per cent.

"We have been a company that makes strategic bets/business model choices, that in many cases involve standing away from the predominant and proximate market practices of the time. Completely own branded offerings, entirely direct-to-consumer reach, not discounting in season, and not advertising are all cases in point," stated Noel N Tata, chairman at Trent, in an earnings release.

Shoppers Stop also saw its sales hit a high of ₹1,013 crore in the September quarter.

"Customer sentiment was strong in Q2 and continues to be so in the Q3 (October-December) of this financial year," said Venugopal G Nari, MD & CEO of Shoppers Stop, told analysts during a conference call.

He said : "The wardrobe reboot followed by an office reboot is making us one of the best destinations in our chosen segment. Our customers footfall both offline and online combined has surged significantly to an overall 40.8 million visits in the quarter that we're talking about, against 25.3 million visits in the corresponding quarter last year."

Nair also said : "We also grew versus the pre-Covid period; our non-GAAP sales grew by 19 per cent and Ebitda (earnings before interest, tax, depreciation, and amortisation) grew by 55 per cent versus the pre-Covid period."

TCNS Clothing Co also saw its sales hit an all-time high during the July-September quarter. ■

Cotton prices likely to remain under control due to surplus supply

Domestic cotton prices are likely to remain subdued over the third quarter of the current fiscal due to fresh arrival of cotton in the markets in key growing states. Compared to the previous season's nearly 30.7 million bales (170 kg per bale), Cotton Association of India (CAI) has estimated an increase in cotton production by almost 12% to 340 to 35 million bales in the current 2022-23 domestic season (October to September).

As per a recent report of India Ratings and Research (Ind-Ra) estimated higher production of cotton is supported by a 7% higher area under cultivation in the current domestic cotton season. The report claims that with the domestic as well as global consumption likely to be lower than the previous season, a supply surplus is expected and it may weigh on the prices.

The trend is reflected in average month-on-month prices that have reduced by nearly 13.4% and 0.5% on year-on-year basis, says the report. Though the spread between Indian cotton and international cotton prices reduced considerably by around 50%, Indian cotton continued to be more expensive than international cotton during October this year, claims the report.

According to CAI president Atul Ganatra cotton prices in the domestic market are hovering around ₹65,000 per candy (356 kg) as against ₹51,000 per candy or 78.5 cent in International Cotton Exchange (ICE), "In fact, some of the multinational firms are engaged in forward selling January month contracts at ₹59,000-60,000 per candy in the domestic market. They are hedging their risk by taking the ICE January contract at ₹50,000 or 78 cent. This activity is alarming for the entire textile value chain, especially for spinners and yarn buyers," says Ganatra.

Spinning mills across India are expecting and waiting for further downfall in domestic cotton prices, says Gautam Dhamsania, secretary Spinners Association of Gujarat (SAG), adding that in order to compete in international cotton yarn market, local mills need to source raw-material at prevailing international prices as out of India's total production of cotton yarn, 40% is being exported.

"The spread between international and domestic prices of cotton determines the competitiveness of Indian yarn spinners. While global cotton prices fell 17% between April and August this year in anticipation of higher production, domestic prices rose 2% because of limited supply during the period. ■

Surat textile workes were unpaid due to longer Diwali vacation

Struggling to get fresh orders amid sluggish demand, textile units in India's biggest man-made fabrics (MMF) manufacturing hub in Surat asked their daily wage workers to take unpaid extended Diwali vacation till mid-November.

Conventionally, Surat textile units keep their activities shut for three to five days after Diwali every year, with Gujarati New Year closely following the festival of lights. This year, however, these units, especially weavers, processors and embroidery manufacturers, decided to shut activities for a longer period of time.

"This Diwali season was an utter failure for the textile industry in Surat. Compared to the previous season, aggregate business was down by almost 40%. Though the marriage season started from the second week of November, very few orders are coming. Over 300 textile markets had been closed since October 25 and opened from the second week of November only," says Dev Kishan Mangani, advisor, textile committee, South Gujarat Chamber of Commerce and Industry (SGCCI).

The situation of weaving units is even more dire as out of nearly 1 million power looms, hardly 100,000 have started operations and the rest remained closed, says Vijay Mangukiya, president of Surat Weavers Association. "This is the first time in the history of Surat's textile industry that weaving units remained closed for a fortnight due to extremely low demand," Mangukiya said, adding, "Ahead of Diwali festivities, we have told workers to go on longer Diwali vacation as there is no work. With almost a 90% cut in supply of grey fabrics, hopefully traders will be able to clear some older inventory after the Diwali period."

As the majority of the workforce in weaving and processing units are on daily wages, these units wouldn't have any burden of paying salaries to them in the case of no production activities. Generally, weaving units pay ₹2 to ₹4.5 per metre to their workers, he said.

Surat-based processing units decided to extend Diwali vacation to a fortnight. Jitu Vakharia, president of South Gujarat Textile Processors Association (SGTPA), says that there were no new jobs as weavers have been compelled to go on a long Diwali vacation. Embroidery units in Surat had announced 20 days of Diwali vacation, said Hitesh Bhikadiya, president of Textile Embroidery Job workers' Association (TEJAS).

Apart from sluggish markets, embroidery units are facing issues of payments and increasing cost of raw material. Naresh Sharma, president of Ahmedabad Textile Processors Association, says that instead of a three-day holiday, processors in Ahmedabad, too, announced a 15-day Diwali vacation as there is no new work.

"Spinners and weavers are waiting for the arrival of fresh cotton. In anticipation of a further cut in cotton prices, they have almost stopped production of yarn and fabric.

With an almost ₹80,000-crore annual turnover, Surat alone produces nearly 40 million metres of fabric per day and processes more than 30 million metres of fabric on a daily basis. The highly labour-intensive weaving, processing and embroidery units provide jobs to more than 1.5 million people. ■

For standardisation of cotton bales 'BIS' Act 2016 needed : Goyal

Implementation of cotton bales quality control order under 'BIS Act 2016' is a must for standardisation of cotton bales in terms of technical quality parameters and traceability that would benefit all stakeholders, Commerce & Industry and Textiles Minister Piyush Goyal has said.

It is high time for branding Indian cotton and creating loyalty 'Kasturi' branded products (an initiative of the Textiles Ministry to promote high quality cotton) from consumers, Goyal said at the third interactive meeting with the Textile Advisory Group in New Delhi recently to review initiatives for the cotton value chain.

The Minister asked the industry to self-regulate and the responsibility of branding and certifying Indian cotton 'Kasturi'.

For increasing cotton productivity, Goyal said supply of good quality cotton seeds was the need of the hour and required concrete action from related Ministries on a "war footing".

He also underlined the need to introduce advanced technologies related to high yielding cotton seeds and innovative agronomy such as high-density planting to enhance productivity of cotton, according to an official statement.

To promote mechanisation use of handheld kapas plucker machines developed by SIMA-CDRA, Goyal asked the textile industry to also chip in to popularise mechanisation of cotton picking. "The Confederation of Indian Textile Industry (CITI) will take up this project in mission mode with distribution support from Cotton Corporation of India Ltd. Industry Associations and Industry leaders together have agreed to fund 75,000 handheld kapas plucker machines," the release said. ■

Marriage season demand makes cheerful Surat fabric units

The ongoing marriage season and the upcoming Pongal festivities have buoyed the prospects of the Surat-based man-made fabric (MMF hub in the wake of fresh orders from the domestic market.

Most of the textile units situated at Surat had shut their activities for almost a fortnight after Diwali in absence of new orders. Generally, these units remain clsoed for three to five days after Diwali, but this year the units forced daily wage workers to proceed on unpaid extended Diwali vacation.

"Textile industry in Surat started operations from November 7. After a week's period, business activities are resuming. Due to fresh orders, traders are able to offload inventories. Though demand is not as per our expectations, the market seems to be on a revival path. Apart from marriage season related purchases, inquiries are being generated from Southern India in the wake of Pongal festivities," says Dev Kisan Mangani, advisor, textile committee, South Gujarat Chamber of Commerce and Industry (SGCCI).

According to Mangani, compared to last year demand is almost 30 to 35% less but Surat-based textile units are hoping the market would stabilise by February next year. Nearly 300-plus textile markets situated in Surat observed an increase in footfalls as well as fresh inquiries over the last few weeks, he added.

Ashok Jirawala, president of the Federation of Gujarat Weavers Association (FOGWA) says that against the installed capacity of 450 million metre per day fabric production capacity of Surat textile industry currently, textile units in and around the South Gujarat city are producing nearly 300 million metres on daily basis over the 2nd week of November 2022.

"During October this year, hardly 200 to 250 million metres of grey fabric was manufactured in Surat. We are hopeful that by early 2023, Surat textile cluster will start functioning at optimum capacity," says Jirawala.

Says Jitu Vakharia, president of South Gujarat textile Processors Association (SGTPA), "There is a slight improvement as far as textile processing segment is concerned. Earlier processing houses were functioning at below 50% capacity whereas now they are operating at nearly 60% capacity," he added.

Thousands of spinning, weaving, processing and embroidery units situated in and around Surat have annual collective turnover of ₹80,000 crore and these units provide direct employment to more than 1.5 million people. ■

Technical textiles : centre signals clearence of 20 research projects worth Rs. 74 cr

The Textiles Ministry has cleared 20 research projects worth ₹74 crore spanning agro-textiles, speciality fibre, protective gear and smart, activewear and sports textiles under the National Technical Textiles Mission (NTTM).

The projects were cleared in a meeting chaired by Commerce & Industry and Textiles Minister Piyush Goyal, according to a statement issued by the Ministry recently.

Revision of R&D guidelines, development of dedicated indigenous machinery and equipment under the NTTM were discussed and recommended by the committee during the meeting, the release said.

"To bolster innovation and research ecosystem in technical textiles, NTTM will support ideation and prototyping R&D projects worth up to ₹50 lakh and ₹100 lakh, respectively, which have clear potential to translate into commercial products and technologies," it said.

Representatives from leading Indian institutes including IITs, government organisations, and research organisations, in addition to eminent industrialists, participated in the meeting, the statement added.

Goyal, and official from different line Ministries, provided inputs on technical textiles.

Despite the prominent use of speciality fibres in India, indigenisation of the technology has still been a major challenge which needs collaborative interventions from both industry and academia, he added.

The 20 research projects include five in speciality fibres, six in agro-textiles, two each in smart textiles, protective gear and apparel, and geo-textiles, one each in activewear apparels, strategic application and sports textiles, the release said. ■

UNCONVENTIONAL NATURAL FIBRE : ROSELLE FIBRE

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Abstract

There are many types of bast fibres such that Jute, Flax, Ramie, Bhimal and Roselle, etc. The Roselle is extracted from the plant roselle which is from class Hibiscus Sabdariffa. Roselle is one of the most noticeable bast fibres which is widely grown in Assam. Roselle fibres are extractedby using mainly two methods viz., bacterial retting and chemical retting. Since it is bast fibre it has slightly higher strength than other natural fibres. The diameter of fibre varies as the plant get matures. Also, so many physical changes occur as fibre becomes mature. The study of the morphological structure of the fibre is given in three stages. The fibre has different structures and properties according to different ages. The study of the chemical composition of roselle fibre indicates that the cellulose content of fibre goes on decreasing and this affects ultimately the strength of the fibre. Roselle is used in a wide range of applications. Identifying the properties of the roselle fibre for different applications is necessary. Mostly Roselle fibre is used for manufacturing fibre reinforced materials.

Keywords : Bast, Cellulose, Fibre, Hibiscus-Sabdariffa, Roselle, Textiles, etc.

1. Introduction

Natural fibres like Jute, Flax, Ramie, Hemp, Sisal, etc. are used on large scale due to their eco-friendly and renewable nature. Natural fibres have low cost, good mechanical properties, abundant availability, material renewability, biodegradability and ease of recycling as compared to synthetic fibres. Roselle fibre is cultivated in Borneo, Guyana, Malaysia, Shri Lanka, Togo and Tanzania. The scientific name of Roselle is Hibiscus Sabdariffa [1].

Roselle is found abundantly in tropical areas. There are various uses of Roselle. The fruit is commonly used in medical applications and the food industry, while the fibre is commonly used in textiles. The colour of the Roselle stem is Red. It has limited popularity in the textile world due to the difficulty in degumming. Also, it has a lack of knowledge of mechanical processes [2].

Roselle has demanded blends with wool, cotton, flax, polyester, acrylic and silk etc. [2] Roselle fibre is extracted by different retting processes. Since it is a natural fibre, roselle consists of a large amount of cellulose, hemicellulose and lignin content in their structure. Properties of roselle fibre are based on plant ages. As the plant ages go on varying the respective properties such as chemical composition, tensile strength, morphology and thermal analysis also goes on varying. Roselle is also demanded better mechanical properties and reinforcing material for polymeric material [3].

2. Roselle plant

Roselle (Hibiscus Sabdariffa) is a flowering plant with Hibiscus geneus native to west Africa. Stems of roselle plant are used as production of bast fibres. Roselle grows upto a height of 2-2.5m tall. Leaves of roselle are deeply 3-5 lobed, 8-15cm long. The flowers are white to pale yellow with red spots at each petal's base. It has a diameter of 8-10cm. Fruits take about six months to get mature [4].

Figure 1 : Roselle plant

In India, roselle is mainly used for the bast fibres. Red calyces of the plant are used for the food colourings. The green leaves are used as a spicy version of spinach. The bright red petal of the roselle fruit is used for sweet and sour chutney in Bihar and Jharkhand. Leaves and flowers are used to add sourness to the chicken dish [4].

2.1 Cultivation

Roselle plants are cultivated in warm and humid climate because it is susceptible to frost and mist. The temperature required for roselle thrives is ranges from 18-35°C with an optimum of 25°C. The temperature required for the growth of the roselle plant ceases at 14°C within an altitude of 3000 feet (900m) above sea level. The necessary rainfall in the roselle growing season is about 400-500mm annually. It is a short-day plant and it is very

sensitive to photoperiod. Roselle plants require a daily light phase of 13 hrs. at its starting 4-5 months of its growth. If the roselle plant is exposed to sunlight for more than 13 hrs in a day, the flowers would not appear. Well, drained humus and rich rich fertile soils having pH 4.5-8.0 are suitable for the cultivation of roselle plants. It tolerates heavy winds and floods [5].

Initially, the seeds are directly sowed in the field. When seeds lose viability rapidly, the previous season's crop is used for sowing. The land is brought to a fine tilth before sowing. Soil is incorporated with a recommended dose of fertilizers after the preparation of convenient-sized plots (6m×4.5m). At a spacing of 75cm along the rows, the ridges and furrows are opened. After 12 hrs. the seeds are pre-soaked in water and treated with 0.2% captan or 0.1% calyxin for a time of 30 min. Then the seeds are sown at the rate of 3-4 seeds per hill at a depth of 5cm at 60 cm distance within the rows [6].

2.2 Harvesting

After 15-20 days of sowing the calyces are ready for picking. The fruits are going to be plucked after their appearance becomes fleshy, plump, tender, crisp and deep red. In a shade, the calyx lobes are separated and dried for 12-15 days till a moisture level of 12% is reached. The harvesting season of the roselle plant lasts for about 2-3 months. Seed production of roselle plant is carried out by picking the calyces and capsule is steel attached to plant. After some time capsule turns dry and starts splitting exhibiting well-developed seeds, which are separately harvested [6].

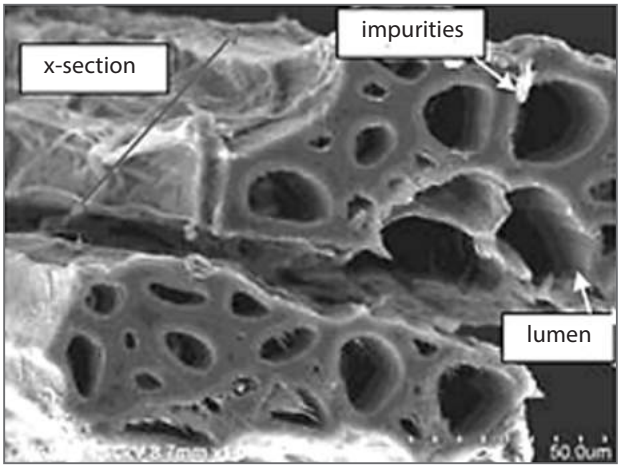
The plants are brought to the threshing yard and seeds are separated and cleaned by cutting them from ground level. A yield of approximately 13000-14000 kg of sparkling calyces which is in flip yield 1800-2000 kg dried calyces in addition to a seed yield of 2500-3000 kg in line with hector can be obtained. From calyces, the recovery % of fatty oil is 16.2% and dye is 1.97% and seeds respectively [6].

3. Morphological structure of Roselle Fibre

The morphology and cross-section of roselle fibre can be observed under a scanning electron microscope (SEM). As it is fine fibre, the cross-sectional morphology of roselle fibre is difficult to obtain. To resolve this problem roselle fibre is deepened in liquid nitrogen to make them hard. For obtaining good results the fibre is coated with gold. The working distance for the examination of the sample is 71mm and the acceleration voltage is 15kV [1].

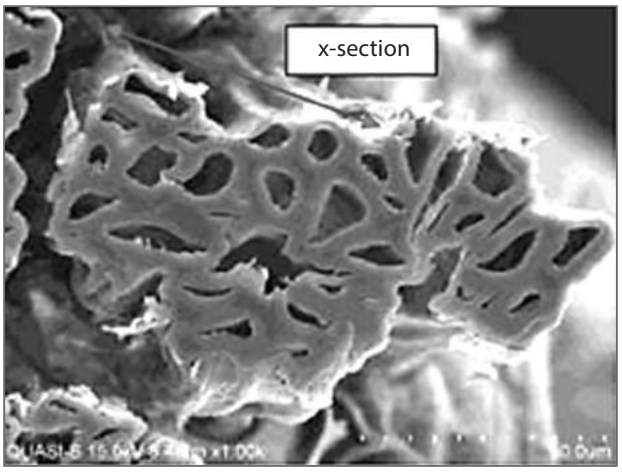
The morphological structure affects the physical and chemical properties of the fibre. The lumen is present at the centre which shrinks due to the presence of a thicker cell wall. The size of the lumen goes on to decrease and the thickness of the cell wall increaseswith the age of the plant. Thus absorbency of fibre increases. The fibres are bonded together with pectin and other non-cellulosic compounds which are responsible for strength. The region where the interference of cells is known as middle lamella. As the cell wall becomes thicker the diameter of the bundle of fibre goes on increasing [1].

The fibre 3 months old shows a bigger lumen structure than 6- and 9-month-old fibre. The 3-month-old fibre appears thinner and it has a coarser surface than 6- and 9-month-old. The surface structure of the 9-month-old fibre is more desirable in composites because of its clean and interlocking structure. The 9-month-old fibre has greater absorbency of water than others due to a thicker cell wall [1].



(a) 3 months

(b) 6 months



(c) 9 months

2 : Cross section of the fibre after 3 months, 6 months, and 9 months.

The fibre length is nearlyequal to 2-2.5m. Also, the maximum diameter of the fibre is 2.90m. The weight of roselle fibre is near about 200-300g and the moisture regain of the fibre is 7.31%.

4. Chemical Composition

Physical, chemical and thermal properties of roselle fibre are influenced by chemical composition. Roselle contains cellulose, hemicellulose, lignin and ash in their chemical structure.

Table 1: Chemical composition of roselle fibre according to plant age. [1]

Chemical Content	3 months old	6 months old	9 months old
Cellulose	64.60	60.55	58.73
Hemicellulose	20.13	16.37	20.87
Lignin	6.20	10.46	7.67
Ash	1.26	1.05	2.05

Roselle fibre contains a high percentage of cellulose on average 60%. Cellulose is considered the main content which provides strength to the fibre and stability to the stem of a plant. It also influences the other physical and chemical properties, the cost of fibre production and the applications of fibre. As the plant gradually matures, the cellulose content goes on decreasing. This is because the plant becomes older and the lumen structure shrinks and the size of the lumen goes on decreasing, this it affects cellulose content and ultimately on strength of the fibre [1].

However, the hemicellulose and lignin content also change as the plant matures. The changes in hemicellulose and lignin are dependent on each other. As hemicellulose degreases the lignin content decreases and vice versa. Hemicellulose occupies the space between cellulose and lignin. Hemicellulose consists of glucose, sugar, xylose, galactose and mannose. Hemicellulose provides a small amount of strength and stiffness to the fibre [1].

Lignin content in roselle fibre is comparatively high than the other bast fibres. Lignin has aromatic rings with higher branching and it is amorphous. It acts as a binder in between the cell walls. Lignin gives strength and stiffness to the cell wall to protect the carbohydrates from various physical and chemical attacks. Structure, morphology, flexibility, other properties and rate of hydrolysis are enhanced by lignin content in the fibre [1].

5. Rosella Fibre Retting Process

There are two types of retting processes are there for rosella fibre. The outer layer of bark was properly peeled from the stems which are used for extraction of bast fibre.

5.1 Bacterial Retting process

Natural retting is also called bacterial retting which is used for the extraction of bast fibres. This retting process is carried out in a tank with 1:20 (w/v) fibre to liquid. Maintaining a temperature of retting water was near about 27 ± 2°C. The pH of the bath is ranging from 6.5 to 7[7], which is like from acidic to neutral pH. Maintain the ratio of retting water to the outer skin bark of the plant material at 10:1 (w/v) throughout the process. The duration for retting decomposition was between 15-20 days. After retting the fibre was washed through running water, and after it was dried in sun and combed with a soft brush, here we got finer fibres and filament. In this process, stalks are immersed in slow-moving water at that time some of the bacteria and fungi boost up in a short time, whichaffects the decomposition and dissolution of materials like lignin, pectin, hemicellulose etc. [7]

5.2 Chemical Retting Process

In the chemical retting process, some chemicals are used to carry out the retting of fibre. It is done by immersing the stalks which havethe entire length in 5-7% sodium hydroxide (NaOH) and 1% sodium bisulphate ($NaHSO_4$) (w/v) solution at a ratio of 1:20, fibre to liquid. After that boil, it for near about 1 hr 30 min, also have to carry out

neutralization by using acetic acid for 3-5 min. when retting is over washed fibre thoroughly with tap water, neutralise it, dried and combed. This process is faster than bacterial retting but it causes some problems as itseffect on fibre strength, stiffness, colour, and lustre. By carrying out the mercerization process it helps to improve fibre properties. Fibres are immersed in 1% NaOH for 3min. It also increases the strength, lustre, and dyeability of the fibre [7].

6. Extraction

Extraction is carried out after the retting process. For making fibre strong the bundle of stalks must be dried. The crushing process carried out by passing the fibres through fluted rollers breaks the dry rosella stalks and reduces the woody particles into small pieces. These particles are removed by the scutching process. Clean rosella fibre can be extracted from the fibre bundles by a hackling process. These processes extract clean rosella fibres extracted by removing hard woody particles. [8]

Figure 3 : Bacterial and chemical retting of fibre

7. Alkali treatment of fibres

Alkali treatment is carried out by usingan 8% aqueous solution of sodium hydroxide (NaOH). The time required for the process is 8 hours and the temperature is maintained at room temperature. Then the fibres are taken for thorough washing to remove the traces of sodium hydroxide. Then the fibre is taken for drying in the oven at 70°C for 24 hours [3]

8. Degumming and Bleaching of Fibre

Extraction of fibre was carried out from rosella bark by decortication and degumming of fibre in an alkaline medium. The process of degumming is based on fibre strength as well as fibre yield. [9] While degumming of decortication fibres was made into a bundle and placed into the stainless-steel vessel keeping material to liquor ratio 1:10 at changing concentrations, i.e., 2.5%, 5.0%, 7.5%, and 10% of sodium carbonate at boiling temperature. Durations are different for boiling temperatures like 60, 90, 120, and 150 min. After the degumming process washes fibre thoroughly for making it alkali-free, neutralizes by using acid which is a dilute acetic acid solution, cleanses it and dried it at a specific temperature. [10]

Bleaching is carried out by adding hydrogen peroxide bleach. [9] Bleaching is carried out using hydrogen peroxide 30% w/v at a temperature of 80ºC bymaintaining pH at 10-11 for a duration of 1hr. After bleaching fibres are washed thoroughly to remove traces of alkali. Add dilute acetic acid solution for neutralization, clean it and dried at a specific temperature. Dried fibres make it suitable for spinning. [10]

After degumming and bleaching of fibre changes in chemical composition are described in the following table :

Table 2 : Comparison table for chemical composition between raw, degummed and bleached roselle fibre [10]

Parameter (%)	Raw fibre	Degummed fibre	Bleached fibre
Cellulose	52.40	54.10	58.00
Hemicellulose	11.50	9.70	8.15
Lignin	15.60	12.34	7.90
Ash	0.80	0.63	0.36
Wax	0.50	0.30	0.20

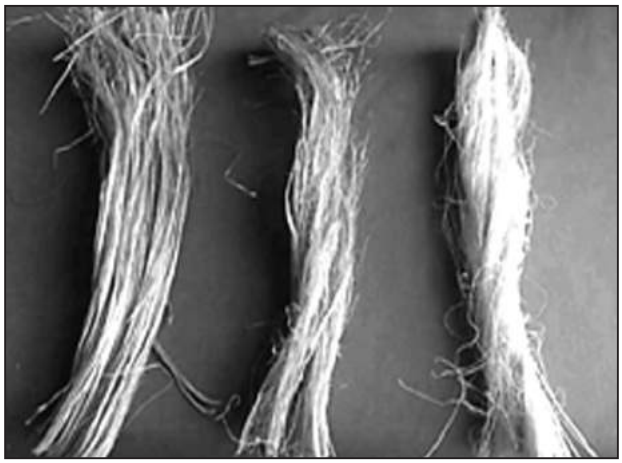


Figure 4: Raw fibre, Degummed fibre and Bleached fibre

9. Properties of Fibre

9.1 Physical properties

The following table shows the physical properties of Roselle Fibre.

Table 3 : Physical properties of roselle fibre [7]

Sr. No.	Properties	Bacterial retted (BR)	Chemically retted (CR)
1.	Moisture content (%)	9.54-11.00	12.90-14.50
2.	Density (g/cm)	1.35-1.46	1.35-1.46
3.	Ash Content (%)	0.93-2.50	1.00-2.70
4.	Colour	Light gold	Dark gold
5.	Diameter(µm)	16.07-20.2	16.07-20.2
6.	Fibre length(mm)	2.10-2.8	2.10-2.8
7.	Yield (%)	25-29	34-42
8.	Strength (MPa)	145.60-177.55	135.15-159.05
9.	Elongation (%)	0.5-0.7	0.4-0.6
10.	Modulus (GPa)	20.70-24.90	19.85-23.70
11.	Strain (%)	0.005-0.07	0.005-0.006

9.2 Chemical Properties

1. **Action of sunlight :** The lignin in the roselle fibre tends to change colour when exposed to light.
2. **Action of heat :** When the roselle fibre the heated for a long time, the fibre gets degraded.
3. **Action of acids :** At cold conditions, the roselle fibre has no reaction when it is treated with organic acids (oxalic acid, formic acid) or mineral acids (sulphuric acid, hydrochloric acid). When roselle fibre is treated with strong acids at boiling conditions hydrocellulose formation takes place.
4. **Action of alkalise :** Roselle fibre loses its weight and strength when it is boiled with dil. caustic soda.
5. **Action of oxidising agent :** Roselle has excellent resistance to oxidising agents.
6. **Action of micro-organisms :** Roselle has good resistance toward micro-organisms. [8]

10. Application of Roselle fibre

Roselle fibre is mainly used for rope manufacturing, heavy-duty cables and composite manufacturing due to its sustainability, lustre, antimicrobial and strength. In the manufacturing of reinforced material for polymer composites, roselle fibre can be used. As the roselle fibre possesses excellent properties, it is used for different applications like automotive and building components.

11. Conclusion

Based on the information provided above about the Roselle fibre, it can be concluded that fibres can be manufactured using a standard cultivation process in India's cold climatic atmospheric conditions. Fibres can be extracted by using various extraction methods. By using various maturity levels of Roselle Fibre different products with varying properties can be manufactured. Like other conventional bast fibre, Roselle Fibre also got great potential for applications in various fields. In the market, fibre has a lot of potential for producing composites. Because it is cellulosic and biodegradable, this fibre can be used to make biodegradable and sustainable composite materials.

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ECOFRIENDLY SCOURING OF WOOL

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ABSTRACT

In conventional method detergent is used for scouring of wool fabric. Use of detergent causes water pollution which increase BOD of effluents about 75%. At a same time, alkaline condition of scouring process gives degradation of wool which leads to loss in tensile and tear strength. In order to reduce water pollution and degradation of wool fibre ecofriendly chemical or natural product should be used. Cow urine and ritha is naturally available which does not cause any water pollution. Also does not cause degradation of wool. In this work wool fabric is treated with various concentration of cow urine and ritha at 50°C for 30 min. Cow urine concentration is varying from 50 gpl to 200 gpl and ritha concentration is varies from 10 gpl to 40 gpl. A remarkable change in absorbency observed in wool fabric from 120 sec to 40 sec. Also, loss in tensile strength is less as compare to convention method. Decrease in COD of wool treated sample indicate no any water pollution because of use of cow urine and ritha solution. Ecofriendly method shows higher whiteness index as compare with conventional method.

Keywords : Cow urine, Ritha, Ecofriendly.

1. Introduction

Scouring is one of the important processes in wool processing which leads to removes non wool contaminants. Conventionally scouring of wool is done by using hot water and detergent. Because of high alkaline condition of conventional scouring gives water pollution and degradation of wool. In order to save water pollution and degradation use of ecofriendly product become essential. Pollution load of conventional emulsion scouring is very high. Natural product like cow urine and ritha solution has ability remove impurity from wool also it saves water and energy. It gives better quality of process as compare to conventional process. In this process cow urine create alkaline medium and ritha give detergency action. Urea present in cow urine gives swelling of wool fibre and ammonia gives pH 8-9. At same time enzyme in cow urine breaks the bond between fibre and grease. All this process leads to scouring action.

2. Material and methods

2.1.1 Gray wool fabric was taken for this research. and fabric particular as below mentioned in table 2.1.1:

Table 2.1.1 Fabric Particular

Sr. No	Fabric Particular	Quality
1	Material	100% wool
2	Weave	Plain
3	GSM	200
4	Tensile strength	40 Kgf
5	Tear Strength	81 Kgf

2.1.2 Chemical : A chemical was taken for study are mention with their particular in table 2.1.2

Table 2.1.2 Chemicals Used for Study

Sr. No	Name of Chemicals	Purpose
1	Cow urine	Antimicrobial agent
2	Ritha solution	Antimicrobial agent

2.2 Experimental methods

2.2.1 Collection of cow urine : Fresh cow urine was used for treatment and the urine obtained was from the same cow through the process.

2.2.2 Preparation of ritha solution : 100 gpl stock solution is prepared by adding 100 gm ritha powder in 500 ml water. Solution is heated at boil for 1 hour. Final volume makes 1000 ml.

2.2.3 Conventional scouring : A gray wool sample is treated 0.5% Sodium carbonate and 1. % detergent solution at 60°C for 90 min. This sample is considered as control sample(S_0).

2.2.4 Ecofriendly scouring : A gray wool sample is treated with various concentration of various concentration of cow urine and ritha solution at 50°C for 30 min. The concentration of cow urine and ritha is mentioned in table 2.2.1.

Table 2.2.1 Concentration of cow urine and ritha in gpl

Sr. No	Sample mane	Sodium carbonate	Detergent	Cow urine	Ritha
1	Control sample (S_0)	0.5%	1.0%	—	—
2	S_1	—	—	50	10
3	S_2	—	—	50	20
4	S_3	—	—	50	30
5	S_4	—	—	50	40
6	S_5	—	—	100	10
7	S_6	—	—	100	20
8	S_7	—	—	100	30
9	S_8	—	—	100	40

10	S_9	—	—	150	10
11	S_{10}	—	—	150	20
12	S_{11}	—	—	150	30
13	S_{12}	—	—	150	40
14	S_{13}	—	—	200	10
15	S_{14}	—	—	200	20
16	S_{15}	—	—	200	30
17	S_{16}	—	—	200	40

2.3 Testing

1. Absorbency (AATCC TM 79) : Prior to test, the specimen shall be conditioned to moisture equilibrium in the standard atmosphere of 65±2% relative humidity and 27±2°C temperature. Absorbency is to be tested by stretching the fabric is an embroidery ring and by putting distilled water from a burette from a distance of 25mm. stop watch is to be used to note the time from falling of drop on fabric to spreading of drop i.e., disappearance of the gloss of water drops.

2. Tensile strength [ASTM D 5035] : Prior to the test specimens were conditioned to moisture equilibrium in the standard atmosphere of 65% relative humidity, 27 ± 2°C temperature. Samples [fabric strip] were cut by using the given template. Cut threads were removed from both side of the sample [raveling] to get strip of exactly 5cm width. Clamp was set on testing machine at distance of 20cm and strength indicating pointer to zero position. Sample was clamped between two jaws, with some length of fabric extending beyond the jaws at each end. Sample was elongated at a constant rate of 300mm/min. till a rupture. Breaking load in Kgf was noted. Same procedure was repeated for all samples.

3. Tearing strength [ASTM D 2261] : The specimen was cut in a dimension of given template shape and dimensions. After cutting, 20mm slit extended from bottom side, leaving a length of 43.0± 0.15mm. to be torn. Pendulum [3200gm attached load] was raised to the starting position and pointer set against stop. The specimen secured in clamps, so that it was well centered with the bottom edge carefully against the stop and upper edge was parallel to the top of the clamp and width wise yarn were exactly perpendicular to them. Clamps were closed by tightening the screws, using approximately the same torque on both the clamps. Pendulum stop was depressed as far as it will go, thus pendulum released. Stop was hold still getting tear completed and pendulum complete its rightward swing. Pendulum is catch on the return swing by the hand without disturbing the position of the pointer read the scale to the nearest whole division.

4. COD : Treated water effluent is taken for testing. 20 ml water sample is taken in reflux flak. 5 mg $HgSO_4$ and $AgSO_4$ added in this sample. Flask kept in cold water at same time 30 ml H_2SO_4 added in the flask slowly. After 10 min 10 ml 0.25 N $K_2Cr_2O_7$ is added in flask. Further flask is refluxed in reflux condenser for two hours. Cool the bath and titrate against 0.1 N FAS. COD is calculated by using titration formula.

5. Whiteness Index (AATCC TM 110) : Prior to test, the specimens were conditioned to moisture equilibrium in the standard atmosphere of 65% relative humidity and 27 ± 2°C temperature. The CIE whiteness index was measured after calibration of spectrophotometer spectro 3000 using D65 Illuminant at 10-degree observer.

3. Result and Discussion

The treated fabric samples were evaluated for its absorbency, Tensile Strength, COD and whiteness index. All the treated sample compared with control sample in order to study the effect of different concentrations of cow urine and ritha solution on the cotton fabric.

3.1 Absorbency

The results of absorbency of conventional scouring and ecofriendly scouring samples are tabulated in table 3.1.1. Absorbency of conventional scoured fabric is 2 min 50 second. As concentration of cow urine and ritha increases absorbency of wool fabric also increases. Remarkable change in absorbency observed. Lowest absorbency time is 42 sec which is achieved in 200 gpl cow urine and 40 gpl ritha solution.

Table 3.1.1 Absorbency time

Sr. No	Sample name	Absorbency Time
1	S_0	125 sec
2	S_1	125 sec
3	S_2	110 sec
4	S_3	100 sec
5	S_4	100 sec
6	S_5	85 sec
7	S_6	75 sec
8	S_7	70 sec
9	S_8	65 sec

10	S_9	60 sec
11	S_{10}	58 sec
12	S_{11}	55 sec
13	S_{12}	50 sec
14	S_{13}	45 sec
15	S_{14}	42 sec
16	S_{15}	40 sec
17	S_{16}	40 sec

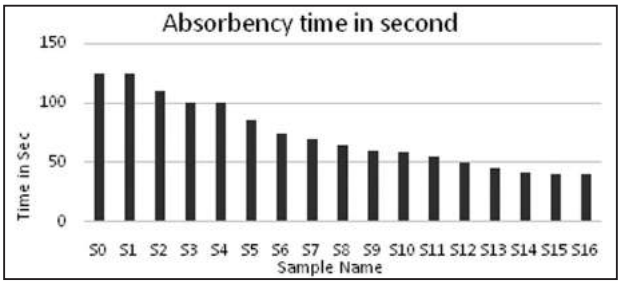

Fig. 3.1.1 Absorbency time

3.2 Tensile strength

The results of tensile strength of conventional scouring and ecofriendly scouring is tabulated in table 3.2.1. Tensile strength in conventional method is less as compare to ecofriendly method. This is because of damage of wool in ecofriendly method. But difference in tensile strength is not up to remarkable level. As concentration increases no any remarkable change in tensile strength of wool fabric. This indicates no any adverse effect of cow urine and ritha solution on the strength of wool fabric.

Table 3.2.1 Tensile strength of wool fabric in kgf.

Sr. No.	Sample name	Tensile strength	
		Warp	Weft
1	S_0	37.50	36.50
2	S_1	39.27	36.30
3	S_2	39.30	36.30
4	S_3	39.20	36.20
5	S_4	39.00	36.25
6	S_5	38.90	36.25
7	S_6	38.95	36.30
8	S_7	38.85	36.15
9	S_8	38.75	36.10
10	S_9	38.75	36.10
11	S_{10}	38.70	36.00
12	S_{11}	38.75	36.15
13	S_{12}	38.75	36.10
14	S_{13}	38.80	36.10
15	S_{14}	38.85	36.00
16	S_{15}	38.75	36.10
17	S_{16}	38.90	36.05

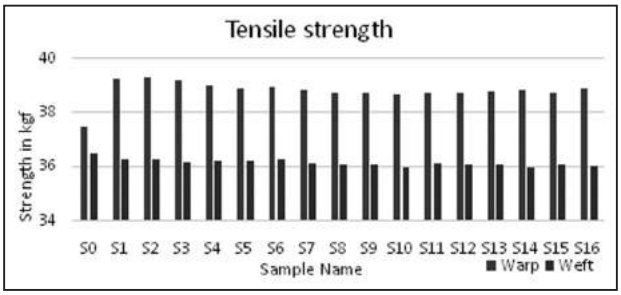

Fig 3.2.1 Tensile strength of wool fabric in kgf

3.3 Tear strength

The results of tear strength of conventional scouring and ecofriendly scouring is tabulated in table 3.2.2. Tear strength in conventional method is less as compare to ecofriendly method. This is because of damage of wool in ecofriendly method. But difference in tear strength is not up to remarkable level. As concentration increases no any remarkable change in tear strength of wool fabric. This indicates no any adverse effect of cow urine and ritha solution on the strength of wool fabric.

Table 3.3.1 tear strength of wool fabric in kgf.

Sr. No	Sample name	Tensile strength	
		Warp	Weft
1	S_0	72.40	70.40
2	S_1	77.00	74.40
3	S_2	76.90	74.20
4	S_3	76.80	74.12
5	S_4	76.20	74.00
6	S_5	76.00	73.90
7	S_6	76.20	73.95
8	S_7	76.40	73.80
9	S_8	75.80	73.85
10	S_9	75.60	73.80
11	S_{10}	75.65	73.65
12	S_{11}	75.60	73.55
13	S_{12}	75.40	73.60
14	S_{13}	75.30	73.80
15	S_{14}	75.00	73.95
16	S_{15}	75.20	73.55
17	S_{16}	75.25	73.55

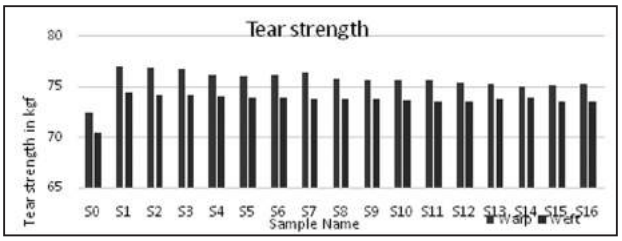

Fig 3.3.1 tear strength of wool fabric in kgf.

3.4 COD

The results of COD of conventional scouring and ecofriendly scouring is tabulated in table 3.4.1. From these results it is observed that use of cow urine and ritha decrease the COD of effluent which indicate water pollution decreases after use of cow urine and ritha. As concentration of cow urine and ritha increases COD decreases. But remarkable change is notobserved because of increases in concentration.

Table 3.4.1 COD of effluents

Sr. No	Sample name	COD
1	S_0	5260
2	S_1	4260
3	S_2	4220
4	S_3	4160
5	S_4	4120
6	S_5	4120
7	S_6	4100
8	S_7	4090
9	S_8	4095
10	S_9	4085
11	S_{10}	4065
12	S_{11}	4050
13	S_{12}	4010
14	S_{13}	3998
15	S_{14}	3996
16	S_{15}	3900
17	S_{16}	3980

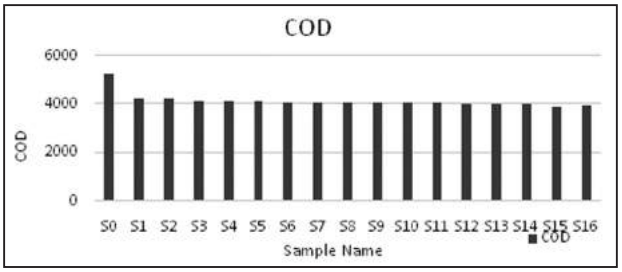

Fig. 3.4.1 COD of effluents

3.5 Whiteness Index

The results of COD of conventional scouring and ecofriendly scouring is tabulated in table 3.5.1. Whiteness index of cow urine and ritha treated sample is higher than conventional method. A remarkable growth in whiteness index is observed in cow urine and ritha treated sample. Effective scouring and presence grease in wool. But increase in concentration of ritha increase yellowness index. It is due to presence of ammonia.

Table 3.5.1 Whiteness Index.

Sr. No	Sample name	Whiteness Index	Yellowness Index
1	S_0	2.75	20.30
2	S_1	12.80	16.30
3	S_2	13.60	16.20
4	S_3	13.64	15.30
5	S_4	14.60	15.60
6	S_5	14.80	15.80
7	S_6	14.60	14.30
8	S_7	13.87	13.60
9	S_8	13.20	14.30
10	S_9	13.64	14.60
11	S_{10}	12.60	15.60
12	S_{11}	13.60	16.90
13	S_{12}	14.62	15.30
14	S_{13}	14.30	15.80
15	S_{14}	13.65	15.30
16	S_{15}	13.21	16.20
17	S_{16}	12.60	14.20

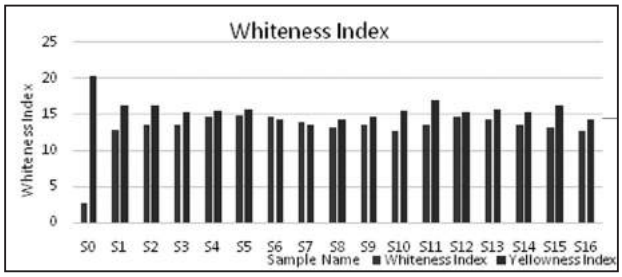

Fig. 3.5.1 Whiteness Index

Conclusion

In this project it is found that fabric treated with various concentration of cow urine and ritha gives satisfactory results of absorbency. The absorbency time decrease from 125 sec to 40 sec as compare with conventional methos. At a same time, there

ECOFRIENDLY SCOURING OF WOOL

is less loss in tensile and tear strength of fabric as compare with conventional method. A remarkable change is observed in COD of effluent which is 5260 in conventional method whereas 4000 in ecofriendly method. This indicate by using ecofriendly methos water pollution can be minimized. Also, very good change in whiteness index is recorded in ecofriendly scouring of wool fabric.

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Spinners observed extended Diwali holidays hoping cotton will fall

Some spinning mills, particularly in south India, are observing extended holidays for Diwali as they await further fall in cotton prices amidst slack demand for yarn.

With demand for yarn yet to pick up, some millers, led by the Tamilnadu Spinners Association (TASMA), have urged Finance Minister Nirmala Sitharaman to extend the window for duty-free import of cotton until March 31.

"Mills have declared an extended holiday for Diwali and are planning to run at a lower level of utilisation in the range of 50 per cent for some more period to rebalance the demand-supply trend," said Prabhu Dhamodharan, Convenor, Indian Texpreneurs Federation (ITF). "South-based mills have extended holidays as there is no demand for yarn. On the other hand, multinational companies are buying cotton that is to be delivered in December and January at low prices. But farmers are looking for better prices. It has created some sort of standstill," said Anand Popat, a Rajkot-based trader in cotton, yarn and cotton waste. "No mills (in some regions of Tamil Nadu) have reopened after Diwali. Cotton arrivals have not been seen after October 22 and price trends are not available over the past week," said K Venkatachalam, Chief Advisor, TASMA.

But OP Gulia, CEO, SVP Group, which owns textile units in Tamil Nadu and Rajasthan, said all mills that had closed have extended the holiday.

"There is also a problem of availability of workers due to continued holidays till *Nag Panchami*. However, all better-placed mills which are open and running have not closed. They have rather reinstated the capacity," he said.

According to Agmarknet, a unit of the Ministry of Agriculture, cotton arrivals during October 19-26 at various agricultural produce marketing committee (APMC) yards were 45,816.59 tonnes compared with 67,127 tonnes during October 13-18.

"There is a slowdown in the arrival of cotton as farmers are unwilling to sell cotton at a low price. The price has decreased by 10-15 per cent from the peak (witnessed in May this year) over the last 3 days," said Ronak Chiripal, CEO, Nandan Terry. "Cotton arrivals have dwindled for a week now due to holiday mood. No one is there to buy. This will again pick up very soon. And so will the price trends," said Gulia.

An industry source said many mills bought cotton at ₹65,000-66,000 before Diwali and some had purchased for November at ₹64,000.

Popat said ginned cotton is currently quoted at ₹65,50 a candy (of 356 kg) by farmers but mills are bargaining at ₹64,800.

"Multinational companies are offering ₹58,000-59,000 a candy for cotton that can be delivered during December-January," he said.

Prices on the ICE New York, are $7.73 a pound (₹5,413 a candy) for delivery in December. ■

MARKETING OF VARIOUS AIR LAID WEB FORMING MACHINES USED TO PRODUCE NONWOVENS

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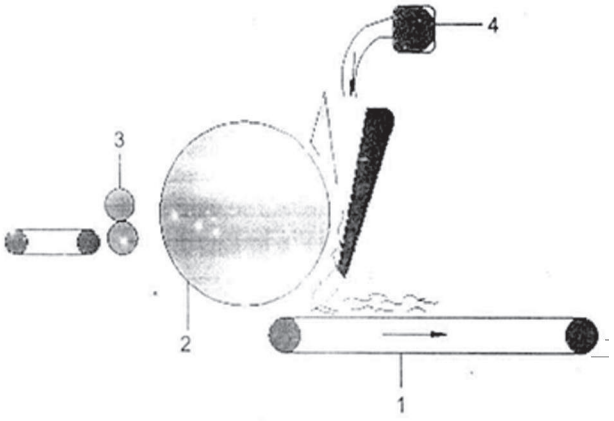
Associate Professor of Textile Technology, DKTE

Abstract

In this paper initially the various air laid web forming machines such as random carding and random opener used to produce nonwovens are listed. Then the photograph of random carding is presented followed by the end use products made by using random card are listed. Then the photograph of random opener is presented followed by the end use products made by using random carding are listed. Then the Photograph of Aerodynamic (air lay) web formation techniques is presented followed by listing the end use productsThat can be made on this machines. Finally the usefulness of the paper is stated.

The various air laid web forming machines are random opener and random card.

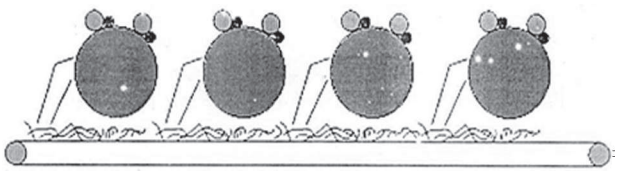


1 – Perforated lattice with suction, 2 – Opening roller, 3 – Feed roller, 4 – Blower fan

Photograph of random opener

Application of nonwovens made from random opener

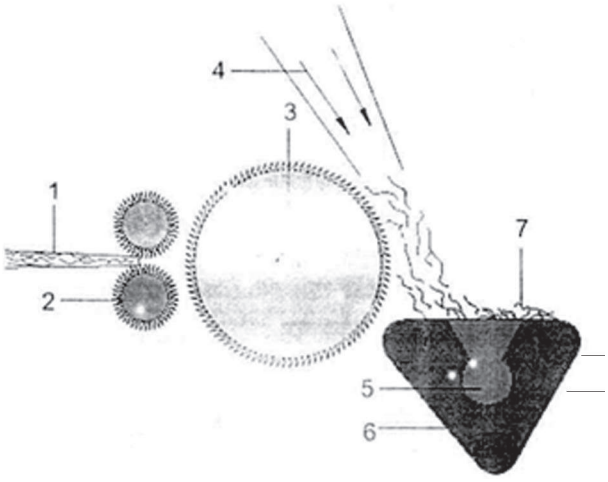
- Wadding
- High lofts used in winter clothing
- Sound insulation material
- Absorbent pads
- Wipes and hygiene



Photograph of random card

Applications of nonwovens made from random card

High loft material suitable for insulating applications



1 – Pre-opened fibers, 2 – Feed rollers, 3 – Main cylinder, 4 – Air blower, 5 – Suction

Photograph of Aerodynamic (air lay) web formation techniques

Application of air laidNonwoven products

- High loft products from the clothing and furniture industry
- Wadding
- Medical and hygiene fabrics
- Geo textiles and roofing felts
- Filters
- Insulation and barrier materials
- Wall and floor coverings
- Moulded products
- Wipes
- Preformed automotivecomponents
- Absorbent cores
- Acquisition and distribution layers

Conclusions

This paper will make reader aware about the various nonwoven end use products that can be produced using the various air laid web forming machines.

Reference

1) Nonwovens by Karthik. ■

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See you soon in India! Loepfe is thrilled to be back in India for ITME 2022. There will be many exciting things to explore. Looking forward to seeing you there – hall 14 booth A2B1!

Market leading YarnMaster clearers and WeftMaster sensors

Loepfe will showcase the market leading YarnMaster PRISMA along with its well-established counterpart YarnMaster ZENIT+. With this dual offering, Loepfe uniquely leads both on technology and performance as well as on the proven reliability for all applications in winding. The latest field study results, which show the impressive cost savings achieved by PRISMA, will be the subject of many discussions. And Loepfe continues to report that promised customer orders are delivered as agreed — a reliable partner at all times.

Loepfe has much to offer even beyond the spinning sector. For example, WeftMaster FALCON-i is placed in various processes from weaving and knitting, to processing different technical textile applications. FALCON-i is known for zero-defect manufacturing regardless of color, conductive materials, monofilament, or multifilament yarns, thus this sensor is successfully used in a wide variety of fields.

And WeftMaster SFB is commonly used in many Indian weaving mills for its efficiency-increasing effect. As the number of weft breaks can be substantially reduced, production is not interrupted - and obviously, weft break repair time is also saved.

Loepfe India – starting January 2023

As part of the strategy to move closer to our customers, and to offer even more effective local installation, training and troubleshooting services, Loepfe Brothers is founding a Loepfe India business unit. By fully integrating the teams of Masterline Technologies India in the three locations Coimbatore, Guntur and Vadodara, we are ensuring continuity while jump-starting our own local operations as Loepfe India, a unit of the local Vandewiele organization.

New partner for the weaving sector – Svan Texcon

To integrate more WeftMaster sensors in Indian weaving mills and support the local customers with a clear focus on the product range, Loepfe has started collaborating with Svan Texcon in India. The Svan Texcon team will serve our clients with need-based consultations and professional service for the WeftMaster product range.

For further information, please contact :
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Website : www.loepfe.com ❐

Deepika Padukone rolls out Autumn Winter collection of Navyasa by LIVA India's first new-age saree brand

After an overwhelming response to its launch early this year, Navyasa by LIVA has launched their much-awaited Autumn Winter collection featuring Deepika Padukone. The collection showcases quintessential contemporary sarees in vibrant colors spread across floral, geometric, and abstract expressions adorned with metallic foil prints, crystal stones, and embroideries.

It also debuts two new fabric designs, LIVA Sheen & LIVA Shimmer with zari, and an extended range that includes tunics, kaftans, tops, dresses, capes and jumpsuits. The collection features ethereal prints and chic styles. Each saree tells a color-rich story with a modern twist. The unique bold designs and diverse themes are

designed to allow style to converge with fashion. Renowned designer Abir and Nanki, along with the LIVA design team at have been instrumental in bringing the collection alive.

Explaining the thought behind the launch of this brand, Mr. Rajnikant Sabnavis, Chief Marketing Officer, Grasim Industries (Pulp and Fiber), said, I am hoping to see a much larger shift in the perception and adaptability to sarees especially among the younger generation and urban women. "Aimed at perceiving sarees as the new "cool" and making it the preferred attire for the modern Indian women. The brand is an ode to true contemporary, cosmopolitan Indian women who believe that style is a combination of fashion and comfort."

Starting from Rs. 2499, navyasa by LIVA currently offers 200+ styles in different varieties of nature based LIVA fabrics appealing to various consumer sensibilities & desires. The new collection is available now at five stores in India's top cities; Delhi, Mumbai and Bangalore, alongside all leading ecommerce portals.

Designers Abir and Nanki added, "The new edit is inspired by all things nature with colors that are a mix of bright and light. This melange of head turning prints has been especially curated for the contemporary woman of today and tomorrow. The modern woman wants her saree to fit comfortably like a second skin, look well, and feel good and navyasa by LIVA accomplishes just that. The fabrics made from natural materials breathe well and at the same time look luxe."

About LIVA

LIVA is a new age fabric from the Aditya Birla Group. Unlike other fabrics, that are boxy or synthetic, LIVA is a soft, fluid fabric which falls and drapes well. A promise that is delivered through an accredited value chain. The new-age naturally sourced fiber made into fabric in pure or blended form, transforms not just the outfit but also the person wearing it. It is comfortable, soft, natural, and eco-friendly.

For further information, please contact :
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TENCEL™ displayed an Exquisite Poetic Indian collection by Anju Modi at Lakme Fashion week in partnership with fashion design council of India a poetic fashion showcase

The showcase was held at the iconic Jio World Convention Centre

Anju Modi's "Damayanti" collection presented by TENCEL™ fiber brand at Lakmé Fashion Week in partnership with FDCI was a poetic fashion showcase that created nostalgic romance on the ramp. The event took place at the Jio World Convention Centre, India's largest & foremost venue for marquee exhibitions, conventions, and social events and located in the heart of Mumbai's business district, Bandra Kurla Complex.

Inspired by the ethereal paintings of top Indian artist Raja Ravi Varma whose muse was Damayanti, Anju's look for the show reflected the western techniques and styles that were pioneered by the

artist as the collection unfolded on the runway. The graceful saris were organic while the hand-crafted silhouettes spoke a design language all of their own.

Anju's design philosophy has always resonated beautifully to empower the craftsmen of the country and this season too, it balanced perfectly with TENCEL™ lyocell and modal fibers for the new collection. The TENCEL™ fiber brand's dedication to eco-friendly and impeccable quality products was aligned with Anju Modi's brand throughout the line presented during this show. The presence of TENCEL™ fibers not only enhances the aesthetics of the collection but is also highly comfortable and breathable for the wearer.

The saris were richly embellished with hand embroidery and draped in various traditional forms. The vibrant hues of the popular 6-yard drape were edged artistically with contrasting shimmering borders that faithfully kept the Raja Ravi Varma inspiration in firm control. The luxurious TENCEL™ lyocell and modal fibres added to the grace and elegance of the collection, as Anju visualised a look that was sheer poetry on the ramp.

Actress Sanjana Sanghi created dramatic, magic on the ramp, when she closed the show, wearing a black/gold draped dhoti, maroon bralette, topped with a black, velvet, embroidered bolero and a royal purple dupatta with gold motifs.

Speaking on the collaboration, Mr. S Jayaraman, Senior Commercial Director, Lenzing Group, said, "We are highly pleased to collaborate with a respected designer like Anju Modi and see her exquisite collection made from TENCEL™ fibers that was presented at this season's Lakmé Fashion Week in partnership with FDCI. It was an honour to co-present this multi-faceted collection inspired by the unique artist Raja Ravi Varma, who is known to exquisitely breathe life into every mythical character in his creations. The multifaceted collection 'Damyanti' and its timelessness will appeal to audiences across genres. With this collection we seek to inspire and create more traditional wear trends powered by modern age fibers like TENCEL™. Our collaboration with Ms. Anju Modi was particularly significant as TENCEL™ fibres celebrates 30 years of sustainable fiber innovation along with the designer who has completed three decades in the industry. We are looking forward to driving continuous innovation and building stronger partnerships within India over the next 30 years and beyond."

Sharing her thoughts on the collaboration, designer Anju Modi said, "The Lenzing Group's dedication to being the industry's innovation leader by offering eco-friendly, innovative, and impeccable quality products proves to be in alignment with the brand values at Anju Modi. The collection made from TENCEL™ Lyocell and Modal fibre gracefully captures the essence of Raja Ravi Varma's painting style and aesthetic and will bring forth a romantic nostalgia on the runway."

The fashion collaboration between TENCEL™ and Anju Modi for the "Damayanti" collection was a stunning, nostalgic, romantic look at fashion which for the coming months will appeal to buyers who desire art as well as style in their fashion stories.

About Fashion Design Council of India (FDCI)

A non-profit organization, the Fashion Design Council of India (FDCI), is the apex body of fashion design in India, represented by over 400 members. Founded on the premise of promoting, nurturing, and representing the best of fashion and design talent in the country; its prime objective is to propagate the business of fashion. FDCI stays true to its commitment to promote the 'Make in India' label as handlooms take center stage, in a country, who's heritage is soaked in the flavors of indigenous crafts. For more information, please visit: www.fdci.org.

About Lakmé

Lakmé, is India's no.1 color cosmetics and leading premium skincare brand from Hindustan

CORPORATE NEWS

Unilever Ltd. Lakmé has been the pioneer of the make-up and color cosmetics in India since 1952 by launching numerous trends leading and high-performance products. Combining international cosmetic technology with an in-depth understanding of the Indian woman's needs, Lakmé offers women a comprehensive beauty experience through its extensive product portfolio as well as contemporary services at Lakmé Salons, India's no.1 salon chain. For Further Information log on to www.Lakméindia.com

About Rise Worldwide

RISE Worldwide is India's largest independent Sports, Lifestyle and Entertainment company. Its portfolio includes Sports & Sponsorship Consulting, Fashion & Sustainability Platform Building, Athlete Talent Management, Licensing, Broadcast Production, Lifestyle and Entertainment with owned or managed key properties such as: Lakmé Fashion Week, India's premier Fashion platform; Indian Super League, country's premier football league; Tata Open Maharashtra, South Asia's only ATP World Tour event; Jio Wonderland; The Voice of Fashion and SU.RE Sustainable Resolution.

About TENCEL™

TENCEL™ is the textile specialty brand under The Lenzing Group that covers textile specialty product fiber offerings for apparel and home. The TENCEL™ product brand portfolio defines a new evolutionary step in terms of sustainability, functional benefits, natural comfort and caters for distinctive everyday usage or application. Product brands under TENCEL™ include TENCEL™ Active, TENCEL™ Denim, TENCEL™ Home, TENCEL™ Intimate, TENCEL™ Luxe and TENCEL™ for Footwear.

Featuring botanic origin and biodegradable quality, TENCEL™ branded modal and lyocell fibers can enhance the breathability of fabrics and have a minimal static charge when used in fabrics. Fabrics made of TENCEL™ Modal and Lyocell fibers are also gentle on skin with smooth, long-lasting softness, color vibrancy and color retention features. TENCEL™ Lyocell fibers are versatile and can be combined with a wide range of textile fibers to enhance the aesthetics and functionality of fabrics. Through moisture management, TENCEL™ Lyocell fibers can also absorb moisture efficiently. A variant of the Lyocell production process also produces the TENCEL™ Luxe branded lyocell filament yarn, which is an extremely fine filament yarn for luxury fabrics and supremely smooth to the touch. Exhibiting high flexibility, TENCEL™ Modal fibers enhance textiles with a naturally soft quality. Offering endless design possibilities, TENCEL™ Modal fibers can be blended with other fibers and processed using conventional machinery, significantly improving the softness and comfort of fabrics.

Fibers and filaments used under the TENCEL™ brand are derived from certified and controlled sources following the stringent guidelines of the Lenzing Wood and Pulp Policy. Namely, TENCEL™ branded modal and lyocell fibers are produced via environmentally responsible production processes and are compostable and biodegradable, thus can fully revert back to nature. They are designated by the USDA (U.S. Department of Agriculture) BioPreferred® Program. TENCEL™ Luxe is registered by The Vegan Society.

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A.T.E. : Your Partner in Sustainability, Innovation and Technology

The India ITME exhibition is the ideal platform for textile manufacturers to source, as well as learn about, the latest textile technologies. Successfully serving the Indian textile industry for more than eight decades, A.T.E. and its principals have been enthusiastic participators in every edition of the ITME expo and 2022 was no exception.

A.T.E. invited all visitors attend in this mega event at his given stall : H1A1B2.

With more than 2000 square metres of space at ITME, A.T.E. and its principals have showcased leading edge textile technology products and solutions – from spinning, fabric forming and processing. In addition, we displayed automation for textile machinery, effluent treatment, nonwovens, synthetics and carpets and much more! A.T.E.'s own pavilion of more than 500 square metres carries 20 textile processing principals such as Fong's, Monforts, and Zimmer, Osthoff Senge, Mahlo, CEIA, Danti Paolo, Color Service, Guarneri Technology, and more.

A.T.E.'s pavilion had also housed our business units such as HMX (heating and cooling solutions), AxisValence (electrostatic control and defect detection systems), A.T.E. Automation division (automation, machine upgrade, and core/slub yarn systems), A.T.E. HUBER Envirotech (wastewater solutions) and EcoAxis (industrial IoT solutions).

TeraSpin had its own stall and will display our world-class spindles, drafting systems, cradles and inserts, A.T.E. automation division's solutions for core and slub yarn and DeChang's compact spinning.

A.T.E. offered a package of machinery for processing woven, knit, denim, terry fabrics and technical textiles. The representatives of all our principals will be available at our pavilion to discuss the latest technology for processing various substrates.

Principal stalls at ITME 2022 given below :

Principal	Hall and stall	Exhibit
TRÜTZSCHLER	H10A3	Spinning, Card Clothing, Non-Woven and Man-Made Fibres
KARL MAYER GROUP	H15C10D9	ISOWARP sectional warping machine
FONG'S	H1A1B2	Soft-flow high temperature dyeing machine for dyeing, automation and digitalisation solution
TERASPIN	H10B8	All new spindle and drafting components for ring frames
ate	H10B8	Slub and core yarn systems
AXIS VALENCE	H1A1B2	Electrostatic discharging and charging, 100% print and surface defect detection and spot viewing
ColorService	H1A1B2	System for automatic powder dyes storage, auto weighing and dyes dissolution
MAG beyond quality	H10E11	Systems for fabric inspection, yarn tenacity and cotton quality testing, and more
得昌纺机 DE CHANG TEXTILE TECH	H10B8	Compact spinning and components

For further information, please contact :
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COLORJET appoints Arun Varshney as head for its all-round development of Textile business

ColorJet has appointed Arun Varshney as Vice President and Business Head - Textile Business. He moves from Voltas Limited, A Tata Enterprises where he was Managing Operations through a team of Sales and Service Managers, Customer Relationship Management & Key Account Management, Marketing & Sales of Textile Machines, Accessories & Services, B2B Textile Solutions, New Avenue's & Profitability Management, Business & Manpower Strategy.

CORPORATE NEWS

Mr. Varshney comes with a vast experience of over 28 plus years in Textile industry. He is also a certified Tata Business Excellence Assessor and is certified in Effective Personal Productivity, Relationship Management, and Conflict Management & Team Building amongst other courses. He started his professional journey with Voltas in 1994 as Textile Engineer, served in to many roles offering B2B Textile Solutions to many leading Textile business houses, and was leading the team of Sales and Service Managers. Lastly was heading textile machinery business of the North and Central region of India.


Mr. Arun Varshney

Mr. Madhu Sudan Dadu, Chairman, ColorJet India Limited, said, "We welcome Arun to ColorJet Family. With his vast experience in key markets across multiple functions, we are immensely hopeful that Arun would add huge value to our textile business. With this key appointment, we are looking forward to expansion in new market segment along with driving growth in the existing market. On His appointment Mr. Varshney Said, I am thrilled and honored to join ColorJet. It has technologically advanced innovative product line, which offers solution to those looking for more environment friendly textile printing processes as by nature it is more sustainable and offer a way forward towards clean, efficient, profitable manufacturing. I look forward to joining hands with talented team and contributing towards its growth.

About ColorJet India Ltd

ColorJet Group, manufacturer of Digital Textile printers from India, markets its products in 25 countries worldwide. Founded in 1995, the company maintains its operations via two manufacturing facilities and sales offices spread across seven countries, which include India, China, Bangladesh, UAE, and Sri Lanka. Till date, ColorJet has installed and implemented over 7,000 of its printing solutions and products across 450 cities around the world backed by a strong 350-member team, of which almost 100 are in technical related functions.

For further information, please contact :
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Global Entertainment Company Marvel ties up with Manyavar for a unique Indian wear collection

Marvel fans have another reason to rejoice after the release of Black Panther: Wakanda forever. Looks like an exciting and one of a kind association is brewing between Indian wear brand Manyavar and world's most prominent character-based entertainment companies Marvel!

If our guesses are right, with this legendary collection the wedding season will be royal and power packed with style quotient going up. Prepare for fanfare across celebrations.

Marvel fans aren't you excited to see your favourite characters unveiling in Indian wear?

For further information, please contact :
Sourabh, Manyavar
Ph : 9167776992 ■

India ITME 2022—Revolutionizing South East Asian Textile Industry

'India ITME 2022' - prestigious, most awaited mega technology and engineering B2B exhibition for Textiles is hosted every once in 4 years in India to cater to the machinery and technology requirements of textile industry of India, neighboring South East Asian and Middle East countries. 11th edition of India ITME 2022 was held from 8th – 13 December 2022; first mega event post pandemic.

This highly anticipated event is India ITME 2022 was held for the first time in Northern India at a world class venue IEML Greater Noida, a well-designed Exhibition Venue in the National Capital Region and one of the largest in India spread across 235,000 sq mtrs area. IEML is strategically located at Greater Noida which is an Industrial Area is located at the intersection of the Western and Eastern Dedicated Freight Corridors and is also the gateway to the Delhi-Mumbai Industrial Corridor (DMIC). It lies within the National Capital Region of India's capital – New Delhi and is adjacent to Noida, one of the largest industrial townships in Asia.

Mr. Adhip Mitra, Addl. Executive Director & Secretary, EEPC & Ms. Seema Srivastava, Executive Director, India ITME Society Signing the agreement

Showcasing 1600 + machines, 68 countries, 1000 + Exhibitors geared upto creating a high voltage goal oriented interaction at this B2B Event to attract business leads, new opportunities in a vibrant and large sized market – India!

"Slow and Steady" has been the growth story of Indian textile industry. India's textile industry has strived to build modern capabilities alongside nurturing age old tradition and skills to stay strong and proud; facing challenges from speed, cutthroat price competition, youthful/instant fashion industry brought on by advent of modern technology.

India ITME Society has played a significant role in facilitating technology access to nation's textile industry from across globe enabling textile segments to upgrade its manufacturing technology and export capabilities. ITME exhibitions from 1980 onwards was specially a boon for small companies who could view and access engineering advancement in textile machinery from across globe without bearing high cost. Over the time, India ITME events became a prime event for South-East Asian countries as well as focused on developing their own textile industry.

Left to right Mr. Sudeep Sarcar, CEO IEML, Ms. Seema Srivastava, Executive Director, India ITME Society, Mr. S. Hari Shankar, Chairman India ITME Society, Mr. Adhip Mitra, Addl. Executive Director & Secretary, EEPC, Mr. Ketan Sanghvi, Hon'Treasurer, India ITME Society

'India ITME 2022' has brought a rich array of concurrent program, workshop & conference offering action packed week for industry members.

Key topics for further growth of Indian textile industry with latest technology and Government Policy Vision for boosting textile machinery manufacturing was addressed at 'CEO Conclave.'

India ITME Society jointly with EEPC as B2B partner had organised Buyer Seller Meet (RBSM) during INDIA ITME 2022. This Buyer-Seller Meet is a unique platform to connect major buyers with sellers of the textile engineering sector in order to facilitate textile engineering businesses in accessing global opportunities. This is one of kind initiative for the textile industry by India ITME Society & EEPC.

India today offered the most reliable, stable and trusted business environment to global business. Indian textile industry offers a large growing opportunity and India ITME 2022 is the gateway to this vast data of potential customers and business partnership.

For further information, please contact :
Seema Srivastava, Excutive Director
India ITME Society ■

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SPINNING

www.truetzschler.com

The event of India ITME Awards

Search for Talent

Jury Engrossed in a Discussion during the Jury Meet at India ITME Society Board Room, date: 30th September 2022
L to R - Mr. R Anand, Mr. Manohar Samuel, Mr. Sanjiv Lathia, Mr. Updeep Singh, Mr. Ketan Sanghvi,
Mr. S Hari Shankar, Ms. Manisha Mathur, Mr. Uday Gill, Mr. G V Aras

"Exceptions make rules Strong; Be the Exception"

This is the idea which drives India ITME Society's search for talented, stand out leaders, innovators and determined perseverance in their field of work. To mark 4-decade old successful journey of India ITME Society an award was initiated.

2nd edition of awards are Society's humble attempt to recognize the exceptional & significant contributions that have influenced positive change in the textile engineering sector of our nation.

India ITME Society Awards 2022 is scheduled to be presented on 10th December 2022 at India Exposition Mart, Greater Noida, Uttar Pradesh.

With India aiming towards becoming a super technology provider to the world and having a vision of developing 100 Indian textile machinery champions, the India ITME Society has been instrumental in textile engineering and technology provider's rise from scratch.

These awards will set the tone for the start of the biggest textile engineering show which will have the presence of international & national delegates representing ambassadors, council members, various ministries, state ministers, textile & state commissioners and global investors. The renowned textile entrepreneurs and emerging textile investors will all be a part of this event. The winners will be felicitated with cash award, trophy & certificate in the format best suitable to the category. With the wide network of the India ITME Society, the recognition of the awards will not just be limited to the delegate present at the award function but will also be circulated to the wide database & the entire press & ministry associated with the India ITME Society.

This 2nd edition of awards looks to recognize and felicitate awards in the following new categories :

- **Category 1 :** Award for Overall Best Performer in Engineering Industry presented in 8 Specific categories (Ginning | Spinning| Weaving & weaving preparatory |Processing & Finishing | Garmenting | Printing | Accessories for Textiles | Technical Textiles)
- **Category 2 :** Award for Best Innovative Technology for Pollution Control
- **Category 3 :** Women Leadership Award in Textile & Textile Engineering
- **Category 4 :** Award for Research Excellence
- **Category 5 :** Textile Maestro

Society strongly believes that education is the foundation platform that has lifted this textile sector to such a glorious stage. So it has also introduced an award category specifically targeting youth, research & innovations. Mr. S Hari Shankar, Chairman, India ITME Society said, "The society & self strongly believes that the young minds of

today are the colourful future of our Textiles, this is why in addition to the dedicated award category for our innovators in 2022 edition, we have always introduced knowledge programs for the learners. Our society over the years is initiating several constructive programs to recognize & empower knowledge to innovative researchers, and technical faculties as well as to act as an active connect between the knowledge hub -technical institutes & the ever-changing industry. I am sure, the success story of innovator recognized in our awards will attract more youths towards R & D in textiles"

To ensure fair practice and true unbiased nature towards the awards selection, the society has brought on board reputed textile technocrats from different sectors of textile.

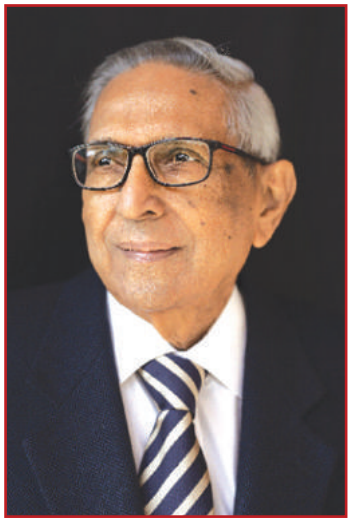
Mr. Uday Gill, Group Chief Strategy Officer, Fibers, Indorama Ventures Ltd., stated that "Encouragement and recognition are essential for people to innovate and grow to their full potential. While there are many prestigious awards, the India ITME Society promotes necessary niche categories and provides proper due diligence to the selection process. I am extremely proud to be on the jury panel and highly impressed by the caliber of nominations."

Adding to this **Mr. Updeep Singh, President & CEO, Sutlej Textiles and Industries Ltd** stated that "Winning India ITME Awards will be an accelerator for the growth of engineering firms. The Society's wide network will not only enhance the company's reputation amongst the fellow industry but among the most prestigious customer industry of the sector. Credits to Society for curating such an enormous opportunity for recognition. The award formations and the precision in the collection of information for the evaluation was perfectly poised."

Application for the 2nd edition of award was opened in July 2022 with the intend appreciating the best in the industry. No stone was unturned, no shores left untouched by the society in its search to locate the best amongst the best, once all the gems were collected across the nation.

Stellar jury panel evaluated and selected the one's that shone the brightest among all the stars. Selecting the winners took 2 days long deliberations where each were put through stringent litmus test.

This year Society introduced a Textile Maestro award to honor the legendary industry leaders of our Country & bestow the deserved respect & regard to the role model who inspires all. Jury Member, **Mr. R Anand, Partner, Eastern Engineering Company** opinioned "India ITME has chosen multiple avenues to remain connected with the textile industry eco system in India and overseas. The decision to recognize people in this eco system through a rigorous and independent selection process is a good initiative. India ITME underlines its position as the platform of choice for all engagements with the textile and textile engineering industries."

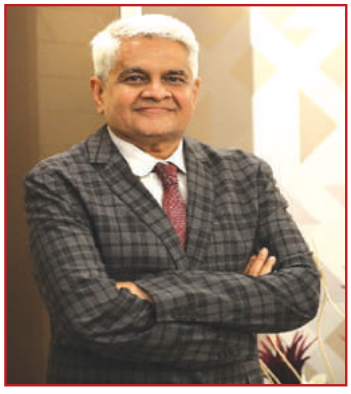


Another effort to stimulate, encourage & motivate women's leadership through recognized firm, encourage & empower women to come forward & make their mark in the highly competitive textiles, apparels, textile engineering & technology segment.

Mr. Gurudas V Aras, India consultant to the ITA group, Germany and APS GmbH & Strategic Business Advisor & Mentor for many textiles & engineering businesses stated and the jury member for both the edition commented "I have been fortunate to be a jury member for the India ITME Society awards since its inception in 2019. The award nominations for both editions have simply amazed me. Having worked in our engineering sector for decades, this technology award creation by the Society was a feeling of achievement

since it will yield deserving recognition to fellow Indian machinery producers. The domain-specific categories and the keen focus on encouraging women leaders by bringing extremely talented women leader's nominations is an inspirational work done by the Society. It will be my utmost honor to continue this journey of aiding recognition and mentorship for our industry. I am sure the competition will go tougher and tougher as the success of other will inspire other competitors to further enhance their game."

Mr. Sanjiv Lathia, Past Chairman of India ITME Society stated "India ITME is always presenting opportunities & platforms for the manufacturers and businessmen from the textile industry and the textile engineering industry. ITME Awards is another excellent opportunity for the awardee organization to showcase their innovation and build their reputation across the textile horizon globally taking advantage of ITME global connect. International exhibitors, Government representatives, Business visitors and buyers, foreign delegates, Embassy & Consulates will all be present at the Technology Award Function."



Dr. Manisha Mathur, Joint Director, SASMIRA stated "India ITME Awards motive of felicitating and encouraging innovations, research in every edition is a remarkable feat now beknownst to all segments of textiles. They are trying to bridge the gap between academic research and industry application. With the introduction of "Research Excellence" capturing students, faculty and institutes is an encouraging work which will truly inspire more and more faculty and students to invest in finding innovative and sustainable practical solutions".

Mr. Manohar Samuel, Advisor, R&D Reliance Retail "An award is a brilliant tool to inspire excellence in a chosen domain, given the visibility and pride that come with it. They truly help organizations in benchmarking their products, processes and services with peers and also in sharpening execution skills through cross learning. Being the leading representative of the Textile Engineering sector, India ITME Society has always encouraged a spirit of innovation and entrepreneurship for the sector's growth. Conceptualizing the awards encompassing a wide spectrum - Technology, Individual and Sustainability is one such wonderful initiative. I enjoyed being amongst the elite jury and believe me, we had a tough time in drawing out winners from outstanding contributions. I wish India ITME, the award winners and all participants the very best in their journey of excellence and nation building."

Mr. Ketan Sanghvi, Hon. Treasurer, India ITME Society "India ITME Society's goal is to promote textile machinery manufacturers in India. With the ITME awards, we are trying to create a gateway for building more visibility and recognition for our fellow technology manufacturers and inspire more investment in India for textile machinery and technology. We would also like to celebrate the increasing participation of women in leadership positions in the textile and textile engineering industries."

The event of India ITME Awards

All the nominations were screened for their eligibility by Suvin –the technical coordinator for the event and then the summarized applications were presented to the jury for further scrutiny and selection of the winner. **Mr. Avinash Mayekar, Managing Director of Suvin** shared his experience over the last 2 years whereby he and his team has provided the technical know-how and format in these awards. "I have seen India ITME society adding value in each and every activity year by year. It was a great honor to be associated with their vibrant success stories. Of course, ITME award ceremony was also a great honor to be with leaders of industry and dynamic ITME management team. Our first edition was for associations across India and in this edition we decided to give justice to the industry in all segments from research to innovation, from corporate leaders to tribal communities, from woman empowerment to green initiatives. It was real encouraging assignment with heavy weigh jury members and a great association with ITME board members."

Mr. S. Hari Shankar, Chairman & Members of Steering committee of India International Textile Machinery Exhibitions Society along with the Jury members takes great pride & pleasure in announcing the winners as below :

Category 1
Top Performance in Textile Engineering Industry

Under the Spinning segment **M/S Lakshmi Machine Works Limited** is accorded the award.

Although other enterprises were neck to neck, the truly Indian make innovation in the product portfolio, systematic skill development program, and a detailed policy for quality and control introduced by Lakshmi Machine works impressed the jury members. They are producing the entire range of Spinning Machinery.

Under the Weaving & Preparatory segment **Rabatex Industries** is accorded the award. Rabatex brand is well known for weaving preparatory machines and has excelled a lot in coming years for producing appropriate technology and giving service support to their customers for past six decades. They are offering sampling machines, sectional warping machines, rewinding machines to the textile industry.

Under Finishing segment **Texfab Engineers (India) Pvt. Ltd.** is accorded the award. Texfab is one of the leading manufacturers and exporters of fabric finishing machine, fabric dyeing machine. Having strong customer service support and being a 100% Indian organization jury members have selected them as a winner in this category.

Under printing segment **ColorJet India Ltd.** emerged as a winner due to innovative concept developed within India which is now gaining a lot of importance in overseas market. Colorjet digital printing machine have also adopted green concept in producing and promoting digital printing machines.

Under the Accessories for entire textile machinery segment **Lakshmi Card Clothing Manufacturing Company Private Limited** is selected as a winner mainly due to their excellent service support innovative product range and stringent quality control systems for spinning industry.

Category 2
Best Initiatives for Pollution Control Technology

Under this category **S. A. Pharmachem Pvt. Ltd** is accorded the award.

The company has developed a supporting recycling technology system. The technology under nomination was a Size recovery and reuse system from de-size wash liquor, a Caustic purification system after mercerization wash liquor, and Indigo dye recovery and reuse. The initiative is fruitfully answering the call of industry. It is also an established product offering water saving with a strong customer base for all three products.

Category 3
Special Award for Women

The nominations received under this category were truly inspiring under different domains. All the winning women have created their mark in specialized area's and are the inspiration for many women going forward. The jury and the India ITME Society seeing the caliber of these women and their dedication declared special categories to award these talented women who have overcome

the odds of society and reached new heights. The special women awarded are as follows :

- **Women Entrepreneur :** Under this category **Ms. Deepa A Kumar** is accorded the award.

Ms. Deepa A Kumar is the Founder & CEO of Yashram Lifestyle Brands. Her product's regular

& technical innerwear like period panties, incontinence innerwear for the elderly, leak proof nursing bras for breastfeeding moms, maternity hygiene panties to prevent UTI during pregnancy & more are curated to resolve the pressing matters of the women of today. Her product is also patented in India and USA as well since 2009. She is also an active socially responsible individual engrossed in many social projects, especially her work at www.HowToTellYourChild.com has been appreciated by the likes of UNESCO. Being a woman founder, she ensures that the less privileged women from our country are given a chance to earn a livelihood. So through her company's initiatives around 40 women from a small town in Andhra Pradesh were firstly given training & later on provided employment.

- **Nurturing Women Empowerment :** Under this Category **Ms. Neha Jhunjhunwala, Director, Sarla Performance Fibers Ltd.** is accorded the award.

Ms. Neha 3rd generation in the business, began with just one objective - to upgrade the company from a successful family run company of 3 decades

to an Indian MNC. From focusing on building a brand image for her organization to cater in the B2B & B2C sector she is passionate to canvass India's brand name in performance textiles on global platforms. Neha truly believes in the power of equity and so under her leadership the company is appreciating & hiring more women at all levels. Early this year, the company hired a lady as plant head, a profile that is predominantly a male domain across the textile industry. Her actions are deserving of the title women empowerment.

Ms. Neha Jhunjhunwala, Winner Nurturing Women Empowerment

- **Woman Master Weaver :** Under this Category **Ms. Santoshi Kewat** is accorded the award.

Ms. Santoshi may not have been a director of multi INR companies but have managed to thrive & shine bright with her leadership qualities. Being just 8th std pass academically she had today managed to become a certified master weaver. She also took

initiative of bring many other women from her village and training them the skills and creating a source of income for the other women. Her initiative has helped in the revival of the traditional handloom art form. She is also a director of the SHG group and a master weaver of Maheshwari Creations which is a specialized handloom saree, dupatta & bedsheet enterprise.

- **Restoring Traditional Skills :** Under this category Ms. Kumari Raita is accorded the award.

Ms. Kumari Raita was not society-privileged economically or educationally but today is contributing towards reviving traditional textiles

& inspiration for women to become self-dependent and create a name of their own. She belongs to a Particular Vulnerable Tribal Group (PVTG) belonging to the Soura Community in the Gajapati district of Odisha state. She has learned carpet making in a limited period and has created an example for other girls from her society. The traditional hand-weaved carpet which was a dying Tibetan art form that will now be kept alive, especially among the Soura PVTG's credits to her efforts and hard work.

The event of India ITME Awards

Category 4
Research Excellence

Under this category **Dr. Rekha Ramakrishnan from SASMIRA** is accorded the award.

The nominations for this category amazed the jury members. The research result, future impact, practical application, cost effectiveness, were the main criteria for selecting the winner. Depth of research was also thoroughly examined. The relevance of research conducted by the institutes was truly commended by the jury members. The jury members quoted "The young R& D wing of India is in a great shape". The winner of this category was "Dr. Rekha Ramakrishnan, from SASMIRA Institute for her research topic - Supercritical Carbon- dioxide based waterless Pre-treatment Technology for Cotton. The topic being innovative, sustainable solution and leading to saving of water utility raked higher above the other categories.

Category 5
Textile Maestro

Under this category **Mr. S P Oswal, Chairman & Managing Director, Vardhman Group of Companies** is accorded the award.

There will not be a single person in the industry unfamiliar with the marvelous work done by the maestro. The word Maestro perfectly sync's with the legend. Being honored with the most prestigious award Padma Bhushan by the government of India in 2010 for his services to the fields of trade and industry, Enlisted among India's Best CEOs (2017), Udyog Ratna by Ph.D. Chamber of Commerce & Industries in 2005 and Lakshya Business Visionary Award by the National Institute of Industrial Engineering in 2019, the India ITME Society being an active driver for the society would like to humbly recognize the stalwart with a small token of our appreciation. He is a true industrialist for our textile industry. A gold medalist from his university, he has provided guidance and vision that has seen the empire of textiles rise in India. It was his contribution that has strengthen the spinning industry of India. He is also regarded as the force behind the establishment of the Ludhiana Stock Exchange in 1983. Apart from leading the Vardhman Group into a position of prominence in the Indian business milieu, his tremendous dedication to social initiatives has helped in the upliftment of society. Village adoption programs in the state of Punjab, Sri Aurobindo College of commerce and management are a few of his social programs that have levitated the society economically and developed skilled knowledgeable youths for generations.

The awards will be presented on 10th December 2022 at India Exposition Mart at the highly prestigious CEO Conclave –"Empowering Textiles through Technology". CEO conclave is an interactive closed-loop forum conceptualized to bring together high-level decision-makers from Government & eminent industry leaders from India and key stake holders from across the globe. The conclave will have representation from Overseas Delegates, Government Officials, and CEO & Managing Directors of top-notch Indian & International Textile & Textile Machinery companies.

India ITME Society in order to create deserved recognition of the achievements for all its winners will be presenting the awards in the presence of the very best from all the stake holders of the textile industry. In order to give due credits to the winner, the society will be presenting them with a token of appreciation in the form of a trophy and certificate along with Cash price to appreciate the efforts of the awardee's work.

"Every edition of India ITME Society awards will try to do justice and grow bigger, better & bolder by introducing strategic categories and reaching a wider audience. The credit for the growth of the awards goes to none other than the fellow participants themselves. It is their dedication and hard work that add value to the award categories. We are grateful for all the applications received which were exceptional in their domain. We also thank every applicant for their belief in the society and urge all the other fellow companies to

participate in the next edition and help us build a bigger and bolder award ceremony during the next editions.

Mr. Hari Shankar, Chairman, India ITME Society

Sincere appreciation goes to the elite jury panel who took time out of their busy schedule to help us ensure smooth and unbiased decision making"

India ITME Society through this prestigious awards has again remained true to its industry label of being a torch bearer for the engineering sector in textiles. Today once again when our industry is coming back on track post the unseen pandemic effects, society is making the much-needed effort to recognize the vastly evolving textile engineering sector, the innovative researcher & the women power of 2022. Visit India ITME 2022 from 8th – 13th December 2022 at India Exposition Mart Limited, Greater Noida, U.P.

For further information, please contact :
Seema Srivastava, Excutive Director
India ITME Society ■

Comfort clothing is necessary in work place

Alasting effect of Covid-19 has been a wardrobe makeover. Loungewear sets and casual wear like pyjamas became the trend of the season, even long after the pandemic showed signs of ebbing. Several comfort clothing brands were launched while prominent players started heavily advertising their loungewear sets for work-from-home schedules. However, as offices reopened, the wardrobes demanded a makeover again. But what continued for two years seems to have become a habit—comfort clothing.

Many professionals agree that office wear is no longer strictly formal as the hybrid work model becomes mainstream and the comfort factor sets in.

Designer Suneet Varma says, "I do agree that office wear has become quite casual in the last couple of years. Having come out of the pandemic, people are working from home and they understand the idea of comfort and I am okay with that. I don't think it's important to be dressed formally all the time—you can be casually dressed as long as your behaviour and decorum are formal."

Varma says that a casual approach to dressing in the workplace may not necessarily mean a casual approach to work as well. "Because you are in a work environment space, where you need to perform, deliver and have responsibilities and I think when people wear casual clothes, like track pants and T-shirts—something loose and comfortable—it doesn't necessarily mean that they let their responsibilities go as well. So, as long as your decorum is formal and up to the mark, it's okay to wear casual clothes," he adds.

Last year, clothing brand Vero Moda launched its first-ever loungewear and comfort collection called 'Ease'. Another Indian brand Jisora, which was launched during the pandemic to cater to the comfort-seeking consumers, clocked more than ₹12 crore revenue by April this year.

Globally, there has been a shift in the way men dress. Artists like Harry Styles and Ranveer Sing have embraced gender-fluid fashion while sporting jewellery like pearls and clothing pieces like skirts.

The shift has also been in the casual approach towards men's clothign especially after the offices have resumed post Covid-19 pandemic. The rising temperatures and the hybrid work model have also led to the end of the 'suit-up' era. Office wear is more casual and the casual look reflects on one's true self now more than ever.

Designer Kunal Rawal's new collection 'Dear Men', which was showcased at the Fashion Design Council of India's (FDCI) Fashion Week recently, drew inspiration from cultural and traditional influences in India. The collection could be worn as toned down, mixed or matched, or even to work, thus pointing towards clothing that not only matches one's own personality but also brings in comfort and is multipurpose.

Men's wear has evolved with the pandemic. It is about personal style and comfort and not 'one style suits all', says designer Anju Modi. "Some prefer bold, some take it easy on colours. Fashion and design innovations in men's wear nowadays have also undergone a transformation. There is freedom to wear all styles with more experimentation in men's wear. Like a *dhoti salwar* or cowl pant or pathani pant is in," Modi adds.

Siddharth R Dungarwal, founder of Snitch, a men's online clothing brand, adds, "Especially, in a country ruled by its societal values and trends, it is vital to understand and recognise the fact that modern Indian men are changing the societal perceptions of fashion as a means to self-expression. Such is the evolved era of fashion, where what you wear speaks a log about who you are, what you do, and how you feel about yourself. After all, it is a fact that modern Indian men are now redefining the meaning of being fashionable." ■

High Costs may have adverse impact on profitability of Apparel exporters in FY 23 : Report

Higher raw material and logistics costs could dent profit margins of apparel exporters in 2022, as per a report. Domestic rating agency Icra said there has been a sharp surge in yarn prices since September 2020, which has touched an all-time high during May-June. "We expect large-mid-scale appatel exporting companies to report a healthy growth in revenues in FY 23. While high realisations are expected to support the revenue growth for the year, higher raw material and logistics costs could dent apparel exporters' profitability for the year," Icra senior vice president Jayanta Roy said. ❐

Tirupur exporters getting orders again as prices dip

After three months of continuous slide in orders from global markets, garment manufacturers in Tiruppur have started getting orders from global brands like Primark and Walmart as their prices have become competitive due to fall in cotton and yarn prices.

Exporters said that countries like Vietnam. Thailand, Bangladesh were quoting much lesser prices for their garments compared to Indian which impacted India's export orders. Indian exporters were facing problems over rising cotton and yarn prices for their garments compared to India which impacted India's export orders. Indian exporters were facing problems over rising cotton and yarn prices in the domestic market and the small and medium units who are into garments exports suffered from a liquidity crisis.

"The export situation has started improving. Recently, yarn prices in India have decreased by 10-15% and this is going to benefit mainly India, not much the competitor countries. Currency depreciation is also in our favour. So we are also hoping that some orders from Vietnam and Bangladesh will also come to us. Big global brands like Primark, Walmart and others have started placing orders with us," said K. N. Subramanian, president, Tiruppur Exporters Association (TEA).

Tirupur has 3,000 garment manufacturing units that employs around 18 lakh people. The annual exports of Tiruppur ranges between ₹33,000-₹35,000 crores.

Indian cotton spot prices have softened by about 6.21% in October to date to trade near ₹32,508 per bale (170 kg) as cotton arrivals have picked up. Cotton prices have been losing on higher domestic production estimates for the crop year 2022-23. "We now expect prices would fall to ₹32,000 / ₹30,000 per bale in the coming days while it can slip to ₹ 25,000 in the medium-term," said Tarun Satsangi, research analyst with Origo Commodities.

Cotton demand remains sluggish while lower prices can boost the market sentiment as Indian cotton has now become cheaper than Pakistan, which will up Indian cotton demand in the international market. Further, the Chinese yarn that is banned by the US is now finding its way into the Indian market at cheaper rates, Satsangi added.

Cotton prices had gained 40% during the period May-June and were at an 11-year high due to a demand supply mismatch.

Barath Raj, managing director of Tirupur-based Selvanganpathy Amman Garments said that the demand for garment has gradually started coming from Germany and Russia, where they are major suppliers. "The demand is up for kids wear and maternity wear," he said.

The TEA president said that they have also urged the government to sign the Free Trade Agreement (FTA) with UK so that exports from Tiruppur can go up to ₹50,000 crores by FY 25. "Apparel manufacturers have been losing business to countries such as Vietnam, which has recently ratified its FTA with the EU. It is much cheaper for the European companies to place orders with Vietnamese vendors because they don't have to pay duties, whereas duties are between 9% and 16% for imports from India,' he added.

The overall export of ready-made garments stood at $16 billion in FY22. ❐

Pashmina Shawals complained with use of Shahtoosh guard hair obtained from endangered Tibetan antelopes

Traders of universally prized Pashmina shawls are complaining that "obsolete testing methods" have resulted in many of their export consignments being flagged by Customs authorities for presence of Shahtoosh guard hair, which is obtained from endangered Tibetan antelopes. The traders claim

the use of obsolete technique such as "light microscopy" by the authorities has resulted in several cases of "false positives", leading to their wrongful prosecution.

Pashmina is obtained from a breed of mountain goats (*Capra hircus*) found on the Changthang Plateau in Tibet and parts of Ladakh. Manufacture of Pashmina is a largely unorganised cottage adn handicraft industry, providing employment and livelihood to approximately six lakh people, most notably to local skilled villagers and artisans in Kashmir.

Shahtoosh, on the other hand, is the fine undercoat fibre obtained from the Tibetan antelope, known locally as *chiru*, a species liveling mainly in the northern parts of the Changthang Plateau in Tibet. As they offer high levels of smoothness and warmth, Shahtoosh shawls became a highly expensive commodity.

However, when their population declined dramatically from commercial poaching, CITES (Convention on International Tradein Endangered Species of Wile Fauna & Flora) listed the Tibetan antelope in 1979, leading to a banon sale and trade of Shahtoosh shawls and scarves.

As the two materials have similar physical properties and tangibility, differentiation is hard without advanced scientific forensic methods.

Naqeed Qasi, a Pashmina trader, has first-hand experience of one of his export consignments of Pashmina shawls getting flagged by Customs authorities for presence of Shahtoosh. "I had sought DNA testing of the consignment but my appeal was rejected," Mr. Naqeed said. The sample from his consignment was instead sent to the Wildlife Institute of India, Dehradun, which employs light microscopy technique to look for the presence of Shahtoosh. The light microscopy method. Mr. Naqeed said, "is subjective and depended to a large extent on the expertise of the examiner."

"My case then involved the CBI. The agency came to my office in Kashmir and went to the artisans. Now, Enforcement Directorate (ED) has got involved in the case and they are looking into the money laundering angle. This is all being done on the basis of one wrong test," Mr. Naqeed rued.

Another Pashmina trader, Imran Rashid, said due to the "prevailing system", a lot of export orders ger cancelled as it takes months –in some cases years – for the shipment to eventually be released by the officials. "As a result, the value of Pashmina exports has dropped from over ₹750 crores six or seven years ago to about ₹100 crores today," Mr. Rashid said. As many of the exporters do not want to get into this kind of trouble, many have quit the export-end of business and are focussing on retail, he said, adding, "That's why there is such a huge dip in exports."

Left with no other option, the Pashmina Exporters and Manufacturers Association has moved a petition before the Delhi High Court, for a direction to improve the existing testing infrastructure by incorporating the modern "scanning electron microscopic" technique and DNA tests.

Advocates Tanveer Ahmed Mir and Kartik Venu, who represented the association, said the ambiguity in the forensic results adversely affected the reputation and finances of the Pashmina industry.

Mr. Mir said that the traders were subjected to both Customs prosecutions – on suspicion of presence of Shahtoosh guard hair - as well as criminal prosecutions by the Wild life Crime Control Bureau (WCCB), CBI and ED, possibly leading to incarceration up to seven years, even when it is not clearly proved if the material used is in fact a contraband.

India contributes only about 1% of the world's Pashmina, but the Pashmina produced in India is considered the best of the lot. ❐

As order inquiries surge, Tirupur exporters become cheerful on business prospects

After a steep decline in orders, exporters in the Tirupur region have reason to cheer.

The exporters, after a gloomy phase, are witnessing a surge in order inquiries from the US and Europe, which are likely to be converted into orders in the coming weeks. In addition to this positive trend, the fall in cotton yarn prices to earlier levels is expected to improve their competitiveness.

Favourable factors

"There are many favourable factors now. The clearance of stocks in a gradual manner and anticipated better sales for Christmas and New Year

are reasons for receiving orders. While currency is also favourable, the reduction in cotton yarn prices to the pre-surge period is a positive factor to enhance our competitiveness," KM Subramanian, President, Tiruppur Exporters' Association told recently.

The Russia-Ukraine war weakened sentiment and there were changes in buying patterns across Europe and the US, As a consequence, readymade garments exports declined every month in the July-October 2022 period. With finance and payment related issues cropping up, exporters in the Tirupur cluster sought a bailout package for the MSMEs, besides a hike in interest subsidy to 5 per cent under the interest equalisation scheme.

Even as the exporters await government support, there appears to be a gradual recovery in order inquiries on the back of calibrated buying from developed markets. exporters are upbeat on a steady and gradual recovery from January 2023 across all products, including apparel, and the March 2023 quarter is likely to be a positive one. ❐

Garment exports dip 21% led by steeper fall in knitwear shipments

Apparel exports contracted 21% in October to $988.72 million, from 1.25 billion in October 2021, according to provisional export data.

Of this, knitwear exports shrank 32.5% in dollar terms and 25.8% in rupee terms, with the knitwear hub of Tiruppur, registering an almost 40% contraction (in dollar terms) in october.

Knitwear exports contracted for the third straight month, according to the Tiruppur Exporters' Association (TEA), with shipments from Tiruppur progressively shrinking month-on-month by 17.4%, 33.1% and 39.8% in August, September and October, respectively.

Average capacity utilisation at garment exporting units in Tiruppur was 30% now, observed Kumar Duraiswamy, joint secretary of TEA.

The U.S., EU, and the U.K. account for 85% of shipments from Tiruppur. With high inflation in these economies, clothing was not a priority for consumers now, according to Mr. Duraiswamy. Also, with buyers saddled with huge stocks, they were postponing delivery.

"We have huge inventory of finished goods as the brands are asking us to defer shipments," said a leading garment exporter in Tiruppur, speaking on the condition of anonymity. With buyers in the EU and the U.S. holding high inventory, and expectations of better sales during the Thanksgiving holidays and Christmas, orders were likely to revive only by January, the exporter added. ❐

Eco slump in US hits Noida Apparel exporters

The economic slowdown in the United States has hard hit apparel exporters from Noida, whose payments of ₹3,000 crores have got stuck as buyers from the US have asked them to delay shipments. The exporters said the US buyers have asked them to ship the consignments that were supposed to leave in September during the December-January period.

Noida-based apparel exporters generally make fashionable apparels priced at $8-10 per piece, unlike Tirupur exporters who make basic items in the range of $4-5 per piece for overseas markets.

"Orders have slowed down from the US and also from Europe. The US is the biggest market for us. The buyers were not keen to pick up the orders that were supposed to leave in the month of September. This has created a lot of financial problems for the apparel exporters based in Noida," said Lalit Thukral, president, Noida Apparel Export Cluster (NAEC).

The NAEC houses 3,500 garment exporting units with an annual turnover of ₹30,000-32,000 crores. Almost 10% of their turnover has got stuck due to delay in shipments to the US.

Nearly 90% of the units in Noida manufacture fashionable items and 10% manufacture basic items such as plain T-shirts for men, tops for women and kidswear. "There are units in Noida who sell products at a price of $15-25 per piece also," said Thukral.

He said the units have some orders in hand till December."After that we do not know what will be the order situation," said the NAEC president.

However, Gautam Nair, owner of Matrix Clothing, which exports knitted garments for men, women and kids, is hopeful that the situation will improve from April in 2023. "Because of Covid, the buyers had over ordered and so they have a huge inventory which is why they are not placing orders. Secondly, US consumers have cut down spending, which too is impacting the order flow. Now that Joe Biden has won the midterm elections and the Fed has signalled no more rate hike, the situation in the US will start improving," he said.

India's ready-made garment exports amounted to $1,020.8 million in September, down 21.6% year-on-year. Cumulative ready-made garment exports for the April-September period stood at ₹8,127 million up 10.8% year-on-year. ❐

Crisis in Pakistan textile industry leads to boost India's export prospects

The fresh crisis leading to higher cost of production in Pakistan textile industry will open up new export opportunities for Indian companies on the back of performance linked incentives announced by the government to boost exports.

Unlike India, Pakistan has a preferential treatment and its textile industry taps the developed markets duty-free. One of the largest cotton producer, India competes directly with Pakistan, Bangladesh and Vietnam.

The Pakistan textile industry has plunged into new crisis with the country's electricity board refusing to honour the subsidy offered by the government.

In a letter to Prime Minister Mian Muhammad Shahbaz Shariff, the All Pakistan Textile Mills Association said the government had committed a Regionally Competitive Energy Tariff of 9 cents for FY22-23, but the power division has notified that the subsidised tariff will be discontinued from October 1.

This will push the power tariff to 20 cents/kwh and many factories have started closing down, it said.

While the textile industry in Punjab is being supplied 50 per cent of its gas and RLNG at $9 per mmBtu, the gas supply to export units in Sindh is at $3.75 and at a quantity meeting 80 per cent of their requirement, said the association.

This huge difference means that units in Punjab are paying $9 for gas and 2 cents/kwh of electricity, while bulk of the Sindh industry is generating own electricity at 4 cents.

International demand has weakened owing to world recession and without price competitiveness it is not possible for Pakistan textile industry to retain its market share, it said.

Last September, the BJP government approved the PLI scheme for textile products with an aim to promote MMF (man-made fibre) apparel, MMF fabrics, products of technical textiles and to enhance manufacturing capabilities and exports from the country of select MMF products with an approved outlay of ₹10,683 crore.

The government has already approved projects worth ₹3,513 crore in Madhya Pradesh under the PLI scheme for the textile sector.

The Textile Ministry, earlier this year, had approved 64 projects with a proposed investment of ₹19,798 crore under the PLI scheme. ❐

Cotton export may contracts as domestic prices rule high

With domestic cotton prices continuing to rule higher than rates in the global market, traders see bleak prospects for the export of the fibre crop in the near term. This is even as cotton arrivals across agricultural produce marketing committee (APMC) yards are gathering pace across key producing regions. Farmers, however, prefer to hold back their produce, expecting higher prices.

Trade sources expect market arrivals to pick up from early December after the elections in Gujarat, the largest producer, and over the next few days in Maharashtra and Telangana.

"The Indian cotton rate is higher by ₹6,000 per candy (of 356 kg). So, we have no buyer for cotton and no such demand. There are no shipments happening at current prices due to unfavourable prices, said Atul Ganatra, President, Cotton Association of India (CAI), the apex trade body.

Normally, the bulk of the cotton exports happens during the October-January period, coinciding with the peak market arrivals. "In these four months, we

carry out 60 to 70 per cent of our exports," Ganatra said.

CAI, in its estimates for the 2022-23 crop season (October-September), has pegged exports lower at 30 lakh bales (170 kg each), a drop of about 30 per cent 43 lakh bales in the previous season.

Unable to compete

"Exports are not taking place because Indian prices are 5-6 per cent higher than the international market. Buyers in Vietnam and Bangladesh are getting cotton from the US, which is cheaper than Indian cotton. Also, they are selling yarn at a lower price, which Indian mills cannot compete with," said Ramanuj Das Boob, a sourcing agent for multinationals in Raichur, Karnataka.

Higher than estimates ?

He further said the demand is muted from spinning mills, which are buying on a need basis. Also, there is no demand for yarn exports, while fabric exports are slow.

However, Origo Commodities believes that exports could be higher than CAI estimates. "We are hopeful that exports will be at least at last year's levels or slightly higher at 45-48 lakh bales as we are expecting a crop size of 360 lakh bales, a bit higher than CAI estimates. As per our ground survey, the crop in Gujarat and Maharashtra is doing well at this point in time, and farmers are holding a lot of stock this year. Farmers are bringing cotton to markets in small quantities, and that's the reason why arrival pressure is not yet seen in the prices," said Rajiv Yadav, Senior VP, Origo Commodities.

On the consumption side, there could be a drop due to recessionary fears and the impact of interest rate hikes. However, the world stocks are at a bit lower level, and we feel that could drive the demand for exports, Yadav said. The demand has been delayed this year, and so also the crop arrivals. However, with the expected pick up in arrivals in the weeks ahead, we could see some export enquiries, Yadav added. Prices are ruling at ₹31,863 per bale at Kadi. "Unless the prices go beyond the ₹33,278 per bale levels, then they would trade bearish," Yadav said.

CAI has pegged the 2022-23 crop size at 344 lakh bales, as also the Ministry of Agriculture. ❐

Nykaa, Dubai's Apparel Group expands it foot print in Gulf alliance

Nykaa recently said it is entering into a strategic alliance with UAE-based Apparel Group, which would see it expand its footprint in the Gulf Cooperation Council (GCC).

Nykaa will play the role of a multi-brand beauty retailer in countries such as Kingdom of Bahrain, State of Kuwait, Sultanata of Oman, State of Qatar, Kingdom of Saudi Arabia, and the United Arab Emirates (UAE).

The Indian cosmetics and fashion retailer has entered into the region through its international subsidiary, FSN International Private.

A new entity will be incorporated in Abu Dhabi Global Market in which FSN International will hold a 55% stake and the balance will be with Apparel Group, Nykaa said in a regulatory filing. The name of the new entity has not been decided yet, said Falguni Nayar, founder and CEO at Nykaa.

The alliance would help Nykaa leverage Apparel Group's offline retail network and its understanding of the market in the region. The group is present in the region since two decades and has more than 75 lifestyle and beauty brands with over 2,000 stores in 14 countries.

Nykaa will brign to the table its consumer understanding, content, marketing and technology, Nayar said. It is an all-cash transaction between Nykaa and Apparel Group and the transaction is expected to be completed by March 31, 2023.

According to a RedSeer report, Kingdom of Saudi Arabia and the UAE, two of the region's biggest beauty and personal care markets, were sized at $17.1 billion and $6.6 billion, respectively, in 2021 and are projected to grow at a compound annual growth rate of 7% and 9%, respectively, over the next three years. The capital investment is small initially, but the potential for revenues was good, Nayar said.

"We have entered into the GCC market looking at the long-term growth potential in region," said Nayar, adding that the company is not considering multi-brand retail business in any other country at present.

Nykaa will be involved in retailing beauty and personal care brands only in the GCC region for now and the digital platform will go live in six months from now, Nayar said. ■

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Weaving and Sustainability: A Multidimensional Approach

For textile machine manufacturers, sustainability is at the core of the product offering. Its impact touches all the challenges faced by the textile manufacturing industry. With textile production being a highly competitive business, there is "no ecology without economy". Increased sustainability must complement and support competitiveness and profitability. Johan Verstraete, Vice President, Weaving Machines, Picanol shares how the company balances sustainability and profitability in its weaving machinery design and innovations.

Fresh Read From ITMA Blog

Swiss Textile Manufacturing - 30 Years of Progress

The Swiss textile industry places a strong emphasis on environmental responsibility - everything a plant does, including the use of land, water, and air, is strictly regulated. In 1997, Swiss textile manufacturer Schoeller Textil embarked on a project to improve impurity control in its manufacturing processes from the outset. This was to ensure there was nothing in the final textiles that could cause a problem 25 years ago. Read more about the progress of sustainable Swiss textile manufacturing from Cornelia Buchwalder, Secretary General of Swissmem.

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- Be the first to receive news on ITMA event updates and customised content.
- Keep abreast of latest trends in the global textile & garment industry.

For further information, please contact :
marcom@itma.com ❐

10th Intex India to be attended by leading Indian and Overseas buyers from 18+ countries and regions

The 10th Intex India, one of the premier International Textiles Sourcing Show of South Asia, will be held in New Delhi from December 8 to 10, 2022.

The Indian economy is a bright spot in the world with a GDP estimated to grow 6.5% in 2022-23 as per the World Bank and to grow 6-7% in 2023-24. This bodes well for a country where 60% of GDP is fuelled by private consumption.

The booming Indian textile & apparel industry is fuelled by India's 800+ million youth aged between 13 to 35 years who are driving industry growth making India the 6th-largest fashion marketplace in the world. Demand is expected to propel India's $54 billion apparel & fashion retail industry to $118 billion by 2028 and fuel the domestic textile & apparel market to touch $220 billion by FY26 from $106 billion in FY20.

To keep accelerating this positive growth, Intex India will showcase international suppliers from China, Korea, Thailand, Belarus, Italy, USA, Vietnam, Uzbekistan, Sri Lanka, Bangladesh, India & others. Since 2015, Intex India has connected 35,000+ buyers from 15+ countries to 1350+ textile suppliers and has empowered industry players to explore new business opportunities and expand business globally making Intex India the annual calendar event for South Asia's textile & apparel industry.

TEXTILE EVENTS

The show fulfils the growing demand for fabrics and accessories for India - one of the biggest apparel manufacturing regions in the world. India's demand have seen imports of man-made staple fibres, yarns & fabrics grow from $837 million in 2021 to $1.03 billion in 2022 while imports of knitted fabrics grew from $485 million in 2021 to $673 million in 2022, with these numbers increasing year on year.

Mayank Tiwari, Founder & CEO of Resha Mandi said, "Intex India is South Asia region's leading and most successful international textiles sourcing show. ReshaMandi, as India's first digital platform for the natural fibre supply chain from farm to retail, is proud to be the online sourcing partner for this expo. We invite you to come and explore Resha Mandi's sustainable offerings in yarns, fabrics, apparel, home and living and lifestyle accessories and look forward to seeing you at the 10th Intex India in Delhi from 8th to 10th December, 2022."

Arti Bhagat, Executive Director of Worldex India and organiser of Intex India said, "It has been a wonderful journey so far. Since 2015, we have organised 9 successful shows across the most relevantSouth Asian textile markets of Sri Lanka, Bangladesh and now looking forward to the 10th edition in New Delhi, India. As an organiser, we are determined to bring a fresh wave of opportunities for manufacturers and buyers from domestic as well as international markets to connect with each otheron this platform."

Major exhibiting categories include Fibres, Yarns, Apparel Fabrics, Denim Fabrics, Clothing Accessories, Dyes & Chemicals, Software & ERP Solutions, Design Studios, Testing Equipment & Compliance Solutions, Trends & Fashion Forecasters, Textile Allied Services, etc.

This year, Intex India would also be organising the renowned Interactive Business Forum (IBF) Seminar Series and 'Trendz Now' –the colour, fabric and fashion forecast showcase alongside Intex India, thus creating a premium and complete B2B international textile trade & sourcing platform.

Intex India is co-organised by the Federation of Indian Chambers of Commerce & Industry (FICCI) under the aegis of the Ministry of Commerce, Government of Indiaand supported by the Ministry of MSME, Government of India.

Intex India is supported by apex chambers from India and across the world including Confederation of Indian Textile Industry (CITI), Tirupur Exporters Association India (TEA), Retailers Association of India (RAI), PHD Chamber of Commerce and Industry (PHDCCI), the Textile Association (India), Tamil Nadu Fabrics Manufacturers Association (TNFMA), Knitwear & Textile Club Ludhiana (K&T Club), South India Garments Manufacturer & Wholesalers Association of Karnataka (SIGA), Garment Exporters Association of Rajasthan (GEAR), Association of Garment Exporters Sitapura (AGES), Recycle Textile Federation, Korea Textile Center (KTC), Malaysian Knitting Manufacturers Association (MKMA), Thailand Textile Institute (THTI), India-Thai Chamber of Commerce (ITCC) – Thailand, Indian Business Chamber in Vietnam (INCHAM) – Vietnam, Vietnam Cotton And Spinning Association, International Textile Manufacturers Federation (ITMF), Dubai Textile Merchants Association (TEXMAS), Bangladesh Garment Buying House Association (BGBA), Joint Apparel Association forum (JAAF), Sri Lanka Apparel Exporters Association (SLAEA), Sri Lanka Chamber of Garment Exporters (SLCGE), Garment Association Nepal (GAN) and others.

Intex India is the gateway to the dynamic markets of India and South Asia, making it one of the must-attend events in the textile sourcing industry.

For further information, please contact :
Phone : +91 9820028359
or write on intexfair@worldexindia.com ❐

4th International & Accessories Exhibition, 2023

ITMACH INDIA

1, 2, 3, 4

March 2023

Helipad Exhibition Centre, Gandhinagar, Gujarat, India

Discover Markets & Explore New Customers

See

Latest textile machinery & technology, experience it firsthand.

Meet

Technical experts from leading textile machinery & technology suppliers, industry professionals.

Fine-tune ideas and network.

Learn

The trends, developments and opportunities in textile sectors.

Do Business

With leading supplier partners from across the world.

Product Categories

- Machinery for Yarn Spinning, Man-made fibre Spinning, Winding, Texturising, Twisting and Accessories.
- Machinery for Web Formation, Bonding, Finishing of Non-wovens, Felting and Accessories.
- Machinery for Preparatory Weaving, Weaving, Tufting and Accessories.
- Machinery for Knitting, Hosiery and Accessories.
- Machinery for Embroidery, Braiding and Accessories.
- Machinery for Washing, Bleaching, Dyeing, Finishing, Cutting, Folding and Accessories.
- Machinery for Printing, Digital Printing, Consumables and Accessories.
- Machienry for Garmenting, Garment Processing & Finishing and Accessories.
- Laboratory Testing, Measuring and Quality Control Equipment and Accessories.

Indian Textile Industry

- Indian Market for Textile Machinery US$ 1.8 Billion/Yr
- Textile & Apparel Export US$ 35 Billion/Yr
- Domestic Textile Market US$ 111 Billion/Yr

Advantage India

India's economic health is growing stronger and well poised to leapfrog to a 5 trillion-dollar economy by 2025. "Make in India" initiative has gained remarkable momentum leading sector, Govt. has adopted the 5F Mantra of "Farm to Fibre to Fabric to Fashion to Foreign" policies and incentives for sustainable growth of the industry.

ITMACH India 2023

International Textile Machinery & Accessories Exhibition

Why to Exhibit ?

- An accredited B2B Exhibition for Textile & Apparel industry.
- Assisted in technology adoption by the industry and encouraged invetments.
- Well attended exhibition by visitors from India and neighbouring countries.
- Right exhibition to showcase excellence and innovation in textile technology, closer to customers.

Connecting to the Land of opportunities-India

- India is fastest growing Large Economy and the second largest textile manufacturer. This sectors is now adding capacity with the aim to "Make in India, make for the world".
- India is second largest market for textile machinery after China and procures over US$ 2 billion worth of textile machinery annually.
- Many State Governments also have their own Textile Policies to woo investors with incentives and rejuvenating the textile industry.
- Central Govt's incentive policies for textile sector like Production Linked Incentive (PLI) Scheme, ATUFS, National Technical Textile Mission etc. are driving further growth in investment. PLI Scheme alone would generate additional investment of nearly US$ 3 billion in next two years in man-made and Technical Textile sector.

An Ideal Location for a Prolific Event

India, being strategically located between South East Asia and Middle East, is one of the largest player in textile & apparel manufacturing and trade. It is also the destination for future growth and investment in textile & apparel industry. Within India, Gujarat is the epitome of success when it comes to economic development and industrialisation. The growth and development of its textile sector is even more deep rooted. Ahmedabad, which was known as the 'Manchester of the East' in the past for its booming textile industry, is today a well-developed business hub & financial centre.

Participation Fee

Foreign Exhibitors :

Shell Scheme : US$ 25 per Square Meter + 18% GST

Bare Space : US$ 225 per Square Meter + 18% GST

Note : Foreign Exhibitors must pay Participation Fee In US Dollar

Domestic Exhibitors

Shell Scheme : Rs. 12000 per Square Meter + 18% GST

Bare Space : Rs. 11000 per Square Meter + 18% GST

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Crystal hall (by invitation only)

DKTE ALUMINI MEET
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- **Israel, Indonesia, Kenya, Kazakhstan, Morocco,**
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- **Uzbekistan, Vietnam, & Zimbabwe.**

Scan the QR code to register & confirm your participation

Oerlikon

Oerlikon Group's polymer processing solutions have been exhibited at India ITME 2022, Greater Noida, India

Sustainable plant solutions for the manmade fiber industry in India and Bangladesh

The Swiss Oerlikon Group's Polymer Processing Solutions division have been exhibited itself at the ITME 2022 under the banner of 'From Melt to Yarn, Fibers and Nonwovens'. The international trade fair is taking place in the India Exposition Mart Ltd, Noida, close to New Delhi, India. Between December 8 and 13 this year, more than 1800 exhibitors and over 150.000 visitors are expected. Oerlikon will be presenting a broad range of products and services focused on manufacturing and processing manmade fibers. Oerlikon's team of experts were keen on seeing you at booth C15 in Hall 11.

From Melt to Yarn, Fibers and Nonwovens – Oerlikon will be presenting its latest machine and plant solutions at the ITME.

In addition to various new component exhibits from the fields of continuous polycondensation including gear metering pumps, filament (POY, FDY, IDY, BCF) and staple fiber spinning, texturing as well as nonwovens production, the dialog with all customers has been more than ever after almost 6 years without an ITME in India again at the center of the trade show activities.

Extrusion Plant Solutions : Mechanical produced melt for manmade fibers

For Oerlikon, this was the third major appearance in the region in the fourth quarter of this year, after having had in November two exciting and interesting customer events in Daman, India, and Dhaka, Bangladesh. This is also because the important markets of India and Bangladesh are currently still standing out in terms of their investment behaviour and currently offer good opportunities for further polymer processing projects. More than 250 participants discussed the technology and market analysis presentations held by Oerlikon experts, at the Oerlikon Technology

Symposium in Daman, India. Afterwards, all guests celebrated the 100th anniversary of Oerlikon Barmag and the 75th independence of India with a big gala event.

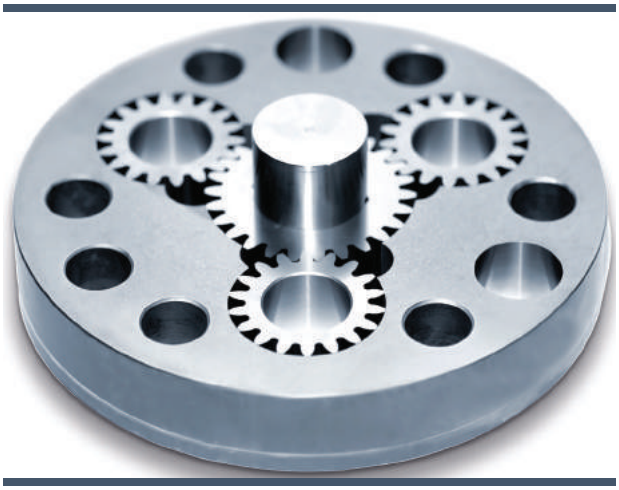
India right now continues to have above-average economic growth with a 6.8% Gross Domestic Product (GDP) for 2022. Experts speak of "a bright spot in a global gloom". Some facts and figures :

- The textile industry in India is one of the largest in the world with a large raw material base and manufacturing strength across the value chain.
- India is the 2nd largest producer of MMF Fiber. India is the 6th largest exporter of textiles and apparel in the world.
- India became the second-largest manufacturer of Personal Protective Equipment (PPE) kits in the world.
- India is the 6th largest producer of technical textiles with a 6% Global Share (12% CAGR), the largest producer of cotton and jute in the world.

Energy efficient production of PET bottle grade granulates

- The industry contributes to 7% of industrial output in value terms, 2% of India's GDP and 12% of the country's export earnings.
- The share of textile, apparel and handicrafts in India's total exports was 10.62% in 2021-22.
- The textile industry in India is one of the largest economic sectors that contributes the most to job creation in the country. It engages 16.73 lakhs of people consisting of 10.28% of the total employment share.
- The domestic apparel and textile industry in India contributes 2.3% to the country's GDP, 7% of industry output in value terms.
- The domestic textiles and apparel industry stood at USD 152 bn in 2021.

"Major growth of textiles will come from Manmade Fiber industry", said Shri Piyush Goyal, Union Minister of Textiles, Consumer Affairs, Food & Public Distribution and Commerce & Industry at the end of October in India. He suggested that the industry should understand each other and work in synergy to amicably resolve the issues among the producers and users of polyester in the entire value chain. Industry representatives responded that they are hopeful of achieving the export of 100 billion USD in the next 5 to 6 years.



Gear metering pumps: The perfect choice for all applications

Success in the markets

In India, however, things continue to go very well for Oerlikon in other respects. In the middle of the year, the joint venture Oerlikon Barmag Huitong (Yangzhou) Engineering Co. Ltd. also recorded a major success. Oerlikon was able to commission a 300 tons per day film-grade continuous polycondensation plant at the Indian customer Sumilon.

Sumilon Industries Limited started in 1970, with trading activity and first manufacturing in 1977. Currently the largest manufacturer and exporter of metallic yarn and one of the leading manufacturers of BOPET film, metalized film, and lacquered film. Sumilon has always been committed to the goal that quality is everything, creating new technologies and enabling safer materials for all.

In fact, the COVID-19 pandemic has also had a serious impact on the project, such as project site installation, commissioning, start-up and so on.

SCIENCE IN INDUSTRY

Customer events in Daman, India and Dhaka, Bangladesh

But the teams of Oerlikon and Sumilon worked closely together, constantly exploring new train of thought, entirely guiding on-site installation and commissioning, remotely controlling DCS system to run, and using modern means of hardware and software, the one-off start-up of 300T/D CP plant has been smoothly achieved, and the device is now stable in operation.

Growing with the second largest exporter of textiles

Bangladesh still has huge potential, especially for the manmade fiber industry. In the so-called downstream (weaving, knitting, finishing, etc.), the country is already very advanced, but what is missing is its own raw material production (MEG, PTA) and its processing in a continuous polycondensation plant, as supplied by Oerlikon. With Modern Syntex, however, the first "From Melt to Yarn and Fibers" plant is currently being built in Chittagong, Bangladesh, under our leadership. Some facts and figures :

- With more than 164 million inhabitants, Bangladesh is the eighth largest country in the world in terms of population. This makes it one of the most densely populated countries in the world.
- The economy of the up-and-coming country continues to grow rapidly, even during the Covid- 19 pandemic, and the poverty rate has been halved since 2000. By 2026, Bangladesh will have officially left the status of a Least Developed Country (LDC), and by 2041, the country aims to become a high-income industrialized country (HIC).
- Bangladesh's economic success is primarily based on its textile industry, which accounts for 10% of the gross national product and 80% of the export earnings.
- Bangladesh is the world's second largest exporter of textiles.

With a colourful and informative event, held in the capital Dhaka, more than 200 invited guests

celebrated the 100th anniversary of Oerlikon Barmag and the 50th anniversary of independence and liberty of Bangladesh. The Mayor of Dhaka, Md Atiqul Islam, emphasised the importance of the textile industry for his country and held out the prospect of further investments, especially in the field of manmade fiber production.

About Oerlikon

Oerlikon (SIX: OERL) is a global innovation powerhouse for surface engineering, polymer processing and additive manufacturing. The Group's solutions and comprehensive services, together with its advanced materials, improve and maximize the performance, function, design and sustainability of its customers' products and manufacturing processes in key industries. Pioneering technology for decades, everything Oerlikon invents and does is guided by its passion to support customers' goals and foster a sustainable world. Headquartered in Pfäffikon,

Oerlikon round table discussion in Daman, India

Switzerland, the Group operates its business in two Divisions – Surface Solutions and Polymer Processing Solutions. It has a global footprint of more than 12 000 employees at 202 locations in 37 countries and generated sales of CHF 2.65 billion in 2021.

For further information: www.oerlikon.com

About the Oerlikon Polymer Processing Solutions division

With its Oerlikon Barmag, Oerlikon Neumag, Oerlikon Nonwoven and Oerlikon HRSflow brands, the Oerlikon Polymer Processing division focuses on manmade fibers plant engineering and flow control equipment solutions. Oerlikon is one of the leading providers of manmade fiber filament spinning systems, texturing machines, BCF systems, staple fiber systems and solutions for the production of nonwovens and – as a service provider – offers engineering solutions for the entire textile value add-ed chain. Furthermore, Oerlikon offers a range of a high-precision flow control solutions. This currently includes a large selection of gear metering pumps for the textile and other sectors such as automobile construction, the chemical industry and the dyes and lacquers industry. With Oerlikon HRSflow, the division develops innovative hot runner systems for the polymer processing industry. In collaboration with Oerlikon Balzers, it offers highly-efficient, effective coating solutions from a single source.

As a future-oriented company, the research and development at this division of the Oerlikon Group is driven by energy efficiency and sustainable technologies (e-save). With its range of polycondensation and extrusion systems and their key components, the company caters to the entire manufacturing process – from the monomer all the way through to the textured yarn and other innovative polymer materials and applications. The product portfolio is rounded off with automation and Industrie 4.0 solutions.

The primary markets for the product portfolio of Oerlikon Barmag are in Asia, especially in China, India and Turkey, and – for those of Oerlikon Neumag and Oerlikon Nonwoven – in the USA, Asia, Turkey and Europe. Oerlikon HRSflow is, above all, active in the key automotive markets. These include Germany, China, Korea and Brazil. Worldwide, the division – with more than 4,500 employees – has a presence in 120 countries with production, sales and distribution and service organizations. At the research and development centers in Remscheid, Neumünster (both Germany), San Polo di Piave /Treviso (Italy) and Suzhou (China), highly-qualified engineers, technologists and technicians develop innovative and technologically-leading products for tomorrow's world.

For further information: www.oerlikon.com/polymer-processing

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SCIENCE IN INDUSTRY

Prosino Borgosesia Rings

Prosino Borgosesia Rings showcased its Steelhawk Flange ring at India ITME 2022, Greater Noida, India

Prosino Borgosesia Rings has been market leader in the production of spinning and twisting rings since more than 75 years. Its current annual production exceeds 10 million rings with a global market presence since 1946.

The company mission is to help spinning companies to get the most from their ring frames, for any type of fibre used, as well as achieve the highest speed rates while maintaining a high standard of yarn quality.

We are pleased to inform all our customers and many industry operators have visited at our Booth J 23 in Hall 9 in India ITME 2022, Greater Noida, India.

- During the international show we have celebrated the success of the Steelhawk flange ring and present several case histories testifying its top performance by the most demanding worldwide customers
- The Steelhawk flange ring has proven his superiority, helping customers to achieve maximum speed and reducing maintenance cost. Customer appreciate its reliability, its flexibility in count change and its capacity to perform in most challenging spinning conditions, such as compact and synthetics.
- The company also presented its conical ring "4+4" that has been successfully used by all the OEM's worldwide as hundreds of spinning mills in the worsted sector

For further information, please contact :
Prosino Borgosesia Rings
The local representative Mr. M.Sikkendar
sikkender@precisionyarns.com
http://www.prosino.com ❐

COLORJET

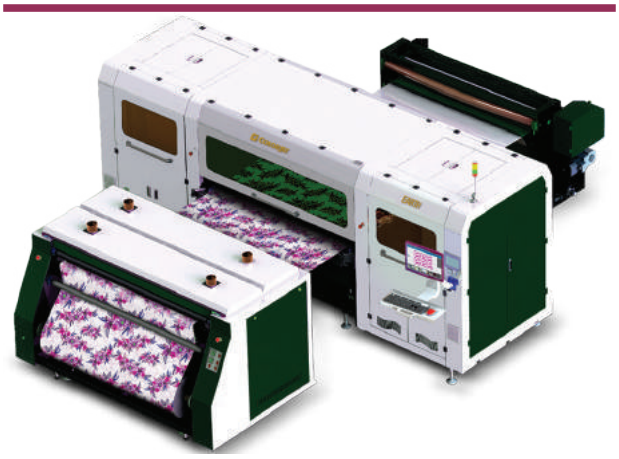
Colorjet rolled out earth series at India ITME 2022

A Sustainable textile printing process enabled by ColorJet Pigment Solution

For over a decade ColorJet Group has committed itself to Sustainability of our ecosystem. All Colorjet new products are created through the prism of sustainability.

COLORJET GROUP unveiled its sustainable Pigment printing solution –EARTH SERIES at India ITME. ColorJet EARTH Series is an advance sustainable printing solution in Digital textile printing segment. This new process does not require additional equipment for pre and post treatment. By way of eliminating pre & post treatment, this has led to huge saving of water and energy, and provides competitive edge in sustainable direct-to-fabric printing category.

ColorJet specialized Pigment Ink with binder offers greener solution by way of eliminating process in digital textile printing. Polymerisation at 160-degree after printing provides excellent color fastness and print quality with exceptional production capacity of 2500 linear meter/day.



The Earth series comes with 3 models - 32, 16 and 8 inkjet powered by Konica Minolta print heads, with the combination of ColorJet' s 3 new technology – Kiloton, Purge Plus, and Osci Plus.

Purge Plus™technology ensures removal of air bubbles from print heads and helps in saving almost 3-4% of total ink used in printing process.

Kiloton™has increased the print head life to a considerable extent of Up to 3 years.

Osci plus precise rollers for efficient tension control and smooth feeding of the fabric irrespective of any fabric helps to accommodate almost every kind of fabric for direct printing

Inspired by the success of pigment solutions, operating successfully across the globe including India, Germany, Brazil, Vietnam, Pakistan and at other leading textile clusters.

ColorJet is now all set to lead the sustainable Pigment printing category with its new futuristic Earth series.

The Colorjet Earth Series will provide sustainable print solution in textiles to Fashion apparels, kids wear, home furnishing and many other segments

Visitors from Textile Printing segment will have the opportunity to see the live Demonstration of this product at INDIA ITME Starting from 08 - 13 December at India expo center & mart, Hall No. 5, Booth No. H5F3G4.

About ColorJet India Ltd

ColorJet group – the wide format digital printing technology leader, Founded in 1995 and since then known for its industry- leading performance. It is one of the top global exporters of wide-format printers and provides excellent fabric printing solutions. Colorjet's digital textile machines are revolutionizing the world of textile printing with their robust performance, sustainable manufacturing, lowest downtime, high value, and ROI.

ColorJet offers an exclusive range of Digital textile printers with unprecedented benefits backed by our extensive knowledge. The company maintains its operations via two manufacturing facilities and sales offices spread across seven countries, which include India, China, Bangladesh, UAE, and Sri Lanka. Till date, ColorJet has installed and implemented over 5,000 of its printing solutions and products across 450 cities around the world backed by a strong 350-member team, of which almost 100 are in technical related functions.

For further information, please contact :
Mr. Abhijeet Kumar
ColorJet India Ltd
Email: abhijeet.kumar@colorjetgroup.com ❐

SCIENCE IN INDUSTRY

Santex Rimer Group

Smart and eco-friendly solutions for textile finishing

Sperotto Rimar offers a range of sustainable technologies

Sperotto Rimar to present first-hand information on sustainable solutions for finishers at India ITME 2022, Greater Noida, India

The finishing sector is undoubtedly the most significant stage in the value chain – contributing to a wide range of properties in the textile end-use. Bringing an ideal look, touch and functionality to many different applications is a real challenge for machine manufacturers. Smart innovations are needed. And customers also demand solutions that respect both valuable resources and the environment. The Sperotto Rimar portfolio combines both ingenuity and sustainability, to meet these goals – and customer needs which can be discussed with the real experts at upcoming India ITME.

Sperotto Rimar follows two energy-saving strategies in machine development for fabric finishing. The first aims at technology which skips one or more production steps, to shorten the finishing process. Equally important is the use of innovative components such as motors, electrical and electronic controls, which can significantly reduce energy consumption.

Optimizing finishing processes is another way to save energy. The highest potential for energy saving today would come from reducing the use of steam, water or electricity in processing, and adopting technical solutions to limit, or partially recover, the energy consumed.

Short process, big impact

The Decofast decatising machine offers significant energy savings with the substitution of a discontinuous process. On certain fabric types, it allows users to skip one pass of direct steaming with pressure. This shortened process results in lower energy consumption and requires less labour. The technology enabling more sustainable decatising was actually introduced at the beginning of 2000 – long before finishing customers demanded machinery with reduced environmental footprints or urgent solutions for energy-saving needs.

Compas open-width compacting and finishing machine saves chemicals and water

Less steam, less energy

The Universa fabric relaxing machine can be used wherever relaxing, shrinking and bulking effects are required. It has wide application in different finishing fields – from wool to synthetic fabrics. Universa was designed to drastically reduce steam consumption. Tests prove that 30% less steam is needed compared to traditional technology. Conclusively, the machine needs 30% less energy – while achieving the expected quality results.

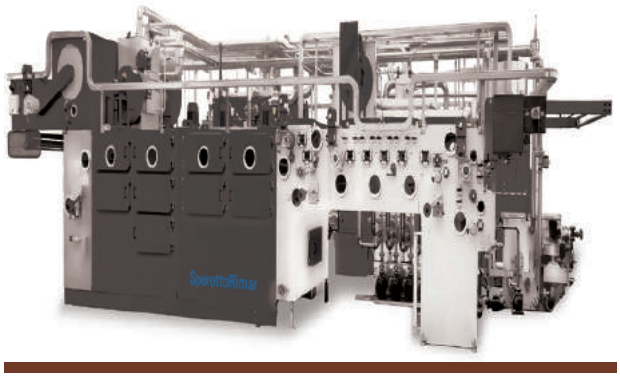
Recycling and closed loops

Nova has been a success for the past 50 years and is still the most eco-friendly solvent scouring machine – and the ideal alternative to traditional water scouring for the washing of synthetic fabrics. The technology has been continuously improved and therefore it facilitates excellent cleaning performance on various materials. Most of all, Nova convinces ecologically-sensitive finishers by its mastery of recycling. The machine recycles more than 99% of the chemicals used in the process.

Traditional scouring machines need a critical amount of water and detergents, which then must be treated as effluent. They also effect a relatively low level of oil elimination from the fabric. Nova solvent-based scouring is eco-friendly, as it works with a closed loop system in which air and solvent are properly treated and recycled. The fact that it takes 10 times less energy to dry solvent than to dry the same amount of water is an additional environmental plus for Nova. Furthermore, it almost totally removes the oil contained in the fabric, so that no polluted fumes are released in the subsequent thermic processes (heat-setting).

Compas – sustainable prime example

Sperotto Rimar's Compas open-width compacting and finishing machine for knitted and woven fabrics uses an indirect water-cooling system to reduce the compacting belt temperature. With this system, the water is recovered by passing it through a chiller to keep its temperature at the right level. This technology can save about three cubic meters



Nova continuous solvent scouring machine saves energy and recycles more than 99% of chemicals

per hour. This water, totally unpolluted, can be continuously recovered and re-used in the machine. Traditional technology uses nozzles to spray water on the belt surface. The disadvantage of this is that the water is then discharged into the drain, contaminated with fluff and other products contained in the treated fabric.

Another feature enables a minimal environmental footprint through technology-based process optimization. Chemicals used before the dry finishing process are typically softeners or resins to enhance the final appearance and touch of the fabric. These are then transferred to the final garment. It is possible to reduce significantly the level of such chemicals, since the machine partially compensates for the effect of these chemicals. Thanks to its unique compacting method, Compas imparts a silky touch, only partly attributable to the softeners used, while mainly deriving from the special materials in the machine design.

Natural stretch is usually obtained by inserting elastane (a synthetic elastic yarn) during the weaving phase. The elastane itself, however, is difficult to deteriorate. Compas ensures the same degree of elasticity but with a final product that is 100% `natural´. Thanks to technology, saving the environment no longer means end-users have to compromise on the touch and feel of fabrics.

Sperotto Rimar inside

Know-how and experience – with a creative and successful development team – can make a big difference to finishing machinery design. Underpinning this, Sperotto Rimar always chooses machine components from latest-generation technology, aiming to save as much energy as possible. For example, the motors installed are of the IE 3 type.

The focus of Sperotto Rimar is to develop a range of effective solutions, which make the most of textiles, in a sustainable way. Continuous technological innovations result in a smaller environmental footprint without compromising final fabric quality.

Sperotto Rimar on-site! Experts offer first-hand information about sustainable solutions for finishers at upcoming India ITME. Sperotto Rimar (member of Santex Rimar Group) welcomes visitors at the Group's Booth H5F5 in Hall 5 at IEML in Greater Noida, Uttar Pradesh.

For further information, please contact :
Santex Rimer Group
Località Colombara 50
36070 Trissino, Vicenza, Italy
VAT 03972260248, CF 97551450154
info@santexrimar.com, +39 0445 1761444 ❐

Itema S.p.A.

Itema exhibits its latest innovations and a complete range of weaving solutions at India ITME 2022

Itema, the leading provider of advanced weaving solutions including weaving machines, spare parts and integrated services will exhibit at India ITME 2022, which is held for the first time in Northern India at the India Exposition Mart IEML in Greater Noida (Delhi) from 8th to 13th of December in Hall 15 – Booth C6D5.

Itema comes from an outstanding year in terms of sales of weaving machines in India. The company closed in fact an impressive number of deals providing the Indian textile industry with its advanced weaving technology to weave a wide range of fabrics.

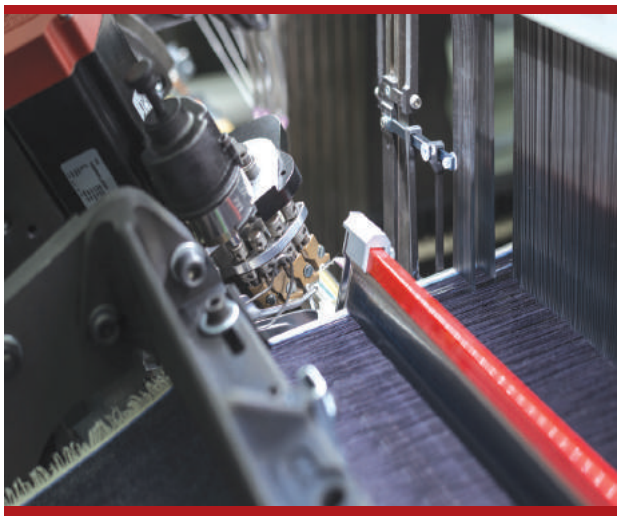
As stated by Sameer Kulkarni, Itema Weaving India General Manager Sales, "2022 represents a landmark year for Itema in India. We are proud to see how our weaving technology is nowadays recognized as the most versatile and the most reliable in terms of textile mastery and performances. In 2022," continued Kulkarni "we established a new record: Itema is by far the best selling supplier of high-end rapier weaving machines in India."

This success is largely due to the Itema leadership of the Surat Region, where weavers selected the Itema rapier weaving machines R9500-2 and R9000-2 as their preferred option when it comes to weaving sophisticated fashion apparel and sarees fabrics. Both with dobby and Jacquard shedding, the Itema rapier technology

demonstrated in fact its superior performances in terms of fabric quality and insertion of fancy yarns.

At India ITME 2022, Itema will showcase a racehorse in its rapier technology portfolio, the R9500-2denim. The weaving machine on show will be equipped with the one-of-a-kind iSAVER®, the device developed by Itemalab® that by eliminating the waste selvedge on the left-hand side of the fabric allows never-before-seen raw materials and economic savings. iSAVER® established a new benchmark in the weaving industry and today it represents the only device effectively running in real weaving conditions capable to contribute to a sustainable weaving process.

Moreover, an Itema rapier R9500-2 in Jacquard version and weaving furnishing fabrics will be exhibited in partner booth Bonas, Hall 14A – Booth 2B1.



In the words of Ugo Ghilardi, Itema Group CEO "we are excited to be finally back at India ITME 2022. India is a key market for Itema and we really value our Indian customers. Our target is much more than selling our weaving machines, we aim at creating long-lasting partnerships built on mutual success."

Itema is present in India with a fully-operational branch since 2003, counting more than 50 employees, with sales and after-sales teams, technical support and advanced repair centers to ensure the highest possible standard of weaving solutions, with a complete offering and range of services to its valuable Customers in the Indian market.

Itema is a trusted partner of many Indian weaving mills, from large textile conglomerates to smaller textile manufacturers, providing the most advanced and user-friendly weaving technology and real-time assistance, from the initial negotiation stage and throughout the whole machine life cycle.

The Itema staff will be present at India ITME 2022 to welcome customers and partners to illustrate the latest innovations and the full range of weaving solutions supplied by Itema, including OEM spare parts of Itema and previous brands and Schoch reeds and other accessories range.

Visit us at India ITME 2022 in Hall 15, Booth C5D6.

About Itema

Itema is a leading global provider of advanced weaving solutions, including advanced weaving machines, spare parts and integrated services. Sixty per cent of Itema is held by Gianni Radici's family heirs (the siblings Angelo, Maurizio, Paolo, Maria Grazia and Bruna) and 40% by the Arizzi and Torri families. Itema Group business areas include also industrial and innovation. In fact, in recent years the Group diversified into complementary, high-growth markets through stakes in innovation driven companies, such as Lamiflex®, Schoch® and Itemalab®, the Itema advanced innovation hub created in 2014 that in 2021 evolved into a fully-fledged company dedicated to develop breakthrough textile and industrial solutions. With more than 1.000 employees worldwide, world-class production sites in Italy, Switzerland, China and India (the latter for Schoch products, ndr), Itema features a global presence with commercial and after-sales services in Italy, Switzerland, China, India, Japan, USA, Hong Kong, Türkiye and Dubai. More information about Itema can be found on the website www.itemagroup.com.

For further information, please contact :
ITEMA S.p.A.
via Cav. Gianni Radici 4
Colzate, BG 24020, Italy

Trützschler Group SE

Trützschler and Valérius 360 : A great development in recycling yarn

Valérius 360 wanted to make a sustainable, circular approach possible in the fashion industry. But it needed a partner with the power to make this green dream a reality. Working together with Trützschler, a pioneering collaborative project has now achieved high-quality recycled yarn – opening up massive potential to drive measurable progress toward a circular and sustainable textile industry.

stages play in the quality of the final yarn. In partnership with Valérius 360, we explored the possibilities to make their project a success.

Testing at the Trützschler Technical Center

The team from Valérius 360 wanted to find ways of improving the processes for yarns made from 50 % recycled and 50 % virgin cotton (Ne30). In particular, it was seeking ways to reduce thick and thin spots, which disturb the appearance of the textile surface.

At the Trützschler Technical Center in Mönchengladbach, we conducted special trials that

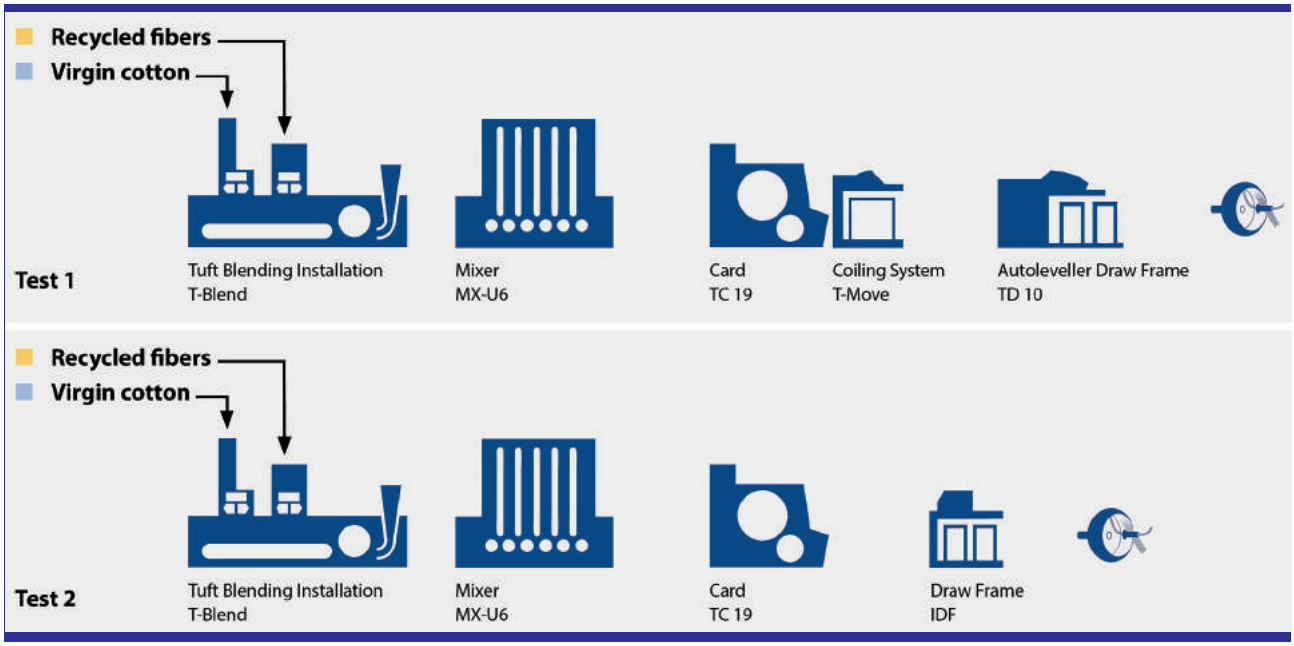


Figure 1 : Process steps 1 Passage (Test 1) vs. Direct Spinning (Test 2)

Valérius 360 was founded in Portugal in 2017. It produces yarn by recycling waste from its own spinning and knitting processes – which keeps more material in the economic cycle for longer, cutting down waste and making an important contribution to sustainability. Recently, its experts launched a new project with the ambitious aim of increasing the quality of yarn made from recycled waste fiber. But processing recycled fibers is tricky in many ways. Reopening textiles down to the fiber, for example, leads to a reduction in the fiber quality.

Trützschler has innovative technologies and significant experience that support spinners with applications that involve recycled waste fibers. Our experts have a deep understanding of the decisive role that fiber and spinning preparation

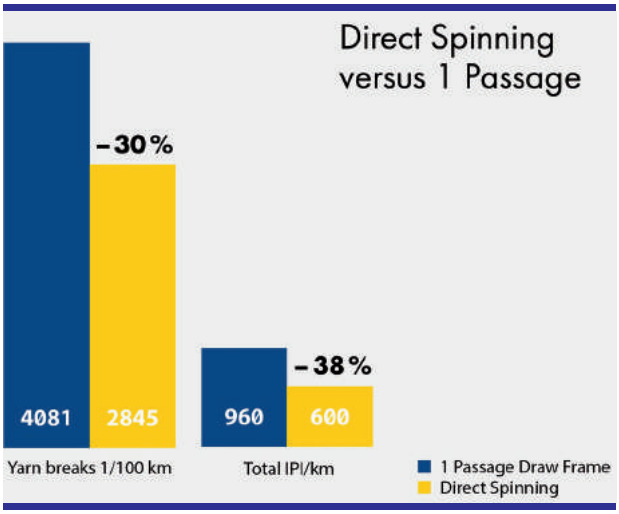


Figure 2 : Direct Spinning vs. 1 Passage

showed that using a direct spinning process for this application delivers much better results than a process with a draw frame passage for rotor yarns.

In direct spinning, the sliver from the card is directly drawn in the draw frame which is integrated in the can stock (see figure 1, test 2). This involves one less process step than using an autoleveller draw frame (see figure 1, test 2), while also saving space and giving staff more time for other operations.

Energy efficiency and cost savings

Direct spinning showed a clear capacity to reduce the number of faults in the yarn. As a result, the yarn breaks were 30 % lower and the Total IPI 38 % lower (see figure 2). The direct spinning process also has a positive effect on energy consumption: Compared to the process with a draw frame passage, for a medium plant size, a savings potential of 5 % is achieved with direct spinning. At an energy price of 0.2 €/kW, the savings amount to over 5,000 € per year.

On-site support from Trützschler Customer Service

The team from Valérius 360 also received in-house training from the Trützschler Customer Service department. Together, they analyzed and significantly improved the process at the Valérius

Patrícia Ferreira, CEO of Valérius Hub (left) and Miklós Pál Nagy, Manager at Valérius 360 (right).

360 production site. This helped to bring yarns made from recycled raw materials up to the required level of the 50% Usterstatistics. This is the reference level for yarns made from virgin raw materials. Accordingly, 50 % of all yarn producers with raw cotton for rotor yarns and comparable yarn counts produce a poorer quality.

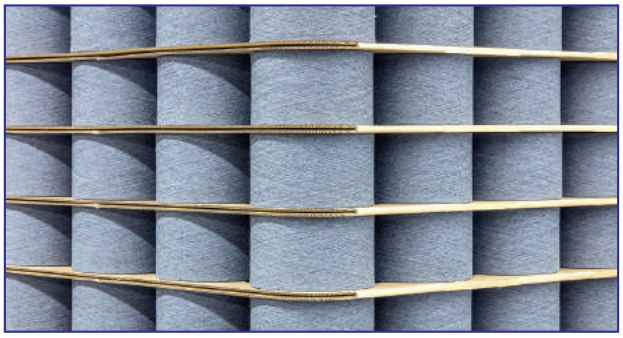
Trützschler is deeply committed to supporting its customers on the journey to a more sustainable textile industry. This case study shows how customers can improve the processing of recycled materials by using preparation systems from Trützschler. This includes plant concepts for fiber preparation, such as T-Blend or the TC 19iR. It also includes concepts for spinning preparation like direct spinning with the unique IDF from Trützschler. These innovative systems help customers to maximize the full potential of the material they are processing – because quality is decided in the preparation stage!

"We believe that right now the fashion industry is in a position to actively play a pioneering role in restoring the environment and thus restoring humanity, and we want to make our contribution to that," said Patrícia Ferreira, CEO of Valérius Hub. "We are very grateful for the great support that Trützschler has given and continues to give us at all levels – from machine configuration through to product development, assembly and customer service", adds Miklós Pál Nagy, Manager at Valérius 360.

Further visual footage

Valérius 360 was founded in Portugal in 2017.

Garment waste sorted by color is reopened back into single fibers and spun again.



Yarn cones from recycled fibers.

About Trützschler

The Trützschler Group SE is a German textile machinery manufacturer headquartered in Mönchengladbach, Germany. The company is divided into four business units: Spinning, Nonwovens, Man-Made Fibers, and Card Clothing. Trützschler machines, installations and accessories are produced and developed in ten locations worldwide. This includes four factories in Germany (Dülmen, Egelsbach, Mönchengladbach, Neubulach), as well as sites in China (Jiaxing and Shanghai), India (Ahmedabad), the USA (Charlotte), Brazil (Curitiba) and Switzerland (Winterthur). Service companies in Turkey, Mexico, Uzbekistan and Vietnam and service centers in Pakistan, Bangladesh and Indonesia provide customer proximity in key regions for the textile processing industry. For more information visit: www.truetzschler.com.

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Kleo Knippertz, Trützschler
kleo.knippertz@truetzschler.de
02166 6078052

❐

S. K. Associates

High technology based few textile products of S. K. Associates with brief description given :

1. SKA Spring loading for Top Arms.
2. Bobbin Holders.
3. Rotary Filter to stationery filter conversion.
4. Pneumafil conversion for individual suction to common suction.
5. Compact spares for spinning.
6. New advanced fully automated smart plucker.

S. K. Associates are dealing with servicing of all ranges of Textile Electronic PCB's (Blow Room to Spinning) & specially we are undertaking servicing & Providing spares for Vouk Draw Frame.

Skaat Bobbin Holder

Bobbin Holders have found acceptance world wide and has been making continuously outstanding product improvements, backed by a prove track record, SKAAT continuously offers tried and tested bobbin Holders trusted with assurance of durability and trouble free performance.

Features

- Fully closed and protected against entry of fly and fluff.
- The spherically centered bearing mechanism

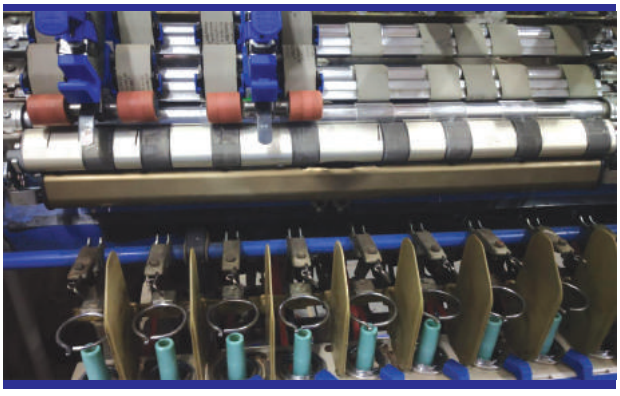
for a smooth and consistent unwinding of roving.

- The ratchet mechanism ensures superior performance and a reliable longer duration of life.

- All components are of anti-static nature and aesthetically appealing with perfect finish.
- The polymer parts are made from worlds leading polymer manufacturer material.

Pneumafil conversion for individual suction to Common Suction

We S.K ASSOCIATES offering our client an excellent quality range of Components for Pneumafil Conversion for individual suction to common suction.



ADVANTAGE

1. To improve suction and save energy.
2. Free from lapping on Rollers.
3. To improve in breakage Rate.
4. Due to less lapping, Operator can Piece broken end faster.
5. While compared to individual suction system, Suction level gradually increase from offend to gear end.
6. Rubber cots damages can be avoided.

Conversion for LR Ring Frames Rotary Filter to Stationery Filter

We S.K ASSOCIATES offering our client an excellent quality range of Components for LR Ring Frames conversion for Rotary Filter to Stationery Filter.

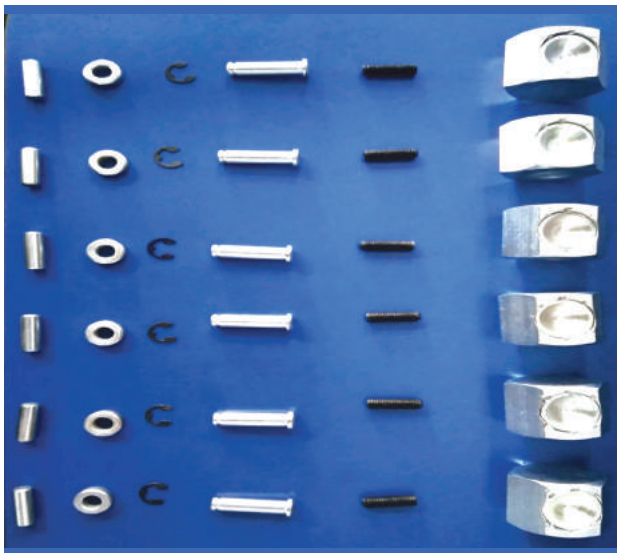
Pneumafil Conversion for individual suction to common suction.

Pneumatic to Spring Loading

We S.K ASSOCIATES offering our client an excellent quality range of Components for LR RING Frames Pneumatic to spring load Top arm conversion.

Advantage

1. To maintain uniform pressure.
2. Individual top arm pressure adjusted.
3. Eliminated all pnumatic pressure hose and fittings.
4. To avoid machine starting end breaks.
5. Save Power.



Top Arm Pressure setting gauge

Suitable for all makes of drafting systems of Ring Frames & Speed Frames.

For further information, please contact :
S. K. Associates
No. 216/2, First floor, Avinashi Road
Gold Wines, Civil Aerodrome post
Coimbatore-641014
Phone : +91-98940 54014/+91 99524 01838
Email : salesska@skassociates.org ❐

Bluemoon Machines

Know about Bluemoon

Bluemoon engineering was established by Mr. Moiz Akbar Kalavadwala in 1968 with a vision to offer quality steam based textile machines. It eventually diversified in manufacturing a perfect range of machines & equipments for textile industry.

Bluemoon is recognized for its tradition of ensuring long term business relationship with customers by achieving total customer satisfaction in its products. The company is assuring leading position in textile industry by providing high-tech, efficient, safe and reliable products to customers at very competitive price and well on time.

Its manufacturing facilities are situated at Surat, famous for its jari, silk and diamond industries at world level and one of the important hub of indian textile business. It gives a privilege to the company, Surat is just 300 Kms away from Mumbai, India's financial capital.

Few textile machines manufactured by Bluemoon

Yarn Conditioning Plant

Bluemoon Advantage

- Low power consumption
- Low maintenance
- Low process cost
- Short payback period
- High quality conditioning
- Uniform moisture gain through out the package
- Moisture level increases by 1.5-2%.

Advantages of conditioned yarn

- Increased single yarn strength and elongation.
- Improved hairiness.
- Constant friction coefficient.
- Better running ability for subsequent production process.
- Enhances productivity, reduces fly generation, improves fabric softness.

Salient Features

- Designed as per ASME SEC VIII DIV I.
- Non corrosive stainless steel used for material of construction.

SCIENCE IN INDUSTRY

- Welding joints are tested with radiography.
- Vessel is insulated externally to maintain negative (vaccum) pressure which helps in producing cold saturated steam at low (46°c) temperature.
- Option of normal vaccum (700 mm-Hg) or high vaccum (750 mm - Hg) i.e. 99%.
- Precise process control as sensors interfaced with PLC based control panel. This allows the process to activate only as per prescribed limit of parameters like water level, pressure, temp, & time etc.
- Precise software ensures accurate repeatation of process.
- Single or multicycle process facility.
- Hydraulic door opening system for utmost safety.
- Automatic platform for feeding and removing trolley from the chamber.
- Condensation prevention roofplates are provided to avoid water droplet on yarn package.

Yarn Steaming Autoclave

Each production step like spinning, twisting or knitting causes tension in yarn & fibre. Yarns tend

to snarl in order to relax. Tension and snarling lead to problems in downstream processing. Blue

moon yarn steaming autoclaves provides optimal and smooth treatment for following application.

1. Heat setting.
2. Fixation of textured & twisted filament.
3. Relaxation of high twisted yarn.
4. Torque Stabilization.

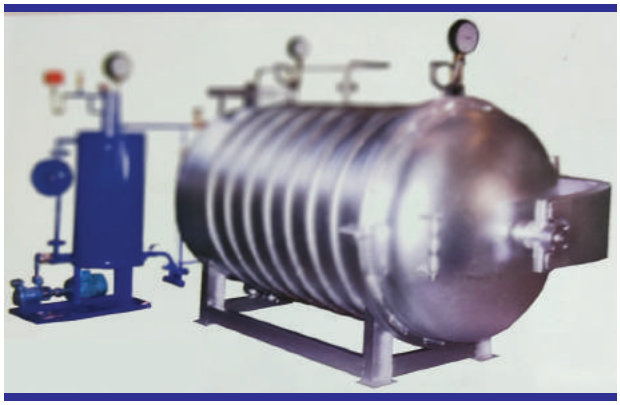
Advantages

- Twist set and relaxed.
- Treatment of Natural fibre, Synthetics, Blends & Micro Fibre.
- Inexpensive paper tubes can be used.
- Treatment in plastic boxes, trolleys & crill.
- Absolutely saturated - dry steam for steaming.
- Steaming from 70°C-150°C.
- No Shock treatment, No condensate.
- Uniform steam distribution.
- Even steam penetration.
- Less electricity/energy consumption.
- Short payback time.
- Better dye affinity.

Yarn Setting Autoclave

Salient Features

- Best solution for steaming/heat setting.
- Treatment is suitable for both man made and natural yarn.
- Treated yarn eliminates undesired twisting effect from fibers.



- Improves shrinkage & elasticity of yarn.
- High vacuum (700mm-Hg) in vessel allows steam to reach inner most layer of yarn package.
- Unfiorm distribution of super heated steam avoids condensation drop on yarn package.
- Easy to operate electronic control panel.

Application

- Polyester
- Viscose
- Nylon
- Metallic film covered yarn
- Jari covered yarn
- Acrylic
- Silk
- Cotton
- Blends like PV. PC.

Hot Air Ager for Yarn Setting & Yarn Drying

A Revolutionery Concept

- This is a revolutionary concept innovated to set low twisted yarn (max 1000 TPM).
- We make forced air to penetred in side the cone.
- Fully Automatic process controlled through control panel to ensure best quality of twist setting through out a lot.

Salient Features

- Low twist yarn setting. (up to 1000 TPM)
- Drying of dyed yarn.
- No colour shade change.
- To cut down production cost by changing of conventional system. (steam to Air)
- To avoid damages to the Paper tubes.
- To cut down batch time.

- To eliminate Bobbin winding-rewinding cost.
- Also to accommodate in small scale industry.
- To make more safer by avoiding steam pressure in machine.

Yarn Setting Steam Ager

Salient Features

- Fully Automatic Process.
- Accurate Temperature & Time Control.
- Short Process Cycle.
- Optimal Process Cost.
- Adequate Process Safety
- Heat Source : LP Gas/CN Gas/Wood/Oil.
- Less Energy Consumption.

Application

- Medium & High twisted yarn steaming.
- To operate at 70°C to 130°C.
- To operate upto 2 Kg/Cm^2.
- Polyester, Nylon, Viscose, Pure Silk, etc. with High Twist.
- Multicolour Spcae Dyed yarn dye fixation.

Availibility

- Fully Automatic/Semi Automatic/Manual

Technical Specifications

Model	Capacity (Kgs)
BSA 50	50
BSA 100	100
BSA 200	200
BSA 250	250
BSA 300	300

M.O.C.

- Stainless Steel.
- Carbon Steel.
- Aluminium.

H.T.H.P. Vertical Dyeing Machine

Salient Features

- Airpad dyeing system helps keeping low liquor ratio from 1:4 to 1:7 compared to fully flooded system. It leads to saving of water, dyestuff, chemical and heat energy.
- Coil type heat exchanger made out of high grade seamless tubes for high heat transfer efficiency.
- In addition to spring loaded safety valve, the machine is equipped with an additional pressure switch to release pressure if it exceeds set limit for utmost safety.
- There is no need to rotate the lid on main vessel to lock the machine but outside ring clamps the lid with vessel for locking. As there is no rubbing of lid, lipseal life increases.
- Option of various type of carriers for fibre, hank, muffs, tops & beams.
- Control panel is fabricated form stainless steel for longer life.
- Modular design. Two machines of same capacity can be coupled to increase batch size.

For further information, please contact :
Bluemoon Machines
Works : Plot No. 201, New Industrial Estate "F" Road, Road No. 6, Udhyognagar, Udhna, Surat-394210, Gujarat, India
Ph : +91 9825120452, 9712911052
+91-9825121428, +91-261-2277973, 2759216
Email : sales@bluemoonmachines.in
bluemoonsrt@gmail.com
Web : www.bluemoonmachines.in
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Basant Fibertek P. Ltd.

BASANT FIBERTEK exhibited its advanced Gentle Fiber Preparatory Solutions at INDIA ITME 2022, Greater Noida, India

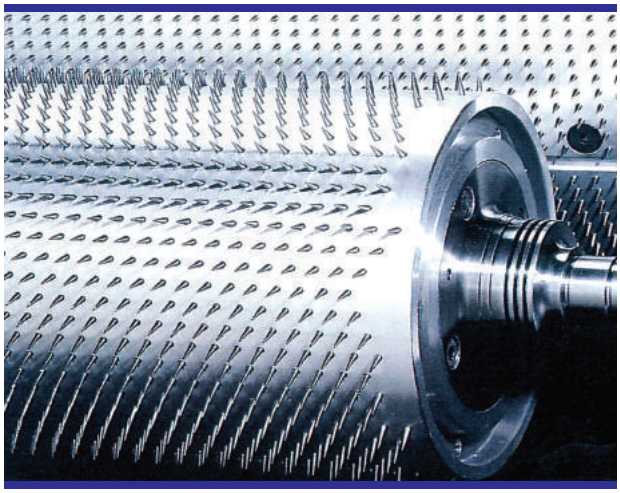
BasantFibertek, market leaders in Pinned Fiber Opening Componentsfor Textile Spinning and Recycling, exhibited its advanced, low-cost solutions for increasing production and reducing waste in Spinning and in Recycling Mills at INDIA ITME 2022.

Textile Pins and Pinned Products

The 57 years old company, the pioneer and market leader in India for world class, critical Spinning and Recycling machinery components that help increase production and reduce waste through Gentle Opening action of Pins. Its Porcupine Brand is synonymous with world class Pins and Textile Machinery Components.

Over the past few years, the company has focused more on offering complete solutions to its clients to address their quality and productivity

needs. The solutions are based on the Gentle Fiber Opening Principle, which essentially means preserving the original strength of the fibers by



Pinned Beater

preventing rupture while ensuring good opening and cleaning. The company has helped many clients improve yarn quality, reduce process waste, increase production and productivity as also reduce maintenance costs through the customized solutions that are designed based on plant audits.

Mr. Kishore Khaitan, Managing Director of the company says "Our commitment for not compromising on quality and on ethics has resulted in developing trust and confidence in our customers and this has resulted in strong client relationships spanning a decade or more.The company is now the preferred supplier to many Mills and OEMs worldwide. Due to our fast-expanding global reach, exports have become more than 50% of turnover. We export to all 5 continents and to over 40 countries.

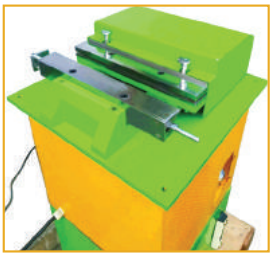
Short delivery times, a hassle-free user experience, customized solutions and economical prices provide our clients the best value for money. This commitment has enabled us be miles ahead of competition,whether domestic or foreign. In view of the rising demand of its products, the company doubled its capacity in 2021 to ensure it lives up to its record of fast response and short delivery time."

Basant is wellknown in industry for its world class, innovative products and gentle fiber handling solutions and is serving OEMs as well as leading Mills in India and abroad. Its range covers solutions for short staple cotton and synthetic spinning, worsted spinning, sisal/linen spinning, rotor spinning as well as other applications in textile and non-textile sectors.

In 2016, the company commissioned its new plant for manufacturing Opening Rollers and Rotors for Open-End Spinning thus becoming the only manufacturer producing these in India. Basant offers lower prices than European and OEM offerings while achieving comparable performance. Its product for Rotor Spinning also beat Chinese

ones in terms of cost effectiveness and reliability of performance. The company offer full range of rotors and opening rollers for all leading makes of Rotor Spinning machines. The company has doubledits capacity for Spinbox components also in order to catch up with the fast-rising demand in domestic and export markets.

For worsted spinning, BASANT is a leading supplier of 'MARATHON" Plastic Faller Pinstrips for Gill Boxes. These pinstrips, made from imported alloy steel, provide long, trouble free life and excellent fiber opening. BASANT also advises clients about the right pinning and settings to obtain best results in their process. The Company also provides automatic Insert Mounting machine foe fast and easy Pinstrip mounting on Fallers.



For further information, please contact :
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E-418, Road No. 14, VKI Area,
Jaipur-302013, India
E-mail : sales@bwipins.com
Phone : +91 94140 63546, 0141-402393
Website : baftek.com

■

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Delivering Qualitative Excellence

Cot Grinding Machine
Model GCGHY-200-25-AF

Cot Grinding Machine
Model GCGHY-200-AF

Hydraulic Cots Mounting &
De-Mounting Machine

Spindle Lubricating
Machine

Auto Feeder with Flocked Clearer
Roller Cleaning Machine

Ultra Violet Treatment
Machine

VISIT US

INDIA ITME 2022

Hall No. H9
Stall No. H9C1A

Our products are specifically engineered and designed for meeting the needs of spinning industry, with our expertise and continued in quality, we are providing leading solutions allowing you to increase efficiency and gain competitive advantage

Other Range of Products

- Eccentricity & taper tester machine
- Ultra violet treatment machine
- Top Roller greasing machine [Vertical]
- Top Roller greasing machine [Automatic]
- Top Roller de - greasing machine
- Clearer roller cleaning machine
- Fluted Roller truing machine
- Cot Mounting machine [Hand/Pneumatic]

GAYATRI

GAYATRI TEXTILE MACHINES

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