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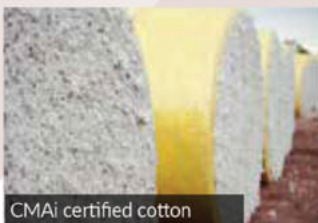
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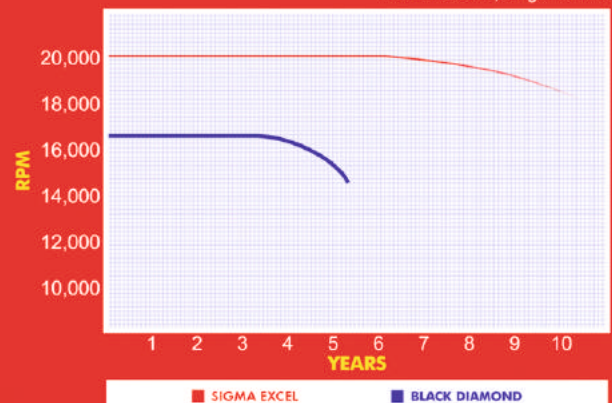
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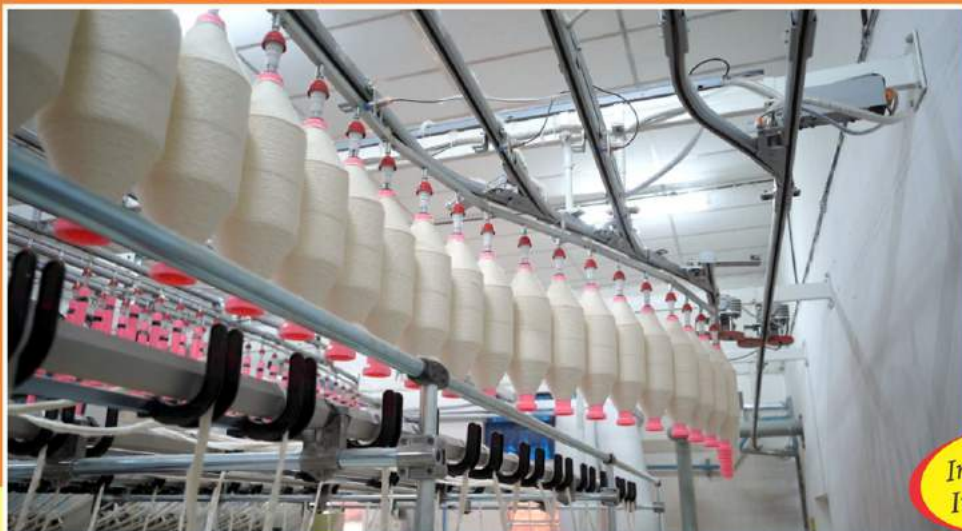
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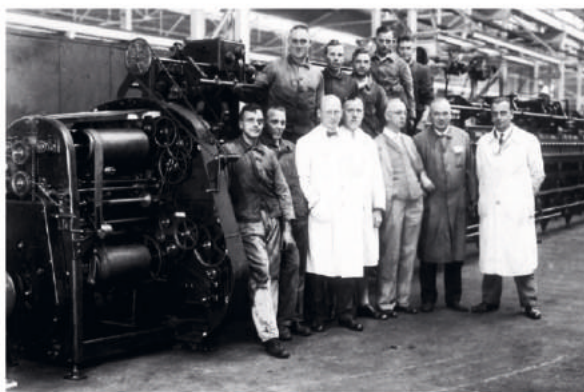
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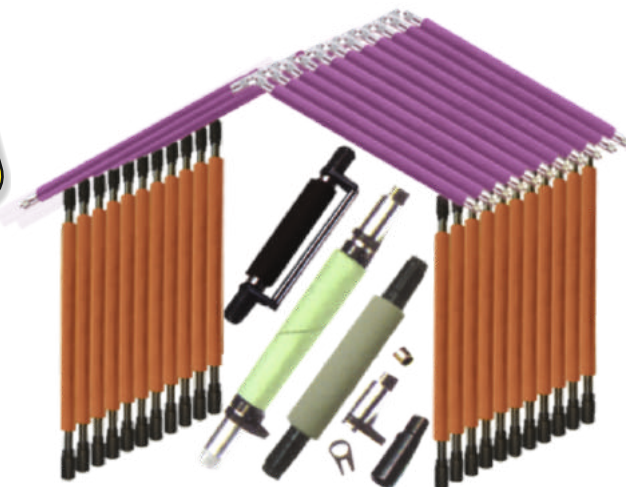


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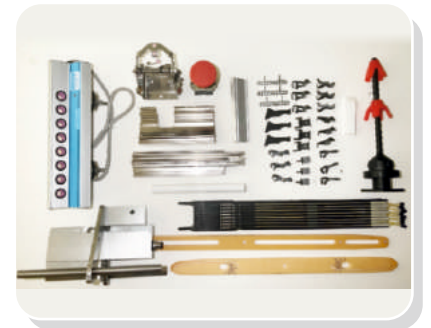
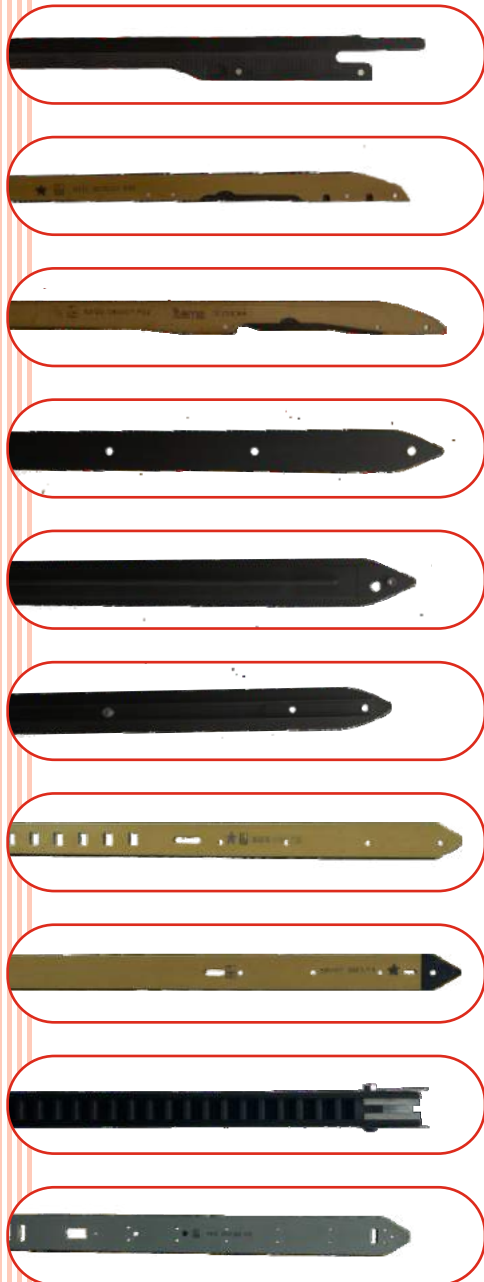
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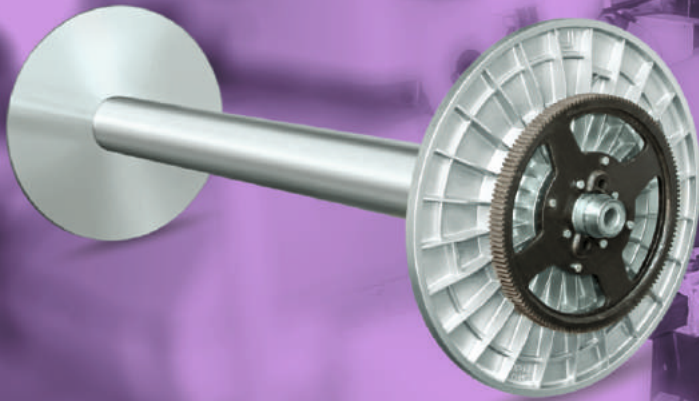
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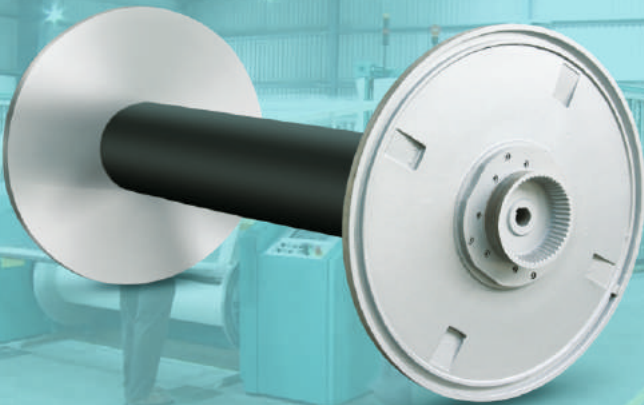


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### *Shershabadi women's embroidery work found a window to the world*

Without any measuring tool, Shershabadi women from Kishangang district in Bihar, whose embroidery work called Kheta, has earned discerning clientele in the last four to five years. Kheta was just a way to reuse worn-out sarees and clothes. The most extraordinary facts about the Kheta is that though the stitch of the embroidery is linear but patterns emerge diagonally. This involves an intuitive visual calculation. The Kheta is one textile art form that is sensed through the hands and feet. Women literally walk over the layers while putting the stitches. It does not have any placement of motifs, but a thread running from one end of the layered sarees to the other end.

Kheta is very labour-intensive product, the women work upon it once all the household chores are done. It is the identity of the community that has kept the craft alive. Each piece takes many months to embroider. Kheta is used as light quilt and essentially made for use at home.

The first-ever exhibition of nearly five centuries-old undocumented crafts was held in Delhi. Today through the exhibitions it has growingly been gaining acceptability to the people of urban and semi urban regions. Shershabadi women have been able to earn Rs.3000/-4000/ per month and are keen on learning new designs. Now, they like to have cash in hand. Earlier they were accountable to the men for the money spent. In the beginning men would negotiate the price but now women directly talk to the wholesalers. The women never saw it as something that could get them money. They never knew that the outside world would be interested in their art.

Now Exhibition organizers are seeking GI status for Kheta as the embroidery is specific to a community and region. Also the craft has remained undocumented. Academic writing, talks, presentations and museum exhibitions are on to generate awareness. We hope government agency will be involved in training and upskilling of the women and this will make the women more skillful in artwork and in turn they will reap higher monetary benefits.

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## WORLD ECONOMY AND TRADE TRENDS

### ➡ US trade deficit widens to record as goods imports surge

The US trade deficit widened to a record in March, reflecting a surge in imports as companies relied on foreign producers to meet solid domestic demand. The gap in goods and services trade grew 22.3% to \$109.8 billion, Commerce Department data showed recently. The median estimate in a Bloomberg survey of economists called for a \$107.1 billion deficit. The figures aren't adjusted for inflation. In the first quarter, the widening of the trade deficit largely explains the economy's worst performance since the pandemic recovery, with gross domestic product shrinking at a 1.4% annual pace. That's because the value of products American businesses and consumers bought from overseas outpaced purchases of US goods and services by other economies. Net exports subtracted 3.2 percentage points from first-quarter GDP, government figures showed of late. An improvement in the trades shortfall any time soon will be difficult as US demand exceeds economic activity in many other nations. Severe lockdowns in China to curb the spread of Covid-19 further complicates the trade picture. Activity at some ports slowed sharply, further straining already-tenuous global supply chains. The value of imports of goods and services rose 10.3% in March to \$351.5 billion and exports increased 5.6% to \$241.7 billion. Both values were records. US merchandise imports grew 12% to a record \$298.8 billion, reflecting a surging the value of industrial supplies that include petroleum. Energy prices rallied in the month after Russia's invasion of Ukraine. Imports of consumer goods, capital equipment and automobiles also increased. On an inflation-adjusted basis, the March merchandise-trade deficit widened 18.9% to a record \$137.8 billion. □

### ➡ China export growth contracts to 2020 low as lockdowns bite

China's exports and imports struggled in April as worsening Covid outbreaks cut demand, undermined production and disrupted logistics in the world's second-largest economy. Export growth in April in dollar terms slowed to 3.9 per cent from a year earlier, compared to an increase in

March of 14.7 per cent, customs data showed recently. That's the weakest pace since June 2020 but faster than the median estimate of a 2.7 per cent gain in a Bloomberg survey of economists. Imports were unchanged in April after sliding 0.1 per cent in March. Economists expected a 3 per cent decline. □

### ➡ UK economy falls in March as buyers cut back

The UK economy unexpectedly contracted in March as the cost of living squeeze saw consumers cut back on spending. Gross domestic product fell 0.1 per cent from February, when growth was flat, the Office for National Statistics said recently. It meant the economy expanded just 0.8 per cent in the first quarter, less than the 1 per cent forecast. While the quarterly growth takes output back above its pre-pandemic level, it's almost certain to make the high point of the year, with the worst bout of inflation since the 1980s expected to see the economy lose momentum and slide into recession. □

### ➡ IMF increases weighting of dollar, Chinese yuan in SDR basket

The International Monetary Fund said recently it has increased the weighting of the dollar and Chinese yuan in its review of the currencies that make up the valuation of its Special Drawing Rights (SDR), an international reserve asset. The review is the first since the yuan, also known as the renminbi, joined the basket of currencies in 2016 in what was a milestone in Beijing's efforts to internationalise its currency. The IMF raised the US currency's weighting to 43.38% from 41.73% and the yuan to 12.28% from 10.92%. The euro's weighting declined to 29.31% from 30.93%, the yen's fell to 7.59% from 8.33% and the British pound fell to 7.44% from 8.09%. The IMF said in a statement its executive board had determined the weighting based on trade and financial market developments from 2017 to 2021. "Directors concurred that neither the Covid-19 pandemic nor advances in fintech have had any major impact on the relative role of currencies in the SDR basket so far," the IMF said. Although the yuan's value has declined recently, it has risen roughly 2% against the dollar since 2016, and appreciated about 6% against its major trading partners. □

### China's Economy declines as Covid lockdowns hit factories, retailers

China's retail and factory activity fell sharply in April as wide Covid lockdowns confined workers and consumers to their homes and severely disrupted supply chains, casting a long shadow over the outlook for the world's second-largest economy. Full or partial lockdowns were imposed in major centres across the country in March and April, including the most populous city Shanghai, hitting production and consumption and heightening risks for those parts of the global economy heavily dependent on China. Retail sales in April shrank 11.1% from a year earlier, the biggest contraction since March 2020, data from the National Bureau of Statistics (NBS) showed recently, a steeper decline than forecast in a Reuters poll. Factory production fell 2.9% from a year earlier, dashing expectations for a rise and the largest decline since February 2020, as anti-virus measures snarled supply chains and paralysed distribution. Analysts now warn China's current downturn may be harder to shake off than the one seen during the onset of the coronavirus pandemic in early 2020, with exports unlikely to swing higher and policymakers limited in their stimulus options. "The upshot is that while the worst is hopefully over, we think China's economy will struggle to return to its pre-pandemic trend," Capital Economics analysts said. The weak data sent China's bluechip stock index into the red in a sharp reversal from morning gains and also put an end to the brief rally seen in other Asian markets of late. Industrial output around the Yangtze River Delta, which includes Shanghai, fell 14.1% in April, while that in China's northeast shrank 16.9%. Both regions saw a more than 30% dive in retail sales. In step with the unexpected industrial output decline, China processed 11% less crude oil in April, with daily throughput the lowest since March 2020. In the same month, power generation fell 4.3%, the lowest since May 2020.

### US manufacturing output increases more than expected in April

Production at the US factories increased more than expected in April amid continued

strong demand for motor vehicles and other goods, which should help to underpin manufacturing activity. Manufacturing output increased 0.8% in April after a similar gain in March, the Federal Reserve said recently. Economists polled by Reuters had forecast factory production would gain 0.4%. Output jumped 5.8% compared to April 2021. But manufacturing, which accounts for 12% of the economy, faces challenges from renewed supply chain bottlenecks because of Russia's invasion of Ukraine and China's zero-tolerance Covid-19 policy. The Institute for Supply Management's index of national factory activity hit more than a 1-1/2-year low in April. A survey from the New York Fed recently showed factory activity in New York state fell in May for the third time this year. The dollar, which has gained at least 2.7% against the currencies of the United States' main trade partners since the Fed started raising interest rates in March, could also hurt demand for exports and undercut manufacturing. US retail sales rose 0.9% in April, a solid rise that underscores Americans' ability to keep ramping up spending even as inflation persists at nearly 40-year high. The increase was driven by greater sales of cars, electronics, and at restaurants, the Commerce Department said recently. □

### EU trims Eurozone Growth Forecast as Ukraine War Bites

The European Union has slashed its forecasts for economic growth in the 27-nation bloc amid the prospect of a drawn-out Russian war in Ukraine and disruptions to energy supplies. The EU's gross domestic product will expand 2.7% this year and 2.3% in 2023, the bloc's executive arm said recently - its first economic predictions since Russia invaded Ukraine on February 24. The European Commission's previous outlook expected growth of 4% this year and 2.8% in 2023. The EU economy expanded 5.4% last year following a deep recession prompted by the Covid-19 pandemic. GDP shrank 5.9% in 2020. "Russia's invasion of Ukraine has posed new challenges, just as the union had recovered from the economic impacts of the pandemic," the commission said when releasing the forecast. "The war is exacerbating pre-existing headwinds to growth." ■

## INDIAN ECONOMY AND TRADE TRENDS

### Forex reserves contracts below \$600-b mark

The country's foreign exchange reserves dipped below the crucial \$600-billion mark in the week ended April 29, 2022, amid rising global bond yields and weakening currency. The reserves fell \$2.695 billion in the reporting week to stand at \$597.728 billion. In his off-cycle monetary policy statement on May 4, Reserve Bank of India Governor Shaktikanta Das said : "India's foreign exchange reserves are sizeable with net forward assets providing a strong backup. The external debt to GDP ratio remains low at 20 per cent." The country's forex reserves had gone past the \$600-billion mark for the first time in the week ended June 4, 2021. In the subsequent weeks, the reserves soared to touch a peak of \$642 billion on October 29, 2021. In the reporting week, all four components of the reserves declined - foreign currency assets (dropped by \$1.11 billion), gold (\$1.164 billion), Special Drawing Rights (\$362 million) and Reserve Position in the IMF (\$59 million). □

### Record-high of April wholesale inflation of 15.08%

Producers' inflation, based on the Wholesale Price Index (WPI), topped 15 per cent in April, up from 14.55 per cent in March to its highest ever since 2011-12 when the series came into force. WPI inflation has now been in the double digit for 13 months straight. "The high rate of inflation in April was primarily due to the rise in prices of mineral oils, basic metals, crude petroleum & natural gas, good articles, non-food articles, food products, and chemicals and chemical products compared with the corresponding month of the previous year," a statement issued by the Office of the Economic Adviser, Department for promotion of Industry and Internal Trade (DPIIT) said recently. The rate of inflation based on WPI Food Index increased marginally to 8.88 per cent in April from 8.71 per cent in March. The April retail inflation based on the Consumer Price Index (CPI) is already at an eight-year high of 7.79 per cent. With both the inflation rates

at elevated levels, the RBI can be expected to put up the policy interest rates. Earlier of May, the Monetary Policy Committee (MPC) raised policy repo rate (the rate at which the RBI lends money to banks) by 40 basis points to 4.40 per cent and the Cash Reserve Ratio (CRR, part of the incremental deposits banks are required to keep with the RBI) by 50 basis points to 4.5 per cent. Following this, various banks raised interest rates on loans. Rajni Sinha, Chief Economist with CareEdge, said the alltime high WPI inflation in April was driven by the rise in prices across the board with manufactured products and fuel and power leading the charge. The double-digit inflation level was very much in line with the CareEdge's expectation of 15 percent. "Higher energy and metals prices due to supply-side bottlenecks have added to the input cost pressures for domestic producers. As inflation is primarily supply driven, we expect upward price pressures to persist in the near term. With recovery in demand, producers are expected to pass on the rising costs to consumers which could push retail inflation even higher," she said. Aditi Nayar, Chief Economist with ICRA, said the heatwave led to a spike in the prices of perishables such as fruits, vegetables and milk, which along with a surge in tea prices pushed up the primary food inflation. The core WPI inflation reverted to a four-month high of 11.1 per cent in April, with producers forced to pass on the increased input prices. While the month-on-month rise in the core-WPI eased to 1.4 per cent in April from 1.8 per cent in March, it exceeded 1 per cent for the third consecutive month. □

### Factory activity gathers momentum in April

The manufacturing sector witnessed faster growth in April amid quicker increases in production as well as new orders. The seasonally adjusted S&P Global India Manufacturing Purchasing Managers' Index (PMI) rose from 54.0 in March to 54.7 in April, as production was stepped up to meet a rise in demand, after Covid-19 curbs were removed. Inflationary pressures meanwhile intensified, owing to rising



commodity prices, the Russia-Ukraine war and greater transportation costs. Input prices increased at the fastest pace in five months, while output charge inflation hit a 12-month high. While manufacturing PMI was in the expansion zone for 10 straight months to April, expansion in March was slower than in February. The eight infrastructure sectors registered a strong sequential growth of 14.4% in March. Growth gathered pace in intermediate and capital goods segments, indicating a rise in capacity utilisation. The services index had scaled a three-month high in March. In PMI parlance, a print above 50 means expansion, while a score below 50 denotes contraction. "The Indian manufacturing PMI remained well inside positive territory during April, recovering some of the ground lost in March. Factories continued to scale up production at an above-trend pace, with the ongoing increases in sales and input purchasing, suggesting that growth will be sustained in the near term," said Pollyanna De Lima, Economics Associate Director at S&P Global. April data showed a rebound in new export orders, following the first contraction for nine months in March. The rate of increase was solid and the strongest since last July. "A major insight from the latest results was an intensification of inflationary pressures, as energy price volatility, global shortages of inputs and the war in Ukraine pushed up purchasing costs. Companies responded to this by hiking their fees to the greatest extent in one year," Lima said. □

### ► Robust growth by 31% in export in April, trade deficit still crosses \$20-bn-mark

Merchandise exports hit \$40.2 billion in April, which is a record for the first month of any fiscal, having jumped 30.7% from a year before. However, imports jumped at a faster pace of 31% in April to \$60.3 billion, driven by high commodity prices, especially of energy products. This widened trade deficit in April to \$20.1 billion from \$18.5 billion in the April. Without substantial easing of international commodity prices,

trade deficit will likely exceed the crucial \$20-billion mark in most of the months in FY23, according to an Icria estimate. Consequently, the CAD is estimated to rise to \$20-23 billion in the June quarter, compared with \$15.5-17.5 billion in the previous three months, according to Icria. Of course, senior government officials have assuaged concerns about financing the CAD. Among high-value segments, the rise in exports in April was led by petroleum products (128%), followed by electronics (72%), chemicals (28%). Even core exports (excluding petroleum and gems and jewellery) grew 19.9% on year in April to \$28.5 billion, reflecting the impact of decent external demand and elevated commodity prices. Similarly, core imports jumped at a faster pace of 34.4% in April to \$35.7 billion. Among the key commodity segments, purchases of coal jumped 146% to \$4.9 billion, petroleum 88% to \$20.2 billion and electronics 33% to \$6.7 billion. Although orders are still pouring in from certain jurisdictions, the supply-side disruptions in the aftermath of the Russia-Ukraine war have hit domestic exporters' ability to ship out goods. The surge in international shipping costs has made the matter worse. The World Trade Organisation, too, has slashed its 2022 global trade growth forecast to 3% from an earlier projection of 4.7%, which would weigh on the prospects of Indian exports as well. However, commerce and industry minister Piyush Goyal earlier exuded confidence that exports will keep up the good pace in the current fiscal as well, as benefits from the recently-concluded free trade agreement with the UAE and another deal with Australia will outweigh potential losses caused by any geopolitical tension. Importantly, merchandise exports hit a record \$422 billion in FY22, as an industrial resurgence in advanced economies (before the Ukraine war in late February) stirred demand for Indian goods. The country's exports had remained below par in the past decade, having fluctuated between \$250 billion and \$330 billion a year since FY11; the highest export of \$330 billion was achieved in FY19. So, a sustained surge in exports for a few years will be crucial to India recapturing its lost market share, analysts have said. ■

## Govt. selected 61 companies for Textile PLI

The Government recently selected 61 companies, including Goa Glass Fibre, Trident, MCPI, Shahi Exports, Arvind Mills, Gokaldas Exports and Monte Carlo, to enjoy benefits under its ₹10,683-crore production-linked incentive (PLI) scheme for the labour-intensive textiles and garment sector. The applications of six more firms, presumably comprising some big names, are still being weighed.

Textiles secretary UP Singh said the companies have pledged to invest ₹19,077 crore over five years under the scheme, which will lead to an incremental turnover of ₹1.85 trillion and direct employment generation for 2,40,000 people.

Incentives of ₹6,013 crore will be extended to these 61 players, which represent 56% of the ₹10,683 crore that the government has earmarked for the scheme.

Commenting on the six applications whose fate is yet to be decided, Singh said, in some cases, more than one company from a particular group applied for incentives under the scheme; in rest of the cases, some minor corrections in applications are required. The names of these firms are yet to be disclosed. Sources had earlier suggested that Reliance and Welspun were also among the applicants. The textile PLI scheme covers 50 man-made fibre (MMF) garments, 42 MMF fabric products and 10 technical textile items. Incentives will be extended for five years.

It will remain operational until 2029-30.

The scheme is open to two categories of investors. Those who will invest at least ₹300 crore will be eligible for a 15% incentive in the first year if they achieve a turnover of ₹600 crore or more.

Similarly, those investing at least ₹100 crore will get 11% in the first year if their turnover hits ₹200 crore or more. After the first year, both the categories of investors will have to show a 25% incremental turnover annually for the next four years. But the benefits will drop by 100 basis points with each passing year in both the cases.

The textile ministry has selected 13 firms under the first category, including Himatsingka, Seide, Madura Industrial Textiles, Paragon Apparel, Shree Durga Syntex and Kimberly Clark India. As many as 48 companies have been selected under the second category. They include Pearl Global, AYM syntex, Kennington Industries, MI Industries, Donear Industries, Nobel Hygiene, Ginni Filaments and Texport Industries.

Interestingly, among the eligible investors, seven are foreign firms, which have committed to invest ₹3,559 crore under the scheme by setting up units in

India. They are Autoliv India, Avgol India, Evertop Textile & Apparel Complex; Kimberly Clark India; Rane TRW Steering Systems; Teejay India; Toray International.

This PLI scheme has marked a paradigm shift in the government's decision-making on two counts. First, it earmarks big bucks for big companies, shedding its long and costly bias towards small businesses. Second, it seeks to correct India's historical policy preference for a cotton-dominated value chain, which is contrary to the global trend. The idea is to reclaim India's export markets after ceding substantial ground to Bangladesh and Vietnam in recent years.

Even before the pandemic struck, India accounted for 4.3% (or \$35.5 billion of global exports of textiles and apparel in 2019 but its share in the man-made fibre segment was much lower at 2.8% (\$9.3 billion). In fact, products based on man-made fibres made up for only 2.6% of India's textiles and garments exports, compared with most 50% in China and 49% Vietnam. ■

### Telangana government to encourage cotton farming

The Telangana Agriculture Department has identified 1,332 clusters for encouraging cotton cultivation, over 1,000 clusters for paddy and 82 for red gram as part of the plans to take up crops in the next Kharif season in about 1.42 crore acres.

The Kharif 2022-23 plan was discussed at a meeting held by Minister for Agriculture S. Niranjan Reddy in Hyderabad recently. According to the plan cotton is likely to be encouraged in 70 lakh to 75 lakh acres, paddy in about 50 lakh acres, red gram in 15 lakh acres and horticultural crops in 11.5 lakh acres.

The Minister felt that the farming community suffered loss of prospective income by not cultivating cotton to the extent suggested by the State government and asked the authorities to encourage them to go for the fibre crop in the planned extent during the next Kharif. He said cluster (5,000 acres) wise crop plans were prepared to make arrangements for supply of seed and fertilizer and green manure seed.

The Minister asked the authorities to supply the green manure seed in May itself so that the farmers could sow them early before taking up regular Kharif crops. He told them to ensure availability of quality seed and take up field visits and inspections to prevent spurious seed reaching the farming community.

He told Agriculture Department officials to create awareness of cluster-wise cropping plans by field visits in May and also train the Agricultural Extension Officers on district-wise plans. ■



## Take measure to ensure availability of raw jute : Calcutta HC to Commissioner

The Calcutta High Court recently directed the Jute Commissioner to take measures to ensure that raw jute is made available at the notified price or to “review and re-fix” the rate, taking into consideration the freight, transportation, handling, and storage charges.

The Commissioner had, in a notification dated September 30, 2021, fixed the price of jute at ₹6,500 a quintal for 2021-22 till June 30, 2022.

However, mills have not been able to procure at these rates as market prices are ruling far higher at ₹7,000-7,200 a quintal despite an estimated higher production of raw jute this year.

“The Jute Commissioner is directed to adopt stringent measures to implement the notified rate, but despite all efforts, if it appears that the notified rate cannot be adhered to, then the Jute Commissioner shall review and re-fix the rate, taking into consideration the relevant factors as mentioned in the Control Order, 2016,” the Calcutta High Court said in its order dated May 11.

The price cap of ₹6,500 a quintal fixed by the Jute Commissioner is not only causing the closure of jute mills across the country but has also led to more than 50 per cent of the demand for foodgrain packaging during the ongoing Rabi Marketing Season (RMS) being met through polypropylene

bags. According to Raghav Gupta, Chairman, Indian Jute Mills Association, the raw jute price is ruling at around ₹7,000 a quintal but the pricing of jute bags is based on the notified price of ₹6,500 a quintal.

“Mills are incurring losses due to this and as many as 11 have shut down. The High Court order has come on May 11. We need to wait and watch (the implication),” Gupta told recently.

West Bengal is estimated to produce 85-90 lakh bales of raw jute in 2021-22, compared to 55-58 lakh bales in 2020-21. The higher production is on the back of favourable weather conditions and an increase in the area due to the highly remunerative price the golden fibre fetched last year. There is no carryover stock from last year due to a lower crop, so the market prices have been ruling much higher.

The Jute Commissioner, being the statutory authority, is liable to take all steps to ensure that raw jute is available at the notified rate. The Jute Commissioner ought to appreciate that fixing a rate which is not feasible serves no purpose. As the jute mills are legally bound to supply jute bags to the government for which they are reimbursed at the notified rate, they have no other alternative but to sell the finished product at a loss, the High Court observed. ■

## As the cotton prices rise centre called a meeting of all stakeholders

With a section of textiles and garments producers calling for a ban on the export of cotton and others threatening to go on a strike against the continually rising raw cotton and yarn prices, Minister for Commerce and Industry and Textiles Piyush Goyal has called a meeting of all stakeholders, including cotton and yarn traders, spinners, garment manufacturers and exporters, recently to look for solutions.

“Whatever the Ministry decides will be in the larger interest of the entire value chain. We normally allow market forces to operate but if we see that there is a need for government intervention, it should be done. At the same time, it should be done in a manner that it does not adversely affect any one segment of the value chain,” Textiles Secretary Upendra Prasad Singh told of late.

Cotton prices have almost doubled since the beginning of the current season seven months ago — from ₹55,000 to about ₹1 lakh per candy — pointed out Sanjay Jain, Managing Director, TT Ltd. “This unprecedented rise has led to a demand destruction of cotton-based textiles and endangered the very existence of thousands of garment MSMEs,” Jain said.

The Centre’s decision to remove the 11 per cent import duty on cotton mid-April did not ease cotton prices. Instead, yarn manufacturers increased prices by ₹40 per kg across categories earlier May, following which garment units in Tamil Nadu’s Tiruppur have threatened to go on a six-day strike.

The Textile Secretary attributed this to the high global prices and to the addition of freight and handling charges to imports. There were also the problems of port congestion and container availability. “Even if someone wants to import cotton, it takes two-three months for the consignment to arrive. So, the industry is not getting any immediate benefits,” he said.

Garment export organisations have been seeking help from the government, including a short-term ban on export of cotton yarn, to help retain their hold on the global market. In a recent representation, the Apparel Export Promotion Council (AEPC) noted that instead of exporting raw materials such as cotton and cotton yarn, the government should encourage exports of value-added products like apparel. ■

## Forced holiday at power looms leads to down-turn in textiles power house

Fifty-two-year old Mulayam Singh, who hails from Unnao in Uttar Pradesh and works in the Pandesara industrial estate in Surat, is sad that his friends and colleagues from UP have gone back home for festivals, but he has not been able to due to his lack of savings.

"To make matters worse, the weekly power cuts means that I lose employment for a day, unlike those working in the city limits who are able to earn more and save for a trip back home," rues Singh.

In April, the state-run Gujarat Urja Vikas Nigam Limited (GUVNL) had ordered weekly staggered holidays for industries with non-continuous processes across high-tension and low-tension users. By late April, the peak power demand in the state had crossed 21,000 MW, much of which came from the industrial and agricultural sectors. Gujarat's power generation capacity stands at roughly 37,000 MW.

A senior official at GUVNL maintained, however, that the order to industry for taking staggered holidays was not mandatory. "Gujarat is in a better position regarding power and is looking at ways to meet the future rise in power demand," the official told recently.

Gujarat, and in particular Surat, may not have seen the kind of power crisis that has affected other states of north India, but workers in Surat's textile industry, especially in the power loom sector, are at a particular disadvantage if there is even a minor decline in production. This is because power loom workers are paid per metre of cloth woven. Staggered holidays and a lesser number of shifts mean that they can produce less and, hence, earn less.

Surat has a migrant worker population of between 1.2-1.5 million, largely employed in textiles, followed by construction and much further down, by the demand industry. Most of them are from Odisha, Bihar and Uttar Pradesh (UP), among others. In normal times, Surat's textile workers are relatively better off than their peers in other industries since they earn on a piece rate basis. For every metre of grey cloth or fabric that they churn out, they get paid anywhere between ₹3 per metre and ₹5 per metre, amounting to average monthly salaries of about ₹20,000 to ₹25,000.

Mulayam Singh's employer Vipul Bekawala of Jai Mata Di Textiles in Pandesara, one of the largest power loom and textile clusters in Surat, says that around 40-50 per cent of the industry's

migrant workers have gone back to their home states, leading to a shortage of labour. This, together with the sluggish demand and weekly power cuts, have led to the industry operating at a sub-optimal capacity.

Today, instead of the usual output of 40-50 million metres of fabric per day, Surat's textile industry is churning out roughly 30 million metres a day.

"This year, many workers have gone back home on extended vacation. Moreover, due to the weekly power cuts and staggered holidays, workers from our industrial area have shifted to units within the city limits where there is continuous power supply and, therefore, a steady income," says Bekawala. As a result, he adds, out of the 250 power looms at his unit, only 130-140 are operational during the day shift and fewer still during the night shift.

Industry sources estimate that 400,000-50,000 migrant workers are employed by textile weaving units, another 300,000-400,000 by textile processing units, and 200,00 by textile traders in the wholesale markets. Surat has an estimated 450 textile processing units, 600,000 weaving and knitting power looms, and over 700 textile markets that employ nearly half a million workers for packing and dispatching of finished goods.

While the diamond industry is largely situated within the city limits where power is distributed by private player Torrent, most of the textile units, including power looms and processing units, are located outside the city, where the state-run Dakshin Gujarat Vij Company Limited (DGVCL) supplies power.

Denying the impact of the shortage of coal and a power crisis, a senior DGVCL official maintains that power cuts are being done only as part of regular annual maintenance ahead of the monsoons. "This has nothing to do with the power crisis. This is an annual exercise done in the summer season to ensure maintenance to reduce mishaps during the monsoon."

Nonetheless, the weekly power cuts by DGVCL have seen at least a 10 per cent dip in production, says Ashish Gujarati, president of South Gujarat Chamber of Commerce and Industry (SGCCI).

"For the textile industry, a production loss of 10 per cent is heavy because of the fixed overhead costs. This coal and power crisis is going to remain for around two more years. Hence, we have requested policymakers and the government to



**Forced holiday at power looms leads to down-turn in textiles power house**

come out with solutions in renewable energy. In Gujarat, industry is growing at around 6-7 per cent and so power is also growing commensurately," Gujarati adds.

Industry insiders say that though the textile processing sector is not so affected by the weekly power cuts, the prices and availability of coal have had an impact on its value chain. These units largely depend on imported coal for its boilers. But with the price of imported coal almost doubling, input costs have spiked from anywhere between 25 per cent and 40 per cent, says Jitu Vakharia, president of South Gujarat Textile Processors Association (SGTPA).

"In textile processing, production is not much affected by weekly power cuts since the weekly off is used for the maintenance of machines and boilers. The impact, however, has been in terms of imported coal prices and availability. Other input costs such as dyes and chemicals, especially sodium hydrogen sulphate and other discharging agents, have seen a price hike of 30 per cent to 150 per cent, resulting in almost a doubling of total input costs," says Vakharia.

And since demand is weak, the textile processing industry is unable to pass on the input cost hike to the subsequent value chain and textile buyers. ■

**3 more firms get Textile Ministry's nod under PLI scheme**

The Textile Ministry has approved the applications of three additional companies under the production-linked incentive (PLI) scheme for textiles, which includes Birla Fashion and Retail Ltd and RSWM Ltd of the Bhilwara Group, taking the total number of selected applicants to 64.

"In the approved 64 applications so far, the proposed total investment is ₹19,798 crore and projected turnover of ₹1,93,926 crore with a proposed employment of 2,45,362," according to a Textile Ministry note.

Textile Secretary UP Singh had pointed out that while 61 of the 67 applications for textiles PLI scheme, for man-made fibre (MMF) apparel, MMF fabric and technical textiles, had been approved during the initial announcement, the remaining were put on hold as there were some issues to be addressed. He said that they would be reconsidered.

**More applications**

"The selection committee met again on April 27 and approved the three additional applications," a person tracking the matter said. Of the three fresh approvals, one application from RSWM Ltd, one of the largest yarn manufacturing companies in India, was under part 1 of the scheme.

The minimum investment requirement under the first part is ₹300 crore with minimum turnover required to be achieved for getting incentive at ₹600 crore.

The other two approvals, one from Birla Fashion and Retail Ltd and the other from Pan Healthcare Pvt. Ltd, are under part two, with minimum investment of ₹100 crore while minimum turnover required to be achieved for incentive is ₹200 crore.

This has taken the total applications approved under part one to 14 and under part two to 60. Other companies that are investing under part one of the scheme include Trident, Shahi Exports, Kimberly Clark India Private Limited (subject to formation of a new company for investment and production under the Scheme as per existing guidelines) and Madura Industrial Textiles Ltd.

Some of the other companies investing under part two of the scheme include Monte Carlo Fashions Ltd, Pearl Global Industries, Sangam (India), Toray International, Texport Industries, Kanodia Global and Lotus Hometextiles.

**Second edition shortly**

The Centre may next come up with a second edition of the PLI scheme, dedicated to apparels and garments with a lower investment criteria, to ensure that the entire ₹10,683 crore of incentives allocated under the scheme gets fully utilised and relatively smaller players can also benefit.

The Textile Ministry is projected to utilise a little more than ₹6,600 crore for the current investors under the scheme and has enough funds to invite a second round of applicants. ■

## Textile PLI 2.0 may be restricted to garment, apparel segment

The Production Linked Incentive 2.0 for the textile industry may be restricted to garments and apparel, according to an official tracking the developments.

“The specifics of the second edition of the PLI scheme, including the product coverage, are still being finalised. Restricting the scheme to garments and apparel is being seriously considered as it is where employment generation is at its maximum. If that happens, then the minimum investment requirement could be brought down to ₹40-50 crore, while the minimum turnover requirement could be about ₹100 crore. But the matter is still under discussion,” the official told recently.

The Textile Ministry has so far approved 64 applications under the scheme with a proposed total investment of ₹19,798 crore and a projected turnover of ₹1.93 lakh crore. As the budget for incentives under the scheme, fixed at ₹10,683 crore, is more than what would be utilised as pay-outs to the 64 shortlisted investors, the excess of about ₹4,000 crore can be utilised as incentives under PLI 2.0.

The PLI scheme for textiles is available for the production of man-made fibre fabrics, and apparels and technical textiles. The first part of the scheme requires a minimum investment of ₹300 crore and a minimum turnover of ₹600 crore. Investors are entitled to an incentive of 15 per cent of the minimum turnover in the first year, which would go down by 1 per cent over the next four years. Part two requires a minimum investment of ₹100 crore, and a minimum turnover of ₹200 crore. The incentive here is lower at 11 per cent in the first year, which would be reduced by 1 per cent over the next four years. “A majority of the 64 proposals that have been approved so far are under part two, where the minimum investment and turnover criteria is lower. To ensure participation of a larger number of garment and apparel manufacturers, it would certainly need to be brought down further,” the official said.

Manufacturing of garments is not very capital intensive, unlike textiles such as technical textiles or an integrated value chains where weaving, spinning, and processing have to be undertaken, the official explained.

“Basically, you need a shed for sewing machines. Typically, a thousand machines should cost around ₹40 crore. So, the minimum investment limit should not be over ₹40-50 crore. Since the ratio of investment is relatively better, the minimum turnover requirement could be ₹100 crore,” the official said.

The PLI schemes announced by the Centre across 14 sectors have the potential to generate at least 60-lakh new jobs, according to the Finance Ministry. ■

### Tripartite meeting on jute crisis brings success

The tripartite meeting on the ongoing crisis in the jute industry held in New Delhi recently was ‘positive’, according to the Indian Jute Mills Association (IJMA).

Sources at the IJMA said the Ministry of Textiles Secretary deliberated in detail on both issues of price fixation of raw jute and the implementation of tariff commission’s report. “The meeting was positive. The secretary will discuss the matter with the Minister,” the sources said.

The State Labour Secretary attended the meeting on behalf of the government of West Bengal. He opposed the idea of maximum price on agricultural products like jute. The State government also demanded 100% reservation for packaging of food grains and sugar with jute bags. “The govt. of WB attended the meeting on jute in New Delhi. The WB govt praised the labourers of jute industry stating they do not strike even though they are suffering and WB govt., under leadership of CM Mamata Banerjee, is committed to their upliftment,” State Labour Minister Becharam Manna said on social media.

With almost a dozen of jute mills closing down in the State and about 60,000 workers out of work, the meeting was eagerly anticipated among several stakeholders of the industry.

Former BJP MP from Barrackpore Arjun Singh said the meeting was fruitful. “The issues raised by me on raw jute price ceiling and tariff commission were discussed in detail. Textile Secretary will speak to Union Minister @Piyush Goyal on these issues,” Mr. Singh tweeted. ■



# EFFECTIVE UTILIZATION OF OPTICAL BRIGHTENING AGENTS ON DIFFERENT WOVEN AND KNITTED FABRIC STRUCTURES

Patil J. M., Professor, Kulkarni G.M., Lecturer, Ghodawat Rishi, Ramane Vaibhavraj, Jamdar Rushikesh  
D.K.T.E.S Textile and Engineering Institute, Ichalkaranji, Maharashtra, India

## ABSTRACT

This report documents and presents the results of a study on the effective utilization of optical brightening agents on different fabric structures such as knitted and woven, derived from cotton fibre. The response and performance of new enhanced and efficient methodology, helps to minimize the excessive use of optical brightening agents which will eventually lessen the burden on wastewater processing and the environment. The present experiment is designed with help of two different stilbene based optical brighteners applied on varied fabric samples differing in the weave. The present work investigates the suitable concentration of optical brightening agent giving the most efficient results in the whiteness Index when applied on different structural fabric. This in turn reduces the relative load on the environment and diminishes the non-biodegradable waste harming the natural habitat.

## INTRODUCTION

Textile fibers do not appear perfectly white due to some natural and externally added impurities. These impurities are removed by chemical pretreatments such as scouring and bleaching. In bleaching the impurities are eliminated by oxidation which is accomplished by bleaching agents like sodium hypo-chloride and hydrogen peroxide. However these yellowness causing impurities are not completely removed during the process and excess use of bleaching agents may adversely affect strength of fibre (1,2). Therefore optical brighteners or fluorescent brightening agents (OBA or FBA) are applied on fabric in order to alter yellowish hue of the material to white. Sometimes bluing agents are also used. Optical brightening agents are colourless or pale yellow coloured organic compound which are directly applied on fabrics. It helps to counteract the yellowness of the fabric by increasing the reflection of blue light rays by converting invisible short-wave ultraviolet rays of sunlight into visible blue light and have a degree of whiteness which is comparatively more intense. (1) OBAs are categorized on the basis of solubility and chemical structure. Depending on solubility OBAs are classified as direct brightener which are water soluble and dispersed brightener and these are water insoluble. On the basis of structure optical brightening agent are classified into derivatives of stilbene, coumarin, 1,3 diphenyl

pyrazoline, derivative of naphthalene dicarboxylic acid, derivatives of heterocyclic dicarboxylic acid, derivatives of cinnamic acid and substance belonging to other chemical system. {4} Most of the optical brightening agents are not degraded easily and play vital role by adding unwanted chemicals in wastewater (2) hence there is strong need to avoid excess use of OBA by optimization of finishing recipes in which OBA are used.

The present research work focuses on identification of effective method of application of OBA and determining optimum concentration of OBA for different fabric structure. Stilbene based OBAs which are widely used were selected and applied on cotton fabric samples with different structure by varying concentration of OBA.

## Material, Chemicals and apparatus

For conducting the experiment and describing in relation, fabric manufactured by two different methods: woven and knitted were resourced from weaving workshop of D.K.T.E's textile and Engineering Institute, Ichalkaranji. The fabrics were conditioned and pretreated at the suitable conditions for obtaining the required ready for finishing fabric with optical brightening agent. The fabrics of different weave structure for both knitted and woven fabric were taken. Knitted fabric samples consisted of single jersey, Lycra Rip, Lycra Jersey, Inter lock while the woven fabric consisted of twill and satin weave.

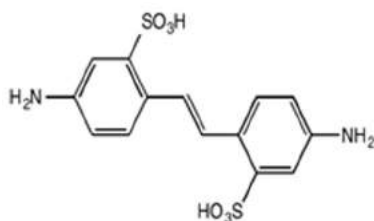
To execute the further process chemicals like optical brightening agents were used. Direct OBA 2B, OBA – BSU were selected for processing. Furthermore, stabilizers were used in the process to stabilize the demonstration.

The instruments taken into account to complete the experimentation were Rota Dyer, Computer Color Matchingsystem (MacbethPremier), Laboratory Padding Mangle (vertical), and Laboratory drying curing and setting chamber with working width 450mm and maximum temperature zone of 250°C.

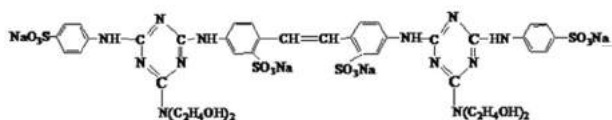
Performance of OBAs was checked using application method. For application of OBA on fabric samples, padding method and exhaust method were adopted. The former check of the chemical was executed since OBA is a textile auxiliary and is combination of numerous other components. This makes it difficult to identify and

## EFFECTIVE UTILIZATION OF OPTICAL BRIGHTENING AGENTS ON DIFFERENT WOVEN AND KNITTED FABRIC STRUCTURES

determine the purity of the chemical and hence, the performance of OBA was checked as a parameter to ascertain the efficiency of the same. However chemical structure of main constituent responsible for increasing brightness in respective OBA was resourced.



Structure of OBA 2B



Structure of OBA BSU

Preparation of OBA solution – Five different concentrations of OBA 2B and OBA BSU ranging from 1gpl to 5gpl were prepared from the stock solutions supplied by Yogeshwar chemicals Mumbai.

### PADDING METHOD

OBA is applied on fabrics under test by padding method. Selected fabric samples were treated and padded with 60% expression by two dip and two nip method. The samples were dried at 80°C and whiteness index was determined.

### EXHAUST METHOD

OBA is applied on fabrics under test by exhaust method. Different concentration of OBA 2B and OBA BSU were prepared by keeping MLR 1 : 30. The pH was maintained between 5 to 5.5 and the temperature was kept between 80 – 90°. The treatment is carried up to 30 minutes. Then sample was dried at 80°C and whiteness index was determined.

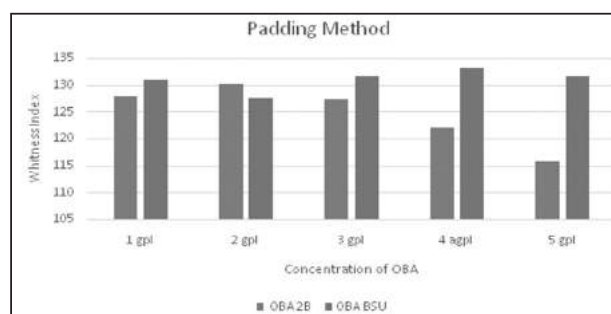
### II) TESTING OF WHITENESS INDEX

OBA applied sample were cut in to the small size to fit in the window of Computer Colour Matching System (CCM). The CCM was calibrated with the standard white tile. First OBA untreated sample was scanned. It was used as a reference. The remaining fabric samples treated with various concentration of OBA were scanned and the percentage whiteness index with respect to untreated sample was noted.

## Results and Discussion

Table : 2.1.A  
Padding method for Single Jersey

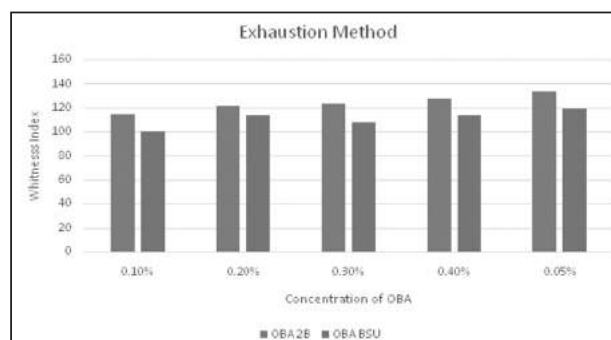
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	127.834	130.156	127.334	121.977	115.811
OBA BSU	130.852	127.448	131.526	133.202	131.513



It is observed that OBA BSU gives maximum whiteness at 4GPL, while OBA 2B gives maximum whiteness at 2GPL by padding method for Single Jersey fabric.

Table : 2.2.A  
Exhaust method for Single Jersey

Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	114.936	121.244	122.903	127.783	133.895
OBA BSU	99.939	114.123	108.072	114.021	119.236



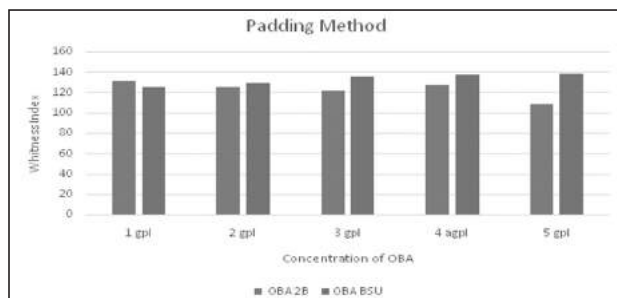
It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Single Jersey fabric.

Table : 2.1.B  
Padding of Interlock

Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	131.133	125.194	121.589	126.694	108.452
OBA BSU	125.517	128.539	135.787	136.998	138.077



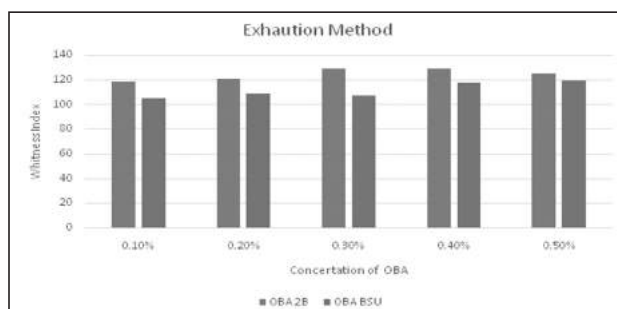
## EFFECTIVE UTILIZATION OF OPTICAL BRIGHTENING AGENTS ON DIFFERENT WOVEN AND KNITTED FABRIC STRUCTURES



It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 1GPL by padding method for Interlock fabric.

**Table : 2.2.B**  
Exhaustion of Interlock

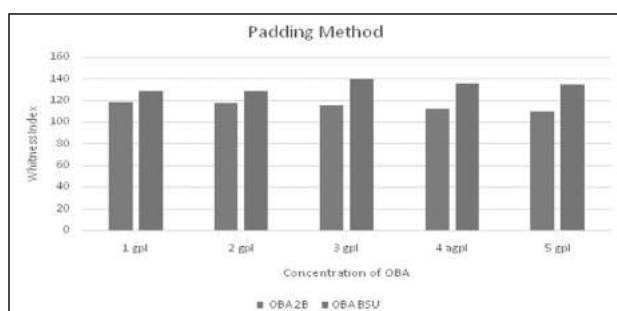
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	118.487	120.822	128.526	128.889	125.237
OBA BSU	104.45	108.607	107.199	117.679	118.966



It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 4GPL by exhaust method Interlock fabric.

**Table : - 2.1.C**  
Padding of Lycra Fleece

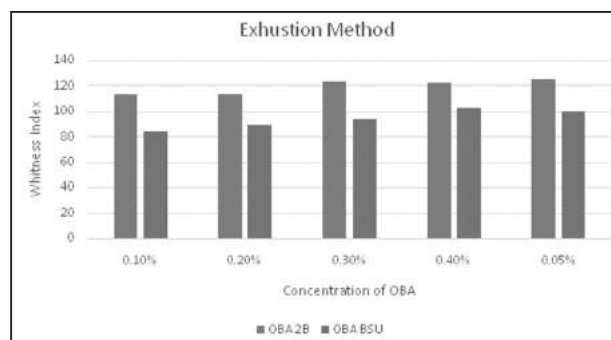
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	118.438	117.541	115.527	111.969	109.178
OBA BSU	127.937	128.239	139.565	135.526	134.15



It is observed that OBA BSU gives maximum whiteness at 4GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Lycra Fleece fabric.

**Table : 2.2.C**  
Padding of Lycra Rip

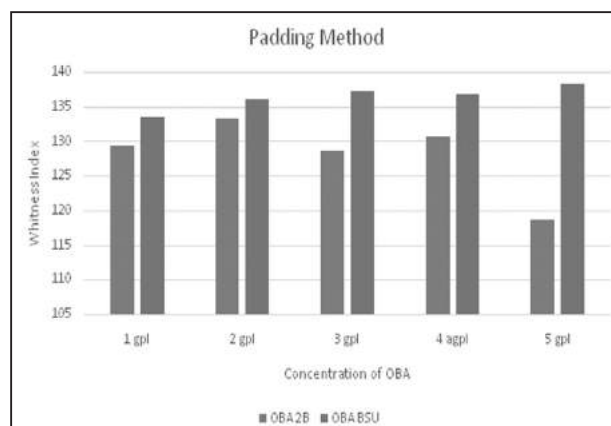
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	113.263	112.816	123.378	122.438	125.143
OBA BSU	83.925	89.234	93.9	102.884	100.158



It is observed that OBA BSU gives maximum whiteness at 4GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Lycra Fleece fabric.

**Table : 2.1.D**  
Padding of Lycra Rip

Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	129.331	133.195	128.513	130.596	118.579
OBA BSU	133.464	136.073	137.156	136.796	138.289

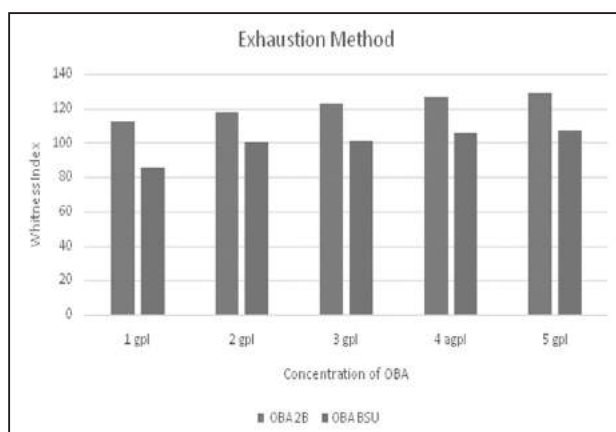


It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 2GPL by padding method Lycra Rip fabric.

## EFFECTIVE UTILIZATION OF OPTICAL BRIGHTENING AGENTS ON DIFFERENT WOVEN AND KNITTED FABRIC STRUCTURES

Table : 2.2.D  
Exhaustion of Lycra Rip

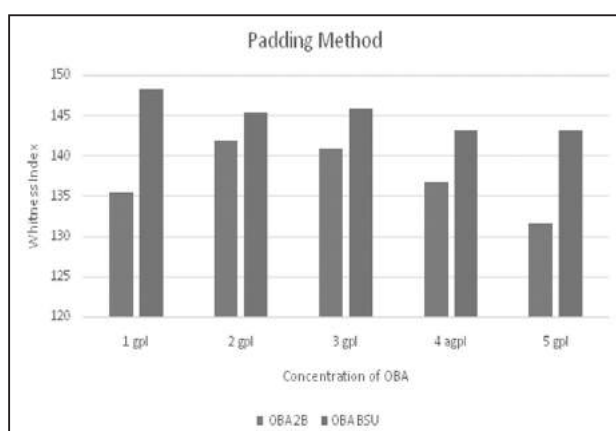
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	112.15	117.29	122.564	126.389	128.915
OBA BSU	85.282	100.411	100.836	105.679	106.839



It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Lycra Rip fabric.

Table : 2.1.E  
Padding of Satin

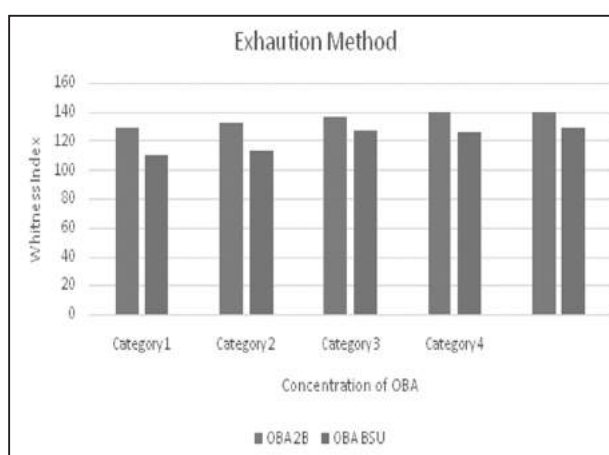
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	135.324	141.761	140.846	136.737	131.496
OBA BSU	148.277	145.277	145.89	143.065	143.123



It is observed that OBA BSU gives maximum whiteness at 1GPL while OBA 2B gives maximum whiteness at 2GPL by padding method Satin fabric.

Table : 2.2.E  
Exhaustion of Satin

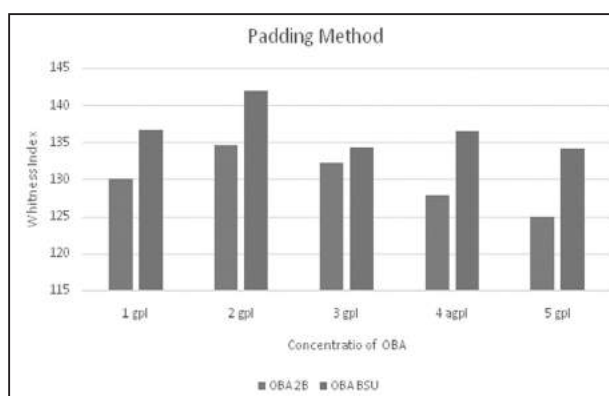
Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	128.737	131.763	136.822	139.595	139.987
OBA BSU	110.025	112.638	127.444	125.712	129.474



It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Satin fabric.

Table : 2.2.F  
Padding of Twill fabric

Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	130.126	134.608	132.149	127.88	124.877
OBA BSU	136.663	141.989	134.209	136.531	134.03



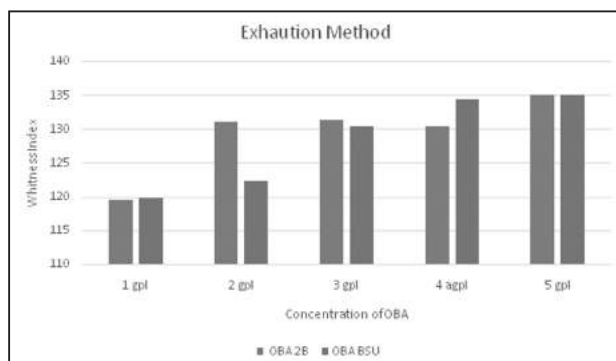
It is observed that OBA BSU gives maximum whiteness at 2GPL while OBA 2B gives maximum whiteness at 2GPL by padding method Twill fabric.



## EFFECTIVE UTILIZATION OF OPTICAL BRIGHTENING AGENTS ON DIFFERENT WOVEN AND KNITTED FABRIC STRUCTURES

Table : 2.2.F  
Exhaustion of Twill fabric

Fabric Structure	1GPL	2GPL	3GPL	4GPL	5GPL
OBA 2B	119.416	131.053	131.414	130.32	135.097
OBA BSU	119.712	122.405	130.321	134.35	135



It is observed that OBA BSU gives maximum whiteness at 5GPL while OBA 2B gives maximum whiteness at 5GPL by exhaust method Twill fabric.

### Conclusions

By exhaustions method, OBA 2B provides greater whiteness at 5GPL concentration for single jersey fabric, whereas OBA BSU provides the same result at 4GPL concentration for padding method. As a result, OBA BSU performs better for Single Jersey padding at low concentrations. For Interlock fabric, OBA 2B delivers a higher whiteness at a minimum concentration of 1GPL. At a concentration of 5 GPL, OBA BSU produces the same outcome. As a result, OBA 2B produces better results for padding methods at low concentrations. For Lycra Fleece fabric, OBA BSU delivers better whiteness at 3 GPL concentration by padding method, whereas OBA 2B gives better whiteness at 5GPL by exhaustions method. By padding method, OBA BSU delivers superior whiteness at 5 GPL concentrations for Lycra Rib fabric, but OBA 2B gives better whiteness at 2 GPL. For Satin, OBA 2B provides greater whiteness at 2GPL concentration, whilst OBA BSU provides good whiteness at 1GPL using the padding approach. As a result, OBA BSU performs better for satin at lower concentrations and for shorter periods of time. For Twill fabric, OBA BSU provides maximum whiteness at 2 GPL, while OBA 2B provides maximum whiteness at 5 GPL. In terms of overall performance, OBA BSU outperforms OBA 2B. The performance of OBA, on the other hand, is dependent on the fabric structure as well as the technique of application.

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# DESIGN AND DEVELOPMENT OF MOTIFS INSPIRED FROM COVID-19 PANDEMIC AND IMPLEMENTING ON GARMENTS

**Theepika K P**, Post Graduate Student, **Dr. U. Ratna**, Assistant Professor

Department of Textiles and Clothing

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

## Abstract

The COVID-19 pandemic is an ongoing global pandemic of coronavirus disease which has changed the routine life of people and it is the first ever global pandemic which made historic economy loss and high loss of people's lives in short period. The research idea was focused on exploring the techniques of developing motif designs from covid-19 as an inspiration and implementing the developed motif designs into fabric by stencil printing and constructed into garments. The outcome of the result was discussed and analysed critically. This study will enable textile designers and others acquire new and interesting techniques in creating textile motif designs from any inspiration related to social being.

**Keywords :** covid-19, motifs, Photoshop, stencil, theme, flat sketch.

## Introduction

Designing in textile is an important component of textile production. Variety of designed fabric that is more appealing and marketable may have been influenced by the initial designing process. The execution of a good design needs the consideration of certain essential factors such as the motif or subject matter, arrangement of motifs and style of rendering combined with the use of colour. Design themes or motifs can be chosen from various sources such as natural, artificial, geometrical, traditional symbols, pictorial scenes, and proverbs among others. For a design to be developed onto a fabric, it needs to go through a printing process. Printing therefore is the process of transferring design from rollers, screen, block and so on onto a textile material with print paste and it includes Roller printing, Screen printing, Block printing, Heat transfer, Polychromatic and Electronic printing. (Ashitey, 2013)

A pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people”. The classical definition includes nothing about population immunity, virology or disease severity. By this definition, pandemics can be said to occur annually in each of the temperate southern and northern hemispheres, given that seasonal epidemics cross international boundaries and affect a large number of people. (WHO).

The COVID-19 pandemic is also known as the coronavirus pandemic. It is an ongoing global pandemic of coronavirus disease (COVID-19) caused by severe acute respiratory syndrome (SARS-CoV-2). The virus was first identified in Wuhan, China, in December 2019. The WHO declared a Public Health Emergency of International Concern regarding COVID-19 on 30 January 2020, and later declared a pandemic on 11 March 2020. More than 167 million cases have been confirmed, with more than 3.46 million confirmed deaths attributed to COVID-19 as of May 2021, making it one of the deadliest pandemics in history. (The Hindu, 2021)

Considering the above facts in mind the investigator selected to study on “Design and Development of Motifs Inspired from Covid-19 Pandemic and Implementing on Garments” with the following objectives to :

- ❖ Design motif inspired from covid-19 pandemic using photoshop cs6
- ❖ Applying pattern on flat sketch of garment using photoshop cs6
- ❖ Print motif on fabric by using stencil printing method
- ❖ Construct garments from motif printed fabric

## Review of Literature

Fibre to Fashion stated that the motif can be an idea, an object or creativity, or we can say a motif differs from a theme. So, motif means a design that consists of recurring shapes or colours, a theme that is elaborated on in a piece of music & unifying idea that is a recurrent element in a literary or artistic work.

Utsavpedia defines that Motif can be classified into various types, according to the theme selected motifs differs. The most commonly used motifs in Indian textile industry during ancient period are peacock, parrot, goose, lotus, mango, tree laden and elephant. According to Ulzen Appiah (2009), the 4 common types of pattern repeats are: Full drop, Half drop, Mirror and Continuous, he also stated that other types of motif arrangements such as spot design arrangement which mostly have plain background with textures concentrated on motifs, counter change, scalloped or meandering, composition, pictorial and other basic design arrangements such as diamond within square,

square within square, circle within square, triangle within square, oval within square among others. Adobe Photoshop for Fashion Design increased methods of designing and ways to think about designing fashion apparel and textiles, it also helps to develop skills in fashion design, textile design and presentation techniques (Lazear, 2009). When combined with Illustrator, Adobe Photoshop adds to the versatility of fashion design projects, allowing you to work with various bitmap images as well as imported Illustrator images. Using Photoshop, fashion designers can re-colour textiles, create textile design repeats, clean scanned images, assemble CAD presentations, render sketches, add dimensional shading, and more. (designersnexus)

Microsoft Encarta (2009), asserts that, design can involve making products, machines, structures that serve their intended purpose and pleasing to the eye. According to fibre to fashion, Fashion design is the art of the application of design and aesthetics or natural beauty to clothing and accessories. Fashion designers attempt to design clothes which are functional as well as aesthetically pleasing.

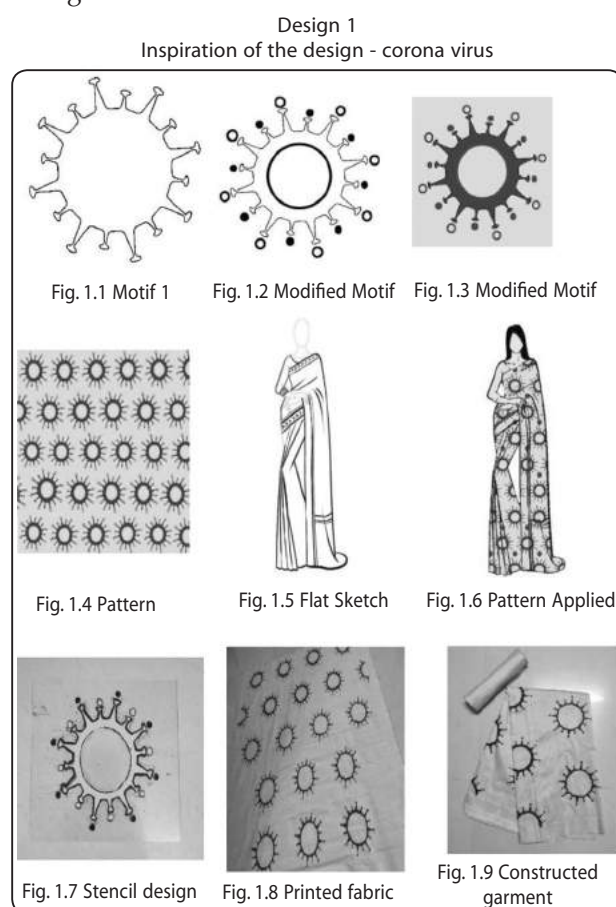
Godwin (2010), further asserts that, several fine arts movements have influenced textile design, including neoclassicism, art deco, art nouveau, the Bauhaus, the art and craft movements, chinoiserie, cubism, expressionism, ethnic, folk and pop art, many individual fine artists have also inspired textile designers.

The free encyclopaedia, from Wikipedia (2010), describe element of design as the basic units of a visual piece that make up a painting, drawing, design, among others. These include point or dot, line, shape, form, colour, space and texture. According to Jirousek (2005), design principles are concepts used to organise or arrange the structural elements of design. Again, the way in which these principles are applied affects the expressive content, or the message of the work. These include balance, proportion, rhythm, contrast, unity, harmony, repetition, dominance, variety and emphasis.

Bradley (2010), simply describes colour as light. Light is electromagnetic radiation and over a range of wavelengths it makes an impression on the human eye. A colour wheel in accordance with the free encyclopaedia is an abstract illustrative organization of colour hues around a circle that shows relationships between primary colours, secondary colours, complementary colours, among others.

## Methodology

Procedure of the study: The overall procedure of the study is to design motifs inspired from covid-19 pandemic in Photoshop and incorporating the designed motifs on flat sketch of garments. Finally, the stencil is prepared according to the design and the motif is transferred to the fabric by stencil printing and then the fabric is constructed into garments.

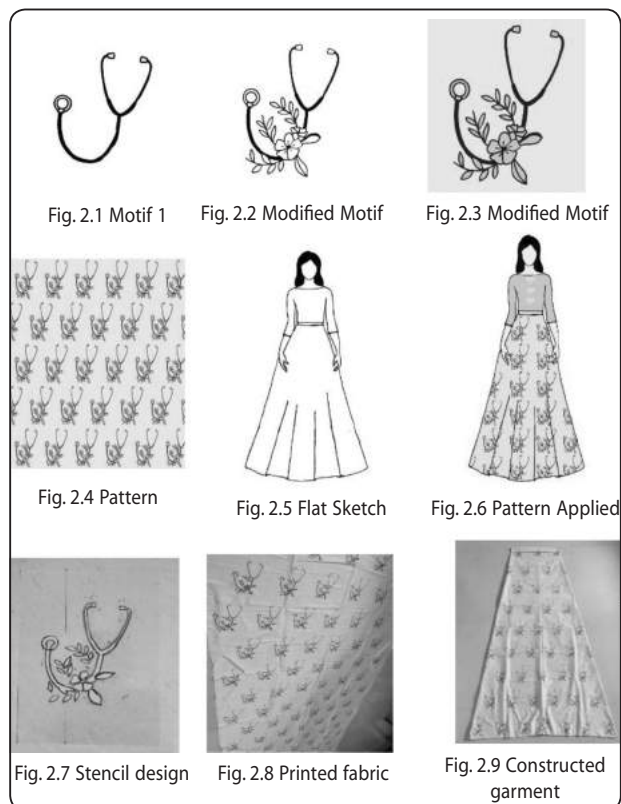


Coronavirus is the first and foremost reason for the pandemic. Hence the microscopic view of Corona virus is taken as a first design (fig 1.1). The microscopic view of coronavirus is modified as a design to apply on garment (fig 1.2 & fig 1.3). The modified motif design is converted into pattern (fig 1.4) and applied to the flat sketch of the garment (fig 1.6). Stencil is prepared according to the design (fig 1.7) and the design is applied on the fabric at regular intervals by stencil printing (fig 1.8). The coronavirus modified motif design is constructed as a saree garment (fig 1.9).



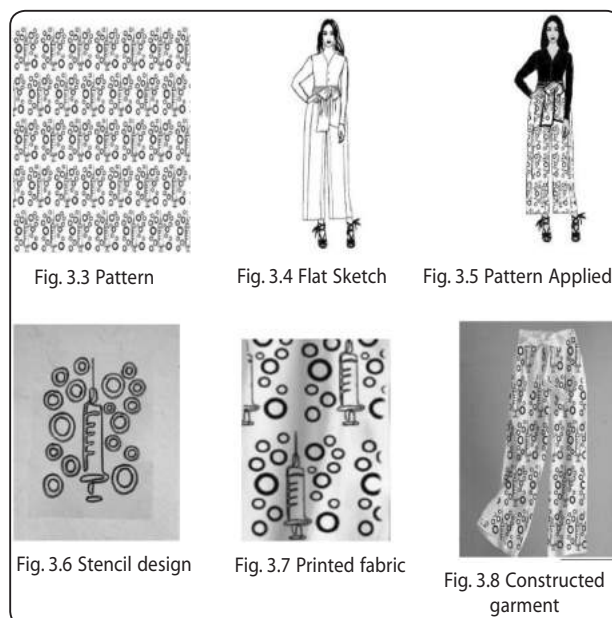
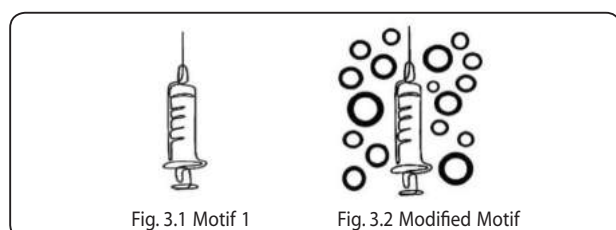
## DESIGN AND DEVELOPMENT OF MOTIFS INSPIRED FROM COVID-19 PANDEMIC AND IMPLEMENTING ON GARMENTS

Design 2  
Inspiration of the design – Doctors



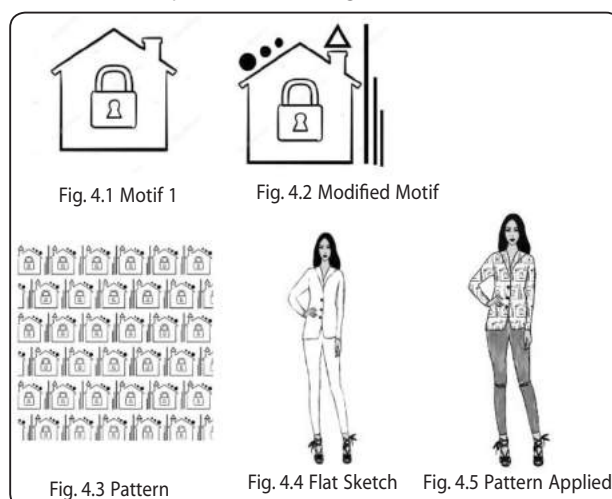
Doctors are greatly helping to the suffering hearts during the pandemic. The help of the doctors and their dedication towards their profession during the pandemic by risking their life to save others life is great. Hence the Stethoscope is taken as an inspired motif (fig 2.1). The Stethoscope is modified as a design to apply on garment (fig 2.2 & fig 2.3). The modified motif design is converted into pattern (fig 2.4) and applied to the flat sketch of the garment (fig 2.6). Stencil is prepared according to the design (fig 2.7) and the design is applied on the fabric at regular intervals by stencil printing (fig 2.8). The Stethoscope modified motif design is constructed as a lehenga skirt garment (fig 2.9).

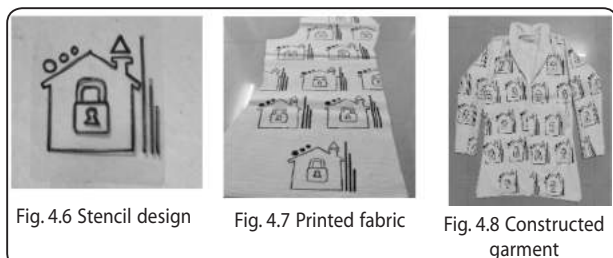
Design 3  
Inspiration of the design – vaccination



Vaccine is one of the great expectations of the people, doctors, scientist and so on. The vaccine for coronavirus is finally discovered and is now processed to people. To boost people to get vaccinated, injection is chosen as an inspired motif (fig 3.1). The injection is modified as a design to apply on garment (fig 3.2). The modified motif design is converted into pattern (fig 3.3) and applied to the flat sketch of the garment (fig 3.5). Stencil is prepared according to the design (fig 3.6) and the design is applied on the fabric at regular intervals by stencil printing (fig 3.7). The modified injection motif design is constructed as a palazzo garment (fig 3.8).

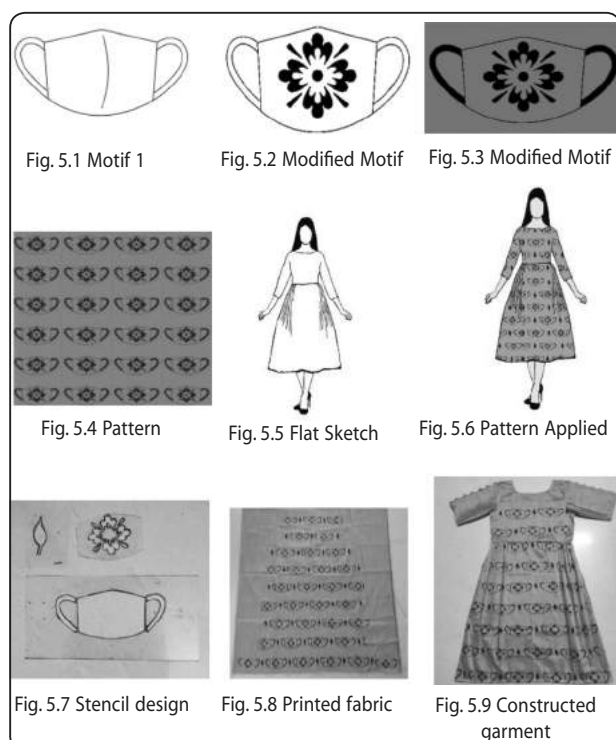
Design 4  
Inspiration of the design – Lockdown





Lockdown plays an important role in reducing the spread of coronavirus among people. If there is no lock down the spread of coronavirus becomes faster and the impact will become tremendous. Hence home and the lock are chosen as an inspired motif from lockdown (fig 4.1). The lockdown is modified as a design to apply on garment (fig 4.2). The modified motif design is converted into pattern (fig 4.3) and applied to the flat sketch of the garment (fig 4.5). Stencil is prepared according to the design (fig4.6) and the design is applied on the fabric at regular intervals by stencil printing (fig 4.7). The modified lockdown motif design is constructed as a waistcoat (fig 4.8).

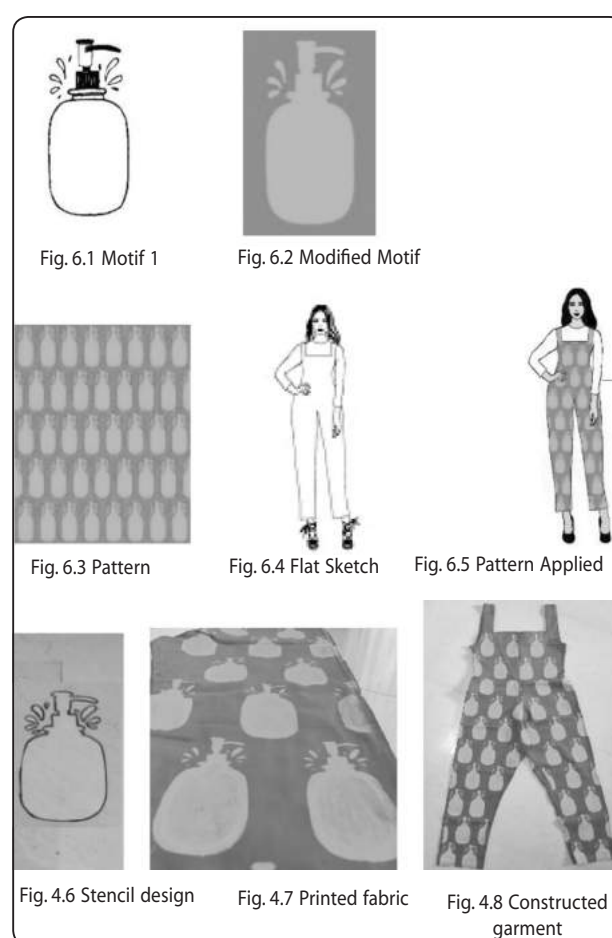
Design 5  
Inspiration of the design – Mask



Mask plays an important role in reducing the spread of coronavirus. wearing mask will reduce the spread of coronavirus by up to 95%. Hence mask is chosen as an inspired Motif (fig 5.1). The

mask is modified as a design to apply on garment (fig 5.2). The modified motif design is converted into pattern (fig 5.4) and applied to the flat sketch of the garment (fig 5.6). stencil is prepared according to the design (fig 5.7) and the design is applied on the fabric at regular intervals by stencil printing (fig 5.8). The modified mask motif design is constructed as a kurta garment (fig 5.9).

Design 6  
Inspiration of the design – sanitizer



Sanitizer is used to kill virus spread on our hands and other things. Hence sanitizer is prescribed by doctors to use regularly if we go outside and also doctors are advising to use sanitizer and rub it on hands thoroughly before touching nose and mouth. Sanitizer is chosen as an inspired motif (fig 6.1). The sanitizer is modified as a design to apply on garment (fig 6.2). The modified motif design is converted into pattern (fig 6.4) and applied to the flat sketch of the garment (fig 6.6). Stencil is prepared according to the design (fig 6.7) and the design is applied on the fabric at regular intervals

## DESIGN AND DEVELOPMENT OF MOTIFS INSPIRED FROM COVID-19 PANDEMIC AND IMPLEMENTING ON GARMENTS

by stencil printing (fig 6.8). The modified sanitizer motif design is constructed as a jumpsuit (fig 6.9).

**Conclusion** The motif is a trimming that is used to increase the attraction and make it fashionable. Motif designs are relatively easy to transfer to stencil and size can be readily varied. The designer also has the freedom to choose any repeat size. Designing on Photoshop helps to experience different designs and allows us to choose the best designs created. Stencil printing is less expensive and easy way for printing design. The key advantage of stencil printing is that it can be used repeatedly. Motif development is an important factor in textile industry as it gives attraction and makes the garment more fashionable. Motif design inspired from covid-19 is created to remember the historical pandemic and the designs inspired from covid-19 may get popularity in fashion industry in future as it is unforgettable among people's mind.

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## Italian Textile Machinery showcases at Techtextil, Trade Fair for Technical and Innovative Textiles

The next edition of Techtextil, the leading trade fair for the technical and innovative textile sector, will take place in Frankfurt from 21 to 24 June 2022. The return of Italian textile machinery manufacturers to such an important trade fair after the last edition in 2019 will once again see them in the spotlight. The Covid-19 pandemic has increased the demand for special-purpose textiles, especially in the medical and personal protective equipment sectors. So in 2021 the Italian textile machinery manufacturers registered a growth of their sales for the sector. Exports of machinery for the production of nonwovens have increased by 76% over 2019 and 85% over 2020.

As in past editions, Italian Trade Agency and ACIMIT, the Association of Italian textile machinery manufacturers, are organising an exhibition space reserved for textile machinery manufacturers. There are 29 companies exhibiting in the Italian pavilion. Of these, the following are associated with ACIMIT: 4M Plants, A. Piovan, Aeris, Beschi, Bombi, Bonino, Color Service, Corino, Cubotex, Fadis, Ferraro, Gualchieri e Gualchieri, Kairos Engineering, Lawer, Loptex, Mcs, Mesdan, Monti-Mac, Nosedà, Salvadè, Sarel, Srs, Stalam, Testa, Toscana Spazzole, Zappa. Other ACIMIT member companies exhibit with their own booths outside the Italian Pavilion.

"Techtextil has always been a fair that Italian manufacturers look to with particular interest, comments Alessandro Zucchi, president of ACIMIT. The versatility of the Italian technological supply allows, in fact, Made in Italy machinery to be used in different application fields of technical textiles, meeting the different requests by the many visitors attending the event".

In the 2022 edition, the focus of Techtextil will be on sustainability, which is another strong point of Italian textile machinery. "Italian manufacturers have been committed to designing sustainable machinery for years, both from an environmental and economic point of view, says Zucchi. Savings in raw materials, energy and chemicals are the basis of ACIMIT Sustainable Technologies project, and the Green Label, which a growing number of Italian textile machinery manufacturers boast, certifies the commitment of the Italian sector to contributing to the sustainability of the textile supply chain".

**For further information, please contact :**

**Mauro Badanelli**

**ACIMIT Economics-Press,**

**Tel. +39024693611**

**e-mail: [economics-press@acimit.it](mailto:economics-press@acimit.it)** ■



# ANGORA : PRE-REQUISITE TO WOOL FIBRE

Ms. S. M. Bairagadar, Lecturer, Nikhil Upadhye, Parvez Mulla, Pratap Morale UG  
Students, D.K.T.E Society's Textile and Engineering Institute, Ichalkaranji

## Abstract

Angora rabbits are kept entirely for their unique qualities like as warm, fineness, whiteness, and softness, as compared to other varieties that are breed for meat and fur. It is a high-end animal hair fibre derived from the Angora rabbit. Angora rabbit is shown in Fig.1. China is the largest producer, with individual farmers raising rabbits in a very intensive small-scale factory farm system. France produces a large amount. Angora rabbit hair is commonly utilized to make a variety of speciality products using traditional hand spinning and weaving techniques. Physical or chemical processes are employed to combine this hair with other textile fibres, increasing the value and performance of the final products.



Figure 1. ANGOIRA RABBIT

## Introduction

Rabbits were popular pets among French nobility in the mid-eighteenth century, and by the end of the century, they had spread to other regions of Europe. They initially arose in the early twentieth century in the United States. Their long Angora wool, which may be removed by shearing, combing, or plucking, is the main reason for their breeding. There are many different breeds of Angora rabbits, but the American Rabbit Breeders' Association (ARBA) recognizes four of them: English, French, Giant, and Satin. German, Chinese, Swiss, Finnish, Korean, and St. Lucian are among the other breeds. Angora is recognized for its softness, thin fibres, and a halo, as knitters call it (fluffiness). Its velvety texture is also well-

known. The hollow core of the angora fibre makes it significantly warmer and lighter than wool. It also gives them their distinctive floaty appearance. The angorais' silky white hair is a hollow fibre classified as wool. It is one of the silkiest animal fibres, with a diameter of 14-16 microns.

## Types of the Angora rabbit

There are four different types of Angora recognized by ARBA: English, French, Satin and Giant. There are many other breeds, one of the more common being German. Each breed produces different quality and quantity of fibre, and has a different range of colours.

## Fibre Production and Grading

The Angora rabbit produces three kinds of hair:

(1) Guide hairs: They are 100 to 110 mm long; they guide and cover the growth of the other hairs.

(2) Guard hairs: They are 80 mm long. They have rough points that lock together, lie over the down hairs and seal it off.

(3) Down hairs: They are 60 mm long. The diameter of 12-14  $\mu$ m makes down hair one of the finest animal fibers used in textiles.

The down fibres are very smooth, with few cuticles scales. The Angora rabbit generates a variety of coloured hairs, but the strain cultivated for textile fibres is albino, producing exclusively white fibres. In India, coloured Angora rabbits are raised for the purpose of producing undyed artisanal cloth with muted colour designs. Because there is no single group or association for Angora rabbit hair, it is impossible to collect global production figures. Actual production estimates are difficult to determine because rabbit hair is generated on small scale farms, however it is estimated that global production is roughly 3000 tonnes. Each year, India produces approximately 100 tonnes of speciality hair fibres (50 tonnes of Angora rabbit hair, 10 tonnes of yak fibre, and 40 tonnes of Pashmina wool). Rabbits are usually shorn every three months before their hair begins to come out, causing felting. Female rabbits produce 25-30% more hair than male rabbits. More frequent yields in China range from 420 g to 820 g each year, with up to 1000 g in France and 1200 g in Germany. In India, annual yields range

## ANGORA : PRE-REQUISITE TO WOOL FIBRE

from 260 to 450 grams. Because rabbit farming in India is unstructured and done on a small scale, determining production estimates is challenging. Before the fibres are sorted, dust and vegetative debris must be removed from the fleeces, which is done by grooming. The hairs do not need to be scoured before carding after this superfluous debris has been removed.

After grooming the fibers are sorted into 4 grades, namely

- (1) Grade 1: Clean, free of felting, over 6 cm long
- (2) Grade 2: Clean, free of felting, under 6 cm but over 3 cm
- (3) Grade 3: Clean, felted, second cut
- (4) Grade 4: All dirty, discolored fibre.

### Production of 100% Angora rabbit Hair Yarn

Angora rabbit hair is known for its lustre, warmth retention, and elasticity. As a result, it's an excellent fibre for textile applications. However, because it has fewer scales and crimps than other animal fibres, it has low spinability and is difficult to spin into a fine yarn. As a result, spinning a 100% Angora rabbit hair yarn necessitates altering the fibre surface to introduce crimps or roughness.

### Softening treatment

This procedure shows how to make 100% angora fibre yarn. In cold water, a solution of hydrogen peroxide, sodium hypochlorite, bleaching agent, and silicone was mixed and dissolved. The temperature of the solution was kept between 0 and 12 degrees Celsius. After that, the rabbit hair fibres were soaked in the bath for around 50 minutes. The chemical treatment dissolved and destroyed the rabbit hair's core muscle, making the fibre flexible. This technique produced 5 to 8 crimps, according to reports. After washing the treated angora fibres, a softening agent and an antistatic agent were added to create a grey yarn ready for spinning.

### Yarn and Fabric Production from Angora rabbit Fiber

The lustre, warmth retention, and flexibility of Angora rabbit fibre make it an outstanding fabric for textile applications. However, because it has fewer scales and crimps than other animal fibres, it has low spinability and is difficult to spin into a fine yarn. Because it is a slick fibre to spin, it necessitates a great deal of twist to keep the fibres

securely in the yarn. Because of its delicate quality and smoothness, one method of spinning yarn from angora wool is to use a hand-held spindle. Because of the high creation of electrostatic charges and the smooth surface of the fibres, difficulties develop during processing. There is a constant risk of fibre discharge as there is lack of fibre to fibre friction. As a result, Angora rabbit fibre is frequently combined with another fibre, such as wool, in order to increase its processing and fabric wear ability. Weaving a 100% Angora yarn is also incredibly tough due of its fibrosis. As a result, most fabrics are woven with Merino wool yarns for the warp and Angora yarns for the weft or blended with fibers or yarns. The evenness of the yarn deteriorated as the quantity of Angora rabbit fibre increased. When compared to pure merino wool yarn, pure Angora rabbit yarn had more naps and other abnormalities. They discovered that a 35:65 blend of rabbit fibre and merino wool was the ideal for making woven or knitted fabric because of its superior performance, attractive appearance, and inexpensive cost.

### Pretreatments and dyeing of angora

Pretreatment is given to the angora because of removal of hydrophobic impurities that are coming from while weaving spinning and added impurities. It can be removed by scouring and hot wash recipe as given below.

Soap – 2gpl

Wetting agent – 0.5-1%

Temperature – 80°C

Time – 30 min

After the completion of process give hot wash and cold wash and then dry the material.



Figure 2. Scoured sample

## ANGORA : PRE-REQUISITE TO WOOL FIBRE

### Dyeing of angora

Dyeing can be done by using with acid dye or metal complex dye. Recipe as given below.

Prepare the dye bath with following recipe

Acid dye -X%

Acetic acid -4%

Sodium sulphate-10%

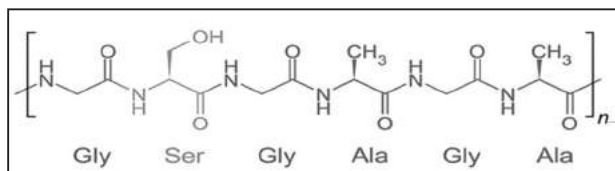
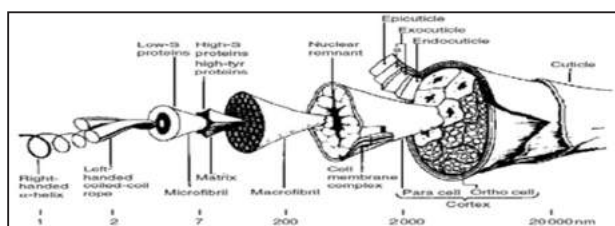
M: LR – as per machine requirement

- ❖ Set the bath at room temperature and workout the material therein for 5 min. Raise the temperature to boil slowly (1°C per min.)
- ❖ Workout the material for 30-60 min. at boil for exhaustion of dye
- ❖ Add 1-2% of formic acid for complete exhaustion of dye
- ❖ Remove the sample and wash thoroughly with cold water.
- ❖ Soup the dyed sample with nonionic soap 4 gpl at 60°C for 20 min
- ❖ Finally wash with cold water

Some of the dyed samples as shown below



### Physical structure and chemical structure



### Physical Properties

Sr. No	Parameters	Range
1	Fiber fineness(denier)	1.97
2	Fiber diameter( $\mu$ )	17.46
3	Breaking strength (cN)	3.18
4	Breaking extension (%)	40.47

5	Tenacity (cN/d)	1.61
6	Friction co-efficient	0.10
7	Length(mm)	50-110
8	Bending length (cm)	1.49-1.70
9	Thermal insulation	1.47-1.75
10	Moisture regain (%)	12.6-13.3
11	Density (gm/cm <sup>3</sup> )	1.15

### Uses of angora

Angora wool is widely utilized in sweaters and suiting, as well as knitting yarn for felting. Angora wool, which is light but warm, is primarily used in knitted garments such as pullovers, scarves, socks, and gloves, and produces a moderate "fluffing" effect. Angora fabric is perfect for thermal clothing, as well as for persons with arthritis or allergies to wool. 100% angora wool garments are regarded overly warm, and the fibres are too fine to offer solidity. To improve its processing effectiveness, flexibility, and wearability, it is frequently combined with other fibres, such as wool (right). Angora products from France typically contain up to 20% sheep's wool.

### Conclusion

This paper focuses on Angora fiber which is an animal fiber. The fiber refers to downy coat and produced by Angora rabbit. From the production of the fiber and yarn to pretreatment and then dyeing is done in fiber or top forms per its physical and chemical properties. There are various products manufactured as per the end uses.

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## EXPORT PROSPECTS AND MARKETS

### Cotton import to be duty free till September 30

The Finance Ministry recently announced that the import of cotton will be fully exempted from Customs duty. A notification in this regard provides the exemption with effect from April 14 and will remain in force till September 30.

"The import of cotton has been fully exempted from Customs duty. This exemption shall benefit the textile chain—yarn, fabric, garments and made ups – and provide relief to consumers. Textile exports will also stand to benefit," the Ministry said. The move comes at a time when retail inflation for clothing is over 8 per cent.

The textile industry has been seeking this since cotton prices have skyrocketed over ₹90,000 per candy. Mills have slowed production as a result. Currently, cotton prices are ruling at ₹92,000-92,500 per candy. □

### Goyal picked to take India's textile exports to \$100b

Textiles minister Piyush Goyal recently pitched for taking India's textiles exports to \$100 billion by 2030 basis healthy growth of the sector along with zero duty access in the UAE and Australia with whom New Delhi has signed trade agreements.

The textiles exports last fiscal were \$43 billion as against \$33 billion in the previous year.

"The sector is growing at a fast pace and we should take exports to \$100 billion by 2030. We will leave no stone unturned to achieve this aggressive growth and substantial target," Goyal said at an event organised by the Confederation of Indian Textile Industry-Cotton Development and Research Association.

India is also trying to get zero duty access in the markets of the European Union, Canada, the UK and member countries of the Gulf Cooperation Council (GCC), he said, adding that the current geopolitical situation is changing and it provides huge opportunities for the industry to boost exports.

Goyal said that there is a need to promote cotton production in the country as the current figure of about 500 kg per hectare is half of the world's average.

Noting that the price of cotton is high today and the government is keeping constant control over that, he said there is a need to maintain the right balance so that farmers and the industry both get cotton at right prices.

Goyal said the country must be open to receive from the world new technology, rare minerals and raw materials which are in short supply in India, at reasonable costs.

"This will only increase our production, productivity and quality, which in turn will increase demand for our products all over the world," he said.

Pointing out that the world today was looking for alternate manufacturing sourcing hubs owing to geopolitical reasons, the minister said the textile industry is in a "very sweet spot to grab this opportunity and hit 'Mauke pe Chauka'" □

### Cotton textile exports exceeds govt's FY 22 target

Cotton textile exports exceeded the government's FY22 target to reach \$15.29 billion, including raw cotton, according to provisional data available.

Manoj Kumar Patodia, chairman of Cotton Textiles Export Promotion Council (Texprocil), said the government's target was \$13.6 billion. Exports in FY 21 had amounted to \$9.8 billion.

All cotton textile and clothing products – yarn, fabrics, and madeups – had seen growth, according to data with Texprocil. Exports to countries such as Bangladesh, the U.S., Portugal and Sri Lanka had seen a significant jump.

Yarn exports to China had risen and cotton textile exports to countries such as Egypt and Portugal had also increased, said Executive Director of Texprocil Siddhartha Rajagopa. The figures indicated that Indian exporters were finding new markets, he said. There had been an increase in volume of exports too, especially for yarn and fabrics, Mr. Rajagopal pointed out.

"We need to wait and watch and sustainability of this growth as there are supply chain constraints, high raw material prices, etc. These are adding to the worries of the trade," he added.

Prices of cotton may remain high and Indian exporters should rebuild their business model, factoring in high raw material prices to remain competitive, industry sources said. □

### Tirupur gaining its ground with resurgence of exports

Braving the Scorching heat of an April Summer, Selvarajan is on his two-wheeler riding through

**EXPORT PROSPECTS AND MARKETS**

the dusty bylanes of Tirupur, carrying a bundle of fabrics on the pillion of his bike. His destination is a dyeing unit, to get this job work done. Selvarajan works for one of the micro-entrepreneurs, who have come up the value chain as an exporter from being just a labourer.

Medium and small units account for 95% of the total 1,200 exporting units in Tirupur, known as the 'Dollar Town' for obvious reasons. Business has recovered for most, with exports gaining ground. According to TEA's provisional estimates, the knitwear export went up to over ₹33,000 crore in FY22 while domestic business touched around ₹30,000 crore.

In FY20 and FY 21, Tirupur's exports were lower at \$27,280 crore and ₹24,750 crore, respectively, owing to pandemic-induced disruptions in overseas markets.

The exports resurgence should be good news for the 22,000 garment factories in Tirupur, which serves as a sourcing base for both domestic and global markets. Yet, the going is tough, courtesy the after-effects of the pandemic and the recent price increase of raw materials.

Tirupur Exporters' Association (TEA) says that the unprecedented steady increase in prices of cotton yarn – the raw material – in the past 18 months coupled with hike in accessories prices have impacted the MSMEs mainly on the liquidity front.

The cause of concern was that as per the commitment made to the foreign buyers in advance, the MSMEs must compulsorily execute the orders, despite incurring losses or getting a wafer-thin margin.

Raja M Shanmugham, president, Tea, told of late that the industry is now in crisis, which has to be addressed by the government of a war-footing.

"To revive MSMEs and get them back to normal functioning, a fresh infusion of liquidity is urgently required and we have asked the Centre to announce a new scheme like ECLGS. MSMEs should be permitted to avail additional credit facility of 10% to 20% of the existing limit," said Raja M Shanmugham.

The association has asked the Centre to remove the 11% cotton import duty for duty-free import of 4 million bales to stabilise cotton prices and to impose mandatory declaration of cotton stock with all stake-holders to curb hoarding and speculation by the traders under MCX and NCDEX.

The knitwear garment exporting units have to fulfill the committed export orders for the same

price of garments, as buyers are not inclined to increase the prices. Moreover, the buyers have the option to source garments from competing countries like Bangladesh, Vietnam, Cambodia and Turkey as they enjoy tariff advantages in the EU market. Also the knitwear exporting units are now facing the placement of lower quantity orders from buyers compared to the corresponding period of last year due to impact of Russia-Ukraine conflict.

Tirupur's entrepreneurs, who provide employment to 600,000 workers directly, 60% of which are women and a third are migrant workers from north and northeast however, are hopeful. Tirupur contributes about 60% of total knitwear exports from the country and is exporting only cotton based garments. The exporters's body believes that there is good scope for increasing the market share in the global space from the current level of about 2.6%, exporting value added and synthetic products.

"Most of the global markets demand synthetic products and we have to meet the buyers demand on this. We are working on product diversification," say TEA officials. Sensing that the workers' attrition was high among the units recently, the association has planned to construct 100,000 housing to them. The garment sector is labour sensitive, and acute shortage of skilled labour is the single major threat to the growth of the textile industry, especially in clusters like Tirupur. One of the important reasons that prevent permanent migration of labourers from their home village to industrial clusters is the lack of adequate housing and hostel facilities. To overcome this issue, construction of houses with all required amenities with the support of Centre, is being taken up. according to TEA. The cluster is also in the process of upskilling of its existing workforce. Mostly all the existing labourers are self groomed without having any formal training which is the biggest lacunae to compete with the global players like China, Korea, Bangladesh and Vietnam. To address this issue, the association is seeking one-time intervention of upskilling the existing workers to match the global standards with the support of Centre.

"We expect our total business to touch ₹1 trillion in another two to three years," Sakthivel, executive secretary, TEA, said. That would be music to the ears of Tirupur's entrepreneurs and workers. □

## EXPORT PROSPECTS AND MARKETS

### European apparel brands slash garment offtake from Tirupur and Noida

European apparel brands have slashed garment offtake from Tirupur and Noida by up to 25 per cent as they cut discretionary expenses due to the uncertainty in the region about the fallout of the Russia-Ukraine war.

As all the big global brands have closed shutters in Russia, the order flow from Europe has dwindled. Tirupur exporters fear that in FY 23 exports may come down by 20%-25% if this trend continues. The garment hub annually exports Rs. 35,000 crore worth of goods.

"It is not that the European buyers are not placing orders. But the volumes have come down. Also, yarn prices have gone up by 110 per cent since 2020. The buyers have already absorbed the increase in prices by two to three times," said Raja Shanmugam, president, Tirupur Exporters Association (TEA).

High yarn price is posing a problem to the garment manufacturing units in Tirupur. "Most of them are MSMEs. Since the yarn prices have gone up, delivering goods on time is becoming difficult. But the foreign buyers rely on India because of the stability in country." Tirupur houses 2,000 knitwear garment export units and another 18,000 ancillary units that are suppliers to the knitwear units.

TEA president Shanmugam added that the units have given a closure all on 16th and 17th May protesting the rising yarn prices.

Lalit Thukral, president, Noida Apparel Export Cluster said the units at Noida have seen a 15 percent drop in orders from Europe. "Unlike Tirupur, we sell high value items. Our base price for a garment is \$5, which may go up to \$10. What we are seeing in Europe is that they are not ready to part with their money for buying clothes. They are saving that money for food and other essential commodities. Till such time the uncertainty continues, the volume of orders will be less."

"For instance, earlier if a buyer was purchasing 150,000 pieces, he is now buying 1,00,000 pieces," added Thukral.

The closure of global brands in Russia too has impacted Indian garment exporting units. Spanish fashion retailer Inditex that owns the Zara brand has halted trading in Russia, closing its 502 shops and stopping online sales suspended operations in Russia following the invasion of Ukraine and imposition of sanctions. Spain's second-largest fashion retailer Mango has also announced temporarily closing its 120 Russian shops. □

### Garment Exporters call for ban on exports of cotton, say they are hit by liquidity crisis

India's readymade garment exporters want a ban on cotton exports, saying they are facing a severe liquidity crisis because of soaring cotton and yarn prices, which is making it difficult for them to deliver shipments to their foreign buyers on time.

Some foreign buyers have sought up to a 30% discount if goods are delayed over 15 days in time or asked for air transport at their own cost, which would wipe out profits for sellers, industry sources told recently.

The industry wants a ban on cotton exports from India to check the rising prices. India had of late banned wheat exports following a sharp rally in local prices.

Textiles minister Piyush Goyal has called a meeting on May 17 to discuss the rising prices of cotton and yarn. The industry will suggest a ban on exports to time over the crisis. Cotton prices have gained 40% in 2022 and are at an 11-year high due to a demand-supply mismatch. This is hurting the entire cotton value chain including the yarn and cotton garment manufacturers.

The price of a candy (335 kg) cotton has breached the Rs. 1,00,000 mark in recent weeks, locking up funds in raw material that has created a liquidity crisis.

"Worst affected are the medium and small enterprises (MSME), which constitute more than 80% of the production base," said Lalit Thukral, President, Noida Apparel Export Cluster said.

"Delivery of garments to the foreign buyers is being delayed."

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## EXPORT PROSPECTS AND MARKETS

Thukral countries like Bangladesh, Vietnam, and Thailand among others are importing cheap cotton from India and posing fierce competition to India in the global garments market, making a case for a ban on exports. India's cotton exports rose to \$9.9 billion in April-Feb FY 22 compared with \$6.3 billion in full FY 21. In April 2022 exports were up 57.6% to \$52.5 million from a year ago. Around 18 months ago, the knitwear units could buy one kilogram of yarn for Rs. 200 whereas now the same money can buy 400 gm of yarn, said Raja M Shanmugam, President, Tirupur Exporters' Association (TEA). □

### Spinning mills start signing deals

Spinning mills mainly in South India, have begun to sign deals to import cotton following the Centre's decision to allow the natural fibre's shipments into the country duty-free until September 30.

"Mills in Tamil Nadu have started placing orders for imported cotton. As a strategy, mills placed orders for 30-40 days of production with the aim of rebalancing with domestic cotton," said Prabhu Dhamodharan, Convenor of Coimbatore-based Indian Texpreneurs Federation (ITF).

"Deals to import at least 100 bales (170 kg each) are being signed every day by spinners in South India since imports were made duty-free on April 13. These imports will begin to take place in two months," said Anand Poppat, a Rajkot based trader in raw cotton, yarn and cotton waste. However, the total quantity signed so far is yet to be fully computed.

The Centre allowed duty-free import of cotton for a limited period as domestic prices had topped ₹90,000 a candy (356 kg). Also as spinning mills were unable to get quality cotton, they had slowed down production in an effort to extend their inventories. Poppat said deals to import cotton are being signed between ₹95,000 and ₹1,03,000 a candy. "This will be the price at which cotton will land at Indian ports," he said. Prices of Shankar-6 cotton, the benchmark for exports, are currently quoting at ₹93,200-93,800 a candy. On the Intercontinental Exchange, New York, benchmark cotton futures are currently ruling at 142.30 US cents a pound (₹88,425 a candy). Ronak Chiripal, Promoter, Chiripal Group, said the Centre's decision had to some extent reined in domestic prices, "We can say that to some extent but cotton inventory is a big challenge right now. We are allowed to import but the stocks have depleted and nobody has much to offer," he said, adding the Centre should waive import duty permanently.

Dhamodharan said: "One of the biggest advantage now with imported cotton is, mills will get better

realisation to the tune of 4-5 per cent due to historic low level of quality in current domestic cotton."

A huge problem with Indian cotton is its contamination. This year, according to spinners, it had resulted in realisation for mills drop to 68.5 per cent. On the other hand, realisation from imported cotton could be 75 per cent. □

### Exports surge 37% in first 2 weeks of April

India's goods exports posted a growth of 37 per cent (year-on-year) to \$18.79 billion in the first two weeks of April 2022 in sync with the performance in financial year 2021-22. Imports during the April 1-14 period increased to \$25.84 billion, a rise of 12.24 per cent over the same period of 2021-22, according to the weekly trade alert shared by the Ministry of Commerce and Industry recently. □

### Textiles apparel exports grew 41% to \$44.4b

India's textile and apparel exports grew 41 per cent to \$44.4 billion in 2021-22 compared to the previous fiscal, and met the annual target set by the government.

The US was the top export destination, accounting for 27 per cent of total exports of textiles and garments, followed by the EU (18 per cent), Bangladesh (12 per cent) and the UAE (6 per cent), according to a Textiles Ministry release recently.

Exports of textiles and apparel in 2021-22 were 26 per cent higher than exports in 2019-20. This was the highest ever export for the sector.

"In terms of product categories, exports of cotton textiles were \$17.2 billion, with a 39 per cent share registering a growth of 54 per cent over FY21 and 67 per cent over FY20, respectively," the statement said. The export of readymade garments in 2021-22 was \$16 billion with a 36 per cent share, registering a growth of 31 per cent over 2020-21 and 3 per cent over 2019-20.

Man-made textile exports were \$6.3 billion, with a 14 per cent share, posting a growth of 51 per cent over 2020-21 and 18 per cent over 2019-20.

Handicraft exports, at \$2.1 billion in 2021-22, accounted for 5 per cent of total textile exports and registered an increase of 22 per cent and 16 per cent over 2020-21 and 2019-20, respectively, the statement noted. ■

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## Details of the Newly Elected Office Bearers of ITAMMA for the year 2022-23

### Mr. Purvik Panchal, President

#### Director – Technical & Sales, Shree Ram Textile

Mr Purvik Panchal graduated in Mechanical Engineering in 2004 and worked for two years in the Industry to understand at the Grass-Root level the dynamics of production, technical aspects and sales and marketing.



Mr. Purvik Panchal  
President

In 2006, Mr Panchal started his career as the partner of Shree Ram Enterprise which is based at Gujarat and is an authorized distributor of Metal Cutting Machines, Cutting Tools, Cutting Oils, Adhesives, Laser Machines, etc. Mr Panchal executed his role for the development of new Business especially

in Corporate business field.

In 2014, Mr Panchal was appointed as the Director – Technical & Sales at Shree Ram Textile (SRT), which is a family owned business; who are manufacturers of Warp Stop Motions for all makes of Weaving Machine Looms. Mr. Panchal has undertaken major product development initiatives, such as launching different Warp Stop Motions for different Models of Air jet, Water jet and Rapier Shuttleless Looms.

Since 2017, he has also taken charge as the Director of Meche Industrial Organisation Pvt Ltd which provides online technical support, turnkey project solutions and engineering support in the Textile Industry.

He is also an active member of the Ahmedabad Panchal Community Association.

### Mr. Nimesh J. Shah, Vice President

#### Partner, Britex Industries

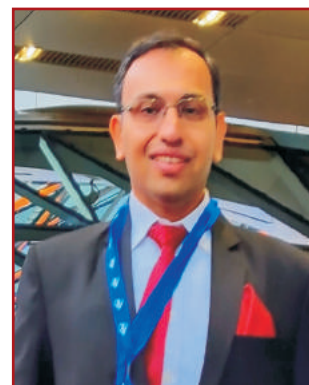
Young and enthusiastic, Nimesh is currently partner at Britex Industries ( which is part of the Wiperdrive Group) which is into selling of Textile spare product and accessories, he is Director at Transec Overseas Pvt Ltd which manufactures Aviation Ground support Equipments and also Director of Oilgear India Pvt Ltd which manufacture and supply Hydraulic and Automation products and solutions.

He holds an MBA in International Marketing from Cardiff University, UK along with a B.E. in Production Engineering from Bombay University, India. He has Twenty five-years of rich experience and exposure to the finer side of running all business successfully.

Dealt with customers such as Air India and Indian Airlines and executed sales up to the tune of Euro 20 million for Ground support Equipment. At a young age of 45 he has played a key role in honing the operation of the group and has demonstrated considerable Financial and Marketing skills.

During all these year, in a short period of time, he has initiated a significant thrust on the group export operations to Europe and Middle East companies He also played a substantial role in getting all Group companies ISO 9001: 2008 certified and participating in international trade fair with thrust on exports.

Nimesh is fully geared to spearhead his all Group companies in the area of world class product and service to exceed customer expectation..



Mr. Nimesh J. Shah,  
Vice President

### Mr. Bhaveshkumar Patel, Hon. Treasurer

#### Proprietor, OM CORPORATION

M/s. OM CORPORATION manufacturer, importer and exporters of Textile weaving Machinery parts and dealing in all types of second hand Machinery.



Mr. Bhaveshkumar Patel  
Hon. Treasurer

He holds DME (Diploma Mechanical Engineer) from Bombay Board, India. He has Twenty five-years of very good experience at all types of weaving machinery spare parts for Air jet, water jet, Rapier & other weaving

Machinery and exposure to the finer side of running all businesses successfully.



## Details of the Newly Elected Office Bearers of ITAMMA for the year 2022-23

Om Corporation was established in the year 1985 and produced the export quality textile weaving machines spare parts. We produce high-quality spare parts from qualified engineers and technicians. OM COPORATION supply all quality spares from all over INDIA as well as Export world-wide.

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### Mr. Dhijen R. Mehta, Immediate Past President

#### Proprietor, Ashton Green & Company

Dhijen Mehta, Owner of M/s. Ashton Green & Company manufacturer and exporters of equipment of Effluent Treatment Plant and Sewage Treatment Plant and other power transmission products related to Textile, Cement, Paper and Food Industries.



Mr. Dhijen R. Mehta  
Immediate Past-President

Ashton Green & Company established in the year 1964 and was pioneer in manufacturing of Transmission product specialize in PIV Gear Boxes and transmission drives related to textile Industries.

Since last one year Ashton Green & Company has started designing and manufacturing of fine and coarse bar screen in standard and step type used in ETP and STP systems.

Mr. Mehta is also an Associate of the concern M/s. Transport Engineering, the manufacturers of power transmission product, dealers and stockiest of worm reduction gear boxes and their spares.

Mr. Mehta is also an Associate of the concern M/s. Medh the manufacturers of special purpose food cutting machinery.

Having the Core competency in Accounts & Finance, he has been serving ITAMMA in this field since last few years and had handled ably

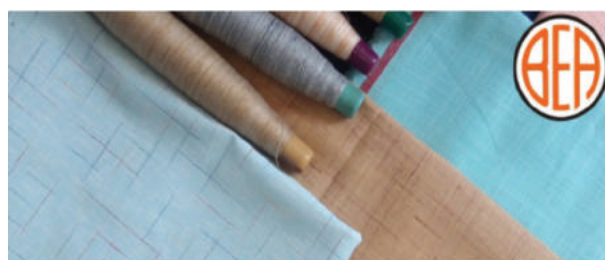
the very responsible post of Chairman of Finance Sub-Committee. Considering Finance being the back bone of any Association for its Sustainability, Mr Mehta wish to continue his services in this field in future also to strengthen the Secretariat of ITAMMA financially so that we can serve our Members very effectively.

Mr. Mehta also guide and help the Directorate in the management of ITAMMA's Building activities leading to delivery of quality maintenance Projects at competitive cost, including state-of-the-art renovation of M C Ghia Hall.

For further information, please contact :  
**Indian Textile Accessories & Machinery  
Manufacturers Association**  
**Bhogilal Hargovindas Building**  
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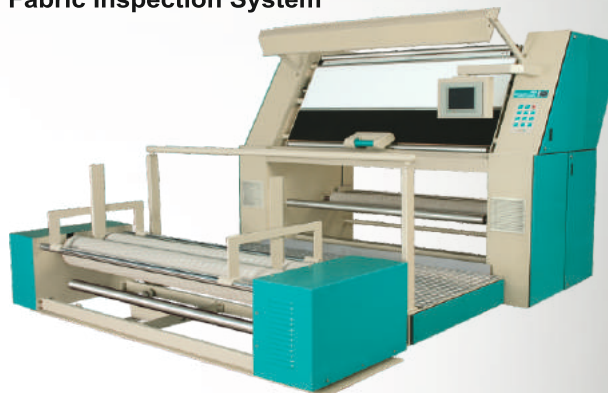
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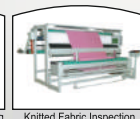
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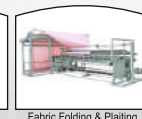
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## CORPORATE NEWS

### Navyasa by Liva's launches its new campaign #freetobe with Deepika Padukone

Launched by the house of Aditya Birla Group, Navyasa by Liva is redefining the saree category

New age saree brand Navyasa by Liva from the house of Aditya Birla Group has announced a marketing and advertising campaign; featuring Deepika Padukone. The brand has been creating quite a buzz with a new approach to wearing sarees that is #freetobe.

Conceptualized in line with the theme #freetobe, the campaign showcases the brand's intent to revolutionize the way sarees are perceived. Navyasa by Liva features vibrant and chic designs for modern women. The range has been visualized by renowned designers Abir and Nanki along with the internal design team at Liva. The fabric is soft and flowy, and allows effortless movement. It is also equally important to note that it is a big leap forward for responsible and sustainable fashion in India.



Commenting on the campaign launch Mr. Rajnikant Sabnavis, Chief Marketing Officer, Grasim Industries (Pulp and Fibre), "Navyasa by Liva is redefining the saree category to beautifully capture the essence of modern Indian women. The brand's intention is clear that it is here to stay and the association with Deepika Padukone as the face of the brand will only up the ante and take the brand to the next level. She perfectly captures the bold and individualistic style that Navyasa by Liva

represents, making Deepika a great fit for the brand. The campaign idea is in sync with the brand spirit and brings alive the ethos effectively. We are very happy to see the response to the campaign and the aspiration it inculcates among the audience."

The TVC represents how a saree is breaking stereotypes with its fluid, breathable and comfortable nature. It is being worn in places not imagined earlier and helps explore life with ease whether at work, party, lunch or a cafe. It gives the wearer the freedom of expression enabling them to achieve their dreams with conviction while wearing the saree.

"Fabrics like Liva Crepe and Satin are very popular amongst the younger audience that drapes sarees. The Navyasa by Liva collection offers contemporary sarees with a complete behavioral understanding of the target audience empowering women to move around with spirited optimism and #freetobe in their element." said Mr. Sabnavis.

#### 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 accredited value chain. The new-age naturally sourced fiber made into fabric in pure or blended form, transforms not just the garment but also the person wearing it. It is comfortable, soft, natural, and eco-friendly. The brand recently launched their eco-enhanced version of the fabric, called Livaeco, which made of wood pulp sourced from FSC certified forests.

For further information, please contact :

Sanika Shetty

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Mumbai-400053

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Email : [sanika@whitemarquesolutions.com](mailto:sanika@whitemarquesolutions.com)

Website : [www.whitemarquesolutions.com](http://www.whitemarquesolutions.com) □

### R CITY mall is holding the biggest summer carnival event in town with a larger-than-life décor and ensemble of exciting activities

After a hiatus of two long years, R CITY mall—Mumbai's largest shopping and entertainment destination—is bringing back its super Summer Fun with the 'Summer Wonderland' that is host

## CORPORATE NEWS

to a stunning and larger-than-life carnival décor coupled with a plethora of exciting activities, workshops, games and many more indulgences till 12th June.



The mall has adorned itself with vibrant decor inspired by a circus wonderland. While a splendidly lit-up facade of hot-air balloons welcomes visitors into this realm of summer extravaganza, the mall premises have also been transformed with magnificent and interactive installations, games and lights, evoking a sense of joy, excitement and nostalgia of your childhood summer.



At the same time, R CITY has left no stone unturned in giving its patrons an extraordinary and holistic shopping and leisure experience through the carnival. Shoppers who shop for Rs. 10,000 or above can indulge in engaging gameslike Spin The Wheel, Ring Toss, Plinko, amongst many others to win assured entry to an entertainment centre like Kidzania, Timezone, SMAAASH, Snow Kingdom, What The Fun, etc.! Furthermore, kids can participate in an array of exciting workshops such as Origami, Canvas Spray Painting, Pottery, Cut Ceramic Art, Bead Making, Zumba, and much more every Friday – Sunday.



Over the years, R CITY has evolved into one of the prime hangouts in the city with over 9+ entertainment centres, 250+ global cuisines, premium international brands, plush and breathtaking interiors and more. The mall also adheres to the best-in-class safety and hygiene protocols and has a fully-vaccinated staff at service to indulge its patrons in a safe yet extraordinary experience.

#### About R CITY Mall

Since 2009, R CITY Mall, the flagship retail venture of Runwal Developers Pvt. Ltd. has been welcoming visitors as Mumbai's largest shopping and leisure destination. Nestled in the heart of the central suburbs, it extends across 1.2 million square feet of retail space, home to 300+ Indian and International brands across Fashion, Food, Beverage and Entertainment. The mall boasts of a 24,000 sq. ft. courtyard - the perfect venue



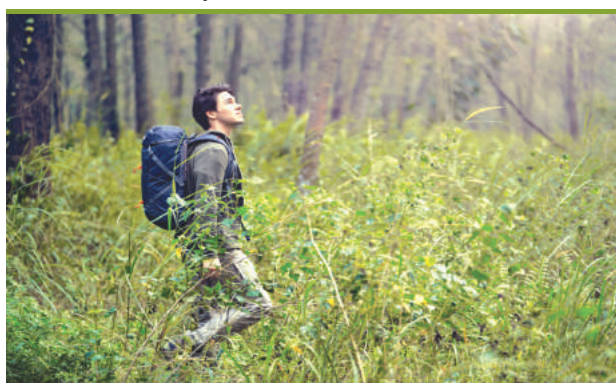
for city level events like musical gigs, stand-up performances, food fests and more. It's also the largest recreation hub of the city with over 9 entertainment centres including India's first and largest indoor theme park - Kidzania and various new age experiential brands in entertainment and leisure to give visitors a truly international shopping experience. With a balanced offering of the best in shopping, entertainment and food, R CITY provides an engaging and unforgettable experience to its shoppers and visitors.

For further information, please contact  
Saisha Ramchandani  
The Other Circle, Ph : 9833202231



## TENCEL™ brand rolls out Tree Climate fabric collection for sustainable outdoor apparel

- » Tree Climate fabric collection by TENCEL™ redefines sustainability in functional outdoor fabrics with moisture management, optimum breathability, and reduced carbon footprint
- » Environmental impact of TENCEL™ branded fibers used in the collection is amongst the lowest of all materials on the Higg Materials Sustainability Index
- » Variety ranges from next-to-skin base layer and biodegradable wadding to water and wind repellent outer layers made of wood-based TENCEL™ Lyocell fibers



Lenzing, a leading global producer of wood-based specialty fibers, has today launched the Tree Climate fabric collection by TENCEL™, curated by outdoor fabric innovators David Parkes and Marco Weichert, at Performance Days in Munich.

The new Tree Climate outdoor fabric collection features the wide range and versatility of TENCEL™ branded lyocell fibers. It displays a great variety of base, mid, and outer layer fabrics each offering a

range of inherent performance qualities, as well as waddings made of wood-based TENCEL™ Lyocell fibers for outdoor applications. The three-fold collection allows the creation of synthetic free and enhanced synthetic content layering solutions for different weather conditions. The environmental impact of the fibers is amongst the lowest of all materials according to the Higg Materials Sustainability Index, an industry-wide tool that measures and communicates the environmental impact of materials used for apparel. In addition to the clear sustainability benefits, the collection demonstrates the versatility of TENCEL™ Lyocell fibers in functional outdoor applications. Wind and water resistant, with optimum breathability and thermal regulation, makes the fabric ideal for outdoor sports lovers all year round. The fibers, which are gentle on skin, also blend well with natural fibers such as wool and hemp.



"We are delighted to launch our new Tree Climate fabric collection and showcase at Performance Days, the industry leading functional fabric fair in Munich today," said Andreas Gürtler, Senior Manager of Global Business Development Active Sportswear at Lenzing. "We are extremely proud of what we have created with the help of renowned curators David and Marco. The fibers, which have high-performance attributes and super soft feel, are also biodegradable. Coupled with carbon-zero fibers, this fabric collection is poised to bring a wave of positive change to the outdoor apparel and the environment."

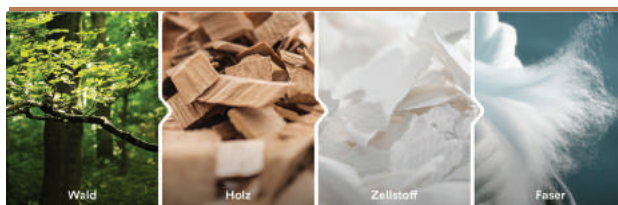
### Bringing positive impact to the outdoors through innovation and collaboration

Outdoor lovers care for the environment. Product origin and its end-of-life impact on the environment are often key topics that are close to their hearts when they choose performance apparel. Through collaboration and innovation with inspirational experts, David Parkes and Marco Weichert, Lenzing is able to ensure the performance of fabric used in outdoor apparel, whilst also ensuring positive environmental impact.



## CORPORATE NEWS

“Sustainability has become a minimum requirement in the outdoor market. The industry is in need of climate neutral fibers, that are nature-based and can claim a function out of nature. Lenzing is providing some of the best fibers for the active market with its TENCEL™ Tree Climate collection. It offers nature based, biodegradable fibers with superb functional attributes such as climate control and moisture management. I am thankful that I had the chance to participate in this project and I am confident that it will do well,” said Marco Weichert, Founder of Performance Days and CEO of Weichert Agencies.



“Performance apparel defines itself through innovative and practical textiles, and the consumer has recognized this for several decades. It is a leader in textile development, and has assumed that role, with accountability, in textile sustainability and environmental awareness. I have been inspired by the sustainability of this generation of TENCEL™ fibers, their attractive aesthetics and impressive thermal and comfort characteristics,” added David Parkes, Founder and CEO of Concept III.



#### About TENCEL™

TENCEL™ is the flagship brand under The Lenzing Group that covers textile specialty product fiber offerings. Since 1992, the TENCEL™ brand has been driving the evolution of fiber solutions for the apparel and home textile segments through several industry-first innovations and environmentally responsible production processes. 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 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. 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. They 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.

#### About the Lenzing Group

The Lenzing Group stands for ecologically responsible production of specialty fibers made from the renewable raw material wood. As an innovation leader, Lenzing is a partner of global textile and nonwoven manufacturers and drives many new technological developments.

The Lenzing Group's high-quality fibers form the basis for a variety of textile applications ranging from elegant clothing to versatile denims and high-performance sports clothing. Due to their consistent high quality, their biodegradability and compostability Lenzing fibers are also highly suitable for hygiene products and agricultural applications.

The business model of the Lenzing Group goes far beyond that of a traditional fiber producer. Together with its customers and partners, Lenzing develops innovative products along the value chain, creating added value for consumers. The Lenzing Group strives for the efficient utilization and processing of all raw materials and offers solutions to help redirect the textile sector towards a closed-loop economy. In order to reduce the speed of global warming and to accomplish the targets of the Paris Climate Agreement and the “Green Deal” of the EU Commission, Lenzing has a clear vision: namely to make a zero-carbon future come true.

#### Key Facts & Figures Lenzing Group 2021

Revenue: EUR 2.19 bn

Nominal capacity: 1,145,000 tonnes

Number of employees (headcount): 7,958

TENCEL™, VEOCEL™, LENZING™, REFIBRA™, ECOVERO™, LENZING MODAL™,

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For further information, please contact  
Simran Maheshwari  
Account Executive, Six Degrees BCW  
bcw, burson cohn & wolfe  
+91 9643855958, [www.bcw-global.com](http://www.bcw-global.com) □

## Planing to strengthen the digital fashion supply chain, BlueKaktus plans to integrate 5000+ vendors over the next six months

- » BlueKaktus plans to integrate 5000+ vendors to the platform in the next 6 months
- » The company currently enables brands to source 11 million garments a month
- » Creating a sustainable supply chain by providing transparency, agility, and real-time visibility

With the help of its cutting-edge technologies, India's leading fashion and lifestyle digital supply chain platform, BlueKaktus, is on track to integrate 5000 vendors with the brands using the its sourcing platform. BlueKaktus' goal is to establish a sustainable supply chain by providing transparency and agility for apparel brands, manufacturing, sourcing, and retailing enterprises via its technology solutions to improve lead times, prices, and performance.

BlueKaktus began its journey with a few hundred vendors, scaling to 2000 in a short span of time and now aiming to integrate 5000+ vendors. As compared to last year, when only 1mn garments were being sourced a month, BlueKaktus witnessed an exponential increase in sourcing with more than 11 million garments being sourced via their platform each month, which is expected to reach 20 million garments soon in the next six months. Right now, the value of the garment sourced is worth \$120 million/month, which is expected to reach \$250 million/month by the next financial year. Using BlueKaktus' technology solutions, leading brands including Myntra, USPA, Arrow, Amazon, Lifestyle, etc., are delivering superior customer experience.

"The business paradigm in the fashion industry is transitioning to on-demand production. Rather than anticipating demand, producers are instead reacting to it in real-time. As a result, fashion fundamentals are shifting. We at BlueKaktus, provide technology solutions that assist manufacturers, sourcing firms, and retailers in shortening lead times, lowering costs and thus improving the performance." said Gunish Jain, CEO, BlueKaktus.

"BlueKaktus aspires to be the country's largest fashion and lifestyle digital supply chain company, contributing to the growth of the new fashion 'pull economy.' We are looking at more than doubling our revenue. We estimate the number of vendors linked with BlueKakatus to grow two-fold in the next six months, which will be a significant achievement for us," Gunish added.

Founded in 2000, BlueKaktus has emerged to be one of the largest supply chain integration platform



in the world. Every month, the company's platform helps sourcing of \$120 million worth of merchandise. BlueKaktus has incorporated industry best practices by automating operations in the fashion supply chain, thanks to its domain experience of 20 years. The company is dedicated to helping sustainable fashion,

assists businesses and manufacturers in reducing inventory levels by 30-40%.

The textile and clothing sector in India is estimated to reach US\$ 190 billion by FY26. With a totally digitized value chain, investing in digital platforms brings significant benefits to apparel companies. BlueKaktus' digitized Single Source of Truth (SSOT) platform ensures complete data transparency between internal and external stakeholders, resulting in more unified supply chain governance and orchestration. BlueKaktus provides real-time data, minimizes time-consuming tasks, analyzes diverse circumstances, and ensures timely delivery.

### About BlueKaktus

BlueKaktus is India's leading fashion and lifestyle supply chain software. The company was founded in 2000 and since then, it has enabled manufacturing, sourcing, and retailing companies to improve their lead times, costs and performance through technology. In more than two decades, the company has grown exponentially and has more than 100 employees working in multiple offices based across the globe.

For further information, please connect :  
Priyanka Mani, 8178477871, BlueKaktus  
[priyankamani@kaizencomm.com](mailto:priyankamani@kaizencomm.com)  
Neha Ratta, 9873497707, BlueKaktus  
[neha.ratta@kaizencomm.com](mailto:neha.ratta@kaizencomm.com) ■



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E-mail: [spinaircbe@gmail.com](mailto:spinaircbe@gmail.com) / [admin@spinair.co.in](mailto:admin@spinair.co.in)

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## TEXTILE EVENTS

### Intex South Asia

16-18 June 2022

Hall IV, ICCB

Dhaka, Bangladesh

**Stage ready for 9th Intex South Asia – Bangladesh Edition in June 2022 at International Convention City Bashundhara (ICCB), Dhaka**

Bangladesh is ready to host the Intex South Asia, the Biggest International Textile Sourcing Show of South Asia, in physical format in Dhaka from 16-18 June 2022 at Hall IV International Convention City Bashundhara (ICCB). Intex South Asia Bangladesh would be the first international textiles sourcing show in Bangladesh post the pandemic.

After two successful Bangladesh editions in 2019 (physical) and 2020 (virtual), Intex South Asia will bring together textile and apparel industry stakeholders from Bangladesh to meet and conduct business with 150+ local and international suppliers of fibers, yarns, apparel fabrics, trims, laces, embroidery, textile design software, as well as to grow international business by interacting with textile parks owners, trends forecasters and more under this unified textile sourcing platform.



This, the 9th Intex South Asia - Bangladesh edition will witness more than 75 companies from India and Bangladesh, along with international participants from South Korea, Turkey, Italy, Indonesia, Thailand, China, UAE, Singapore and UK showcasing their innovative, sustainable and latest textile offerings for 2023-24 SS/AW.

Alongside the exhibition, there will be an Interactive Business Forum Seminar Series. This knowledge sharing platform has hosted cutting-edge industry seminars, presentations and workshops on supply chain, innovations, sustainability, global fashion trends by global industry experts such as The Woolmark Company,

Cotton USA, Italtex Italy, QIMAone (Hong Kong), Oeko-Tex (Germany), BCI Better Cotton Initiative (Switzerland) and more. The 2022 edition's IBF Seminar Series Agenda will be announced shortly.



With Bangladesh's textile and apparel exports aiming to reach US\$ 100 billion in the next 10 years, the Intex South Asia platform will offer excellent opportunities for the textile & RMG industry stakeholders to reconnect with new and existing international textile suppliers, explore sourcing opportunities for new product development and learn about the latest innovations, trends and sustainability in textiles by international experts. Furthermore, our platform will assist Bangladesh's large and SME textile manufacturers to showcase "Made in Bangladesh" trendy & quality products and promote backward linkage to leading garment manufacturers, exporters, sourcing / buying offices of international brands and retailers, domestic apparel brands, fashion labels, etc. in Bangladesh.

Speaking on the occasion, Ms. Arti Bhagat, Director of Worldex India, Organiser of Intex South Asia Bangladesh said, "The 2022 edition presents a curated collection of new products and innovations by India and international suppliers to create assured, new business opportunities for the Bangladeshi industry. This show delivers a two-fold advantage for Bangladesh; It creates opportunities for Bangladesh to increase its global market share and strengthen its reputation as a sourcing destination for high-fashion and value-added garments. I believe our platform would further assist the growth and development of the textile and apparel industry of Bangladesh".

We are pleased to welcome Arise Integrated Industrial Platforms (ARISE IIP) as our Africa Investment Partner at Intex South Asia Bangladesh. ARISE IIP identifies industrial gaps in Africa and



## TEXTILE EVENTS

designs sustainable solutions to locally transform raw materials, boost exports and promote trade. We request everyone to visit their booth and attend their Session on 'Investment Opportunities in Africa' at the IBF Seminar Series.

We invite all industry representatives to visit the show in-person and make the best of this opportunity at the 9th Intex South Asia Bangladesh. To receive your complimentary badge, register yourself at [https://bd.intexsouthasia.com/buyer\\_reg.html](https://bd.intexsouthasia.com/buyer_reg.html)

Intex South Asia is organised by Worldex India Exhibition & Promotion Pvt. Ltd and endorsed by International Textile Manufacturers Federation (ITMF), Bangladesh Knitwear Manufacturers & Exporters Association (BKMEA), Bangladesh Garment Buying House Association (BGBA), India-Bangladesh Chamber of Commerce & Industry (IBCCI), Taiwan Textile Federation (TTF), Korea Textile Center (KTC), Thailand Textile Institute (THTI), The Cotton Textiles Export Promotion Council (TEXPROCIL), Federation of Indian Export Organisations (FIEO) and the Malaysian Knitting Manufacturers Association (MKMA) to name a few.

For further information, please contact :  
website : <https://bd.intexsouthasia.com> □

## Gartex Texprocess India was all geared up for its Mumbai launch to highlight advanced and sustainable garment manufacturing technologies

Jointly organised by Messe Frankfurt India and MEX Exhibitions, the trade fair aims to accelerate technological advances in the Indian textile and garments industry through a showcase of innovative and competitively-priced products from over 120 exhibitors. An exclusive Denim Talks series to present Digital manufacturing and Bio Dyeing technique for the first time in India while the first-ever Flash dyeing technique of indigo has been made public at this key textile industry gathering.

Raising the momentum created by its New Delhi edition, GartexTexprocess India was all geared up for its Mumbai launch which took place from 12 – 14 May 2022 at the Jio World Convention Centre in BKC. With Denim Show, Fabric & Trims Show and Screen Print India being hosted under its umbrella, GartexTexprocess India 2022 will

display innovations in textile and garment making machinery, denim, trimmings and screen-printing verticals.

Brands including Baba Textile Machinery (India) Pvt Ltd, Balaji Sewing Machine Pvt Ltd, Cotton Council International, EH Turel & Company, Felix Schoeller, Gayatritex Engineers Pvt Ltd, Golden Laser India Pvt Ltd, Mehala Machines India Limited, Orange O Tec Pvt Ltd, Ramsons Garment Finishing Equipment Pvt Ltd, Sera Machines, Sky Enterprises, Sewco Garment Solutions Pvt Ltd and Zoje demonstrated their prowess in manufacturing technologies. The exhibition attracted apparel brands, design studios, fashion designers and merchandisers, trade body representatives, distributors, garment and textile machinery importers, exporters, wholesalers and many more under its roof.



Extending strong support to the platform and highlighting the Ministry's approach to incentivise local innovation, said Shri Vijoy Kumar Singh, Additional Secretary, Ministry of Textiles – Government of India, stated: "I am glad to know that Messe Frankfurt India and MEX Exhibition are organising the first edition of Gartex Texprocess India 2022 in the financial capital of India after successfully hosting the Show in Delhi last year. I had an opportunity to inaugurate the Delhi edition and visited the exhibition in person after such a long time of pandemic which stalled all the activities globally. We need to be careful but at the same time push economic activity in light of employment creation and development."

"It has been our experience that textiles industry is majorly dependent on imported machines. There is a need to make most of the machines manufactured in India particularly in light of current disruption of world logistics services. We in Ministry of Textiles are currently formulating a

scheme for incentivising manufacturing of textiles machinery in India. The approach is to incentivise local innovation and at the same time invite eminent manufacturers to set up ventures locally."

Apparel Export Promotion Council (AEPC), Retailers Association of India (RAI), Denim Manufacturers' Association (DMA) and the Gujarat Garment Manufacturers' Association (GGMA) are among the other top industry bodies extending support to the three-day exhibition.

As a comprehensive trade exhibition for garment and textile machinery, GartexTexprocess India 2022 will display state-of-the-art machinery for textile and garment production, including:

- ✦ Go Green machine by Ramsons executes wet processing of garments with extreme efficiency and sustainability
- ✦ The TS 1800 Digital Thread Dyeing System by Orange-O-Tec dyes thread in millions of colours on demand with precision
- ✦ Mehala will showcase The Procut 1800 from Bullmer – A highly-precise automatic cutter for large quantities of apparel.
- ✦ The R6000 digital feeding smart lockstitch machine by Bruce

#### Top denim brands sign-up for Denim Show 2022

India's leading b2b exhibition for denim, Denim Show 2022 will be held in Mumbai for the very first time and aims to showcase innovative, fashionable and sustainable trends in the world of denim. Supported by Denim Manufacturers' Association, the platform will enable India's biggest denim brands and mills to reunite under its platform. Hyosung India, Jindal Worldwide, Arvind, Ginini International, Raymond UCO Denim, Bhaskar Denim, LNJ Denim, Oswal Denims, KG Denim, Nandan Denim, and Ashima Group are some of the illustrious brands raring to showcase their latest denim collections at the exhibition.

The Denim Show and the Indigo World have also collaborated with artisans from Adiv Pure under the expert guidance of Rupa Trivedi. Neelpatra shall provide the material support by sourcing natural indigo which is the foremost and truest sources of one of the most enigmatic colours in the world. Through this workshop, Neelpatra aims at bringing a change in the lifestyle of the people and help them go natural and ethical for a more sustainable future through this precious dye.

They have carefully curated an experience where one can dye a piece of fabric by dipping it into a vat of natural indigo dye with their own hands. This shall not just educate one about the extraction of natural indigo, the preparation of indigo vats and the process of dyeing the fabric, but also witness and the surreal transformation the fabric undergoes once taken out of the vat.

#### Denim Talks to discuss a series of original and eye-opening industry themes

For the very first time in India, topics like flash dyeing of indigo, Digital manufacturing and bio dyeing and Sustainability initiative by Levi Strauss will be discussed at 'Denim Talks' that is scheduled on 13 May 2022.

The one-day conference will play an incredible role in highlighting technical innovations & 'green' initiatives in the denim manufacturing sector by uniting denim industry stakeholders and thought leaders under a common platform.



#### Fabric & Trims Show to highlight the fashionable elements of garment production

Evolving fashion trends demand variety in every aspect of garmenting. Today, the quality and aesthetics of any finished apparel depends on the selection of the right fabric, styling, embellishments and manufacturing process.

Tending to these new demands, Fabrics & Trims will feature fabrics, trimmings, embellishments and accessories for apparels of the future. It will feature apparel enhancing features and products, such as:

#### Screen Print India returns to Mumbai after a successful New Delhi edition

After a promising response at its first post-pandemic edition in New Delhi last year, Screen Print India 2022 is gearing up for its next edition in

## TEXTILE EVENTS

Mumbai. Showcasing new technological capabilities in digital textile and screen-printing, the exhibition will bring leading brands in to demonstrate their manufacturing technologies for screen printing, digital sublimation, heat transfer and textile printing, garment decoration to potential business visitors and traders.

Brands like Dhaval Color Chem Pvt Ltd, Konica Minolta, Skyscreen International Pvt Ltd., Stovec Industries, Epson India Pvt Ltd and many more will be a part of this edition.

- ✦ Sustainable water-based Ready Made print pasteby SCHUTZEN Chemical Group for discharge style of printing on pre-reactive dyed cellulose substrate
- ✦ JETVARNISH 3DS with iFOIL S by Konica Minolta executes high-speed Hot Foil Stamping in house, with virtually no set up and personalised finishing
- ✦ Launch of Ready-to-Print Stencil Systems by SKYSCREEN
- ✦ The DART digital printer by Stovec Industries with reliable print heads for sharp images, vibrant colours and smooth gradations.

Together, the concurrently held exhibitions will provide an all-inclusive platform for the stakeholders of textile, garment and screen-printing industry, to discover new manufacturing capabilities in their respective verticals.

**For further information, please contact :**  
**Ruhi Shaikh**  
**Head - PR & Corporate Communications**  
**Mess Frankfurt Trade Fairs India Pvt. Ltd.**  
**Mobile : +91 88283 96822**  
**ruhi.shaikh@india.messefrankfurt.com**



## ITMA 2023

08-14, June 23

Milan, Italy

**Transforming the World of Textiles**

**ITMA 2023 Sector Plan opened**

ITMA 2023 has drawn enthusiastic response despite the economic and geopolitical uncertainties confronting the global business community. To date, 97% of the exhibition space has been booked.

- ✦ 1,444 applicants from 42 countries
- ✦ 114,230 square metres of net exhibition space

Mr Ernesto Maurer, President of CEMATEX, said: "The response to ITMA 2023 has exceeded our expectations. We appreciate the strong endorsement from the industry. The space booking status shows the industry's confidence in ITMA as the best global launch pad of the latest technologies and innovations."

## Disruptive Technologies for Sustainable Garment Making Process

The textile industry has seen the development of many new technologies such as zero discharge processes and minimal use of water, in the quest for a more sustainable future.

From design to production, the positive impact of these disruptive technologies has the potential to bring the textile industry into a new era, impacting a change not only in the product itself but more importantly, the way it is made.

**Carmen Silla, Marketing Director, Jeanologia**

Major themes in sustainability, circularity and digitalisation have brought opposite ends of the textile value-chain together as brands and technology manufacturers collaborate to realise these common objectives and bring innovative solutions to scale. A new circular textile economy is booming nationwide in Sweden.

**Sigrid Barnekow, Chairman of Board,  
 Swedish Fashion Association**

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Make planning your trip a breeze as MiCodmc Group – the official travel agent for ITMA 2023 takes care of all your hospitality requirements.

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**Join ITMAnetwork**

Invite your colleagues and friends from the industry to join the ITMAnetwork so that they can enjoy a host of benefits such as :

- ✦ 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**





## CEMATEX launches online business platform to connect Global Textile Community

**ITMAconnect platform available to all ITMA 2023 participants before, during and after exhibition**

An online platform that allows ITMA 2023 participants to build connections, source technologies and solutions, share ideas and grow their business has been introduced by CEMATEX - the European Committee of Textile Machinery Manufacturers and owner of ITMA 2023.

ITMAconnect is the new one-stop sourcing platform and knowledge hub that complements the ITMA 2023 exhibition which will be held at the Fiera Milano Rho, Milan, from 8 to 14 June 2023. It will enable exhibitors, visitors and industry partners to start their engagements before the exhibition, make appointments for in-person meetings at ITMA 2023, and continue their discussions even after the exhibition.

Mr Ernesto Maurer, President of CEMATEX, said: "Even before the Covid-19 pandemic, we have been exploring ways to add value to our participants in the digital space. We are excited that with the launch of ITMAconnect, we now offer the global textile community enhanced opportunities that extend beyond the physical exhibition. We hope exhibitors will make full use of this online platform to keep their contacts engaged while generating new leads to grow their business."

Exhibitors will be able to pinpoint business opportunities in advance by allowing them to have access to ITMA 2023 buyers early. They will be assigned ITMAconnect digital spaces for them to present their company information, upload brochures and press releases, and showcase their products. They can also start their engagements with the smart messaging and video meeting feature, and schedule in-person meetings via the business matching tool.

ITMA exhibitor Mr Oscar Rius, CEO and Co-Owner of Rius-Comatex enthused: "As an online platform, ITMAconnect offers us even more value to our participation at ITMA 2023 as we can establish a brand presence all year round. It's a useful platform for us to discover, target and reach out to more buyers, pre and post exhibition."

ITMA 2023 exhibitors will automatically become ITMAconnect subscribers. There are several subscription tiers offering varied features to suit the needs of the exhibitors. Access to the platform for exhibitors to prepare their digital showcases will be available from 15 November 2022.

Similarly, visitors will enjoy a two-in-one offer to gain access to ITMA 2023 as well as the online sourcing platform when they purchase their badges. Online access starts from 8 March 2023.

After the close of the exhibition, ITMAconnect will be open to non-ITMA 2023 visitors who will be able to purchase an ITMAconnect visitor ticket to gain access to the platform from 15 June 2023.

Access to ITMAconnect for all ITMA 2023 participants will expire on 14 June 2026.

Ms Julieta Pagliuca, Project Manager of The Brazilian Textile and Apparel Industry Association (ABIT) shared: "It is great to learn that with ITMAconnect, we can now get in touch with ITMA 2023 exhibitors conveniently through the platform even before the exhibition. This will help our members plan their visits better since ITMA is such a big show and there are so many innovative technologies to explore."

The ITMAconnect platform will also allow participants to access content all year round, making it the go-to knowledge hub for textile related content and events, including webinars, community forums and showcases by exhibitors.

### About CEMATEX & ITMA

The European Committee of Textile Machinery Manufacturers (CEMATEX) comprises national textile machinery associations from Belgium, France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland and the United Kingdom. It is the owner of ITMA and ITMA ASIA. Considered the 'Olympics' of textile machinery exhibitions, ITMA has a 71-year history of displaying the latest technology for every single work process of textile and garment making. It is held every four years in Europe.

### About ITMA Services

Headquartered in Brussels with a subsidiary in Singapore, ITMA Services is the appointed organiser of ITMA 2023 and future ITMA branded exhibitions. It is managed by professionals with extensive experience in organising ITMA and other

## TEXTILE EVENTS

major trade exhibitions around the world. It aims to maintain and expand ITMA's unique selling proposition and relevance to a global audience.

**For further information, please contact :**

**Ms Cornelia Buchwalder CEMATEX**

**Tel: +41 44 384 48 12**

**Email: info@cematex.com**

**www.cematex.com**

**Ms Daphne Poon**

**ITMA Services**

**M: +65 94789543**

**Email: daphnepoon@itma.com**

**www.itma.com**



## Intense Applications from Procurement Committees who want to attend ITM 2022

The countdown has begun for ITM 2022, the first major international textile machinery exhibition to be held after a 3-year break during the pandemic period. Thousands of visitors from all over the world, who are growing impatient to come to the ITM 2022 Exhibition, where leading textile technology brands will realize their world launches, make intense applications to the Turkish Consulates and Commercial Attachés in their respective countries.

Organized by the partnership of Tüyap Fairs and Exhibitions Organization Inc. and Teknik Fairs Inc., the ITM 2022 International Textile Machinery Exhibition will be held at Istanbul Tüyap Fair and Congress Center on 14-18 June 2022. The fact that the ITM 2022 Exhibition, one of the most important organizations in the world in its field, will bring together the textile technology leaders in Istanbul after a long mandatory break due to the pandemic measures excited the textile industry. Hundreds of domestic and international exhibitors are looking forward to presenting their newest technologies for the first time at the ITM 2022 Exhibition. Leading textile machinery manufacturers, global sector investors, and professional visitors are planning to come to the ITM 2022 Exhibition to examine the latest technologies closely.

Trade committees from dozens of countries are requesting to attend the ITM 2022 Exhibition, which is included in the 'Domestic Organizations

Covered by State Incentives' list by the Ministry of Commerce. Bangladesh, India, Iran, Serbia, Czech Republic, Pakistan, Indonesia, Ethiopia, Malaysia, Mexico, Egypt and Vietnam are among the countries that requested procurement delegations.

## Countries Having Visa Agreements with Turkey Will Increase the Number of Visitors to the Exhibition

The intense application of visitors to consulates and commercial attachés from all over the world clearly reveals that ITM 2022 will host a large number of visitors. Thousands of visitors from Europe, Central Asia and Arab countries, especially the Turkic Republics, will visit the ITM 2022 Exhibition to be informed about the latest trends in textile machinery. The visa agreement between Turkey and many countries such as India, Pakistan, Bangladesh, Indonesia, Vietnam, Egypt, Algeria, Tunisia, Morocco, Iran, Uzbekistan and Turkmenistan will be effective in increasing the number of visitors.

## Leading Textile Technology Brands to Make their World Launches at ITM 2022

The ITM 2022 Exhibition is of great importance for Turkish textile machinery and accessories manufacturers to increase their competitiveness in exports and to sign collaborations that will result in worldwide exports. Leading textile technology brands, which focus on product development and new productions during the pandemic conditions, are looking forward to the ITM 2022 Exhibition to present their products to the market and introduce them to their customers face to face. More than 300 manufacturers will make the world launches of their latest technological innovations at the ITM 2022 Exhibition.

**For further information, please contact :**

**Tuyap**

**www.tuyap.com.tr**

**T : +90 212 867 1100**

**E : itm@tuyap.com.tr**

**Teknik Fuarcilik**

**www.teknikfuarcilik.com**

**T : +90 212 876 75 06**

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## The entrepreneurial spirit of Indian women fuelled by digital wave rises several small and Mid-size homegrown fashion brands with affordable and unique clothing

When fashion designer Ritu Kumar launched her sub-brand Aarké late last year, she heralded a new trend for the millennial woman—affordable designer wear. Her latest endeavour was also a foray into the mid-segment apparel market, making her offerings available to a larger section of consumers and beyond the metros.

“Aarké is the newest offering from Ritu Kumar, catering to women who dress with Indian aesthetics. It is rooted in tradition, yet captures the various moods of a multi-tasking urban woman,” reads the introduction to the brand.

The idea of offering a designer garment in the value segment may have been new for Kumar, who has been ruling the fashion world for over 50 years, but several homegrown ventures are already betting big on affordable, stylish clothing.

Launched in 2012 by Shivani Poddar and Tanvi Malik, the fashion house continued to grow and expand throughout the pandemic and forayed into personal and skin care segment. It also launched its day wear brand—Earthen by Indya—last year while strengthening its online portfolio, which accounts for 50% of its total business.

The onset of the pandemic and the resultant toll on incomes and buying habits of consumers led to the rise of several small and mid-segment brands dealing in ethnic and fusion wear, western wear and lounge wear, among others, in the past few years. Aware of the untapped potential of the market, both established and new brands are curating affordable and unique clothing for the Indian women to experiment with and, thanks to the digital wave, are also finding takers.

There is no dearth of high-end and luxury labels ranging across ethnic, fusion and western wear in India but being able to own a Manish Malhotra, Falguni Shane Peacock or a Ritu Kumar with the premium pricing remains a dream for many.

On the other hand, there are several western brands selling in India that offer affordable wear and therein lies the paradox. There is a demand for homegrown labels, but the local market remains out of reach owing to geographical barriers.

Over the last decade, a number of mid-segment brands has emerged in India as e-commerce platforms became popular. The growth has been slow but steady. However, the pandemic ushered in an era of hyper digitalisation, which in turn opened gateways for online businesses and presented an opportunity for offline businesses to shift to online as well.

The consumer found a new confidence of purchasing from small and medium brands selling through the online mode. Several homegrown labels

like Archho, Libas, Rustorange, Indya, Bunaai, Koskii, Lavanya-The Lable and Tjori started flooding the digital space and witnessed a spurt in the number of orders. What worked for these brands were the freshness of designs and variety and the affordability they provided.

Kreeva, an e-commerce Indian ethnic wear platform with a prime focus on India's rich heritage, has been seeing a constant growth since its launch in 2020.

According to founder Manthan Dhameliya, the brand clocked a revenue of ₹10 crore in 2020 and the figure went up to approximately ₹25 crore the following year. While the pandemic adversely affected businesses initially, it opened doors for e-commerce brands like Kreeva to grow, says Dhameliya. The brand also witnessed an increase in the number of products in carts per shopper during the pandemic.

Among the homegrown labels, fusion and ethnic categories are best sellers. E-commerce platform Flipkart shares that 2021 saw an interest in fusion ethnic and affordable ethnic wear during the festive season. In the category, the men and women *kurta* segment, ethnic dresses and asymmetric / A-line *kurtas* continue to be popular choices. Amazon Fashion India, too, saw an uptick in the sales of local homegrown brands over the past few years, which has paved the way for more conscious, localised and eclectic brands in the country. “There was a surge in the demand for ethnic and fusion wear this festive season. A spike in demand was seen for *salwar kameez* and other ethnic and fusion wear such as *saris* and *kurta* sets for women as well as men,” adds Saurabh Srivastava, director and head of Amazon India Fashion.

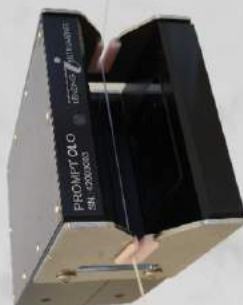
Another e-commerce platform Etsy has several small and medium sellers selling directly to the customers. Kari by Kriti, available on Etsy, is Hyderabad-based Kriti Jindal's brainchild. She shares that the last couple of years have seen a tremendous growth in small businesses that are leaning towards sustainability, ethically sourced, organic, and hand-made products.

Unfortunately, the sustainable fashion wave is yet to catch up in India, feels Delhi-based Payal Jaggi, who started Kinche by Payal, an upcycled clothing brand on Etsy, in 2014. As far as sustainability is concerned, fashion will be a last resort in India since festivals and weddings demand fast production and instant gratification, she says.

“All my *kantha* jackets are now upcycled and my *phulkari chaddar* jackets are getting a lot of attention. I believe that people in India have always experimented with fashion but unfortunately sustainability is not the first thing on everyone's mind,” she adds. ■



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# RMP Bearings Limited, leading manufacturer of auto & textile bearing, parts & sheet metal components

## RMP Bearings Limited

### Few words about RMP

Founded in 1978, RMP Bearings Limited is at the forefront in design and innovation and has become a major supplier to the Automotive and the Textile Industry and is a leader in providing state-of-the-art products and solutions.

RMP Bearings Limited products are renowned for providing market leading technological component & system integrated into a customized solution package. We are a proud member of the automotive component supplier group and among the frontrunner in product development & serial production to the automotive industry.

Our constant growth has been ably supported through its world class Research & Development Centre which has been at forefront of providing new innovations to meet the high standards of the global automotive industry. We have the highest quality machines equipped with the latest instrumentation and computation technologies to accurately simulate, develop and test products and systems for varied technologies.



SHRI R.C. MAKWANA  
CHAIRMAN



SHRI M.R. MAKWANA  
MANAGING DIRECTOR

### Key features of RMP

#### Business segments of RMP

- ⇒ OEM Business – Domestic
- ⇒ Replacement Market – Domestic
- ⇒ OEM – Overseas Business
- ⇒ Replacement Market – Overseas Business

### The Team of RMP

**Teamwork makes the dream work : a peek into our company**

We have over 42 years of experience and have implemented Quality Control Systems like QS

9000/ IATF 16949. We are well supported by our 1000+ strong experienced workforce engaged in various departments like Manufacturing, R&D, Quality Control and Sales. We would be proud to be associated with you as YOUR development partner.

### Plant Strength of RMP

#### Manufacturing Plant @ Ranpur, Gujarat (India)

Year of Establishment : 1978

Total Area : 30,000 Sq/ Mt

Built up Area : 18,000 Sq / Mt

Total Strength : Skilled Work Force : 550, Semi Skilled : 200

Techno Commercial Staff : 155

Senior Management, Engineers in Manufacturing, Quality Division & New Product Development : 90 Nos.

In House Facility : Own well Equipped Tool Room, Material Testing Laboratory, Heat Treatment Plant, Zinc Plating & Blackodizing Plant, Grinding Shop, Press Shop, Fully Equipped Quality Assurance Department, Automatic Super Finishing & Assembly Line.

Certificates : IATF 16949 : 2016 & ISO 14001 : 2015

### Research & Development of RMP

**Productivity requires input, and that's what research is**

RMP Bearings Limited R&D Centre's aim is to be a faithful and dedicated development partner to its global client base. Our goal is to form a mutually beneficial relationship with our clients and become their partners in providing creative & innovative solutions to their engineering & technical requirements.

Our vast experience in design, engineering, technological developments and providing customized solutions is the bed rock of RMP Bearings reputation and performance. Our constant growth has been characterized by our in-house ideas and innovations.

Revolutionary and Innovative ideas are transformed into ground breaking products by a comprehensive process of design, prototyping, testing, validation & serial production. We have highly skilled project managers who are an



integral part of each project and are instrumental in managing each projects requirements, progress and solutions.

#### **Infrastructure of RMP**

#### **Boosting business productivity with our expertise and technology development**

Our core competency lies in our vast repository of expertise and infrastructure created over the past three decades. We have the latest and sophisticated machines on our various production lines and these manufacture products with cutting edge technology delivering products of supreme performance.



RMP Bearings Limited has painstakingly established its credibility in the manufacture of Sheet Metal, injection Molding, Automatic Temperature Control Heat Treatment, Finishing & Super Finishing processes.

At RMP Bearings Limited we follow stringent Quality control checks to ensure products of highest quality and with zero defects to ensure that we constantly achieve and surpass International Quality Standards. TQM is applied at each stage of production from design to dispatch of finished products. We constantly perform intensive testing of products on the latest state of the art metallurgical & metrological instruments.

#### **RMP's Manufacturing Facilities**

**We make it happen**

#### **Tool Room - Inhouse Machine Building activities**

We have developed our own in-house machine development capabilities that have continuously

boosted RMP Bearings Limited infrastructure and credibility. This facility has its own dedicated Tool Room manned by Tool Specialists which manufacture special purpose production machines, testing fixtures, injection molding tools & press tools.



#### **Marketing Activities**

#### **Implementing our marketing plans to generate leads**

We have Branch Offices located Pan India which support our marketing activities. The Marketing division is led by Mr. Miten Makwana- Managing Director. He has a vast and sound experience in leading the Business Development and Marketing divisions of Automotive and Textile Industries and has been instrumental in contributing in the growth and strengthening of our business.

#### **Some OEM Prominent Customers—Textile of RMP**

- ✧ LMW
- ✧ KTTM
- ✧ Truetzschler India
- ✧ Saurer
- ✧ Rieter

**For further information, please contact :**

**RMP Bearings Limited**  
**Station Road, Ranpur-382245**

**Dist. Botad (Gujarat), India**

**Phone : +91 2711-238227**

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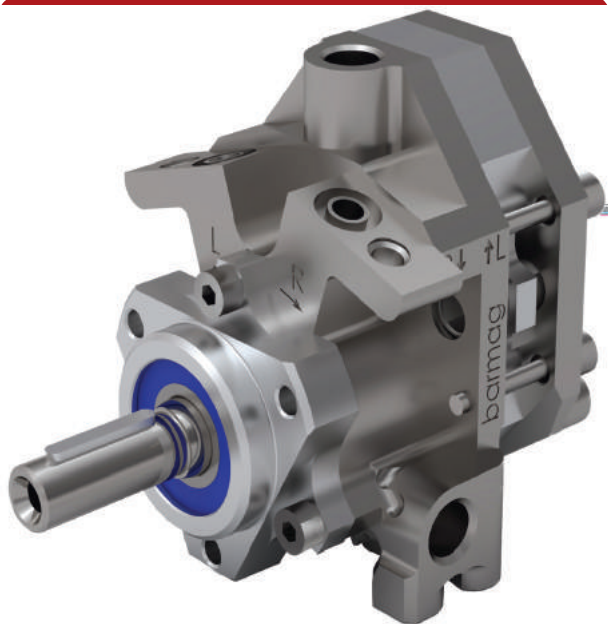
## Oerlikon

**Oerlikon Barmag at the PaintExpo 2022 held in Karlsruhe from April 26-29**

### Light and high-precision

Extremely low weight, improved productivity and increased service life – these features would be making Oerlikon Barmag's GP451C paint metering pump stand out at this year's PaintExpo, took place in Karlsruhe (Hall 3, Stand 3235) between April 26 and 29. Developed especially for increasingly compact robot arms deployed in paint and lacquer systems, the pump enables efficient, high-precision paint application in automobile production, in the aerospace industry and in the manufacture of components for generating renewable energy, for instance.

Paint application is frequently one of the most challenging manufacturing processes. Growing requirements in terms of the durability of end products demand highly-efficient paint and lacquer systems that apply paints and lacquers perfectly with regards to both look and feel, ensuring they provide the toughest and most wear-resistant surfaces possible. Oerlikon Barmag has been producing gear metering pumps for metered surface coating and painting since 1985. The high-precision pumps allow the paint and lacquer system atomizers to carry out their task reliably.



The Oerlikon Barmag paint metering pump is easily adapted to the production systems' periphery.

### Long service life and extreme flexibility

Coming in at less than 1,000 g, the GP451C excels as a result of its particularly low weight. This considerably reduces the wear on the arms of the painting robots used. "The GP451C's already low weight can be additionally reduced if produced by means of additive manufacturing", explains Thorsten Wagener, the Sales Manager responsible for pumps. "The innovative technology permits total design freedom when adapting the pump to the production system's periphery", he continues.

The pump has a wide speed range (20 - 240 rpm), hence covering a large application area, which means that manufacturers do not have to deploy several pumps of varying sizes. At the same time, they save time and costs for product conversion, logistics and parts inventories.

The DLC wear-protection layer and the use of ball bearings considerably increase the pump's service life. Furthermore, the pump is clearance volume-optimized in design, which dramatically shortens the required purging and product conversion times, hence helping to increase productivity.

### About Oerlikon

Oerlikon (SIX: OERL) is a global innovation powerhouse for surface engineering, polymer processing and additive manufacturing. Its solutions and comprehensive services, together with its advanced materials, improve and optimize the performance, function, design and sustainability of its customers' products and manufacturing processes in key industries. Oerlikon has been a technology pioneer for decades. All developments and activities have their origins in the passion for supporting customers in achieving their objectives and increasing sustainability. Headquartered in Pfäffikon, Switzerland, the group has two divisions: Surface Solutions and Polymer Processing Solutions. The group has a global footprint of more than 11,800 employees at 207 locations in 38 countries and generated sales of CHF 2.65 billion in 2021.

For further information: [www.oerlikon.com](http://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 added 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](http://www.oerlikon.com/polymer-processing)

**For further information, please contact :**  
**Ute Watermann**  
**Marketing, Corporate Communications**  
**& Public Affairs, Oerlikon**

**Tel. +49 2191 67 1634**

**Fax +49 2191 67 1313**

**[ute.watermann@oerlikon.com](mailto:ute.watermann@oerlikon.com)**

**André Wissenberg**

**Marketing, Corporate Communications**  
**& Public Affairs, Oerlikon**

**Tel. +49 2191 67 2331**

**Fax +49 2191 67 1313**

**[andre.wissenberg@oerlikon.com](mailto:andre.wissenberg@oerlikon.com)**



## U V Hitech Pvt Ltd

### U V Hitech offered to Textile industry best automatic warehousing solutions in partnership with Automha

UV Hitech Pvt Ltd having its corporate office in Mumbai was established in year 2000 with an intention to serve the Textile Industry on an all-India basis with creative solutions for improving the productivity / quality and energy conservation. The solutions covered all the segment of Textile Industry ranging from cotton ginning to yarn, from fibre to fabrics/ knitting, finishing non woven, made ups, and manmade textiles/garments

The expansion of production capacity of Indian Textile industry was realised through most modern technologies evolving around the Textile machinery world. However, it was soon realised that industry had a very poor infrastructure for storage & supply chain and was seeking to find the right solution.



UV Hitech soon appreciated these requirements and offered to Textile Industry the best and the most efficient warehousing solutions in partnership with Automha Italy with following features:

- A. High throughput
- B. Traceability of goods produced and Raw Material
- C. Dense storage
- D. Lowest foot print

## SCIENCE IN INDUSTRY

- E. Low operation cost by employing less manpower
- F. Low-cost warehouses

Textile Industry has a complex matrix in terms of huge number of intermediate processes, different technologies, production capacities for the final goods such as ladies' wear/ men's garments/ children wear/ sportswear/ season wear/ casual wear/ knit wear /furnishing fabric /non woven / technical textile etc and therefore warehousing solution becomes complex & customized. Depending upon customer's needs a solution is developed, which can be a fully automatic or a semi-automatic warehouse with latest management software. The tallest warehouse built so far is 38 meters with an uptime of 98.5%

Some of solutions implemented are as follows

- ❖ Multi-deep Grey yarn storage solution
- ❖ Dyed yarn Automatic storage & retrieval system

- ❖ Fully automatic Single roll storage solutions
- ❖ Fully Automatic double deep storage solutions with rolls in pallets
- ❖ POY yarn fully automatic warehousing solutions
- ❖ DTY fully automatic warehousing solutions
- ❖ Grey knits fabric semi automatic warehouse
- ❖ Finished knit fabric semi automatic warehouse

These solutions allow the textile companies to expand production base /improve warehouse management/timely dispatches with less mistakes, real time information of raw material and finished goods etc.

For further information, please contact :

UV Hitech Pvt. Ltd.

Rajesh Padalkar

rajesh.padalkar@blkrsna.com



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## Vetri Engineers

**VETRI B2B smart transformations within short notice from Vetri stock**

**You are cordially invited to visit our stall BA 51 in the forthcoming tex fair at Coimbatore from June 24-27, 2022**

### PROFILE

VETRI ENGINEERS, Global Spinner's trusted top rollers from India, a progressive organisation established in 1992 at Coimbatore, has developed a vast network around the world as a renowned supplier of Textile Spinning replacement spares.

Indeed, we could achieve this recognition simply with our commitment towards excellence in our products sourcing, manufacturing, quality control & inspection, real value for money, relationship, strict delivery and after sales service.

VETRI Engineers an ISO 9001 Certified company is trusted for its commitment and focussed on customer delight and just in time deliverables with competitive price.

### KEY STRENGTH

VETRI's strength focus on customer centric and ever-growing needs of our customers prompt to add new products to our range, While the existing products are also constantly updated.

VETRI specialized in manufacturing, sourcing, and exporting of engineering products & components customised for various industrial applications to many countries with their expertise reverse engineering process.

VETRI has more than 5000 parts made / sourced with full back up technical specifications and dimensional drawings unique from the textile spares suppliers all fully quality tested and made exports in the last 29 years.

### CUSTOMER DELIGHT

In addition to existing manufacturing supplies of new Top rollers and End bushes, VETRI also caters reconditioning activity of Top rollers and specified draw frame end bushes to entire satisfaction of its valuable customers provided with quality inspection report.

### INFRASTRUCTURE

VETRI has an exclusive In- house manufacturing with highly precision automated Japanese CNC machines value worth INR 80 lacs to produce STATE OF ART end bushes with stringent quality and reliability.

The only manufacturer passionate to produce nearly 222 types of Top rollers for almost all kind

of textile preparatory machines in the world with WTO compatible.

### PRODUCT LAUNCH

The company is launching greasing type end bush for Rieter D50 and LMW LDF3 draw frames at the show. Some of the key benefits of the product include, longer life, better performance and minimal maintenance.



FIRST TIME IN INDIA –VETRI END BUSH MANUFACTURING WITH HIGHLY PRECISION AUTOMATIC JAPANESE CNC MACHINES  
VALUED Rs. 80 lakhs

### VISION 2025

VETRI Engineers will be able to excel 4 times production as against the existence.

### SLIVER QUALITY DETERMINING YARN QUALITY

VETRI produces world class Top rollers proven for its performance and long life determining the sliver quality of Comber, Draw frame & Lap former machineries of M/s. Rieter, Ingolstadt, LMW, Trutzschler, Zinser, Vouk, Toyoda, Hara Cherry, Howa, Padmatex, Texmaco – Howa, Platts – Sacco Lowell, etc.,

In addition, we also provide vital Textile top rollers for spinning, roving, under casing for carding, Comber Uni Comb, Top combs and Lap Spools & selected spares for various Textile Spinning machines.

### BUSINESS EXCELS

We believe textile industry got huge employment opportunities and request our honourable union textile ministry to extend valuable support in textile manufacturing process, deployment of manpower and overcome the current crisis of steep hike in raw material and imbalanced pricing ratio between cotton and yarn.

In such situation, VETRI with it's extended STATE OF ART "IN HOUSE" manufacturing

## SCIENCE IN INDUSTRY

facilities, Standard and Regular Top Rollers with End Bushes can be made available within 24 Hours to 72 Hours\* from VETRI STOCK. (\*Conditions will apply)

## VETRI ENGINEERS CONNECTING GLOBAL CUSTOMERS

We take this opportunity to wish Textile Industry to excel in the present Textile turbulent Business and look forward soon to greet all our customers across the globe to visit our stall BA 51 at Tex fair 2022, Coimbatore.

For further information, please contact :

Vetri Engineers

348, Sri Lakshmi Nagar 2

Thanneer Pandal, Peelamedu

Coimbatore-641004

Phone : 0422-2513340/50/80, 2513621

Mobile : 77080 40900

E-mail : hr@vetriengineers.com

vetrimail@yahoo.co.in

Website : www.vetriengineers.com



## Trützschler Group SE

Visitors are asked to attend both 308A (Hall 3) of Trützschler Group at ITM 2022

Industry experts and innovative solutions from Trützschler Group will be available for visitors at the ITM 2022 trade fair in Istanbul from June 14-18. At our interactive exhibition booth 308 A (Hall 3), our team will present our state-of-the-art sustainable technologies for the textiles industry – including all business areas: Spinning, Card Clothing, Nonwovens and Man-Made Fibers.

## Sustainability and automation

Trützschler is driven by its vision of smart and sustainable solutions. Visitors to ITM 2022 will experience exactly how we bring this vision to life with our technologies. With regard to spinning preparation our booth will feature the new and easy-to-use combing machine, TCO 21, which maximizes productivity and automation to provide excellent process efficiency and yarn quality.

Name for Quality Products Traverse **DRUMS** for winding Machine

Better Winding &  
Longer Lasting ....



Friction Roller Drum for TFO M/c.'s



Belt Guide Roller for TFO M/c.'s

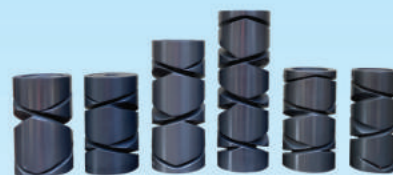


Bakelite Drum

- Bakelite Traverse Drums
- Bakelite Drum with Ceramic Insarts in Traverse
- Aluminum Hard - Anodised Drum for Successfull Performance in Synthetic & Blanded Yarns for RJK, P.S. Mattler Brad Cone, Schalforhst Auto Coner, Kamistu, Textool, Murata, Savio, Lessona, Cimco, Harish and the local as well as winding Machine Requirement



Autoconer Drum



Aluminum Hard Anodised Drum

Manufacturers of Quality Product Traverse Drum  
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Based on various graphics and animations, guests get the latest of the pre-cleaner CL-X and our intelligent card TC 19i, which utilize advanced air technology and contribute to more energy-efficient



Meets the demands for cotton yarn spinners around the globe:  
The new Trützschler comber TCO 21

spinning mills. Visitors will also get a chance to see and touch card slivers made from recycled materials at our booth. They can then talk to Trützschler experts about our specially designed recycling card, TC 19i for Recycling. It empowers customers to achieve highest possible quality when carding secondary fibers from torn waste through continuous self-optimization.



The pre-cleaner CL-X contributes to a more energy-efficient spinning mill through advanced air technology.

Models and samples will also showcase our unique range of wires for card clothing, including solutions for recycling applications. Trützschler Man-Made Fibers will present news about all variations of the OPTIMA platform for Bulk Continuous Filament (BCF) carpet yarn manufacturing. Whether BCF standard qualities, low dpf, high-count or tricolor yarns – OPTIMA delivers highest productivity and yarn quality. Further, our booth will offer touchscreen movies that share interactive information about our technologies for nonwovens – with a special focus on our efficient cotton nonwoven lines as well as our proven carded/pulp technology. Both concepts allow for manufacturing eco-friendly wipes from renewable resources, for example pulp

and re-generated cellulose fibers, such as viscose and lyocell. Moreover, Trützschler Nonwovens will introduce its new digital solution, T-ONE, which enables our customers to keep an eye on the quality of their products as well as their line performances.



Trützschler Nonwovens' proven carded/pulp technology enables the production of eco-friendly, biodegradable baby and body wipes.

#### Solutions and services for the strong market in Turkey

At Trützschler, we view Turkey as one of our top markets worldwide. The demand for innovative textile machinery solutions is very strong – and it is growing all the time. This trend is driven by the constant push for saving energy and boosting resource efficiency, while cutting costs.



Trützschler Man-Made Fibers: With 4-ends per spinning position our OPTIMA BCF extrusion systems are unrivalled in the market.

Our local service team is dedicated to supporting customers at every stage in the lifecycle of our machines, and we collaborate closely with our local partners to deliver outstanding performance.

If you want to know more about Trützschler solutions for better efficiency and quality and discuss your projects with our sales and service team, visit our booth at ITM 2022.



## SCIENCE IN INDUSTRY

We are looking forward to meeting you in Istanbul in June.



Trützschler Card Clothing offers a unique range of wires and flat tops, including specific solutions for recycling

#### 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](http://www.truetzschler.com).

For further information, please contact :

Trützschler Group SE

Postfach 410164

D-41241 Mönchengladbach

Kleo Knippertz, [kleo.knippertz@truetzschler.de](mailto:kleo.knippertz@truetzschler.de)

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**ISO 9001:2008 COMPANY**

# MEHRA WAX ROLLS



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Under Certificate Number - C813639SUPPTEx01.2009



Manufactured by:



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## Marzoli India

### Camozzi Group

#### Market Information

#### India-UAE free trade pact comes into force

India and the UAE's free trade agreement has come into effect on 1 May, under which domestic exporters in various sectors such as textiles, agriculture, dry fruits, gems, and jewellery will get dutyfree access to the UAE market.

These consignments to Dubai will not attract any customs duty under the pact, which is officially termed as Comprehensive Economic Partnership Agreement (CEPA).



The Central Board of Indirect Taxes and Customs (CBIC) and the Directorate General of Foreign Trade (DGFT) has issued relevant notifications for the operationalisation of the agreement from May 1.

The UAE is the second or third largest trading partner of India and that country is a gateway to the middle east, North Africa, Central Asia, and sub-Saharan Africa, he noted.

The trade pact will help in taking the two-way trade to USD 100 billion in five years from the existing USD 60 billion.

(To read more please visit: <https://www.financialexpress.com/May 01, 2022>)

#### Khadi sales soar 43%, hitting a record high of Rs 5,000 crore

Khadi sales rose 43% to a record high of Rs 5,052 crore during the last financial year, making it bigger than several textiles companies in the country.

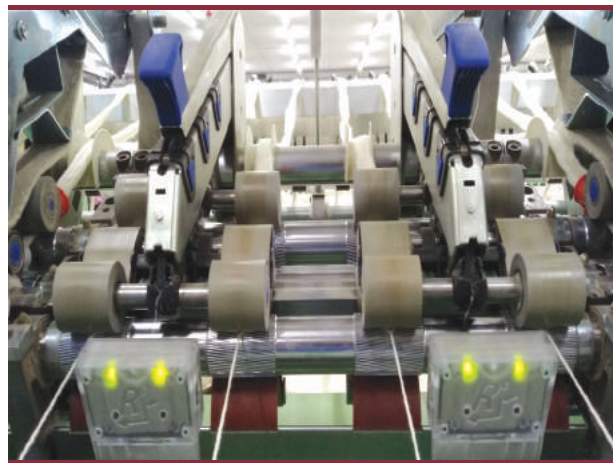
Nearly a third of this was accounted for by the sale of cotton fabric with another 22% made up of garments. In a statement, Khadi & Village Industries Commission said during 2021-22 its cumulative sales topped Rs 1 lakh crore, including village industry produce such as food items.

During the last financial year, its turnover is estimated to have increased over 20% to 1.15 lakh

crores, with production being ramped up. Overall production rose 16.7% to over Rs 84,000 crore.

#### Marzoli Innovations

Marzoli exhibited 19 Patented Innovations in ITMA 2019 which involves 140,800 manhours in R&D and 4500 new drawings.



#### TAOMApp

The mission of Marzoli derives from this consolidated expertise: being a Solution Provider by leveraging technical and technological know-how that is unique in the world. Recently, we launched an application TAOMApp (Trash Analyse Opening Marzoli Application) on Trash Analysis which helps users to identify the Trash. The analysis of trash is possible with the app TAOMApp, created by Marzoli in collaboration with Camozzi Digital, the first patented software platform in the world based on Artificial Intelligence. The application use photos of the cotton bales to calculate the trash level with AI Technology. It permits the collection of a large number of samples, to improve the accuracy and have a global situation of the material. The customer can take a photo of the raw material and the app gives back a value that can be A, B, C, or D. These 4 categories represent 4 different levels of trash.



#### Steps to activate TAOMApp on your Smart Phone

» Go to Play Store on your Mobile and search for a TAOMApp application.

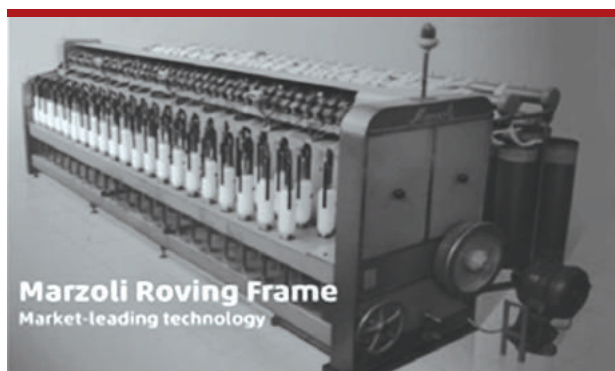


## SCIENCE IN INDUSTRY

- » Trash Application TAOMApp to be installed on an Android-based phone.
- » After the installation, open the application and click on SIGN UP. Fill up all the details as required. Save the details and go to the home screen.
- » Select SIGN IN and give your mail id and password as you have configured in the above step. The tester person's mail ID should be communicated to us.

### How to perform the Test

- » Choose a sample area on 1 cotton bale.
- » The photos must be taken with the following procedure:
  - » The distance of 10-15cm from the sample.
  - » Not blurred (use the smartphone focus to help in that)
  - » Containing only cotton and trash.
- » For each sample, 6 photos will be required to do the analysis.
- » After taking the photos, select all six photos and press analysis.
- » The analysis will take a few seconds and will give back a value that can be A, B, C, or D. These 4 categories represent 4 different levels of trash.



Category ranges have been created based on Global standards with a certain sample of pictures. We suggest you take results from TAOMApp and match them with your TA Instrument in R&D. Please give us the feedback and we will customize it according to the need.

### Technical updates

#### Individual Roving Sensor

- » Eliminates suction fan motor of 4 to 5 KW in Marzoli roving frame.
- » Lowest installed KW in Marzoli roving frame compared to the competition.

- » Exhaust air trenches are not required for the Marzoli roving frame (saving in the construction cost for the new project and increasing the number of spindles per machine for the old project).
- » Humidification fan kW is reduced since there is no suction fan discharged air in our design.
- » Annual saving of Rs 1,89,000 electrical power cost per machine.
- » Loss of humidified air due to continuous suction by open suction tubes of roving frames in case of competition.
- » These sensors are also used for Individual spindle monitoring. Spindle wise breakage record available on display for detailed analysis.

Marzoli, an Italian company with a long history dating from 1851, is today a leading exponent in the supply of spinning machinery. One of the leading manufacturers in Europe of a complete line of machines.

# Insta

## Industrial Ventilation Coolers

Plastic Duct

Industrial Coolers

- Product installed in all type of various industries
- Low Investment / Running cost / Maintenance cost
- It consume only 20% of the power compared to the conventional Humidification and give the same result of air humidity.

Plastic duct - cost effective & long life - simply superb..

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Mob: 9943786494 / 9787676494  
E-mail: sre\_tex@yahoo.com • sretex@gmail.com



Marzoli developed the first roving Frame in 1940, which was Market-leading Technology at Global Level.

In 1999 Marzoli Spa is acquired by the Camozzi family. Under the guidance of the Camozzi Group.

Camozzi Group: One Company video:- <https://youtu.be/00i0bbl7pGM>

The addition of a Digital division within the Group has also made access to digital skills and the potential offered by Industry 4.0 possible.

**YARNET** : One software for the entire spinning line, easy & immediate monitoring of every machine, Recipes editing & uploading and Power management function.

**DRM** : Continuous monitoring of critical parameters, Immediate warning in case of deviations from standards and Predictive maintenance.

The new headquarter in Coimbatore, Tamil Nadu, located in an area of over 10,000 sqm of working space and equipped with the latest technologies, will allow Marzoli to efficiently serve its customers.

**For further information, please contact :**

**Marzoli India**

**MTMM Pvt. Ltd.**

**Door no SF 143/1, 144/1, 146**

**SNMV College Road, Malumichampatti**

**Coimbatore, Tamil Nadu, India-641050**

**Mob : +91 7838380861**

**Mail id : [sudhirmehani@marzoli.in](mailto:sudhirmehani@marzoli.in)**

**Web : [www.marzoli.com](http://www.marzoli.com)**



## TEXLAB Industries

### Write-up and images of highly sophisticated machines manufactured by TEXLAB

We introduce ourselves as one of the leading manufacturers of Textile, Dyes & Chemical Laboratory Testing Instruments, based at Ahmedabad and glad to inform you that we have been granted License to manufacture and Market Fabric Feel Tester—Highly sophisticated Machine developed by Indian Institute of Technology, (IIT) New Delhi.

#### Introduction

Fabric feel is a generic term for the textile sensations associated with fabrics, and remarkably influences consumer preferences of textile products. Although fabric handle is still being

judged effectively to a large extent, the need for objective methods to measure the fabric handle has always existed. At present there are few instruments available for evaluating fabric handle objectively, like Kawabata evaluation system for fabrics. The main disadvantages of this instrument are high cost, complexity and the time consuming procedure. It is proposed to develop a comprehensive system which would give a feel value as well as other mechanical specifications of a fabric in a single test. The proposed instrument will be very helpful to the industries who are dealing with the production, evaluation and applications of textile fabrics for process control, quality control and quick decision making. These industries are mainly weaving industries, processing industries, garment manufacturer, buying houses, test houses etc. It will be also very useful for the academic and research institutes for research and development of new types of fabrics.

#### Purpose of Instrument

- ❖ To measure fabrics softness, feel directly.
- ❖ To select the optimum fabric finish treatment by comparing feel
- ❖ To check change in fabric feel after chemical or mechanical treatment
- ❖ To develop newer fabric with better feel.



#### Users

- ❖ In dyeing & finishing industries
- ❖ In weaving industries
- ❖ In garment manufacturing industries
- ❖ In testing laboratories
- ❖ In academic and research institutes.

#### Salient Features

- ❖ Quick evaluation low cost
- ❖ Real time continuous graph
- ❖ Different nozzle diameter for different types of fabric

## SCIENCE IN INDUSTRY

- ❖ Fixed operating speed
- ❖ Separate load cell for axial and radial force measurement
- ❖ Automatic stop motion.

### High Performance Laboratory Package Dyeing Machine for Yarn - 50g & 200gm.

- ❖ Based on innovative Dyeing technique.
- ❖ Simulates bulk conditions.
- ❖ Each dyepot has independent 12 step program.
- ❖ One can carry out combination of different dyeing simultaneously in different dyepots like polyester, cellulosic or viscose dyeing.
- ❖ Highly repeatable and accurate dyeing with any class of dy including Dispers, Reactive, Acid.
- ❖ Available in 6/12 Pots.
- ❖ Available in 50gms and 200gms.

### Introducing Auto Feed, Drain, Wash & Clean facilities in 50gm and 200gm

Range of Cotton, Yarn, Fabric, Dyes & Chemical, Processing and Testing Instruments.

### High Temperature High Pressure Yarn Dyeing Machine

- ❖ 50-300 grams yarn dyeing machine 6 pot with 1 HP main pump and DP-01
- ❖ Controller with standard accessories for single pot
- ❖ Minimum order for 3 pots.
  1. Machine capacity : 6 × 300 grams yarn dyeing.
  2. Operation : with plc control and delta make HMI.(OPTIONAL)
  3. Specification of YARN carrier : vertical star type.
  4. Liquor ratio : about 1:10 for air pad and 1:12 for fully flooded operation.  
(This MLR is given for standard size packages. The MLR is directly dependent on the package size, package density)
  5. Heating system : STD electric / steam heating (OPTIONAL)

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SJS 29102



SJS 28991



SJS 28992



SJS 28985







LIGHT RECEIVER / TRANSMITTER  
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 E-mail : [sumanlal@sumanlal.com](mailto:sumanlal@sumanlal.com), [sumanlal1947@gmail.com](mailto:sumanlal1947@gmail.com)  
 Visit at : [www.sumanlal.com](http://www.sumanlal.com)

6. Maximum working temperature : 1450c
7. Working pressure : 4 kg/cm<sup>2</sup>.
8. Addition tank : nil
9. Heating gradient : up to 40c/min.
10. Cooling gradient : up to 30c /min.
11. Maximum bobbin diameter : 95 mm (vessel dia.110mm)
12. Total power : 16.5 kw. (2KW HEATING IN EACH POT WITH 1HP PUMP)
13. Size : 1500 × 1800 × 1250mm.

#### Utility requirements

1. Compressed air : 7kg/cm<sup>2</sup> dry and clean air.
2. Steam line : 7kg/cm<sup>2</sup> saturated steam. (OPTIONAL)
3. Water line : as per process requirement
4. Drain line : for drain out color, chemicals.

This machine is suitable for dyeing synthetic and natural fiber in different forms like loose stock, top or yarn wound on collapsible dye spring using suitable carriers.



The machine will have the following main components:

1. Main dyeing vessel
2. Necessary pipe line for the machine
3. Heating coil / jacket in the main vessel,
4. Stainless steel main pump
5. Fiber carrier (optional)
6. Control panel with dyeing programmer.

#### Function available with HMI is

1. Heating rate
2. Heating
3. Cooling
4. Pressurizing can be set as (for 10kg and above model)
5. De-pressurizing (for 10kg and above model)
6. Inside-outside and out side – inside working time.

7. Control of stop function in-between in – out and out in.
8. Operator call as and when required.
9. Alarm after complete the process.

#### Technical details

Main pump : 1HP × 6 NOS.

Injector pump : NOT REQ.

#### Loading details

The yarn carrier will be designed as the size of the package and will accommodate 300 GRAMS of yarn.

Package size: The carriage is designed for a standard package size.

Diameter of package : 95 mm.

Tube ID : 57mm

Tube height : MAX 230MM

Nett weight of package : 300 GRAMS

No. of yarn carrier poles : 1 no in each tank.

No. of package in each poles : one.

#### Main dyeing vessel

This vessel is made out of S.S 316/316L with a maximum working pressure of 4kg/cm<sup>2</sup> and working temperature of 145°C. The thickness of the shell is 4mm and the dished end is 5mm. The vessel is pressure tested up to 12kg/cm<sup>2</sup>. The main lid of the vessel is easily operated and locking arrangement. The lid is interlocked with other safety devices.

#### Main pump

Main pump is an axial flow pump and it rotates in both directions for change the direction of the liquor flow.

#### Heating and cooling

Jacket is fitted on the vessel, is made out of S.S 316 / 316L seamless pipe to prevent leakage and long life. The same pipe is also used for cooling of the dye liquor.

#### Pipe lines

Complete pipeline with all necessary fittings, valves and hardware is made from stainless steel. Flanges for steam inlet and water inlet will be provided.

#### Pneumatic control valves

Following pneumatic control valves along with solenoid valves will be provided.

1. Heating
2. Cooling water inlet

#### Control panels

With the automation of DELTA MAKE HMI / DP-01 CONTROLLER the following function are controlled.



## SCIENCE IN INDUSTRY

1. Heating rate
2. Heating
3. Cooling
4. Pressurizing can be set as ( for 10kg and above)
5. De-pressurizing ( for 10kg and above)
6. Inside-Outside and out side – inside working time.
7. Control of stop function in-between in – out and out in.
8. Operator call as and when required.
9. Alarm after complete the process.

Main vessel size will be id = 115mm × height 400mm.

For further information, please contact :

**TEXLAB Industries**

Texlab House, Purvadeep,

Near CTM Mills, NH-8,

Amraiwadi, Ahmedabad.380026, Gujarat (India)

Mob- +91-99252 27360/+91-9925227357

E-mail:Info@texlabindia.com



## Loepfe Brothers Ltd

### YARNMASTER® Prisma for clear reasons

**Kohinoor Textile Mills Limited relies on latest Loepfe Technology**

Perfection for compact yarns – The General Managers of Kohinoor Textile Mills Limited Pakistan know exactly what they need for their business and are again relying on the latest Loepfe technology for, clear reasons – a new level in yarn quality with increasing profitability.

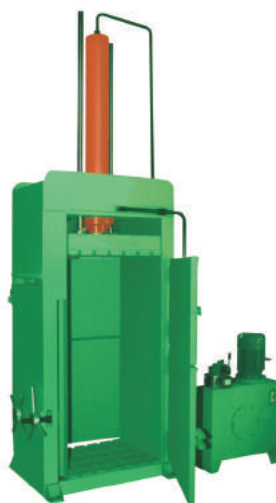
Mr. Muhammad Irfan, General Manager of the Gujar Khan plant and Mr. M. Jahanzaib Baloch, General Manager of the Rawalpindi plant lead one of the most successful textile businesses in Pakistan. They operate nine units with 180,000 spindles, covering the complete range of coarse and fine count yarn from natural to man-made fibers. Kohinoor Textile Mills Limited is known for its consistent yarn quality. The focus on satisfied customers has proven itself and is



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continued meticulously. This is achieved, among other things, through the constant integration of the latest technologies.



Kohinoor Textile Mills Limited

A total of 5,500 Loeffe yarn clearers are integrated into the spinning process, with the first 1,112 winding units now being replaced with the new yarn clearer generation, YarnMaster PRISMA. The motives are clear.

Mr. Muhammad Irfan commented: "Loeffe yarn clearers have helped us to improve our yarn appearance and customer satisfaction. We are delighted to continue our relationship with Loeffe by installing YarnMaster PRISMA on our lines – and, in fact, we are already seeing the benefits of this new leading-edge sensor technology."



Mr. Muhammad Irfan, General Manager of the Gujar Khan plant and Mr. M. Jahanzaib Baloch, General Manager of the Rawalpindi plant and Mr. Martin Bace Service Manager Loeffe

With PRISMA, Kohinoor Textile Mills Limited achieves a new level in yarn quality while increasing profitability. This is accomplished through the unique four-sensor technology combined with the intelligent clearing algorithm. Especially important for Kohinoor Textile Mills

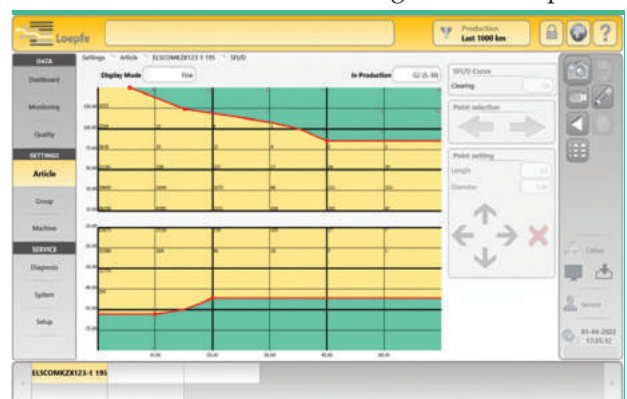
Limited and their mainly compact ring yarn production are the additional fine classes of SFI/D and OffCount clearing. The refined matrices simplify the settings and provide flexibility to adapt the clearing curve to all market needs. Thereby the compact spinners are given the best yarn structure overview of their produced yarn.

Kohinoor Textile Mills Limited uses the unique feature based on the continuous monitoring length of 80 meters for SFI/D clearing and 50 meters for OffCount clearing. Removing long faults in one piece delivers significant advantages:



Mr. Umair Mansoor Service Manager, Service Traders (Pvt) Ltd. Pakistan and Mr. Martin Bace Service Manager Loeffe

- ❖ Increased machine efficiency due to less splice cycles and immediate alarm of bad bobbins after the first few meters
- ❖ Increasing yarn quality due to complete removal of long faults
- ❖ Certainty in yarn quality since no remnants of longer faults are processed further. As this is the case with other yarn clearer models which are cutting longer faults on their set curve and therefore slicing faults into pieces.

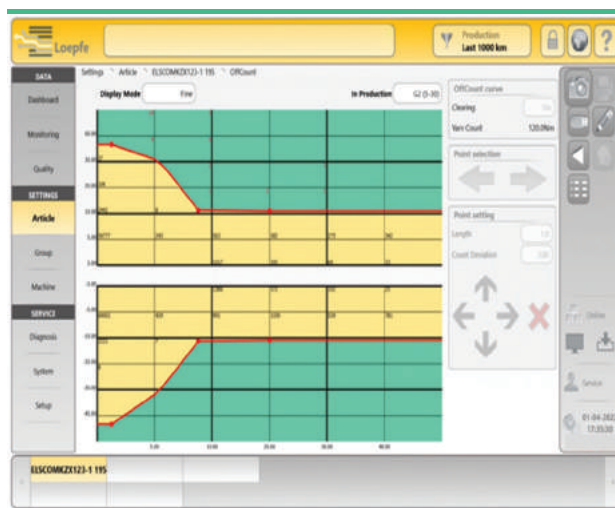


Monitoring length of 80 meters for SFI/D clearing

Mr. M. Jahanzaib Baloch added: "KTML is a vertically integrated set up producing yarn



## SCIENCE IN INDUSTRY



Monitoring length of 50 meters for OffCount clearing

for its own requirement and selling in the local market at the same time. Finished goods are sold to world-famous brands in the US and Europe. Quality is ensured in each and every step. The

export market is very sensitive to contamination. To achieve this objective Loepfe and Service traders are our partners for decades. PRISMA is an excellent product made it possible to optimize at the deepest levels. There is a world full of opportunities in a single sensing head. For us, Loepfe is a brand we trust on."

Immediate and professional support in all matters is a pillar of Loepfe customer care. If our customers are satisfied. Then so are we.

Thank you Kohinoor Textile Mills Limited for your loyalty and we look forward to hearing more about your successes in the coming months!

For further information, please contact :  
**Loepfe Brothers Ltd**  
 Kastellstrasse 10  
 8623 Wetzikon, Switzerland  
 Phone : +41 43 488 11 11  
[marketing@loepfe.com](mailto:marketing@loepfe.com)  
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## Mayer & Cie.

### Mayer & Cie. to showcase three machines at the ITM in Istanbul

#### Turkish circular knitting market offers prospects in turbulent times

After a four-year, Covid-related break the German circular knitting machine manufacturer Mayer & Cie. is exhibiting with its Turkish representative Mayer Mümessilik (MMÜ) once more at the important International Textile Machinery Exhibition (ITM) in Istanbul. At Booth 713 in Hall 8, Mayer & Cie. will present three machines: the D4-2.2 X interlock machine, the OV 3.2 QCe for double jersey structures and the MV 4 3.2 II for single jersey fabrics. For the Mayer & Cie. and MMÜ team the focus will be on in-person contacts with customers, suppliers and partners. Despite the tense international situation both the manufacturer and its representative are positive about the medium-term outlook for the Turkish market.



Despite the many challenges global economy faces, Mayer & Cie. sees good perspectives for the Turkish market.

#### Established machines with that something special: OV 3.2 QCe for double jersey structures

The portfolio of machines that Mayer & Cie. is exhibiting at the ITM is tried, trusted and popular. The OV 3.2 QCe is a specialist for interlock fabrics and double jersey structures that it knits in both filament and synthetic fibre yarns. With a conversion kit the OV 3.2 QCe also qualifies as a producer of 8-lock structures, spacer fabrics and fine gauges. The machine is available in a choice of three frames: from open-width and industrial to giant frame. Stefan Bühler, regional sales manager for Turkey, has this to say: "Not for nothing has the OV 3. 2 QCe been one of our

most popular machines for years. It is mainly used for sportswear and for leisure- and outerwear." In Istanbul the OV 3.2 QCe on show will be a 30-inch, E40-gauge model.

#### D4-2.2 X for fine rib and interlock fabrics

The double-jersey D4-2.2 X is an obvious choice for knitting fine rib fabrics of up to E28 gauge. Spacer and interlock fabrics are also part of the machine's established repertoire. And it can produce elastomeric plating in both cylinder and dial cam. No matter which of these tasks is assigned to the D4-2.2 X, it performs it with impressive productivity.



An assembly line at Mayer & Cie. in Albstadt-Tailfingen.

#### MV 4 3.2 II for flexibility in the single jersey sector

In the single jersey sector, the long-established German firm delivers a literally fine solution. The MV 4 3.2 II on show at the ITM knits to an E38 gauge. The machine can also be supplied for gauges from E14 to E60. It is, in addition, highly flexible, with a repertoire that ranges from piqué and double piqué to one-thread fleece and smooth single jersey. our performance for your profit.

#### Turkey is a market with prospects

"The challenges that the global economy faces are at present enormously wide-ranging, of course," says Mayer & Cie.'s Turkey specialist Stefan Bühler. "The Russian invasion of the Ukraine, supply chain outages, shortages of raw materials and skyrocketing energy prices all create uncertainty." And then there is galloping inflation in Turkey and elections in 2023. Yet despite, and in part because of, this state of affairs Bühler and Kahraman Güveri, CEO of Mayer & Cie.'s Turkish representative MMÜ, hold a positive view of the market outlook for the years ahead. Large orders, especially for standard products, are on the increase, Kahraman Güveri explains.

## SCIENCE IN INDUSTRY

That leads to new investments, new companies and a growing demand for refurbished machines that then need to be replaced by new machines elsewhere. And former commission merchants are now enterprises in their own right.

"Apart from that, Turkey benefits from its proximity to Europe, transport routes are manageable," says Stefan Bühler. "This location advantage attracts brand manufacturers who together with their orders bring new approaches, new designs and new technologies into the country." And Turkey's already very highly developed textiles sector benefits too. That, says Kahraman Güveri, is why one can be confident for the next few years, "at least for as long as nothing unforeseen happens".

#### The ITM is an important platform

The last ITM was held in 2018. Held every other year, the ITM fell afoul of the Covid pandemic in 2020. It is not yet clear how attendance will compare with before the pandemic. "The ITM,



Mayer & Cie. headquarters in Albstadt, Germany.

together with the ITMA, was definitely a highlight in the trade fair calendar," Stefan Bühler says. "I have my doubts as to whether it will attract such a large international turnout this time round. Yet we nevertheless look forward to it eagerly. There is no substitute for direct, in-person contact with customers and partners, and after two years of online meetings it is simply an urgent necessity." our performance for your profit



**DEVELOPED FOLLOWINGS TO IMPROVE YARN QUALITY BY MINIMUM 20 % IN IPI & CLASSMAT**

From The Result of 36 mm Short Cradle & 43 mm Medium Cradle

AGMA Cradle	Cradle Size & Colour	For Top Arm	Yarn Type	Can be Used for
	AGMA - 43" Black Colour	Rieter / Lakshmi P3-1	Normal, Milange, Slub, Licra, Eli Twist & Compact	100 % Cotton, P/C, 100% Viscose P/V Blend Up to 44 mm Cut Length
	AGMA - 40.5" Light Green Colour	Rieter / Lakshmi P3-1 Sussen Top Arm	Normal, Milange, Slub, Licra, Eli Twist & Compact	100 % Cotton, P/C, 100% Viscose P/V Blend Up to 40 mm Cut Length
	AGMA - 50" Light Blue Colour	Rieter / Lakshmi P3-1 (For Medium Cradle Drafting)	Normal, Milange & Slub	100% Viscose P/V Blend Up to 51 mm Cut Length



AGMA Cradle	Cradle Size & Colour	For Top Arm	Yarn Type	Can be Used for
	AGMA - 40.1" Yellow Colour	SKF & TEX PARTS PK 225, PK 2025	Normal, Milange, Slub, Licra & Compact	100 % Cotton, P/C, 100% Viscose P/V Blend Up to 40 mm Cut Length



**SPACER - DISTANCE CLIP**

A) Single Spacer from 2.50 mm to 6.00 mm

B) Twin Spacer from 2.50 / 2.75 mm to 6.00 / 6.25 mm



**AGMA Saddle Gauge**

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### About Mayer & Cie.

Mayer & Cie. (MCT) is a leading international manufacturer of circular knitting machines. The company offers the entire range of machines required for making modern textiles. Fabrics for home textiles, sportswear, nightwear and swimwear, seat covers, underwear and technical uses are made on MCT knitting machines. Furthermore, Mayer & Cie. regularly develops new approaches underlining its leadership in technology.

Since 2019, Mayer & Cie. has augmented its portfolio by braiding machines which produce sheathings for hydraulic tubes used in aviation, automotive industry as well as in further, very specific fields of applications.

Founded in 1905, Mayer & Cie. generated sales of EUR 103 million in 2021 with about 450 employees worldwide, according to preliminary figures. In addition to its headquarters in Albstadt, Germany, where around 350 people work, and subsidiaries in China and the Czech Republic, sales partners for circular knitting and braiding machines in around 80 countries represent Mayer & Cie.

For further information, please contact :

**Claudia Bitzer**

**Kommunikation & PR**

**Mayer & Cie**

**Tel.: +49 (0)7432 6057201**

**Mobile: +49 (0)179 2222279**

**E-mail: Presse@mayercie.de**

**www.mayercie.com**



### **Lakshmi Ring Travellers (Coimbatore) Private Limited**

#### **Know about Dealing with End-breaks in Spinning**

End breaks in Spinning cause a loss in production because the spindle produces no yarn after an end breaks until it is pieced. An operator may serve few thousand spindles in modern unit and it is unavoidable that on occasions, an end break will cause a delay of perhaps twenty minutes or even longer before a piecing made. If an end break occurs every minute on every spindle, the production efficiency would be terrible.

When an end breaks, normally the fibre keeps flowing and it is sucked away by pneumafil system. To manually piece the breakage, the operator has to retrieve the end from cop, then thread it through the Ring Traveller, balloon

control rings and lappet hook before inserting into nip of the front drafting rollers. With an experienced operator it takes very few seconds or so. But the time spend on patrolling to find the end break is quite another matter. Machines or additional ring data attachments to identify the broken ends easily, can simulate the action, but the investment is high.

It is also possible to interrupt arrest the movement of roving with roving stop motion system to prevent the wastage choking. The complexity of the roving stop motion results in an initial cost that amounts to a significantly and it improves yarn quality as a consequence. Because of the capital costs involved with the roving stop motion system, most of the spinners prefer the without additional investment on these, but in involves the expense of dealing with around 2% fibre loss.

Waste fibre can be recycled, but only with care because it does not give well spin yarn. It has to be mixed and diluted with virgin fibre. In spinning, there is always some fibre loss from twist triangle zone and suction is always required to remove the waste.

When an end breaks, the amount of waste increase. Overall the spinning frames, there is a level of waste that is dependent on the mean end-breakage rate and beyond a certain level it is difficult to absorb the wastage without deterioration of the plant performance or quality of the product. Apart from the above, using a good Ring Traveller combination will help to reduce the soft waste by minimizing the end breakage in spinning.

#### **Replies from the Readers on the following question**

**What are points to be considered while setting speed pattern in Ring Frame to get better performance ?**

**Mr. Sudhakar Kodela, Vice President, Sri Venkata Siva Parvati Spinning Mills, Chebrolu, Andhra Pradesh**

The following points to be considered while setting speed pattern in Ring frame to get better performance.

**Lift of Ring frame :** If the lift is more, the spindle speed increase will have limitation, but more cop content can be accommodated and better average speed can be achieved. If the lift is less, more spindle speed can be achieved and thus average speed can be achieved to get more production per spindle.



## SCIENCE IN INDUSTRY

**Ring tube length :** If the Ring tube length is more, the spindle speed increase will have limitation but more cop content can be accommodated and better average speed can be achieved. If the Ring tube length is less, better spindle speed can be achieved to increase grams per spindle.

**Ring rail starting position on Ring tube :** The space utilization on Ring tube to the optimum extent will improve the cop content and average speed can be achieved better. Normally 10 MM clearance will be given from bottom of the Ring tube to absorb the variations of Ring rail sections setting and to lay under winding while doffing.

**Ring diameter & Traveller speed :** More Ring diameter will not help to increase spindle speed and with less Ring diameter, we can achieve better spindle speed and more grams per shift, which we need to aim.

**Mr. Abhishek Mehta, Senior President - Maintenance, Nahar Fibres Limited, Jitwal Kalan, Malerkotla, Punjab**

As a thumb rule, speed is kept 80-85% at beginning and 95% at the end of the doff due to higher tensions at these positions. Speed is gradually increased in increments so that two objectives are achieved, first the end breakage should not increase drastically and secondly the power consumption should not shoot up vertically.

In the machines with latest technology, the average spindle speed is usually 3-4% of the maximum speed, where as in older versions it could be 5-8%. The Traveller weight and profile needs to be wisely chosen while increasing spindle speed. Low bow height and lighter Traveller is preferred to increase the spindle speed.

The increased speed affects cop filling and this needs readjustment along with winding length per chace. Rogue spindles should be rectified for the upkeep of the machine performance as a whole.

Few modern machines equipped with observing graph - length vs. speed on the panel and for older models the same can be drawn on laptop, PC and tablet, which will help in identifying points where steep changes can be noticed, this serves as a guideline to begin with and minor alterations can be done by observing the performance on the machine practically at all stages.

**Mr. Raja V M, General Manager, Sri Saradhabika Spintex Private Limited, Billich, Coimbatore**

The productivity of the Ring frame is a major factor contributing to the profitability of Spinning Mill and higher spindle speed has become necessary for higher productivity. Problems encountered in spinning yarns at high spindle speeds include breakage rate, hairiness, strength loss, fly generation and Traveller fly.

To arrive a good speed pattern, stage wise and length wise breakage report should be analysed and accordingly pattern curve should be altered.

Speed pattern - average and maximum speed to be kept as per the yarn CSP of the running material. If the CSP is high, the difference between maximum and average speed may be kept 98%. If the CSP is medium, the difference between maximum and average speed may be kept 95% to 96%. If it is low, the difference may be kept 90% to 92%.

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**Mr. V. Kannan, Senior Manager-Technical, Viswateja Spinning Mills Private Limited, Boyapalem, Guntur, Andhra Pradesh**

Basically, there are three parts of speed selection based on stage wise breakage rate. They are Initial speed selection, Maximum speed selection and Average speed selection.

**Initial speed selection :** It is normally from 8000 to 12000 RPM. Initial speed selection based on the restarting breaks and Traveller size. Higher restarting breaks resist higher restarting speed. Lighter Traveller gives better performance. But, it will not support lower restarting speed.

**Maximum speed selection :** It is based on Count, CSP, Traveller size and Ring diameter. Very important in speed pattern is the selection of maximum speed. Higher maximum speed always gives higher breaks, particularly in Hosiery counts. Lighter Traveller supports higher maximum speed. But in Hosiery counts, it is always recommended coarser Traveller. Also, Ring diameter is important in the selection of Maximum speed.

**Average speed :** It is the heart for speed pattern. It is based on GPS. It is constant based on mills requirement, initial and maximum speed is variable based on TM, Warp or Hosiery, coarser or finer count and type of material and Ring life. We can achieve the average speed in two ways, i.e., lower initial speed and higher maximum speed - 8000 and 22000 RPM. Another one is higher initial speed and lower maximum speed - 14000 and 20800 RPM.

**Breakage rate :** Based on the breakage rate, selection of speed pattern should be set. If the breakage is higher in 1/4, 1/2 and 3/4th stages Traveller selection should be changed and speed should be reduced and vice versa. To achieve average speed, 100 to 150 meter steps should be made. In all counts at 3/4th stage 4 to 8% speed reduction is need to avoid final stage breakages, because of Ring rail load, fluff accumulation and spindle vibration due to higher cop content.

**Mr. T. Guhan, Production Manager, Kiwi Cottspin Mills Pvt. Ltd, Annur, Tamilnadu**

Parabolic curve should be maintained in all steps. According to count, we should start the initial speed from 12000 RPM to 14000 RPM. If finer Traveller or finer count, we can start higher initial speed. We should maintain nominal initial speed according to the start-up breaks.

Doff length and speed pattern's final length should be same. We can reach the high speed at 30% of maximum length. It will vary slightly depends upon the Ring life. If it is compact yarn, we can increase the initial speed as well as high speed. Also, we can reach the high speed quickly in between 25-30% of doff length.

Below 1000 RPM difference to be maintained in between Average and High Speed. If we need to improve the Cop content, we can increase the high speed running length. If we run coarse count up to 25s, it should be set 8 or 9 steps and for above 25s, it should be 10 to 13 steps.

**Mr. S. Kather Mohideen, Factory Manager, Poigai Spinners India Pvt. Limited, Aravakurichi, Tamilnadu**

The following points should be considered, while setting speed pattern in Ring Frame to get better performance

- ❖ In the initial stage, the distance between the front roller nip to ring is high and in this position yarn tension also high. Hence to reduce the yarn tension, we have to reduce the speed.
- ❖ After reaching the 20% of the cop content, we have to increase the speed.
- ❖ Speed must be increased gradually, sudden jumping of speed will create end breakages.
- ❖ In inverter drive, Ring Frames will get smooth speed increase, when compared with variator drive.
- ❖ After reaching 90% of the cop content, we have to reduce the speed to certain level.
- ❖ Parabolic curve pattern will give better results.

**Mr. K. T. Srinivasan, Manager, Premier Mills Limited, Pulankinar, Tamilnadu**

While setting speed pattern the following points to be consider in Ring frame

- ❖ End breaks at re-starting, Initial, middle and final stage should be considered.
- ❖ When end breaks are minimum, to set speed curve accordingly to increase GPS.
- ❖ Speed pattern depends on raw material i.e., Cotton, synthetic or blends.
- ❖ Coarser counts & finer counts also type of process warp, weft or hosiery.
- ❖ Speed pattern can be set based on Traveller weight & profile and Finish.
- ❖ Spinning geometry 18.5 to 25.5 degree will give better yarn tension & less.

## SCIENCE IN INDUSTRY

Mr. K. Ponraj, Manager - QAD, Sree Anandhakumar Mills Private Limited, Saravanampatti, Coimbatore

The following parameters should be considered while setting speed pattern in ring frame to get better performance.

- » Cop Content in grams and Ring diameter
- » Type of Count and material
- » Type of TM and TPI used
- » Top and bottom cop clearance - 10 MM
- » Type of the Traveller profile and weight according the speed
- » Speed pattern should be matched with actual speed at maximum speed.

#### What is Sapphire Plus Travellers ?

LRT had introduced its **Sapphire Plus Traveller** during 2016 with a special diffusion treatment for better wear resistance and long life to cater the needs of spinners of higher productivity and consistent quality. LRT would like to thank its customers for the overwhelming response and acceptance of this product.

Now LRT has upgraded the quality of Sapphire Plus Travellers by improving surface treatment as well as improvement in metallurgical properties to meet the recent requirement of higher spindles speed, more life and running on rings with optimum frictional properties. Sapphire Plus Travellers can be used for spinning cotton, synthetic and blends. Sapphire Plus Travellers have the following advantages :

- » Quicker setting time on Rings
- » Possible for achieving higher speed
- » Increase life due to process improvement
- » Can be used for Running-in of new rings also
- » Best suitable for Compact system
- » Smoother surface finish keeps the yarn quality better
- » Start-up breaks are significantly less due to improved finish.

For further information, please contact :  
Lakshmi Ring Travellers (Coimbatore)  
Private Limited

Sulur Railway Feeder Road, Kurumbapalayam  
Muthugoundenpudur, Coimbatore-641402

GSTIN : 33AAACL3736F1ZV

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## BB Engineering

### BB Engineering is put on shortlist for Plastics Recycling Awards Europe

BB Engineering has been shortlisted for the prestigious Plastics Recycling Awards Europe 2022 for the category Recycling Machinery Innovation with its PET recycling line VacuFil® Visco+ for fiber-to-fiber inline recycling.

"We are still a recycling newcomer and are therefore particularly proud that our technology has already convinced so far that we are now among the finalists. Our origin lies in extrusion, filtration and spinning technology. We have incorporated our decades of know-how in these fields into the development of our VacuFil® Visco+ process. We have succeeded in developing a fiber-to-fiber recycling process that produces high-quality rPET yarn. Being named a finalist is already a great achievement for us." said Mr. Matthias Schmitz, Head of Engineering Recycling Technology.

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BB Engineering GmbH (BBE) is a German machine building company founded in 1997 as a joint venture between Oerlikon Barmag, a subsidiary of Oerlikon Textile GmbH & Co. KG, and Brückner Group GmbH. Today, the company employs more than 160 members of staff at its location in Remscheid, Germany. BBE is the exclusive supplier of its mother companies for extrusion systems, melt filtration technology, recycling technology (VacuFil® Visco+), compact spinning technology (VarioFil®) and air-texturized yarn (ATY) technology. Beyond that, the entire portfolio is offered to third parties within the plastics and textile industry.



3D Rendering of VacuFil® Visco+ for fiber-to-fiber inline recycling

The process presented as part of the award is the combined VacuFil® Visco+ with VarioFil®. This machinery enables the textile industry to perform closed-loop inline recycling of post-consumer polyester (PET) textile waste. The given recycling technology is a thermo-mechanical recycling process optimized for the textile industry. Key component here is the liquid state polycondensation reactor, known as Visco+, to adjust the intrinsic viscosity. Compared to existing fiber recycling processes, which address rather less demanding textile applications and don't include subsequent spinning, BBE's solution is a whole-in-one process that enables the textile industry to perform closed-loop inline recycling of post-consumer PET fiber waste even into high-tech textile yarns with low dpf-values.

The Plastics Recycling Awards Europe 2022 winners will be announced on 23 June, during the second day of the Plastics Recycling Show Europe taking place at the RAI Amsterdam.

Open to organisations and individuals across Europe who are involved in the recycling of plastic materials, the Plastics Recycling Awards Europe are organised jointly by Plastics Recyclers Europe (PRE) and Crain Communications, organisers of the Plastics Recycling Show Europe. [www.prseventeurope.com](http://www.prseventeurope.com).



Mr. Matthias Schmitz, Head of Engineering Recycling Technology

### About BB Engineering

BB Engineering GmbH is a German machine building company founded in 1997 as a joint venture between Oerlikon Barmag, a subsidiary of Oerlikon Textile GmbH & Co. KG, and Brückner Group GmbH. Today, the company employs more than 160 members of staff at its location in Remscheid, Germany, focusing their business on the development, engineering, design and manufacturing of extrusion and filtration technologies as well as complete spinning lines (VarioFil®) and recycling technologies (VacuFil®, Visco+) for the plastics and textiles industry. The services offered range from the design and planning phases all the way through to the implementation of projects.

**For further information, please contact :**

**Mrs. Pia Kürten**

**BB Engineering**

**+49 2191 9510 194**

**[Kuerten.pia@bbeng.de](mailto:Kuerten.pia@bbeng.de)**

**For more information on the awards visit:**

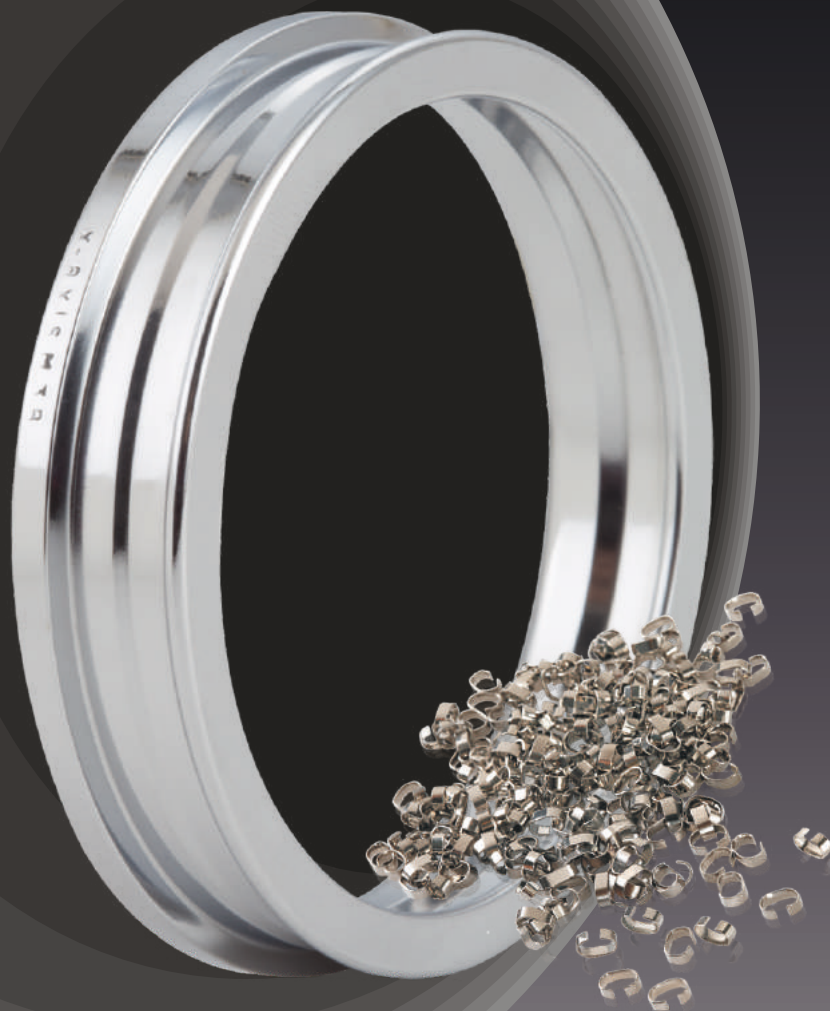
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F : +91 4259 2967 11  
E : marketing@magsolvics.com  
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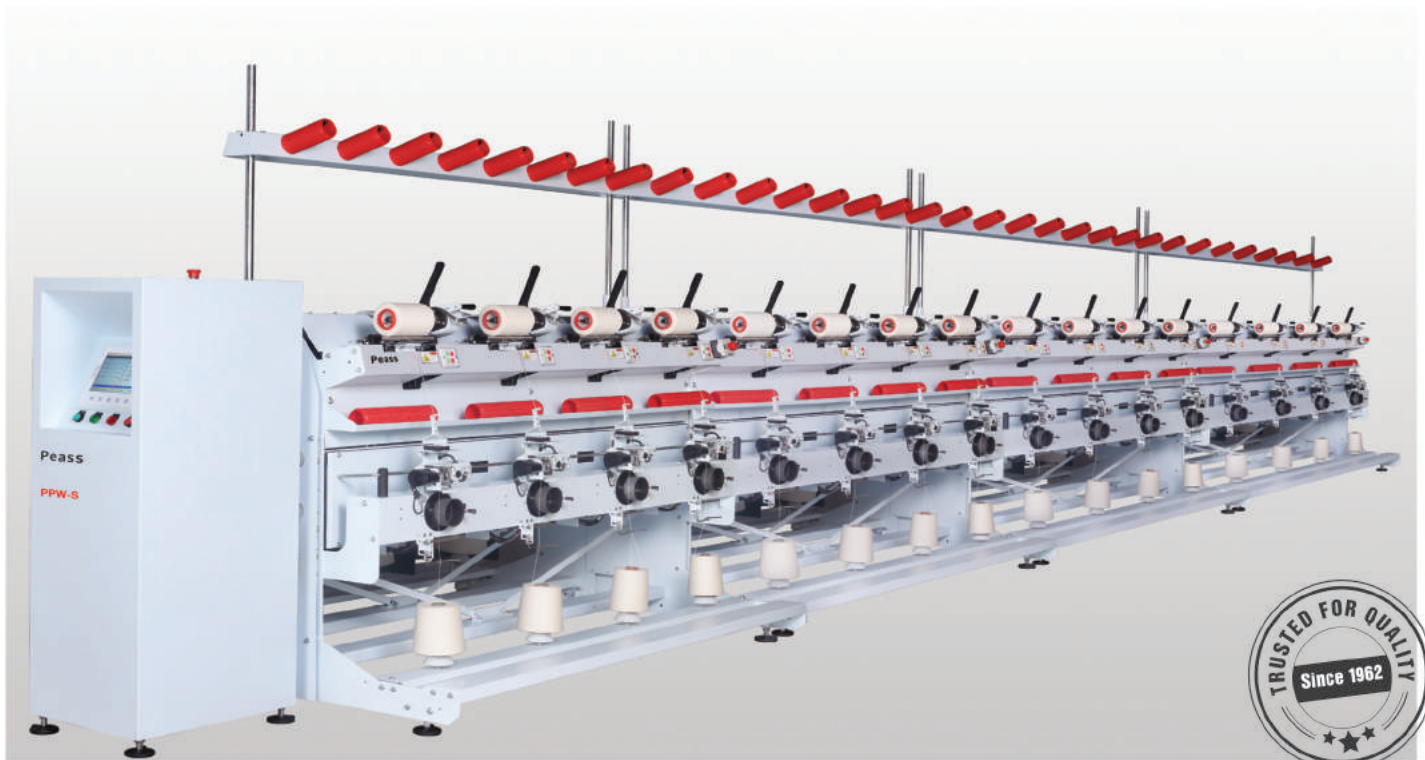




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#### Mumbai Office:

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#### Coimbatore Office:

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509, D.B. Road, R.S. Puram,  
Coimbatore - 641 002 INDIA  
Tel: +91 422 2544097/98  
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E-mail: [cbe@peass.com](mailto:cbe@peass.com)

#### Ahmedabad Office:

Samudra, B-201, 2nd Floor,  
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Navrangpura,  
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