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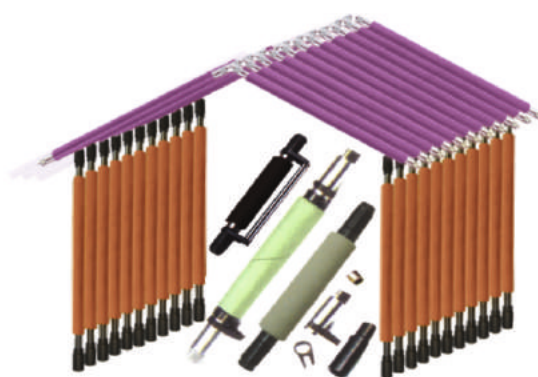
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Editor : Shri Malay Chakarabarti

Asst. Editor : Dr. Tapan Kumar Banerjee

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Eastern Plaza, 8th floor, Suite No. 9/22
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Online thrift stores managed by the students in Lockdown Period

Senior school and college students embarked a venture opening thrift stores during the Lockdown period. In morning they are in studies and evening in thrift stores. A lot of online thrift stores that saw the light in 2020 are managed by eco-conscious, multi-tasking school and college students. During the Lockdown they turned entrepreneurs starting thrift stores —selling pre-loved and export surplus or rejected —garments via Instagram.

Students started the thrift stores with their clothes and donations from their families and later they source garments from the markets around Delhi. During Lockdown students had realised they had many clothes that had never been worn or used. Lockdown saw an increase in the number of such online thrift stores run by students. No access to stores or export surplus and reject markets frequented by students contributed to the trend. People came to realise from the Lockdown that fast fashion comes with a huge price: be it on the environment, labour rights or working condition in the industry. Thrifting is like finding a treasure. Like, finding a high-end piece of clothing is at below retail prices.

Garment and textile industries are pegged as one of the largest pollutants of water. They contribute to greenhouse emissions, and landfills comprising garments made of non-biodegradable fabric. We may suggest for sustainable fashion include making the pattern of consumption circular at the heart, of which is recycling, reused and extending life of a garment. Aware of the facts, these students prioritise being sustainable. Earning while at it is an added incentive.

Since most of the customers of thrift stores are students, therefore merchandise is not priced high. Price is kept fit to the pocket of students and these garments look like anything one would get in branded stores. The prices, usually, are in the range of Rs.200/- to Rs.800/- and in rare cases Rs.1000/-. Most of these thrift stores source garments from the market mostly based in Delhi. Everything from shopping and photography to posting on social media and packaging is handled by students. The trick is posting pictures of garments and clothes in such a way that can catch the eye of the audience and make it as aesthetic as possible. Since the thrift stores are managed mainly by students, they are not sure what future holds for their Lockdown project.

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➡ Britain hikes business tax to pay off nation's vast Covid debt

Britain will raise corporation tax to 25 per cent from 19 per cent from 2023 to help pay for the cost of the Covid crisis but tempered the tax rise with a "super deduction" to spur investment, finance minister Rishi Sunak said recently. "The government is providing businesses with over £100 billion of support to get through this pandemic so it is fair and necessary to ask them to contribute to our recovery," Sunak told parliament. "Even after this change, the United Kingdom will still have the lowest corporation tax rate in the G7," Sunak said. Sunak said he would encourage businesses to invest their cash reserves with a so-called "super deduction" to reduce their tax bill by 130 per cent of the cost. He said that under existing rules, a construction firm buying 10 million pounds of new equipment could reduce their taxable income in the year they invest by 2.6 million pounds but with the "super deduction" they could reduce it by 13 million pounds. "We've never tried this before in our country," Sunak said. Sunak quoted the Office for Budget Responsibility as saying it would boost investment by 10 per cent; around £20 billion higher per year. "It makes our tax regime for business investment truly world-leading, lifting us from 30th in the OECD, to 1st," he said. □

➡ Sudan devalues currency to stimulate economy

Sudan's central bank steeply devalued the country's currency, as part of a broader effort to win debt relief and revive the struggling economy. The move was demanded by international lenders but threatens to pile on more hardship in a country whose inflation rate topped 300 per cent in January. The currency liberalisation is a key component of the economic reforms planned by Sudan's military and civilian rulers, who began transitioning the African nation to democracy after decades of authoritarian rule. The central bank instructed banks and exchange bureaus to adopt the new system immediately, according to a statement on its website. The move essentially aims to stamp out a black market and control currency volatility in a

nation with a foreign debt load of around \$60 billion. The change is critical to helping Sudan win some debt relief, Finance Minister Jibril Ibrahim told reporters, while acknowledging that it will lead to a "soaring of prices." He said "precautions" would be taken to help cushion the impact, but offered no details. □

➡ China sets 6% growth in 2021; to spend 3 times India's on defence

China's government has set a conservative economic growth target for this year, shifting its focus from recovery mode to longer-term challenges like reining in debt and reducing technological dependence on the US. The growth target was set at above 6 per cent, well below economists forecasts, with the budget deficit expected to fall to 3.2 per cent of gross domestic product, Premier Li Keqiang said recently at the opening of the National People's Congress. China projected defence spending growth of 6.8 per cent this year, the largest gain since 2019, amid tensions with the US and key neighbours. The target for 2021 stands in contrast to the 8.4 per cent expansion that economists predict, allowing officials to focus on longer-term ambitions, like developing hitech industries and supporting consumer spending. Military expenditure is expected to climb to 1.35 trillion yuan (\$209 billion) in the coming year, the Ministry of Finance said of late. The figure, released at the start of the annual National People's Congress meeting in Beijing, compares with a projected rise of 1.8 per cent in budgeted fiscal spending. "We will provide stronger financial guarantees to vigorously support the modernisation of national defence and the armed forces, and help China's defence capabilities rise in step with its economic strength," the Ministry of Finance said in a report. A Bloomberg calculation of the latest defence budget number shows spending for this year will actually rise 6.9 per cent. The increase is over three times higher than India's defence budget of about \$65.7 billion (including pensions). Last year, China allocated about \$196.44 billion, according to the state-run Global Times. The defence spending boost comes after China sparred with India on its border and as the nation seeks to modernise its military to make it more competitive with the US. China, the only

major economy in the world to expand last year, also announced recently an economic growth target of above 6 per cent for the year, well below what economists had forecast. "We will boost military training and preparedness across the board, make overall plans for responding to security risks in all areas and for all situations, and enhance the military's strategic capacity to protect the sovereignty, security and development interests of our country," Chinese Premier Li Keqiang said in an annual report to the national legislature. □

► China Feb exports grew at record pace of 154% surge

China's February exports grew at a record pace from a year earlier when Covid-19 battered the world's second-biggest economy, customs data showed recently, while imports rose less sharply. Exports in dollar terms skyrocketed 154.9 per cent in February compared with a year earlier, while imports gained 17.3 per cent, the most since October 2018. The data did not include figures for January alone. In the January-February period, exports jumped 60.6 per cent from a year earlier, when lockdowns to contain the pandemic paralysed the country's economic activity. That exceeded the forecast of analysts in a Reuters poll for a 48.9 per cent surge. Strong exports, which benefited from China's success in largely containing the public health crisis, have helped fuel the country's recovery from a pandemic induced paralysis. The surge was driven by a rebound in foreign demand, customs said in a statement on its website, citing improvements in manufacturing industries in the European Union and the United States, and their increased imports of Chinese products thanks to fiscal stimulus measures. "In addition, a majority of manufacturing employees (in China) chose to stay put over the Lunar New Year holidays," the statement said. "Our survey showed a lot of firms in export-oriented provinces stayed open, and orders that usually only get delivered after the new year had been delivered normally." Chinese factory activity usually goes dormant during the Lunar New Year break, which fell in the middle of February this year, as workers return to their hometowns. □

► Iran and China sign 25-year strategic long-term economic agreement

Iran and China recently signed a 25-year strategic cooperation agreement addressing economic issues amid crippling US sanctions on Iran, state TV reported. The agreement dubbed the Comprehensive Strategic Partnership, covers a variety of economic activity from oil and mining to promoting industrial activity in Iran, as well as transportation and agricultural collaborations, according to the report. No additional details of the agreement were revealed as Iran's foreign minister Mohammad Javad Zariff and Chinese counterpart Wang Yi took part in a ceremony marking the event. The deal marked the first time Iran has signed such a lengthy agreement with a major world power. In 2001, Iran and Russia signed a 10-year cooperation agreement, mainly in the nuclear field, that was lengthened to 20 years through two five-year extensions. Before the ceremony, Yi met Iranian President Hassan Rouhani and special Iranian envoy in charge of the deal Ali Larijani. Saeed Khatibzadeh, spokesman for Iran's foreign ministry, called the agreement 'deep, multi-layer and full-fledged.' The deal, which had been discussed since 2016, also supports tourism and cultural exchanges. It comes on the 50th anniversary of the establishment of diplomatic relations between China and Iran. The two countries have had warm relations and both took part in a joint naval exercise in 2019 with Russia in the northern Indian Ocean. Reportedly, Iran and China have done some \$20 billion in trade annually in recent years. That's down from nearly \$52 billion in 2014, however, because of a decline in oil prices and US sanctions imposed in 2018 after then President Donald Trump pulled the US unilaterally out of a nuclear deal between Iran and world powers, saying it needed to be renegotiated. Iran has pulled away from restrictions imposed under the deal under those sanctions in order to put pressure on the other signatories—Germany, France, Britain, Russia and China — to provide new economic incentives to offset US sanctions. ■

INDIAN ECONOMY AND TRADE TRENDS

⇒ FDI equity inflows surge 40% to \$51.5 bn

Defying the Covid-induced disruptions, foreign direct investment (FDI) in equities in India surged 40% in the first three quarters of this fiscal to a record \$51.5 billion. Gross FDI inflows—which include FDI in equities, reinvested earnings, equity capital of unincorporated bodies and other capital—rose 22% year-on-year to as much as \$67.5 billion between April and December 2020, showed the data released by the commerce and industry ministry recently. Total inflows in December alone jumped 24% from a year earlier to \$9.2 billion. Inflows were boosted by those into the digital sector. Analysts have pointed out that a sizeable chunk of these was drawn by Reliance Jio alone. The FDI inflows take place at a time when domestic private investments have remained elusive in recent years. Investments remain critical to the country's economic resurgence, as private consumption has been badly bruised by income losses in the aftermath of the pandemic. □

⇒ Core sector output grows 0.1% in January

India's eight core sectors recorded a meagre 0.1% rise in output in January, propped up by a 5.1% rise in electricity, 2.7% growth in fertilisers and 2.6% growth in steel production, even as the other five sectors contracted. The core sectors had recorded a marginal growth of 0.2% in December, as per updated data, compared to a 1.3% contraction estimated earlier. Core sectors have an almost 40% weightage in the index of industrial production, and economists expect overall industrial output to record less than 1% growth in January. "This anaemic growth is a concern as this reflects physical production that has now declined by 8.8% for the year," said Madan Sabnavis, chief economist, Care Ratings. "Therefore, while the monetary value-added number has been positive, the same does not hold here," he added. "Cement has now degrown for three months which is disappointing as this reflects developments in the construction sector which was expected to pick up," said Mr. Sabnavis. "The mood in the real estate sector has not recovered as the focus is on disposing off inventory rather than going in for new projects," he added. □

⇒ Exports declines marginally in Feb

If macro economic data released recently brought some cheer as it indicated a revival in the economy, trade data released recently came as a dampener, revealing that exports dipped by 0.25 per cent in February after rising for three consecutive months. Exports attributed the decline to shortage of containers and supply disruptions because of increasing Covid-19 cases in some states back home. According to preliminary trade data released by the commerce department, exports stood at \$27.4 billion in February, compared with \$27.67 billion in the corresponding month last year. The decline was also the result of the high base of last year, as a similar level of exports in January translated to a growth of 6.16 per cent. As was expected, the pharma industry continued to grow in February, rising 14.58 per cent, but major foreign exchange earners such as petroleum, gems and jewellery and engineering goods contracted. In value terms, petroleum products acted as a drag on exports, declining 27.13 per cent. Exports rose 3.55 per cent to \$25.16 billion, excluding petroleum products. Earlier, the World Trade Organization (WTO) had said the high rate of global merchandise trade growth (in volume) during the fourth quarter of 2020 was unlikely to sustain in the first half of 2021 as key indicators appeared to have already peaked. Meanwhile, imports rose for the third consecutive month in February by about seven per cent to \$40.55 billion, led by gold imports, which grew by 124 per cent. Non-oil non-gold imports rose 7.4 per cent to \$23.85 billion, indicating that the domestic economy was on a revival path. Trade deficit or the gap between imports and exports declined to \$12.88 billion in February from \$14.54 billion in January. Aditi Nayar, principal economist at ICRA, said the trade deficit in February was lower than ICRA's forecast by \$1 billion, on account of oil imports, and also marked a moderation from the average \$15 billion deficit recorded in the three months. Sharad Kumar Saraf, president of the Federation of Indian Export Organisations (FIEO), said : "We continue to see signs of further revival not only in the order booking positions, but also in the demand from across the globe, paving the way for much better days and

months for the sector." He, however, said a rise in exports from China has led to a shortage of containers in the region as most empty containers are available only for exports from there. He said the shipping lines and container companies are being paid hefty premiums for bringing empty containers back to China. In a note, Barclays said continued improvement in imports is likely a reflection of the faster pace of normalisation in economic activity. Exports declined 12.32 per cent at \$255.92 billion in the first 11 months of the current financial year. Imports, meanwhile, fell 23.09 per cent to \$340.88 billion during this period. As a result, the trade deficit stood at \$84.06 in the period, down 44.5 per cent from the \$151.37 billion seen the previous year. "We expect the trade deficit to print at \$12.5-13.5 billion in March, resulting in a current account deficit of under \$5 billion in that quarter, Nayar said. □

⇒ Economy set to be back sooner with revival in service sector : RBI

The Indian economy is set to be back on the rails sooner than anticipated earlier as the services sector is also reviving and inflation easing after June, a central bank report said. The latest monthly bulletin of the Reserve Bank of India (RBI), however, warned that vaccinations need to be speeded up amid concerns of a second wave. "There is a restless urgency in the air in India to resume high growth" said deputy governor Michael Patra and his team of economists in the paper published in the latest monthly bulletin. "Incoming data point to even contact-intensive services such as personal care, recreation and hospitality gathering traction and pace even as agriculture crosses production highs in various crops and in horticulture and manufacturing finally shrugs off the vice-like grip of contraction." But the bond market does not seem to be taking the positive cues. "Bond vigilantes could, however, undermine the recovery, unsettle financial markets and trigger capital outflows from emerging markets. The RBI is striving to ensure an orderly evolution of the yield curve, but it takes two to tango and forestall a tandav," wrote Patra and his team. In 2021, inflation will likely ease after June, but

it will be higher than in prints because of the statistical base effects of high inflation a year ago. But inflation has witnessed upside pressures. Headline CPI inflation has moved in a tight range of 5.8 to 6.4 per cent from June, testing the upper tolerance band of the inflation target of 6 per cent. Global oil prices are hardening causing production restraints. "The ratcheting up of input prices to multi-year highs poses a dilemma" said Michael Patra and his team. It is also likely that India will decouple from other emerging economies for which rising financing costs and rising pile-ups of debt prevent recovery. □

⇒ Exports surge 17.3% to 14 bn in first 2 weeks of March

Showing healthy signs of revival, India's exports grew 17.3% to \$14.22 billion during March 1-14 compared with a year earlier, according to the Commerce Ministry's preliminary data. Imports during the period increased 27.8% to \$22.24 billion, leaving a trade deficit of \$8.02 billion, the data showed. The key sectors that recorded healthy growth in exports include engineering, rice, gems and jewellery. However, exports of leather, oilseeds and readymade garments of all textiles contracted during the period. Import of gold, electronic goods and pearls as well as precious and semi-precious stones registered growth during the same period. Growing for the third consecutive month, the country's exports rose marginally by 0.67% to \$27.93 billion in February, compared with the same period in the previous year, even as trade deficit widened to \$12.62 billion. □

⇒ Private sector plays key role to drive economic growth

Finance Minister Nirmala Sitharaman recently said the Union Budget 2021-22 is about the role of government as a facilitator and the private sector as a key driver of economic growth, without which the country would be losing a big opportunity, reports PTI. "The most important component or input required here is the participation of the private sector. Unless the private sector is energised enough, unless it is facilitated enough, India is just losing a very big opportunity," Sitharaman said. ■

Yarn rates pickup on rising cotton prices, demand

Cotton yarn prices have increased sharply in India since the beginning of this year in view of a surge in cotton prices, besides domestic and export demand.

"Prices of the 30s combed yarn, used by the hosiery sector, have been raised by 30-40 per cent by export merchants in Gujarat over the last few weeks. They are quoting the yarn at ₹274 a kg. Prices were ₹245 in January," said Anand Poppat, a Rajkot-based trader.

With demand for cotton yarn being good, at least two months of production of some of the spinning mills has been sold out.

"If you want cotton yarn, you can expect to get supply only late in April or May. If you are lucky, you can get some quantity for March from mills that haven't sold all their production," Poppat said.

According to Trading Economics Website, cotton has gained over 13 per cent since the beginning of 2021, with prices rising nearly 10 per cent in February.

Global cotton prices are seen spiking this marketing season (August 2020-July 2021) in view of production projected at a four-year low, higher imports by China and lower carry forward stocks.

"Cotton prices in New York have increased from around 51.44 cents a pound in June last year to around 89.2 cents by February-end. The rise has come despite the country carrying over record stocks of cotton from last season (October 2019-September 2020)," said Southern India Mills Association (SIMA) Chairman Ashwin Chandran. According to the Cotton Association of India, a body of traders, a record 107.50 lakh bales (of 170 kg) stocks were carried over from last season.

With prices dropping a tad during the weekend, cotton prices in New York quoted at 88.48 cents a pound (₹51,300 per candy of 356 kg approximately).

According to the Cotton Association of India (CAI) and Gujarat Cotton Trade Association, India's benchmark Shankar-6 cotton is offered for exports at a little below ₹48,000 a candy.

Cotton futures for delivery in April ruled 1.17 per cent lower at ₹22,460 a bale of ₹47,033 a candy on the Multi Commodity Exchange.

As the textile sector began operating at near optimum capacity, demand for yarn increased since December 2020. This resulted in higher yarn production, but prices have increased, primarily, as cotton prices gained.

"The percentage of increase in yarn prices is lower than the rise in cotton prices. And prices have actually dropped from the peak seen a few days ago," the SIMA Chairman said.

For example, the 40s count warp yarn topped ₹300 a kg but has now dropped to ₹275-285. Hosiery yarn prices are still lower. "Yarn prices are expected to be raised again from March 1. It will become difficult for small and medium players in the hosiery sector," said Textile Exporters Association (TEA) Executive Secretary S Sakthivel.

Besides domestic demand, which has resulted in panic buying, export buying has also pushed up yarn prices.

"China is buying a good quantity. Its purchases have increased 15-20 per cent," trader Poppat said. "Besides China, Bangladesh, Peru and Brazil are also importing Indian yarn," said Sakthivel.

Yarn prices began heading north after supplies were unable to match from December onwards. The mismatch cropped up as garment and fabric manufacturers resumed production operations quicker than the spinning sector.

This results in the yarn inventory with the spinning mills drying up, while the rise in cotton prices compounded the issue.

Textile industry sources said they had urged the Centre to ensure that the CCI, which had bought nearly 100 lakh or one-fourth of the total cotton produced in the country this season.

"But that has not happened and spinning mills are now shouldering the blame for the yarn price spike," the sources said.

SIMA's Chandran blamed the panic purchase of yarn for the spike.

Ratings agency Ind-Ra said that global cotton prices have also increased due to the curbs imposed on Xinjiang region (China) cotton by the US administration. This is benefitting Indian domestic spinners,' it said.

Textile industry sources say that if the US eases the curbs, then prices could head south. ■

Cotton farmers take advantage on higher global price this season

Cotton farmers in the country have taken advantage of higher global price for the natural global fibre this season (October 2020-September 2021), resulting in at least 80 per cent of the production being sold till now.

As a result, most of the ginning mills in north and western parts of the country that process *kapas* (raw cotton) into ginned cotton are likely to shut operations from April this year.

Most of the cotton produced this season have arrived across various markets in the country mainly since prices have ruled higher than the minimum support price (MSP) of ₹5,515 a quintal since the beginning of the October.

"Barring 15-20 per cent of *kapas* that some well-to-do farmers are holding, the rest of the production has arrived. These farmers always hold back and sell only during monsoon since they get a good price in the off-peak season," said Rajkot-based Anand Poppat, a trader in raw cotton, yarn and spinning waste.

According to an estimate by the Cotton Association of India, a body of traders, arrivals till February 28 this year since October 1 were 298.89 lakh bales (of 170 kg).

The arrivals are against CAI's projection of the cotton crop production at 358.50 lakh bales against 360 lakh bales last season. The Committee on Cotton Production and Consumption (CCPC), a body representing all stakeholders in the textile industry including government officials, has estimated this season's crop at 371 lakh bales (358.50 lakh bales last season).

Arrivals have been higher despite record carryover stocks from last season. While CAI has pegged the carryover stocks at 115 lakh bales, the CCPC has estimated in at 97.95 lakh bales.

Cotton prices in New York have gained nearly 11 per cent this year, according to the Trading Economics website. In fact, prices are off the highs over 90 cents a pound (₹51,700 a candy of 356 kg) seen late February.

Currently, cotton in New York is quoted at 86.13 cents a pound (₹49,600 a candy), while Indian exporters are offering a benchmark Shankar-6 cotton at ₹45,900-46,200 a candy.

Indian cotton has been offered for exports at a competitive price of between ₹44,000 and ₹48,000 a candy this season. This helped *kapas* prices to increase in most of the market yards.

Kapas modal prices (rates at which most trades take place) in Gujarat's Rajkot agricultural produce marketing committee (APMC) yard is ruling at nearly ₹6,100 a quintal. "But quality cotton is getting as high as ₹6,700," said Poppat. "This season, arrivals have been higher as farmers got good prices," said K Selvaraju, Secretary-General, Southern India Mills Association (SIMA), the apex body of textile mills in the South.

As a result of the high arrivals till February end, most farmers have run out of their produce or want to hold it back, expecting higher prices later on during the off-peak season starting May.

Of the total arrivals plus the carryover stocks, CAI has estimated consumption during October-January at 137.50 lakh bales, while mills are projected to hold stocks of 92.50 lakh bales.

Cotton Corporation of India (CCI), which bought nearly 100 lakh bales as part of the Centre's procurement plans, is reported to have stocks of 92.50 lakh bales, while ginners, multinational companies and MCX are estimated to have a total of 164.89 lakh bales with them.

According to Poppat, at least 44 lakh bales of cotton have been exported until first week of March. Last season, exports totalled 50 lakh bales and this season, they are projected to increased to 65 lakh bales. ■

Cotton yarn shortage leads price-rise of Hosiery items

Shortage of cotton yarn in the domestic market has pushed up prices of hosiery items, including innerwear and loungewear, by 10-20%, and manufacturers say the price jump could double if the supply disruption caused by increased exports is not remedied.

Top manufacturers Lux Industries and Dollar Industries said the increase in yarn export to Europe and the US since October-due to disruptions in their local manufacturing and in their sourcing from China-has led to a shortage of yarn in the domestic market, and the situation is not expected to improve till July.

About a third of the country's Rs. 30,000-crore innerwear industry is in the organised sector, controlled by companies having more than Rs. 500 crore in annual turnover.

Vinod Kumar Gupta, managing director of Kolkata-headquartered Dollar Industries said his company has already increased prices of innerwear and outerwear by 6-8% since January and plans to increase prices further. "During the next few months, starting from March till May, we are going to further increase the prices by 10% or 12%," Gupta said, adding that prices of yarn and finished goods are unlikely to cool before July.

However, Gupta said that the price increase would not lead to any contraction in demand. "Since the products we manufacture are of basic nature, people can only differ from buying, but cannot do away with it. Hence, demand suppression may not happen during the summer season sales," he said.

Lux Industries has increased the price of garments containing cotton yarn. "We have scarcity of raw material in south India, as required quantity is not available. The market demand starts converting to the summer season from January onward. Since January, we have already increased prices by about 20%," said Rahul K Todi, director, Lux Industries. ■

Surat's textile hub witnesses spectacular revival

When the lockdown was lifted last year, Rasikbhai Kotadiya, who runs a powerloom unit in the Kim-Pipodara industrial area on the outskirts of Surat, was left with only four workers out of the 48 that he used to employ to run his 128 looms. Though the economy had been unlocked, his textile unit, and that of thousands of others, struggled to resume operations.

By the last week of May, nearly 700,000 of Surat's 1.2-1.5 million migrant workers, left high and dry with no pay during the lockdown, had returned home. In Laskana, another textile weaving hub in Surat, the powerlooms were all but silent, with only 2,000 of the total 55,000 looms churning out grey cloth at a snail's pace.

But the problem was not only one of a crippling shortage of labour. Faced with mounting losses, owners of textile units were paying the few remaining workers a fraction of their pre-Covid-19 salary of ₹15,000-18,000 a month.

That was then. Today, Gujarat's textile hub is witnessing a spectacular rebound. The nearly ₹70,000 crore synthetic textile industry of Surat, which had come to a standstill during and in the immediate aftermath of the lockdown, is humming once again.

Kotadiya, for instance, has not only added more machines at his unit, but has also increased his manpower to 60 from the 48 that he had before the pandemic. "Business was crawling for a few months. However, after Diwali, there has been no looking back," says Kotadiya, whose unit is one of the few in Surat that has water jet jacquard machines that roll out designer colour fabrics.

The workers, too, are profiting from the revival. Pitambar Behera, 36, and his two brothers, who work at a powerloom on the Udhna-Magdalla Road in Surat, have just managed to clear an old debt of over ₹10 lakh left by their deceased father.

"I thought my life was over when the lockdown happened and I had to return home to Ganjam in Odisha. The revival here has not only helped me get jobs for my brothers, but it has also repaid my father's debts," says Behera, who

got a salary hike and has managed to treble his family income.

Industry sources estimate that 400,000-500,000 migrant workers are employed in Surat's textile weaving units, 300,000-400,000 in the textile processing units and another 200,000 are employed by textile traders at the wholesale markets. There are around 450 textile processing units and over 600,000 weaving and knitting powerlooms in Surat.

Unit owners like Mayur Chevli of DM Textiles on the Udhna-Magdalla Road powerloom cluster estimate that they suffered losses of anywhere between four and six months of business last year. "However, with the revival in the retail market post Diwali, unit owners like us were desperate to get as much business as possible. So we began wooing workers back with higher salaries," says Chevli, who has also expanded his business.

In normal times, textile workers in Surat are relatively better off than their peers in other industries since they earn on a piece rate basis. This means that for every metre of grey cloth or fabric that they churn out, they get paid between ₹2 and ₹5, which amounts to an average monthly salary of ₹15,000 to ₹20,000. Since last Diwali, though, their average salaries have shot up to ₹20,000-₹25,000, says Kotadiya.

What has also worked in Surat's favour is that unlike other textile clusters in the country, the industry here manufactures synthetic fabric, garments, saris and caters to the lower and middle income groups. It is this segment that has made a comeback in the retail market since the festive season.

However, it is only the yarn makers who have gained the most, with synthetic yarn prices being increased from ₹90-₹95 per kg to ₹130-₹135 per kg — a whopping 45 per cent rise over last year. The subsequent units in the textile value chain have not been able to increase prices as much, thereby losing out on the profit they could have earned otherwise. Since Diwali fabric prices have risen by only 10-15 per cent. ■

Garware Technical Fibres consolidated its position as one of the leading players in the world of Technical Textiles

Garware Technical Fibres Ltd. (formerly Garware-Wall Ropes Ltd.), is one of the leading players in the world of technical textiles, specializing in providing customized solutions to its customers worldwide. Globally the company is known for its applied innovations in the field of aquaculture, fisheries, shipping, agriculture, coated fabrics, and geosynthetics. The company's products are manufactured in its state-of-art facilities at Wai and Pune in Maharashtra and marketed in more than 75 countries.

Managed under the 'hands-on' leadership of its Chairman and Managing Director, Vayu Garware, GTFL's day-to-day operations are handled by the apex team led by the CEO. Shujaul Rehman, and a team of professional managers having vast techno-commercial, industrial, and marketing experience. Today it is a debt-free company, listed on the NSE & BSE stock exchanges. The company's share price reflects the consistent performance of GTFL with a rise of more than 500% in the last five years.

With global leadership in many areas, GTFL is a true Indian multinational company living its mission, "To provide innovative, application-focussed solutions to enhance the value of our customers globally". At the heart of every endeavour that GTFL undertakes, it ensures that adding to the customers' bottom line is a prime objective. The company stands on four value pillars. These are, Ownership — a value that empowers people with an entrepreneurial spirit; Improve — which helps continuously improve solutions for the clients; Bond — which fosters a family bond with employees and business partners; and Enhance — to enhance stakeholder value through profitable growth in sales and earnings.

Today, Garware Technical Fibres (GTFL) has over 20,000 SKU's and in FY'19 the company recorded a turnover of over Rs. 100 crores and by doing so, it became one of India's top 500 companies' on the basis of its market capitalization. GTFL has leveraged its technological expertise in the engineering of polymers and its in-house capabilities in areas such as extrusion, knitting, net processing, fabric weaving, coating, and fabrication to build a highly diversified product portfolio, which covers several industry segments. With an intense focus on consistency developing new applications and solutions for clients, GTFL created an independent in-house R&D unit as far back as the early 1990s. Over the years, it has filed 61 patents, of which 19 patents granted so far.

The company has also been actively involved in developing environment-friendly solutions. In the Indian fisheries industry, the company has

gained a leadership position with its specially designed product offering like fishing nets that help in lower drag and improving fish catch. GTFL is now a dominant player in the global farmed-salmon industry with one-in-three salmon being protected by GTFL protection solutions. The company also has a range of agricultural products that helps in improving farm yield and quality of produce through a range of shade nets, sericulture nets, insect nets, fencing nets, hail protection, and harvesting. Another key units of GTFL which is addressing environmental challenges is the Geosynthetics Division of GTFL. The Geosynthetic division undertakes turnkey solutions in specialized areas like Industrial Landfills and reservoir Linings, River and coastal protection, Landslides, and rockfall mitigation, and erosion protection. GTFL's solutions also replace conventional construction materials and technologies with new technologies that bring economy, ease of construction, and reduce carbon footprint.

In the recent past it has been the recipient of awards like 'The Economic Times Polymer Awards 2020' for its aqua-fisheries product range and the revolutionary X12 Lice Skirts. It has also been ranked among India's best companies to work for by The Great Place to Work Institute India. ■

AEPC hails Textiles Ministry action on cotton price

The Apparel Export Promotion Council has welcomed the Central government's speedy response to the request to reduce cotton prices.

Cotton yarn prices have consistently increased in the last four months. High prices of cotton yarn and unpredictability in its availability were affecting the entire value chain and having an adverse cascading effect on garment exports.

"We wholeheartedly thank Textile Ministry Smriti Zubin Irani for her help in getting Cotton Corporation of India (CCI) to reduce cotton prices," said a statement quoting A Sakthivel, Chairman, AEPC.

Irani met the industry representatives on March 18, 2021, to discuss the issue of yarn price increase. Recently, CCI has come out with an announcement that cotton price has been reduced by around ₹1,500 per candy, he said.

Sakthivel said the Textiles Minister was extending continuous support by taking several initiatives to protect and revive the apparel exporting industry since the outbreak of the coronavirus pandemic.

The move on cotton prices is significant as it will help reduce the burden on garment exporters across the country, he said. ■

REJUVENATING KHADI KIDS WEAR WITH DIGITAL PRINTING

Radha Kashyap, Head of Department, **Simran Walia**, Post-Graduation Student
Department of Fashion & Textiles, IIS (Deemed to be University), Jaipur, Rajasthan

Abstract

Khadi is defined as which is cloth hand spun and hand woven. Yarn made of cotton, silk or wool. An attempt is made to develop ranges of eco-friendly apparel for kids wear using digital printing for kids. The study has been conducted in Jaipur city. The sample has been selected is purposively because of the easy accessibility of the respondents who are consumers for khadi apparel. The total sample size for the study has been 50 Mothers and Would-be-Mothers from Jaipur As they would better know about children's choice, comfort, price, color and variety of fabrics used in children clothing, requirement of safety features as well as types of garments\ dresses available in the market for the kids wear. The data has been done collected by an interview schedule. For developing the garments nautical motifs has been selected using Digital printing.

Key words : Digital print, Eco-friendly, Khadi, Kids wear.

Introduction

Khadi constitutes an important segment of the textile sector. It is defined as any cloth woven on handlooms in India from cotton, silk yarn handspun in India or from a mixture of any two or all of such yarns. (Busenna, 2014). It is the most breathable and comfortable fabric to wear. Khadi is an appropriate fabric for kids wear because of its characteristics and versatility. Through ready-made garments are available in khadi, but they are not trendy and there is lack of variety, especially ready-made in kids wear. Hence there was a need to develop a range for kids wear. Clothes made of 100% natural fibers are preferred. A fabric that is too thick and heavy makes the kids look tired. Itchy textures of the fabric bother the skin of kids as it is very tender. Due to less cost, easy availability, easy care and maintenance parents have been opting for polyester fabrics or their blends for children's clothing with the result, the child cannot enjoy the comfort and convenience at the cost of the child. The largest manufacturer of children garments, designers are working in this field, and khadi being a hand woven and hand spun natural fiber is friendlier for the environment, health and future of this planet. The present study is design to develop an eco-friendly range of clothing for kids wear in fabric made of natural fibers. Varieties of garments are available in market in khadi but are not in digital prints. Hence attempt is made to design

apparel for kids wear based on digital printing on khadi for kids wear to create new a range in khadi. In order to enhance the fabric digital printing can be done which can give variety. Hence a line in nautical motifs has been developed for apparel in digital print. Digital Textile Printing designs are printed on fabric directly from computer.

The main objectives of the study isto develop ranges of eco-friendly apparel for kids wear using digital printing.

The main limitations are as follows :

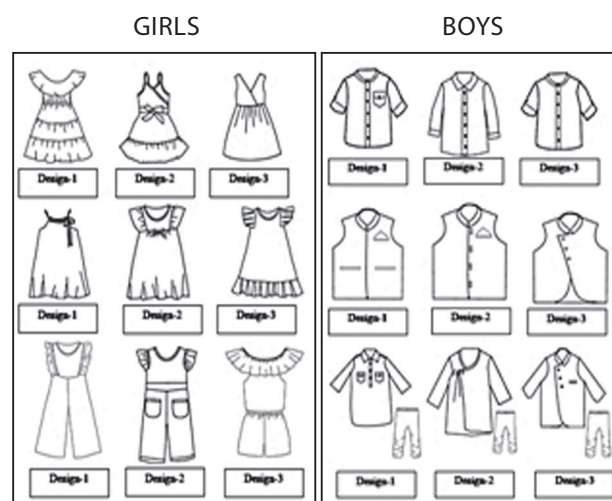
1. Present study has been conducted only in Jaipur city.
2. The sample size is limited to mothers and expectant mothers.
3. The study is limited to the development of eco-friendly digital printed garments.

Research Methodology

Locale : The study has been conducted in Jaipur city.

Target group : The total Sample size of respondents is 50 Mothers and Would-be-Mothers from Jaipur.

Sampling method : Purposively sampling method is used to approach the respondents.



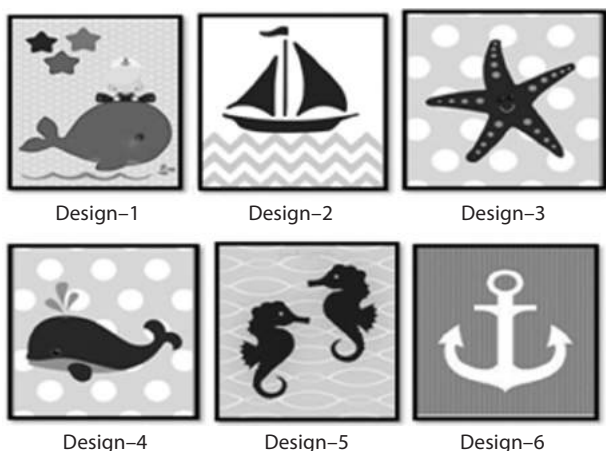
Selection method : The mother has been selected as respondents for the present study, as they understand the choice, comfort, price, colour and variety of fabrics used in children clothing, requirement of safety features as well as types of garments\ dresses available in the market for the kids wear. The data has been done collected by an interview schedule.

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Sketching of garments : Eighteen sketches were made nine for girls and nine for boys which were shown to mothers and preferences for the designs has been taken for construction of garments.

Surface ornamentation : Nautical motifs were used for value addition through Digital printing technique was used for design development. Six motifs were selected for developing the designs.

Data analysis : The data was analysed using percentage and Rank.



Results and Discussion

In order to understand the preferences first demographic characteristics of the sample were studied.

Table 1 : Distribution of respondents on the basis of age (n=50)

Age	Frequency	Percentage
25-35	11	22.0
36-45	27	54.0
46 and above	12	24.0

Out of a total of 50 respondents 22% of them were in the age group of 25-35 years, followed by 54% who fell under the age group of 36-45 years and 24% were in the age group of 46 and above.

Table 2 : Distribution of respondents on the basis of occupation (n=50)

Occupation	Frequency	Percentage
House wives	11	22.0
Government service	8	16.0
Corporate service	23	46.0
Self-employed/ professional	8	16.0

Majority of the respondents (46%) were in corporate service, 16% of respondents were

in government service and self-employed/ professional while 22% of respondents were house wives.

Table 3 : Distribution of respondents on the basis of education (n=50)

Education	Frequency	Percentage
Not graduate	9	18.0
Graduate	12	24.0
Post- graduate	24	48.0
Professional qualification	5	10.0

Maximum respondents were post- graduate 48% where as 24% of respondents were graduated. It also shows that 18% of respondents were not graduated and it was noticed that only 10% of respondents were professionally qualified.

Table 4 : Distribution of respondents on the basis of sales and discount offers (n=50)

Visitto Khadi showrooms	Frequency	Percentage
Yes	34	68.0
No	16	32.0

Maximum number of respondents 68% shop only at time of sales and discount offers whereas 32% of respondents shopped irrespective of sales and discount offers.

Table 5 : Distribution of respondents on the basis of preferences kids wear

Product characteristics	Rank
Comfort	7
Quality	6
Trendy Motif and prints	5
Durability	4
Price	3
Colour	2
Over all appearance	1

The number of respondent's gave highest rank to comfort followed by quality (6th), Trendy Motif and prints (5th) durability (4th) price (3rd) colour (2nd) and least on the list was overall appearance (1st).

Table 6 : Mothers perceptions regarding color preference

Color Shades	Boys		Girls	
	F	%	F	%
Light	12	24.0	25	50.0
Medium	15	30.0	15	30.0
Dark	23	46.0	10	20.0

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Colour preferences for boys are dark colour (46%) and than medium shades (30%) while for girls light colours (50%) prefer more than medium colour shades (15%).

Table 7 : Mothers' perceptions on garment

Reason	Frequency	Percent
Semi fitted	41	82.0
Lose fitted	9	18.0

Maximum number of respondents (82%) prefer semi fitted garments for children whereas 18% of respondents prefer lose fitted garments for children and zero for fitted garments.

Table 8 : Preference towards on garment detail for boys

Constructional detail		Boys garments			
		Kurta	Pajama	Jacket	Shirt
Opening	Front	42	40	38	45
	Back	—	—	—	4
	Side	4	2	5	—
	Shoulder	4	—	7	1
Fasteners	Button	41	2	45	39
	Hooks	20	4	13	9
	Elastic	—	46	—	—

Results of the above table show that they prefer kurta with front opening (42%) that opening on side they prefer to have buttons (41%) followed by hooks (20%). For pajama they prefer opening at front (40%) instead of side (2%). They prefer elastic (46%) followed by hooks (4%) and button (2%). For jackets too, they prefer front opening (38%) with fasteners at buttons (45%) and elastic (13%). In case of shirt too the preferences is for front opening (45%) with buttons (30%) followed by hooks (9%).

Table 9 : Preferences perceptions on garment detail for girls

Constructional detail		Girls garments		
		Tunic	Frock	Jumpsuit
Opening	Front	14	4	5
	Back	28	28	22
	Side	4	12	5
	Shoulder	4	8	17
Fasteners	Button	27	17	20
	Hooks	11	7	11
	Zipper	10	21	14
	Elastic	—	3	2
Fullness	Velcro	4	1	2
	Gathers	—	32	—
	Pleats	16	15	32

Results of the above table show that they prefer tunic with back opening (28%) that opening on front they prefer to have buttons (27%) followed by hooks (11%) with pleats (16%). For frock they prefer opening at back (28%) instead of side (12%). They prefer zipper (21%) followed by button (17%) and hooks (11%) with gathers (32%). For jumpsuit too, they prefer back opening (22%) with fasteners at buttons (20%) and zipper (14%) with pleats (32%).

Ravage results

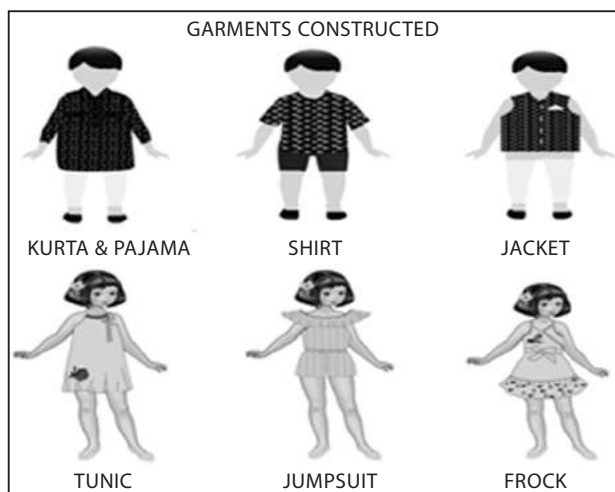
The results of the study revealed that majority of the respondents prefer to have new khadi products for kids. Out of 18 designs 06 best designs of kids wear has been selected on the basis of rank. Majority of the respondents prefer light colour for girls and medium colour for boys through colour palette colour are selected. Fifteen motifs of nautical were evaluated by the panel of judges through ranking scale. Best six motifs were selected were design through coreldraw software. Nautical

Raw material	Cost of raw material, other items and stitching charges(Rs/-)					
	Boy's garments			Girls garments		
	Shirt	Kurta & pajama	Jacket	Frock	Jumpsuit	Tunic
Khadi fabric	1 meter	2.5 meter	1 meter (.5 mtr lining)	1 meter	2 meter	1 meter
	250/-	625/-	300/-	250/-	290/-	200/-
Lace	—	—	—	—	—	(1mtr) 20/-
Buttons	(6pcs) 30/-	(4pcs) 20/-	(5pcs) 50/-	—	—	—
Zipper	—	—	—	(1pcs) 10/-	—	—
Elastic	—	(.5meter) 10/-	—	—	(.75meter)15/-	—
Digital printing	300/-	300/-	300/-	300/-	300/-	300/-
Stitching charges	170/-	300/-	200/-	180/-	250/-	150/-
Total (Rs.)	750/-	1,255/-	850/-	740/-	855/-	670/-

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motifs has been used through Digital printing to add design in garments.

The cost of the six prepared garments were calculated. The cost of the raw materials and stitching charges were taken into account for calculation along with the other materials incurred.



The cost included for the girls garments was found to be the highest for jumpsuit i.e. Rs 855/- and lowest for tunic at Rs 670/-. The estimated cost came out to be Rs 740/- for frock. The cost included for the boys garments was found to be the highest for kurta-pajama i.e. Rs 1255/- and lowest for shirt at Rs 750/-. The estimated cost came out to be Rs 850/- for jacket.

Conclusion

On the basis of the findings of the study, it can be concluded that new designs were proved to be an innovative step for creating designing on khadi kids wear. All the prototypes designed with nautical motifs, were liked by the respondents. They appreciated that creative designing for the promotion of Khadi.

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Telangana to expand cotton area to 80 lakh acres

After topping Gujarat to become the second-largest State in cotton acreage, Telangana now wants to consolidate its position by adding another 15-20 lakh acres in the upcoming khariff season, taking the area under the fibre crop to 75-80 lakh acres.

While asking the farmers to increase the acreage, Chief Minister K Chandrashekar Rao has asked the officials of the Agriculture Department to make arrangements to mobilise the seeds required for the kharif.

Farmers generally use two packets (of 450 gm each) in an acre, pegging the total requirement at 1.50-1.60 crore packets.

The State, which had experimented with the Regulated Cropping System last year, had dramatically increased the cotton area to 60 lakh acres from the previous record of 46 lakh acres in 2019. As they achieved the target of 60 lakh acres, the Telangana farmers had surpassed Gujarat, the second largest cotton player, which grows cotton on about 56 lakh acres.

In 2019, Gujarat cultivated cotton on 66 lakh acres, while their peers in Telangana grew the crop on 46 lakh acres. Maharashtra, with 1.04 crore acres, tops the list in cotton acreage.

Meanwhile, the State wants its farmers to grow redgram (pigeon pea) on 20-25 lakh acres, more than double the area from last kharif.

The additional stress on cotton and redgram indicates that the State wants its farmers to reduce their excessive dependence on paddy. During the last kharif, farmers grew paddy on 53 lakh acres out of the total cropped area of 1.36 crore acres. ■

DESIGNING AND CONSTRUCTION OF INNOVATIVE FASHION ACCESSORIES USING CHIKANKARI EMBROIDERY AND BEADS

Dr. Harpreet Kaur, Head, P.G. Department of Fashion Designing, Kanya Maha Vidyalyaya
Ms. Harpreet Kaur, Research Scholar, P. G. Department of Fashion Designing,
Kanya Maha Vidyalyaya, Jalandhar

Abstract

Chikankari embroidery originated in Lucknow in the Mughal period, Lucknow and received patronage of Jehangir's wife. The study aimed to create designs of accessories using Chikankari motifs with embroidery. Chikankari work has potential to uplift workers and buyers if new innovation is infused to add new lease of life to this traditional craft form. Motifs were categorized into five types: Jali, Bel/Border, Paisley, Buta and Buti. Three designs were made from each category. The colors were selected from pantone color palette of spring/summer 2019 and the color for base fabric was pantone 17-1564 TCX Fiesta and thread color was 13-0850 TCX Aspen gold. Three designs were executed on accessories. The highest ranked motif from each category was used to create fifteen compositions of accessories. A copyright of design for Chikankari earrings was applied to copyright office, Government of India, which was granted.

Key words : Accessories, Chikankari, Innovative, Pantone, Traditional embroideries.

1. Introduction

1.1 According to Dr. Naik, (2010) The country has a rich heritage of culture, tradition, art, music, literature, sculpture and does exhibit 'unity in diversity' through variegated charms of festival, rituals, art, music, costume and languages. Clothing plays an important role in the life of every individual since it is symbolic. It is a symbol to identify the groups of people region wise, culture wise and designates the rank, role, occupation, status, standard of living of community at large. Clothing is not only the article used by people to cover, but also a part and parcel of decoration that encircles, includes, painting, dyeing, printing, embroidery, ornaments, cosmetics tattoos, hair dress, footwear and other accessories.

Dr. Naik, (2010) states "Embroidery is a beautiful thread works on a variety of fabrics, which makes the fabric more attractive. Women are the pioneers in creating excellent delicate embroidered garments since ancient times."

According to Cambridge Dictionary "A small, colored, often round piece of plastic, wood, glass, etc. with a hole through it. It is usually put on a string with a lot of others to make jewellery." ("jewellery" n.d.)

Prof. Baral et al., (n.d.) state that Lucknow—the state capital of Uttar Pradesh is world renowned for its traditional Chikankari embroidery. Chikankari is the embroidery work done with the white cotton thread on fine white cotton material. Chikankari is also called as shadow work. The word 'Chikan' is basically derived from Persian word 'Chikeen'. In earlier days, the Chikankari embroidery is traditionally done on mulmul- fine muslin cotton.

Now-a-days Chikankari is almost commercialized where both men and women have their contribution. The Chikan work has gained the foreign market and therefore the articles are produced on commercial scale according to the demand. (Naik, 2010).

1.2 Working places of Chikankari embroidery

The artisans of Chikankari embroidery are scattered in the villages of Lucknow district and other nearby districts. Both urban and rural areas are largely depending on this activity. The places where Chikan craft is practiced are:

- » Lucknow : Amethi, Alambagh, Amaniganj, Aashiyana, Aminabad, Alambagh, Bijour, Kakori, Malihabad, Rakabganj, Sarojini Nagar, Sahib Nagar, Thakurganj.
- » Barabanki : Nindura, Fatehpur, Deva, Massouli, Banki, Harakh, Jahangirabad, Siddaur, Trivediganj etc.
- » Hardoi : Sandila, Behdar, Kachouna, Mallawan, Bharawan, Ahirouri, Balamau etc.
- » Unnao : Nawabganj, Auras, Hasanganj, Mohan Chakalbansi, Asoha etc.
- » Sitapur : Biswan, Sidhuli, Mahmoodabad, Misriksh etc.
- » Sultanpur : Bazaar Shukl, Jagdishpur, Gouriganj, Amethi, Jamo, Musafirkhana etc.
- » Raibareilly : Deeh, Bachrawan, Shivgarh, Maharajganj, RahiHarchanpur etc.
- » Lakhimpur kheri : Lakhimpur Urban, Bankeganj, Kumbhi etc. (Arya and Sadhna, 2005)
- » Chikankari N.G.O centres : There are many NGOs working for welfare of artisans in the cluster. These NGOs have established craft development centers in the area, which directly helps the artisans. One very prominent N.G.O which has done significant work in the field of Chikankari embroidery in the nineties decade was SEWA (self employed women's association). (Arya and Sadhana, 2001)

1.3 Stitches of Chikankari are unique and can be divided into three categories

1. Flat stitches: Which are delicate and subtle and lie close to the surface of the fabric giving it a distinctive textural appearance.
2. Embossed stitches: Which are highlighted from the fabric surface leading it a characteristic grainy stitches texture.
3. Jali work: Which is the most striking feature of Chikankari embroidery and which creates a delicate net effect. (Arya and Sadhana, 2001)

1.4 Motifs of Chikankari embroidery

The designs in Chikan are graded and used according to the stitches employed- murri ka buta and tepchi ka jaal- through terms hathi (elephant) and kairi (mango) are used to signify the shape of the motif. It is however the stitch employed that is the established nomenclature. Other common motifs include mostly paisley, flowers, foliages, creepers, fruits, birds like peacock and parrots. (Bansal, 2011)



J-1



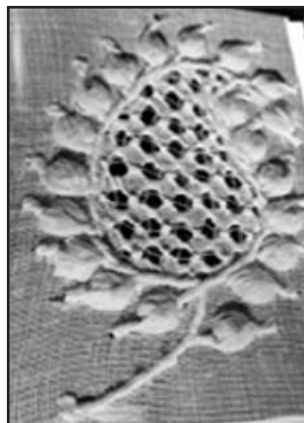
J-2



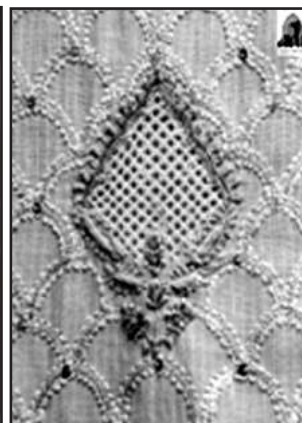
J-3



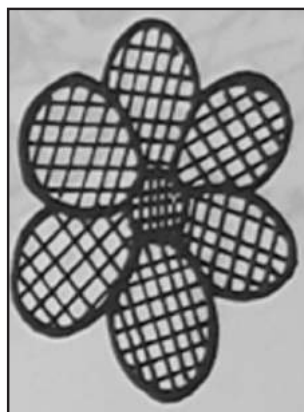
J-4



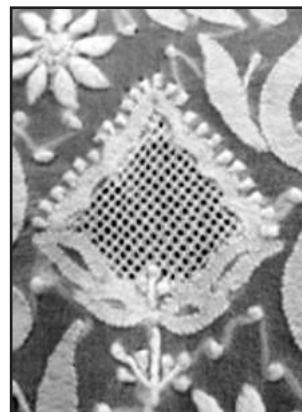
J-5



J-6



J-7



J-8

Jali

1.5 Articles produced by Chikankari embroidery

The work is found on a wide range of garments for women, men and kids. We can buy everything from a long kurta, to a saree, anarkali, palazzos and even a range of accessories, and some décor items like lampshades, cushion covers, runners, curtains and bed throws. This study was conducted to explore about the motifs, types of threads, fabrics, stitches and articles of Chikankari and how they have changed from their original form to their contemporary usage. It was also an endeavor to understand techniques used in Chikankari.

Aims and objectives :

- ❖ To study the origin of Chikankari embroidery
- ❖ To study the materials and techniques of Chikankari embroidery
- ❖ To create innovative accessories by Chikankari embroidery and embellish them with beads
- ❖ To construct 3 most preferred designs
- ❖ To apply for a copyright of design for one of the preferred designs

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Limitation :

- ❖ The sample size is limited to 30 respondents only.
- ❖ The study is limited to the age group of 20 to 40 year only.
- ❖ The study is limited to the designing of accessories with beads Chikankari embroidery only.



P-1



P-2



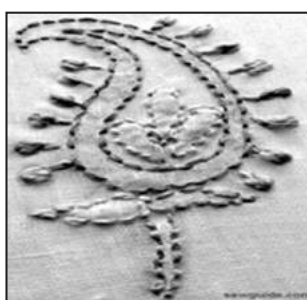
P-3



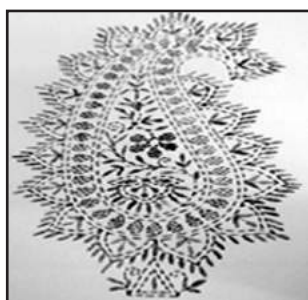
P-4



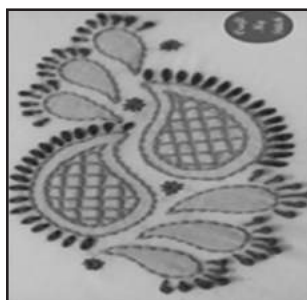
P-5



P-6



P-7



P-8

Paisely

2. Review of Literature

Hjortshoj, (1979) explained Lucknow, the capital city of Uttar Pradesh is an important cultural, historical and industrialized center. Some of these areas, for example, around Khadra, Bhran Nagar and Sarojani Nagar are extremely old, dating back to the seventeenth and eighteenth centuries.

Dusenbury, (2004) explained that the branding tools of contemporary brands would comprise a dedicated Chikankari website, ramp shows, online Chikankari trade fairs, use of information technology to create virtual sample and shop-in-shop at leading retail chains.



B-1



B-2



B-3



B-4



B-5



B-6



B-7



B-8

Bel/Border

Jafri, (2011) studied time and cost of manufacturing and reported that for each item of Chikan the maximum time taken to finish the respective jobs by cutting master, printer, tailor and washerman is not more than 60 minutes, whereas, the longer time is taken in embroidery by the Chikankari women artisans.

Banerjee, (2013) explained that SEWA (Lucknow) did hard work to reach rural people especially women during June 1992. After completing their training, the women have become regular members of SEWA.

According to Anonymous, (2015) certification will give a major profitable improvement to the craftsmen, who otherwise are being demoralized by the middlemen while selling their products.



B-5



B-6



B-7



B-8

Buta


B-1



B-2



B-3



B-4

3. Methodology

Research methodology is a way to systematically solve a research problem. It is a science of studying how research is done scientifically. Essentially it is the procedure by which the researchers go about their work of describing, evaluating and predicting phenomenon.

It aims to give the work plan of research. It provides training in choosing methods materials, scientific tools and techniques relevant for the solution of the problem.

The study was conducted to obtain detailed information of the Chikankari embroidery of Lucknow like its origin, types, motifs, stitches and articles which have occurred over the years in Chikankari and to innovate designs suitable for accessories with Chikankari embroidery and beads.

In order to facilitate the presentation, the methodology was divided into the following parts.

3.1 Selection of method
3.2 Pre testing
3.3 Selection of motifs
3.4 Analysis of design

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- Ranking
- Coding
- Tabulation



B-1



B-2



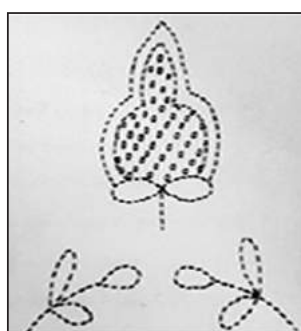
B-3



B-4



B-5



B-6



B-7



B-8

Buti

3.5 Selection of placement

- Five design were prepared
- Ranking
- Coding
- Tabulation

3.6 Selection of color

- Pantone chart

3.7 Technique

- Embroidery

3.8 Embellishment

- Beads

The study was undertaken to achieve the goal of creating accessories using Chikankari motifs in design. Sourcing of designs was done from various secondary sources like books and internet.

Pre-testing : To test whether embroidery is suitable for representing Chikankari embroidery sample was prepared using one of the Chikankari motifs. It was found to be giving a justifiable representation of the same thus it was selected for proceeding further.

To ensure objectivity the motifs were categorized as per type of motifs like Buti, Paisley, Jali, Bel/Border and Buta.

From each category only 8 motifs were selected i.e., total 3 motifs were shortlisted.

To ascertain freedom from personal prejudice, a panel of judges ranked each category of motifs. The panel comprised of :

- ❖ 10 faculty members
- ❖ 10 students of M.Sc. Fashion Designing, 2nd Semester
- ❖ 10 students of M.Sc. Fashion Designing, 4th Semester

To ascertain freedom from personal prejudice, a panel of judges ranked each category of motifs. Coding and tabulation was done to find out the highest ranked motif from each category. The method of weighted ranking was used to ensure high quality result.

The highest ranked motif from each category was used to create three compositions.

Various placement styles were used and three prototypes were prepared for ranking. Panel of judges was reported for ranking of final placements.

Panel of judges was selected for ranking of final composition i.e., again the panel comprised of :

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- ❖ 10 faculty members
- ❖ 10 students of M.Sc. Fashion Designing, 2nd Semester
- ❖ 10 students of M.Sc. Fashion Designing, 4th Semester

Coding and Tabulation was done to find out the highest ranked composition.

Highest ranking composition was selected for embroidery on the accessories.

For color selection latest forecast of pantone color, spring 2019 chart was used. The color for the base fabric used was pantone 17-1564 TCX fiesta and the color for the thread used was 13-0850 TCX Aspen Gold.

Using the technique of embroidery, Chikankari traditional stitches are used in the accessories.

To test consumer acceptability the prepared accessories was shown to 50 randomly selected respondents. Using convenience ranking technique from the P.G.Department of Fashion Designing.

4. Results and Discussion

4.1 Selection of motifs

Motifs were collected from various books of traditional embroideries of India, books on Chikankari embroidery, internet etc. The categories were made according to the type of motifs :

- ❖ Jali,
- ❖ Buti,
- ❖ Paisley
- ❖ Bel/Border
- ❖ Buta

Total of three motifs were short listed from each category. A panel of 30 judges comprising of 10 faculty members 10 post graduate students of semester 2 and 10 students of semester 4 of fashion designing were further asked to rank the motifs from each category.

4.2 Ranking sheet

{Jali} Table no. 1

Design no.	Marks	Weight	Rank
J-1	12	1.2	8
J-2	8	3.2	4
J-3	15	12	1
J-4	6	1.8	6
J-5	9	4.5	3
J-6	5	3	5
J-7	7	1.4	7
J-8	11	7.7	2

Table no.1 shows that motif J-3 obtained maximum marks i.e., 15 and was at Ist position, J-8 was at IIInd with 11 marks and J-5 was at IIIrd i.e., 9 score.

{Paisley} Table no. 2

Design no.	Marks	Weight	Rank
P-1	11	1.1	7
P-2	8	1.6	6
P-3	10	8	1
P-4	6	2.4	5
P-5	9	5.4	2
P-6	5	5	3
P-7	7	4.9	4
P-8	3	0.9	8

Table no.2 shows that motif P-3 obtained maximum marks i.e. 10 and was at Ist position, P-5 was at IIInd with 9 marks and P-6 was at IIIrd i.e. 5 score.

{Bel/Border} Table no. 3

Design no.	Marks	Weight	Rank
B-1	8	0.8	8
B-2	7	1.4	7
B-3	9	7.2	2
B-4	12	8.4	1
B-5	6	1.8	5
B-6	7	4.2	3
B-7	5	2.5	4
B-8	4	1.6	6

Table no.3 shows that motif B-4 obtained maximum marks i.e., 12 and was at Ist Position, B-3 was at IIInd with 9 marks and B-6 was at IIIrd i.e. 7 score.

{Buta} Table no. 4

Design no.	Marks	Weight	Rank
B-1	8	0.8	8
B-2	7	3.5	4
B-3	6	1.2	7
B-4	15	12	1
B-5	11	7.7	2
B-6	5	2	5
B-7	9	1.8	6
B-8	10	6	3

Table no.4 shows that motif B-4 obtained maximum marks i.e., 15 and was at Ist position, B-5 was at IIInd with 11 marks and B-8 was at III i.e. 10 score.

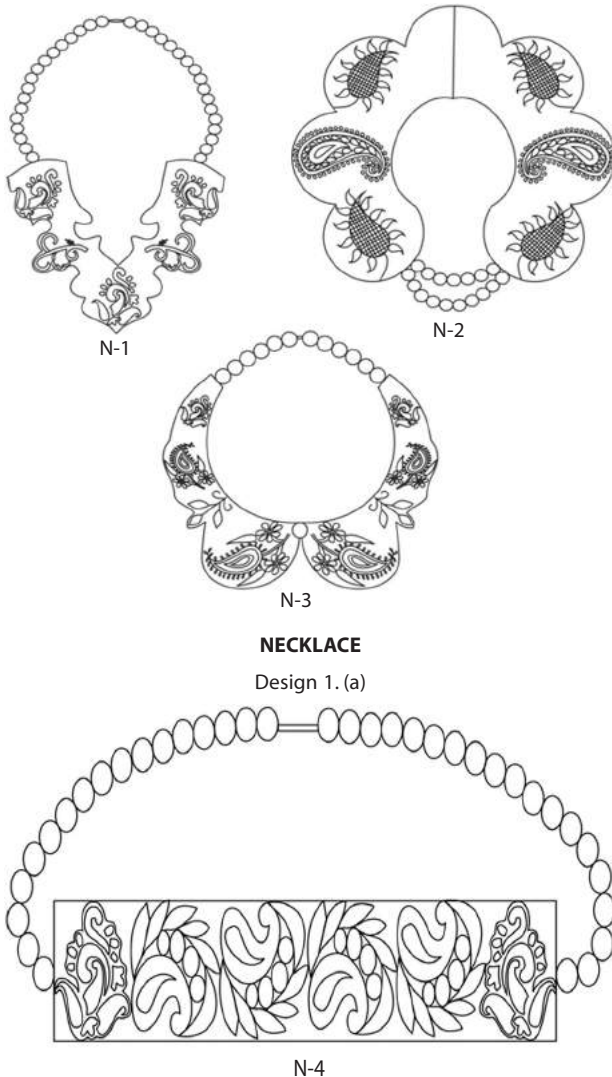
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{Buti} Table no. 5

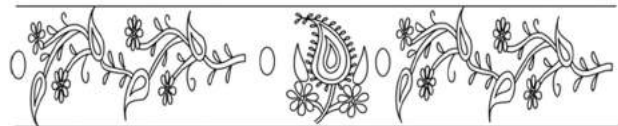
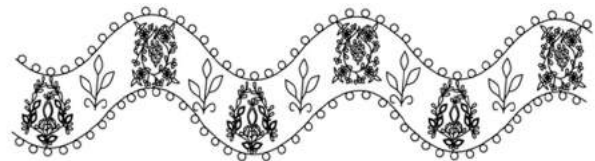
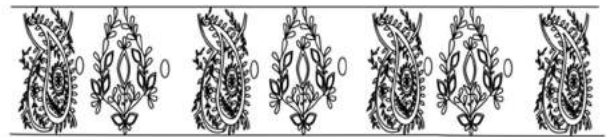
Design no.	Marks	Weight	Rank
B-1	6	0.6	8
B-2	8	1.6	7
B-3	7	4.2	4
B-4	23	18.4	1
B-5	14	9.8	2
B-6	10	5	3
B-7	9	2.7	5
B-8	5	2	6

Table no.5 shows that motif B-4 obtained maximum marks i.e. 23 and was at Ist position, B-5 was at IInd with 14 marks and B-6 was at III i.e. 10 score.

4.3 Evaluation of design placement



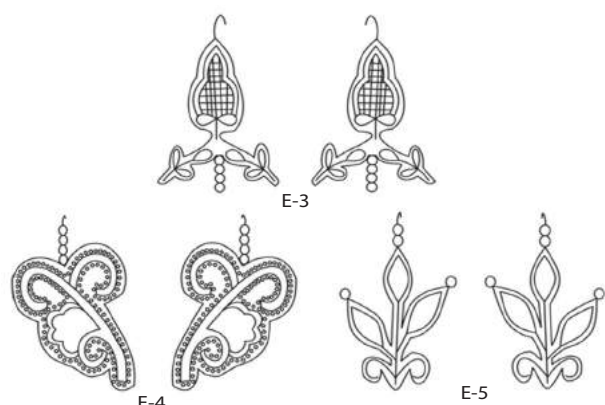
NECKLACE
Design (b)



BELTS
Design 2



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EARRING

Design 3

1. Evaluation of design placement

Evaluation of placement of designs were evaluated by the same panel of judges. The designs were given ranks and marks subsequently.

{Necklace} table no. 6

Design no.	Marks	Weight	Rank
N-1	11	3.3	3
N-2	5	0.5	5
N-3	9	1.8	4
N-4	9	4.5	1
N-5	10	4	2

Table no.6 shows that motif N-4 obtained maximum marks i.e. 9 and was at I position. N-5 was at II with 10 marks. N-1 was at III i.e. 11 score.

{Belt} table no. 7

Design no.	Marks	Weight	Rank
B-1	11	3.3	3
B-2	10	4	2
B-3	10	2	4
B-4	14	7	1
B-5	11	1.1	5

Table no.7 shows that motif B-4 obtained maximum marks i.e. 14 and was at I position. B-2 was at II with 10 marks. B-1 was at III i.e. 11 score.

{Earring} table no. 8

Design no.	Marks	Weight	Rank
E-1	14	7	1
E-2	9	2.7	3
E-3	17	3.4	4
E-4	6	2.4	2
E-5	11	1.1	5

Table no.6 shows that motif E-1 obtained maximum marks i.e. 14 and was at I position. E-4 was at II with 6 marks. E-2 was at III i.e. 9 score.

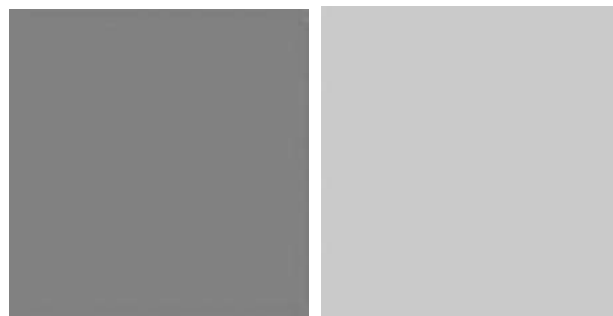
Top one ranked designs from three categories was designed by Chikankari embroidery and beads with selected color from pantone color chart spring 2019.

2. Selection of colour

The colors selected from pantone color palette of spring/ summer 2019. The base color is pantone 16-1564 TCX fiesta and the thread color 13-0850 TCX aspen gold.

Fiesta
16-1564 TCX

Aspen Gold
13-0850 TCX



3. Working on accessories

The embroidery was done from N.G.Os SEWA (self employed women's association). This is one of very prominent N.G.O which has done significant work in the field of Chikankari embroidery.

Step 1 :



Step 2 :



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Step 3 :



(a)



(b)

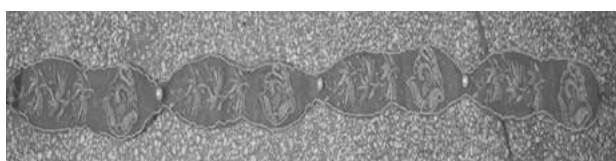


(c)

Step 4 : Final product



(a)



(b)



(c)

Earning design :



4. Consumer acceptability of the innovative accessories: the accessories were shown to randomly selected people. A questionnaire was administered to 30 randomly selected respondents who were college going girls. Data was collected to check acceptability for the estimate cost of accessories.

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(a)



(b)



(c)

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- » [www.craftsvilla.com\(n.d.\)](http://www.craftsvilla.com(n.d.))



MARKETING OF IDEAS ON RECENT ADVANCEMENTS IN INTERDISCIPLINARY RESEARCH BETWEEN TEXTILE AND OTHER ENGINEERING FIELDS

Dr. N. B. Timble, Ph.D(USA)NCSU
Associate Professor of Textile Technology, DKTE

ABSTRACT

In this paper the topics of recent advances in interdisciplinary research between textile and other engineering fields i. e. computer science, mechanical, electronics, civil, electrical and information technology are marketed. Four topics where the textile and computer science people can work are mentioned. Finally the usefulness of the paper is stated. Four Topics where textile and mechanical engineering department can work together are mentioned. Three Topics where textile and mechanical engineering department can work together are mentioned. Then as far as interdisciplinary research areas are concerned between textile, electronics and computer science one photograph of the front cover of the book on electronics and computing in textiles is mentioned. Then the four topics related to interdisciplinary research between civil engineering and textile are stated. Then a book available on textiles in civil engineering in textiles with its brief content is mentioned which will be useful to carry out interdisciplinary research between textile and civil engineering. Then a paragraph on interdisciplinary research between electrical engineering and textile department is stated. Finally valuable information about Interdisciplinary research between Information Technology and Textiles is described.

Interdisciplinary research between computer science and textiles

- ◆ application of computer science in textiles
- ◆ tomographic approaches to nonwoven structure definition
- ◆ enterprise resource planning
- ◆ human perception and fabric streakiness.

Interdisciplinary research between mechanical and textile departments

- ◆ influence of fabric friction on automated handling and transport system
- ◆ structural factors affecting interfacial forces in fabric
- ◆ application of robotics in textiles
- ◆ application of mechanical engineering in textiles.

Interdisciplinary research between electronics and textile departments

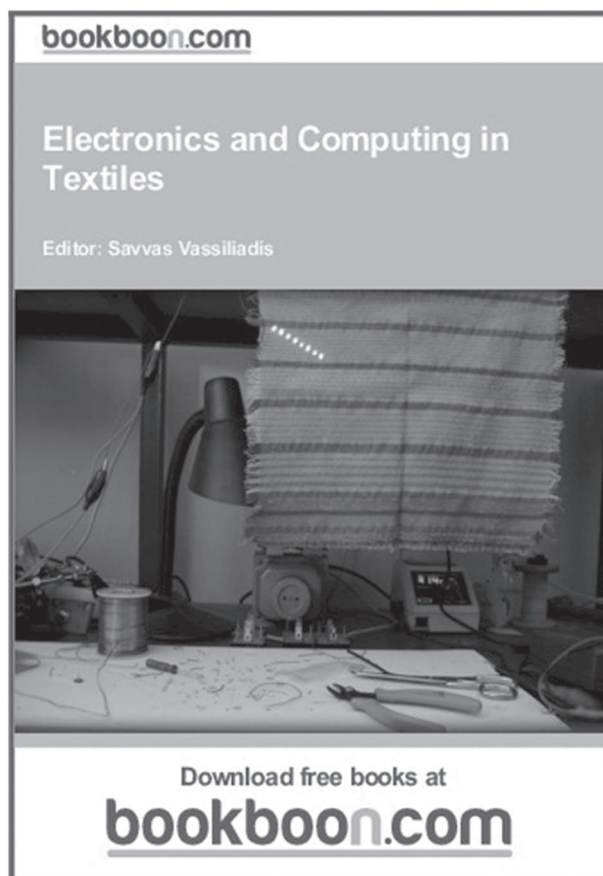
- ◆ wearable electronics
- ◆ application of electronics in textiles

It has shown that weaving can be used to incorporate electrically conductive yarn into a fabric to obtain a textile that can be used as a "Wearable Motherboard". It can connect multiple sensors on the body, such as wet gel ECG electrodes, to the signal acquisition electronics.

Measurement of true area of contact between fabric surfaces electronically so has to predict fabric frictional behavior.

Interdisciplinary research between electronics, computer science and textile department

Following book mentioned is available where we can get idea about interdisciplinary research between electronics, computer science and textile department.



Interdisciplinary research between civil engineering and textile department

- ◆ geotextiles
- ◆ application of civil engineering in textiles
- ◆ application of fluid mechanics to design water jet orifice
- ◆ in hydroentanglement (one type of nonwoven manufacturing)
- ◆ friction between textile fabric and soil is important.

There is a book textiles in civil engineering applications by Senthil Kumar

Civil engineering applications have a wide spread demand with growing and emerging economies building capacity and infrastructure rapidly. Civil engineering and building industry are an integral part of the development of human society as they involve the planning, design, building, operation and maintenance of infrastructure. Historically, major developments in structural engineering have only been possible because of parallel developments in the technology of construction materials. Textiles, polymers and composites are increasingly being utilized in the construction sector. Textiles play an important role in the modernization of infrastructures, offering peculiar properties such as light weight, strength and resilience as well as resistance to many factors such as creep, degradation from chemicals, sunlight and pollutants.

From this book we can get ideas to do interdisciplinary research between civil engineering and textiles.

Interdisciplinary research between electrical engineering and textile department

The textile industry, being one of the oldest of industries, was so highly developed mechanically when electricity was still in its infancy that for many years the industry did not use electric apparatus for anything except as a source of prime motive power. Within comparative recent years, however, developments in machinery and processes have been rapid. With the new machinery and processes it is natural that many electrical means are employed to perform functions previously performed mechanically. There are a number of basic electric tools that are now employed in various combinations to get many desired results in machine operation and performance. It is the purpose of this article to list and describe a number of these and also to show how they are used to get improved textile machine performance.

Interdisciplinary research between Information Technology and Textiles

Today, Information technology (IT) plays a vital role in the field of textile industry. Any manufacturing unit employs four Ms that is, Men, Material, Machine and of course Money. To get organizational success, managers need to focus on synchronizing all these factors and developing synergies with in and outside organizational operations. With the increased competition, companies are taking support of IT to enhance its Supply Chain Management (SCM) and using it as a competitive edge. In short, many textile companies are leveraging the technological power to adding value to their business.

Supply Chain Management includes: sourcing, procuring, converting, and all the logistic activities. It seeks to increase the transaction speed by exchanging data in real-time, reduce inventory, and increased sales volume by fulfilling customer requirements more efficiently and effectively.

Why Textile Industries Need IT Support?**Lack of information on demand and supply aspects**

Most of the decisions a manager takes are related to demand and supply issues. But unfortunately very few are able to get it, as a result decisions taken carries risk and uncertainty. Excess inventory is one of the most common problems faced by managers which further results in long cycle-time, outdated stock, poor sale, low rates, and reduction in order visibility and finally leads to customer dissatisfaction.

Long procurement time

In a traditional textile industry, procurement process takes a much longer time. So, the retailers need to forecast demand and identify consumption trends at a much earlier stage. Lack of clarity about future can either result in early stock out, delay or overstock.

Supply chain in-competency

With the urge for getting global, apparel and textiles are facing hurdles of inefficiency in carrying out various processes involved right from designing, developing samples, getting approval, manufacturing, dispatching to payment procedures. The total time taken can get extended to one year or even longer. If we calculate, production actually accounts for just ten to twenty percent of the total time. Rest of the time is taken for the information processing from one end to the other.

MARKETING OF IDEAS ON RECENT ADVANCEMENTS IN INTERDISCIPLINARY RESEARCH BETWEEN TEXTILE AND OTHER ENGINEERING FIELDS

The trajectory of development of Information Technology has intersected every application in textile industry. From enhancing performance of textile manufacturing and tighter process control, IT has inserted intelligence at every node of textile supply chain.

Step into the global trade

It is a fact that a company going global is opened with lot of opportunities as well as threats in terms of competition, changing trends, and other environmental changes. It necessitates managing every kind of information efficiently and at much faster speed.

Interaction of Information Technology with Textile Supply Chain

Sharing of Information

Proper flow of information among supply chain member is very crucial. Such flow of information can influence the performance of overall supply chain operations. It includes data about customers and their demand, inventory status, production and promotion plan, shipment schedules, payment details, etc. Bar coding and Electronic data interchange are the two information technology tools which can facilitate information integration.

Bar coding facilitates recording of detailed data by converting it to electronic form and can be easily shared among members through EDI system. EDI with its high efficiency is able to replace the traditional ways of transmission like telephone, mail and even fax. EDI enables managers to analyze and apply it in their business decisions. It also helps in expediting order cycle that reduces investment in inventory. EDI based network enables Company to maintain quick response and closure relations with suppliers and customers, who are geographically dispersed. Manufacturers and retailers can share even new designs developed through CAD/CAM.

Supports planning and execution operations

Planning and coordination are very important issues in supply chain management. The next step after sharing information is planning which includes joint design and implementation for product introduction, demand forecasting and replenishment. Supply chain members decide their roles and responsibility which is coordinated through the IT system.

Various software tools like MRP, MRP-II, APSS facilitates planning and coordination between different functional areas within the organization.

Material Requirements Planning (MRP): It helps in managing manufacturing processes based on production planning and inventory control system. Proper implementation of MRP ensures availability of material for production and product for consumption at right time optimizes the level of inventory and helps in scheduling various activities. MRP system uses computer databases to store lead times and order quantity. MRP includes mainly three steps: first assessing the requirement of how many units of components is required to produce a final product; here it applies logic to implement Bill of Material (BOM) explosions. Second step includes deducting the stock in hand from gross to find out net requirement. Finally, scheduling manufacturing activities such that finished goods are available when required, assuming the lead time.

Manufacturing Resource Planning (MRPII) system is a logical extension of MRP system which covers the entire manufacturing function. This typically includes machine loading, scheduling, feedback and Software extension programmes in addition to material requirement planning. It provides the mechanism to evaluate the feasibility of a production schedule under a given set of constraints.

A textile company which has multipoint manufacturing and engaged in global business necessitates something more than MRP and MRP-II like Distribution Requirement Planning (DRP), it has ability to solve both capacity and material constraints and quickly propagates the effects of problems in both backward and forward direction throughout the supply chain.

The Advance Planning and Scheduling (APSS) system includes both material focus of MRP and rapid response scheduling power of MRP-II.

Coordination of logistics flows

Workflow coordination can include activities such as procurement, order execution, implementing changes, design optimization, and financial exchanges which results in cost and time efficiency. The results are cost-effective, speedy and reliable supply chain operations.

IT contributes towards the maximizing the value of textile supply chain through integrating supply chain operations within and outside the organization and collaborating the acts of vendors and customers based on shared forecasts. Internet adds to IT contribution towards supply chain management through coordination, integration and even automation of critical business processes. New

MARKETING OF IDEAS ON RECENT ADVANCEMENTS IN INTERDISCIPLINARY RESEARCH BETWEEN TEXTILE AND OTHER ENGINEERING FIELDS

system of the supply chain game emerges as a result of business innovation fuelled by the Internet.

Many supplying companies maintain demand data by style, size, fabric and color to replenish inventory at retail outlet. Level of replenishing is predetermined by both parties after reviewing history of sales by product and buying behavior of the community.

New Business Models**Data mining and data warehousing**

Data mining is the process of analyzing data from different viewpoints and summarizing it into useful information that can be used as a basis of monitoring and control, enabling companies to focus on the most important aspects of their business. It allows users to analyze data from many different dimensions, categorize it, and summarize the relationships identified. In short it is the process of finding correlations or relationship among dozens of fields in large relational databases.

Data warehousing is the repository of data and can be defined as a process of centralized data management and retrieval. Centralization of data maximizes user access and analysis.

E-commerce

E-commerce can be B2B (Business To Business) and B2C (Business To Customer). B2C commerce is the direct selling to consumers through Internet. While B2B marketplace can be defined as neutral Internet-based intermediaries that focus on specific business processes, host electronic marketplaces, and use various market-making mechanisms to mediate transactions among businesses. B2B appears to be more prospective than B2C.

E-retailing

The textile-retail giants are adding an Internet shopping-component to their offering. It has affected their distribution and warehousing infrastructure. As a result of going online, retailers have changed their supply chain strategy. High volume products with stable demand are stocked in local stores, while low-volume products are stocked centrally for online purchasing.

Companies prefer a direct route to consumers by closely scrutinizing individual customer's tastes, preferences, habits, and buying patterns. Instead of waiting for consumers to visit their stores, retailers simply send them e-mails with offers. Internet has facilitated quick response system. With the use of web-enabled technology it is possible to have automatic customer replenishment system.

Conclusions

This paper will be useful to textile engineers to collaborate with different other engineers such in the fields of computer science, mechanical, electrical, electronics, civil and information technology to carry out interdisciplinary research.

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Craft handloom villages to be set up in five States

To encourage integrated and sustainable development of handlooms, crafts and tourism, the Textile Ministry has started work on the construction of craft handloom villages on important tourist circuits across Jammu & Kashmir, Assam and Kerala.

"Craft handloom villages will be able to offer traditional handwoven products to the consumers and tourists by inspiring knowledge about authentic weaving technique through 'hands on' experience," according to a note prepared by the Ministry of Textiles.

At present construction work is going on for the crafts handloom villages at Mohapara (Assam), Kullu (Himachal Pradesh), Srinagar (J&K), Kollam (Kerala) and Rampur, Bodhgaya (Bihar).

"These craft villages are to be set up with the cooperation from the respective State governments," the note said. The on-going exercise is in line with the announcement made by Textile Minister Smriti Irani last year of the government's intention to develop ten craft and handloom villages so that handloom products are not limited to clothes or home furnishing alone. "More craft villages will subsequently be set up," an official said.

The idea is to have tourists visit these handloom villages to not only learn about the weavers but also contribute to Aatmanirbhar Bharat by buying more of these items.

To help weavers, exporters, manufacturers and designers to create new designs in step with global demand, the Textile Ministry is setting up Design Resource Centres. A DRC is to come up in Kancheepuram, Tamil Nadu, while seven others have already been set up at Delhi, Ahmedabad, Jaipur, Varanasi, Guwahati, Bhubaneswar and Mumbai. ■

CORPORATE NEWS

An Article on Sagar Manufacturing

Sagar completes a Century of Truetzschler Cards

In a posh modern building in Bhopal, India, a man is about to enter inside his office. At the entrance the man takes off his shoes and bends down to touch the ground as is the tradition while entering the temples. This sign is enough to know that traditional Indian culture and values are followed here in this company. The gentleman is Mr. Sudhir Kumar Agrawal, Chairman of Sagar Group. He says "I always had firm belief in our strong value system at Sagar Group. Our biggest strength and treasure are our People."



Vinod Kumar Jain, Executive Director, SMPL

Mr. Sudhir Agrawal, a first-generation entrepreneur, with dynamic leadership, commitment and integrity as core values has taken the Sagar group to greater heights.

Starting from a humble beginning by having a one room office, today Sagar Group is the fastest growing conglomerate in Madhya Pradesh, India. For more than 35 years Sagar Group continues as a dynamic and vibrant entity. They started with their first real estate project in 1983. Later in 2001 they ventured into the education field by starting the Sagar Public School. At present they are successfully operating three leading schools, three engineering institutes, one B-school and one Pharmacy institute. They also have a rice milling unit near Bhopal.

In 2012 Sagar Group ventured into the textile business by setting up a spinning mill Sagar Manufactures Pvt Ltd. In this project Mr. Sudhir Agrawal, a visionary person, was ably assisted

by his son, Mr. Siddharth Agrawal who is the Managing Director, a Civil Engineering graduate from (NIT) Bhopal. He says "We are working in diversified sectors like infrastructure, education, food and textiles, all these contribute towards the basic needs of any civilization. So, when we started the spinning mill, we required the best technology available and Truetzschler fit the bill perfectly".



Sudhir Agrawal, Chairman, Sagar Group

The man at the helm of affairs at the mill is Mr. Vinod Kumar Jain, Executive Director, SMPL. Mr. Jain is associated with the spinning mill project right from its inception in early 2012. Mr. Jain is a well-known technocrat in India and leaves no scope for any ambiguity when it comes to quality. He says "At Sagar we strive for optimum utilization of technology and resources, targeting quality production with an aim of exceeding customer



Siddharth Agrawal, Managing Director, Sagar Group

expectations". He added that "Our workers are well versed with the Truetzschler technology and therefore all our four units comprising of 150,000

spindles have Truetzschler blow-room and cards.” In fact, he happily said “We have completed a Century of Truetzschler cards and at present we have 115 Truetzschler cards running in our four units.”

SMPL believes in opting world class technology with less expensive automation which should last long in order to remain competitive in the market on all fronts and training and development is the key skill used for the optimum use of technology and controls. We are hiring both male and females and all are working shifts/have good dormitories and a beautiful campus for employees accommodating more than 1200 people with all facilities which industry needs.



Sagar Carding Department

At present SMPL makes about 85 tons of yarn per day super quality yarn. 65% of this is for export market and rest caters to the domestic demand. Count varies between Ne 20s and 40s which include 100% cotton combed fancy slub yarns, BCI cotton yarns, combed compact yarn for weaving and knitting including grey knitted fabrics normal cotton and lycra blend.

Regarding the recent COVID-19 crisis Mr. Siddharth Agrawal said “The recent business environment has affected international as well as domestic demand. Weak consumer sentiments and the fear of the virus led to a little bad financial year for us also. But now after a sluggish start the textile industry in India is showing an upward trend and we at SMPL along with our strengths we have already consolidated our manufacturing operations.”

SMPL leads all their products in a niche market where customers demand very high quality and they are striving further to raise the benchmark since inception.

When asked about future expansion plans, Mr. Vinod Jain said that they are expanding by 42,000 spindles this year and the order for further 22 latest wider width Truetzschler TC 15 cards is already placed.

From the Desk of
Rajesh Balkrishna Padalkar
Truetzschler (India) Pvt. Ltd.
N.I.D.C. Estate, Near Lambha Village
Post : Narol, Ahmedabad-382400 □

Marzoli focuses on India with new set up

Marzoli takes immense pride and pleasure to inform you that we are relocating our assembly line in India from Hosur to Coimbatore. The new factory is housed in a swanky location encompassing 50,000 square foot of working space and would be catering to the machinery requirements of customers across India and overseas.

Sharing a few glimpses of our new factory.

Camozzi Group

- ✦ Since 1999, Marzoli is owned by the Camozzi group.
- ✦ Facts and Figures

Marzoli

- ✦ Marzoli was established in 1851 and has experience & competence in manufacturing Textile Spinning Machinery for over 170 years.



- ✦ Marzoli is one of the 3 system suppliers to deliver complete spinning machines range from Blow-room to Ring Spinning.
- ✦ Marzoli can supply and is delivering the entire spinning mill world over. We also have a complete spinning mill from Marzoli in India.

CORPORATE NEWS

- ⇒ 19 Innovations in Spinning patented and exhibited in ITMA 2019 by Marzoli. Invested 140,800 manhours in R & D and established 4500 new drawings.

Marzoli India

- ⇒ We are moving to Coimbatore next month to a new facility having 50,000 sq. ft covered area and similar space available for mirror expansion.
- ⇒ Spinning machines will be assembled for exports & the domestic market.
- ⇒ We are live on SAP.
- ⇒ 95% of our employees are engineers & technically qualified.
- ⇒ Our company is ISO 9001:2015.

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 9815655937
 Mail: gbala@marzoli.it
 Web: www.marzoli.com
 Our new Address:
Marzoli India
MTMM Pvt Ltd
 Door No. SF 143/1,144/1,146,
 SNMV College road, Malumichampatti
 Coimbatore, Tamil Nadu India-641050

How has fashion rewired itself - What has changed: Work Revolution (WFH), Fashion Revolution (Home parties)

The new normal has changed the way fashion is being consumed. The trends and choices has evolved. It will be interesting to note the new fashion normal and how brands are adapting to it.

Showing signs of shifting in certain directions

We cannot solve our problems if our buying patterns are not guided by the principles of reusing, recycling, repurposing and generally just purchasing lesser. A T-shirt cannot cost as much as or less than a sandwich.

Fabrics in vogue what are the top 5 fabrics that are featuring in SS21 collections across key brands

As brands launch their new season it will be interesting to note what are the fabrics that take

centre stage. Comfort and sustainability remain focal points across brands.

Adios FY21 a recap of innovative new offerings by brands in the FY gone by

Underjeans to Anti-Viral shirts, Indian brands launched many new products in the year gone by. It will be interesting to take note of these innovations and how they were received by the market.

About Spykar

Spykar is synonymous with the Young & Restless



generation of today. Keeping up with the ever-changing dynamics of the global fashion industry, our collection exudes an individualistic and contemporary style. Spykar is a part of the Lord Bagri promoted Metdist Group, a diversified portfolio of companies. Spykar is known for its superlative product quality and great fits. Young & Restless at heart, we always aim to deliver emerging hi- street denim trends and fashion staples that resonate with the growing Indian consuming class. Our range of denims consist of styles which include Purist for the classic lovers to YnR for the contemporary souls. The top-wear collections are season highlights and compliment the vast range of denims for the season.

For further information, please contact :

Arva Kankroliwala
White Marque Solutions
Creative Strategy, Public Relations,
Digital Outreach
Landline: 022-26335094-98
Extension: 15
Cell : +91 9967843877
Email: arva@whitemarquesolutions.com
Office No: 422/423, 4th Floor, Laxmi Plaza
Laxmi Industrial Estate
Andheri (West), Mumbai-400053
Website: www.whitemarquesolutions.com

Graviera is all set to rise in style

Graviera brings to you fabrics that are value-for-money and are a utility-conscious buy

Graviera is a pioneer in the ready-to-stitch, over-the-counter fabric industry with a rich heritage of over 40 years. The brand has an elaborate and well-established PAN-India distribution, catering to varying consumer needs with a wide and unique variety of collections to choose from; the fabrics are for suits, blazers and trousers in Poly-Viscose (PV) and PV Blends. Their strong markets are Southern and Western regions, with high-quality products at affordable prices.



The Year 2021 is the dawn of a new era and with it, we hope to instil new hope for the markets to re-open and Graviera is up for the task, by fulfilling the basic need of the market. The brand is rolling out Dream 11 Qualities, which are available throughout the year. These qualities are time tested & absolute favourite in the market.

Originating from the core roots of Indianness and valuing Indian tradition, Graviera has introduced many gifting collections to name few – Happiness, Shagun, Aabhushan, Parampara, Bandhan, Shresht, Sarvashresht, Printmania, All of these collections come in very attractive gift boxes of various sizes & pocket friendly prices. The brand also offers Exclusive Premium Safari collection which are available in cool colours and they are super comfortable to wear. There is something for everyone this summer.

Graviera has always tried to add value for the money spent by the consumers and all the product are well researched & competitively priced. The Graviera products - ranges from 499 Rs. To 999 Rs. and this price range encompasses the complete product offering by the brand.



The brand enjoys a strong advantage of coming from the reputed House of Donear Industries Ltd., with a competitive price-point in the organized market. Thus, the brand offerings are of superior quality at enviable prices – it is a win-win situation for the consumers.



Commenting on Graviera's recent collections, Sanjay Srivastava (Sr. Vice President – Graviera) said, "Graviera is a legacy brand that understands the need of the suiting fabric market like no one else, and constantly strives to manufacture high quality products that are value-for-money and utility-conscious buy for our consumers.

CORPORATE NEWS

Originating from the core roots of Indianness and valuing Indian tradition, Graviera has introduced many gifting collections to name few – Happiness, Shagun, Aabhushan, Parampara, Bandhan, Shresht, Sarvashresht, Printmania. All of these collections come in very attractive gift boxes of various sizes & pocket friendly prices. The brand also offers Exclusive Premium Safari collection which are available in cool colours and they are super comfortable to wear. We at Graviera, are optimistic that our customers will love these new collections, which are perfect for the upcoming season. Graviera tayyarhai, aapkotayyarkarnekeleli!”

About Graviera

Graviera from the House of Donear Industries Ltd., is a pioneer in the ready-to-stitch, over-the-counter fabric industry with a rich heritage of over 40 years. The brand has an elaborate and well-established PAN-India distribution, catering to varying consumer needs with a wide and unique variety of collections to choose from; the fabrics are for suits, blazers and trousers in Poly-Viscose (PV) and PV Blends. Their strong markets are Southern and Western regions, with high-quality products at affordable prices.

For further information, please contact :
Wizspk Communication PR Pvt. Ltd.

Delhi Office

Plot 8, Sector-32, Urban Estate

Gurgaon-122001, Haryana

Tel : Board : 0124 4801212



Sustainability report on Innovation for a Sustainable Future

Oerlikon to be Operationally Climate Neutral by 2030

- » Oerlikon publishes first Sustainability Report
- » Aligned with United Nations 2030 Agenda for Sustainable Development
- » 2030 targets reflect Oerlikon's focus on the most material ESG contributions

Oerlikon (SIX : OERL) today makes a strong public commitment to sustainability by publishing its first Sustainability Report, Innovation for a Sustainable Future. “Sustainability has been an integral part of our strategy that drives our innovations and operations to serve our customers’ needs for many years,” states Dr. Roland Fischer, CEO Oerlikon Group. “With the report, we now make a public commitment and join the ranks of

people proactively engaging with sustainability and inspiring others to do the same.” Helping customers in key industries to achieve more with less is an integral part of Oerlikon’s value proposition, technologies and operations. Based on the materiality analysis, Oerlikon has selected 8 out of the 17 United Nations Sustainable Development Goals (SDGs) where the company can make the most difference for its stakeholders.

Environmental, social and governance targets for 2030 have been set by the Group in areas that align most closely with its operations, policies and capabilities. These targets, for example using only energy from renewable sources and increasing the number of women in leadership roles, have been selected with care and consideration in areas where Oerlikon can make the greatest impact. “Setting ambitious targets, such as achieving climate neutrality in our operations by 2030, clearly underlines our commitment,” added Dr. Fischer. “We also intend to have 100% of our R&D investment in new products to cover the ESG criteria. We have always seen innovation and sustainability as interdependent – for example, in 2019, our innovative technology solutions for jet engines helped our customers in the aerospace industry to save 25 million tons of CO₂. At the same time, the CO₂ impact of our own global operations was only 157 000 tons.” Oerlikon has many other tangible examples of how its engineering and processing of materials and surfaces contribute to sustainability in collaboration with its customers. Oerlikon’s technologies lengthen the useful life of machinery and tools, improve automotive and aerospace fuel efficiency and pioneer advances in textile manufacturing and the future of mobility. Oerlikon’s 2020 Sustainability Report is prepared according to the internationally recognized GRI Sustainability Reporting Standards, underlining the Group’s commitment to transparently sharing its sustainability achievements and progress, and is accessible online at www.sustainabilityreport.oerlikon.com.

About Oerlikon

Oerlikon (SIX: OERL) is a global innovation powerhouse for surface engineering, polymer processing and additive manufacturing. The Group’s solutions and comprehensive services, together with its advanced materials, improve and maximize performance, function, design and sustainability of its customer’s products and manufacturing processes in key industries.

Pioneering technology for decades, everything Oerlikon invents and do is guided by its passion to support customer's goals and foster a sustainable world. Headquartered in Pfäffikon, Switzerland, the Group operates its business in two Divisions – Surface Solutions and Manmade Fibers. It has a global footprint of more than 10 600 employees at 179 locations in 37 countries and generated sales of CHF 2.3 billion in 2020.

For further information, please contact :
Kerstin Flötner
Head of Group Communications,
Investor Relations & Marketing, Oerlikon
Tel: +41 58 360 98 68
kerstin.floetner@oerlikon.com
www.oerlikon.com
Leng Wong
Head of Group External Communications &
Public Affairs, Oerlikon
Tel: +41 58 360 96 14
leng.wong@oerlikon.com
www.oerlikon.com □

Colorjet & Konica Minolta – A Strategic Global Alliance

Two giants in their own spheres - Konica Minolta, Japanese multinational and world leader in optical digital print, and Colorjet, the largest manufacturer of digital inkjet printers in India have formed a strategic global alliance. As part of this renewal of decades old partnership, Konica Minolta would promote ColorJet digital textile printers through their global sales network.

This marks a new milestone in the decades old strategic partnership of Colorjet & Konica Minolta.

ColorJet is the largest and leading digital printer manufacturer in India, well-known for delivering smart solutions of digital large format printers that enable users to enhance their business proposition and maximize their ROI.

For years, Colorjet Digital Textile Printers, for example, Vastrajet and Metro have been designed around Konica Minolta's industry-leading cutting-edge reliable print heads - a testament to the long-standing and established business relationship between the two companies.

This strategic partnership between Konica Minolta and Colorjet would make it possible to offer comprehensive solutions to the digital textile print industry all over the world, using the

combined technological and commercial channel leadership of both companies.

There are no other large format printer manufacturers other than Colorjet with a range of print solutions, which seamlessly integrate global best-in-class technologies. Colorjet has been delivering enhanced business values to the most demanding of customers since 25 years with more than 4,500 Colorjet printer installations.

"The philosophy behind Colorjet products has been 'Smart Indian Engineering' for sustained long-term profit and this is what diverse customers want," MS Dadu, Chairman and Managing Director of Colorjet India, said.

The new strategic arrangement between Colorjet and Konica Minolta aims to result in a gain of 15-17% market share in their target countries. This would be made possible with the increased product range that would appeal to a much wider range of textile and apparel industry entrepreneurs and because an optimized value would be delivered in terms of product and service.

Initially, the strategic sales collaboration will start in China, Pakistan and subsequently the partnership will extend to other countries.

About ColorJet India Ltd

ColorJet Group the largest manufacturer of digital inkjet printers in India for Textiles and Signage, markets its products in 25 countries worldwide. Over 4,500 ColorJet printers are in operation around the world, across India, Middle East, Australia and Europe and the company keeps its presence strong, by exhibiting at various international exhibitions.

About Konica Minolta

Konica Minolta was formed in 2003 with the management integration of Konica and Minolta. Konica started operations 140 years ago and Minolta has been operating for 85 years. Over the years, the two companies consistently played leading roles in Japan's optical equipment industry.

For further information, please contact :

Arun Rao
Taurus Communications
Cell : +91 98250-38518
Email : arun@tauruscomm.net
Abhijeet Kumar
ColorJet India Ltd
Cell: +91 98119-92462
Email: abhijeet.kumar@colorjetgroup.com ■

EXPORT PROSPECTS AND MARKETS

Garments, made-ups sectors likely to get lower duty reimbursement RoDTEP scheme

Input duty reimbursement for exporters of garments and made-ups under the new RoDTEP scheme may be lower than the rates under the previous RoSCTL scheme if the government finds it difficult to meet the needs of all other entitled sectors with the available resources, officials said.

Last year, the Textiles Ministry had extended the Rebate of State and Central Taxes and Levies (RoSCTL) on export of garments and made-ups, which offers reimbursement of input taxes at 6 per cent or more of the exported value, till a time the Remission of Duties and Taxes on Exported Products (RoDTEP) was implemented. It was said that the rates were likely to remain the same under RoDTEP.

"The problem is that with the limited budget for RoDTEP, at around ₹13,000 crore annually, it will be very difficult to provide the RoSCTL rates to the textile sector as it would take up around ₹7,000 crore. The government will be left with less than half the amount for all other sectors," the official said.

There is a big demand from exporters to expand the budget for the RoDTEP scheme as with the amount being currently considered, many believe it will not be possible to compensate exporters for all the input taxes paid. Initially, the Finance Ministry had said that a provision of ₹50,000 crore will be made for RoDTEP but with the present resource crunch, it may be reduced to less than a third of that.

"The RoDTEP is a duty refund scheme which provides refund of all taxes and duties hitherto not refunded through any other mechanism. If it is a refund scheme, the refund should not be limited to the budget constraints," according to exporters' body FIEO.

FIEO has asked the government to provide whatever budget is needed to enable the export sector to get the rightful claim based on the parameters of rates fixation. "We have to bear in mind that India hardly has many options to support exports after losing special and differential treatment. RoDTEP, being a WTO compatible measure, should provide rightful competitiveness to exports not marred by the budget constraints," FIEO officials said at a recent press interaction.

The RoDTEP will be effective from January 1, 2021, although the rates are still being finalised, as the popular Merchandise Export from India Scheme (MEIS) stands withdrawn from December 31, 2020. A WTO panel had ruled that MEIS was incompatible with multilateral trade rules as it could not be directly correlated to the input taxes paid by exporters.

The garments and made-ups sector, which were under primary focus at the WTO, switched over to the RoSCTL scheme from the MEIS much earlier in April 2019 and it was decided that it would be merged with the RoDTEP scheme for all exporters once it was announced.

"The Textiles Ministry has been making a case for retaining the RoSCTL rates of reimbursement for garments and made-ups under the RoDTEP as well but it looks difficult," the official said.

Although the MEIS scheme had a budget of over ₹50,000 crore, it is being trimmed for the RoDTEP scheme as the government has to also provide for the Production Linked Incentive (PLI) scheme for the identified sectors which is aimed at promoting domestic manufacturing. □

Cotton exports may grow 30% as global market surges

India's cotton exports may increase by about 30 per cent for the current crop year (October 2020-September 2021) as rising global prices have made the fibre competitive.

According to trade experts, including Cotton Corporation of India (CCI) Chairman and Managing Director (CMD) PK Agarwal, exports could be between 65 and 70 lakh bales (of 170 kg each) compared with 50 lakh bales (lb) the previous year.

Agarwal sounded bullish on export prospects with CCI holding huge stocks of the fibre. "Export demand is good and overall Indian exports could be around 65-70 lakh bales this (crop) year," said the CCI CMD.

"We will easily export over 65 lakh bales in the current global market scenario," said Rajkot-based raw cotton, spinning waste and yarn trader Anand Poppat.

The bullishness on cotton exports, after traders pruned their projections to 54 lb in January, follows cotton prices in New York topping 89 cents per pound (₹45,924 a candy of 356 kg).

EXPORT PROSPECTS AND MARKETS

In contrast, Shankar-6, India's benchmark cotton for export market, is quoted at ₹44,600-45,100 a candy. Cotton futures for delivery in April were quoted at ₹22,200 a bale (₹46,489 a candy) on MCX.

"Indian cotton is still the cheapest in the world," Agarwal said adding that there was good demand from countries such as Pakistan, Bangladesh, Vietnam and China among others. "Bangladesh is the biggest buyer of Indian cotton. Turkey and Indonesia are other buyers. Pakistan also needs cotton as its crop is lower this year," Poppat said.

Indian shippers are offering cotton at least 10 per cent lower than the prices quoted on New York Mercantile Exchange.

Brownfieldagnews website quoted a US national cotton council official as saying that cotton prices are projected to rule strong this year on demand recovery. Global economy is recovering at a faster pace and mills are buying more cotton.

Agarwal said a lower US crop is also seen as a positive for the Indian exporters.

Poppat said at least 30 lb have been exported by January-end and another 2-3 lb could have been exported so far this month. On its part, CCI expects to ship a good amount of cotton this year through open market and global tenders. "We expect our share in India's total exports could be around 10 lakh bales this year," Agarwal said.

CCI, under the Centre's procurement scheme at minimum support prices (MSP), has purchased 91.8 lb accounting for nearly 25 per cent of the projected crop this year.

The Committee on Cotton Production and Consumption (CCPC) has estimated this year's production at 371 lb (365 lb). The Cotton Association of India (CAI) has retained its production estimate at 360 lb. India holds an advantage with high carryover stocks of over 110 lb from last year. CCPC has projected the carryover stocks from last season at 125 lb, while CAI has pegged it at 113.50 lb.

Agarwal said that CCI has sold 20 lb so far and the corporation currently has 70 lb stocks with 63 lb from the current season.

The CCI CMD said the public procurement will be coming to an end as the arrivals have tapered off and the market prices are ruling at ₹6,000-6,200 per quintal, above the MSP of ₹5,515.

In Gujarat's Rajkot district, one of the primary growing regions, raw cotton or *kapas* was quoted at ₹5,850 a quintal in February, while prices in Punjab markets ranged between ₹5,700 and ₹6,000.

Rajkot trader Poppat said one hurdle in cotton exports could be the persisting container problem. "It continues to affect shipments," he said. □

Textile Ministry asks for information on refund rates for garment exporters

Concerned over the fate of exporters from the garments and made-ups sector who had to shift to the new incentive scheme, Remission of Duties and Taxes on Export Products (RoDTEP), from January 1, the Textiles Ministry has sought details from the Commerce Ministry on the rates of reimbursement they will be entitled to, a source closely tracking the matter said.

"Exporters of garments and made-ups are nervous as they have no idea what reimbursement rates they will get under the new RoDTEP scheme and whether they would be comparable to the earlier RoSCTL scheme. The Textiles Ministry wants to find out what the rates are before they are announced so it can have some say in the matter," the official told recently.

The Commerce & Industry Ministry announced the implementation of the RoDTEP scheme for goods exports from January 1, 2021 to compensate exporters for the input taxes not reimbursed under existing schemes, including embedded levies (such as mandi tax, stamp duty etc.).

The popular Merchandise Export from India Scheme was simultaneously withdrawn as it was ruled as a banned export subsidy by a WTO panel since the reimbursement rates were not calculated strictly on the basis of input taxes paid. As the outlay of RoDTEP is set to be much lower than the over ₹50,000 crore allocated for the MEIS, cuts in reimbursement rates are expected.

"Exporters do not have any issues with an alternative incentive scheme is long as they are not losing out in terms of rates. Since the Commerce Ministry is yet to announce the rates for different sectors, the discomfort is growing as exporters do not know on what basis they should price their products," the source said.

Concerned over uncertainly

Exporters of garments and made-ups (items stitched from any type of cloth, other than a garment such as bed-sheets, cushion covers, lampshades etc) are especially concerned as they had already shifted from the MEIS to a new scheme called the Rebate of State and Central Taxes and Levies (RoSCTL) scheme in 2019 to mitigate the

EXPORT PROSPECTS AND MARKETS

incidence of State VAT and other State taxes (including embedded taxes) that was seen as being WTO compatible. While they were under the impression that the reimbursement rates that were fixed at around 6 per cent of the value of exports of garments and around 8 per cent for made-ups would remain the same under RoDTEP, they are not sure now, the source said.

"The Textile Ministry officials had got in touch with the GK Pillai Committee working out the RoDTEP rates to find out what it had proposed for garments and made-ups. However, they were directed to the Commerce Ministry, which has already received a draft report from the committee with the rates proposed for a number of items. The Textile Ministry has now sought information from the Commerce Ministry," the source said. □

The causes that make Pakistan textile sector to face an uphill task

Hopes of Pakistan importing cotton from India have been raised after New Delhi and Pakistan renewed their agreement to observe a ceasefire along the Line of Control and the international border in Jammu and Kashmir in early March.

But there are a few hurdles, especially political ones, for Indian cotton to surmount before it can reach Pakistan, according to traders and industry officials.

Signs from Pakistan are ambiguous, particularly after Imran Khan headed a meeting yesterday on surging cotton yarn prices. Adviser to Pakistan PM on Commerce Razak Dawood tweeted that the Pakistani Prime Minister had "instructed to take necessary measures, including cross-border trade of cotton yarn, to keep the momentum of value-added exports."

Recently a high-level Pakistan meeting was held after raw cotton (*kapas*) prices increased to an 11-year high in the neighbouring country to Pakistani rupee 12,000 (Indian ₹5,560) per maund (37.32 kg).

Cotton prices in Pakistan are literally on fire as its production for the current marketing year (August 2020-July 2021) is 24 per cent lower at 60.19 lakh bales (of 170 kg), according to the US Department

of Agriculture (USDA), which estimates Pakistani cotton imports at 60 lakh bales.

The drop in Pakistan crop comes at a time when global cotton prices have increased sharply since June last year to 87 cents per pound (₹50,050 per candy of 356 kg) now.

At the same time, prices of Shankar-6 cotton, the benchmark for exports, in India are quoting below ₹47,000 a candy. Pakistan spinning mills could stand to gain from this.

The problem, however, is that after the Pulwama blast in February 2019 trade between Islamabad and New Delhi has come to a halt. "There is no ban on exports to Pakistan from India. A political decision has to be taken. There is no political pressure here on us," said a government procurement agency official.

Cotton Corporation of India (CCI) Chairman and Managing Director PK Agarwal told recently that Pakistan would have to withdraw its curbs on the import of Indian cotton.

"Currently, Pakistan could be willing to buy any cotton but no one has approached from that side," he said. India can meet any export demand as it is carrying record cotton stocks from last year.

The Committee on Cotton Production and Consumption has estimated the carryover stocks at 120 lakh bales.

CAI President Atul Ganatra said that no one from the government or trade had approached for the supply of cotton to Pakistan.

Anand Poppat, Rajkot-based trader in raw cotton, yarn and spinning waste said: "There has been no direct enquiry yet from Pakistan."

Besides cotton, there is also a demand for the import of cotton yarn. This has left the Pakistan textile industry divided.

Representatives of the value-added sector have told Dawood that "it is also most crucial to allow the import of cotton yarn from the neighbouring country through the Wagah border."

"Pakistan can easily buy 10-15 lakh bales of cotton from India given the shortage it faces. Trade on both sides will gain but a political decision has to be made," Poppat said.

Traders and officials concur with the view. □

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EXPORT PROSPECTS AND MARKETS**Govt. should review tariff policy in regard to the import duty on cotton**

The sudden impost of customs duty on imported cotton has left the stakeholders in the cotton industry shocked. The user industry has expressed serious concerns over the viability of exports covering cotton yarn, fabrics, made-ups and garments.

The Budget sprang a surprise by imposing on imported cotton a five per cent basic customs duty plus a five per cent Agriculture Infrastructure Development Cess. The pre-existing 10 percentage point Social Welfare Cess continues, taking the aggregate duty burden to 11 per cent advalorem on cotton. India imports 15 lakh to 20 lakh bales (of 170 kg each) of the fibre, especially superior varieties like Extra-Long Staple (ELS), from origins such as the US and Egypt. While these contamination-free fine varieties are hardly grown in our country, there is demand for such varieties from the user industry to make superior quality garments, lingerie and so on. The imported cotton is blended with domestic cotton to add lustre and strength to the value-added end-product.

The user industry has a point when it argues that import of less than 20 lakh bales of cotton in the country's over-all annual cotton production of 330-360 lakh bales is hardly an issue; but it would surely exert a negative impact on export. There is no evidence that import of varieties such as ELS affects the domestic market. If anything, the duty is likely to erode India's competitiveness in the export market.

It is unclear what considerations lay with the Finance Ministry when it proposed the impost. Support to domestic growers could not logically have been the reason as the country does not cultivate ELS variety on any notable scale. Revenue, too, could not have been a consideration as the volume of import is rather modest.

Someone in the policymaking circle should explain the rationale for this impost. There is need to unambiguously state the objects and reasons for the level of duty. If not, the duty should be withdrawn because of its counter-productive impact. A nuanced yet matured approach on the part of New Delhi would be to engage with the user industry to explore ways to enhance ELS cotton production in India.

However, importantly, a study of agro-climatically suitable areas for cultivation should be undertaken. Demand projections for the next 10-15 years should be worked out scientifically. A long-term, sustainable production, consumption and

export policy is the way forward. All this will take time, but a beginning must be made without delay.

So, until India reaches reasonable self-reliance in cultivation of superior cotton varieties, import of duty-free cotton should be allowed especially to ensure value-added export.

Textile is a critical sector for the country with significant labour-intensity and export earnings. Trade and tariff policies of the government should help sharpen the competitive edge of the sector rather than disrupt its activities in unproductive ways. □

Textile Ministry keen on signing FTA with UK

The Textile Ministry has put its weight behind an early limited free trade deal between India and the UK which, it says, must include tariff reduction for textile and clothing items, resulting in possible gains for the sector, officials have said.

"The textile industry is very keen that India should sign an early Free Trade Agreement (FTA) with the UK as it could benefit enormously from tariff cuts," an official told recently.

While formal talks on a India-UK FTA have not yet started, there is a possibility for discussions during UK Prime Minister Boris Johnson's visit to India according to UK officials.

Commerce & Industry Minister Piyush Goyal had, in April proposed to the UK Secretary of State for International Trade Elizabeth Truss that the two countries could work on an interim pact on a preferential basis based on which both sides would reduce or eliminate tariffs on select items.

The UK is India's 14th largest trading partner accounting for \$8.7 billion of exports and \$6.7 billion of imports in 2020-21.

The Textile Ministry wants more market access for textiles and clothing under the proposed trade pact with the UK as the industry has been complaining about not being able to perform to its full potential because of tariff disadvantages.

In a letter to Prime Minister Narendra Modi dated December 21, 2020, the Apparel Export Promotion Council (AEPC) pointed out that India's apparel export industry was facing severe competition in the UK due to duty disadvantages arising out of benefits under the Generalised System of Preferences (GSP) to 47 Least Developed Countries including Bangladesh. While the GSP scheme is for EU countries, the UK has indicated that it will continue despite exiting the EU. ■

TEXTILE EVENTS

KTM Kahramanmaraş 2021

International Textile Machinery Exhibition to be held from 23-25 September 2021

The Giants of Textile Meet at KTM 2021

The International KTM 2021 Fair, which will be held in Kahramanmaraş for the seventh time between 23-25 September 2021, is once again in preparation for bringing the Turkish and world textile industry together.

While making its preparations to bring together textile technology producers worldwide for the seventh time in Kahramanmaraş, as the center of textile production, International Kahramanmaraş Textile Machinery Fair-KTM 2021 will be the scene of important business contacts accompanied by B2B meetings as well as will be the showcase of the launch of new technologies to the textile sector.

Organized for the seventh time by ECR Fuarçılık, which has made a name for itself in the sector with its organizations, the fair itself, with its boutique structure, offers the participants the opportunity to market their innovations directly, while giving companies a unique opportunity to achieve business partnerships.

Within the scope of International KTM 2021 Fair to be held in Kahramanmaraş Kafum Fair Center; domestic and international technology producers from yarn, knitting, weaving, technical textile, dye-printing, textile finishing and machinery accessories & spare parts sectors will have the opportunity to exhibit their innovations to sector representatives.

The fair, which has been held since 2014, exhibits the textile and ready-to-wear production chain as well as raw materials. Bringing together important companies in the Turkish and world textile industry in its sixth edition that was held in September 2020, the fair brought 109 world brands and textile manufacturers together from Kahramanmaraş and from other regions. The International KTM 2020 Fair, organized in Kafum Fair Center under the main sponsorship of Kahramanmaraş Chamber of Commerce and Industry and Textile Exporters Associations, which lasted for 3 days; it hosted 5.431 visitors from 21 cities such as Gaziantep, Niğde, Osmaniye, Şanlıurfa, Denizli, Bursa, Kayseri, Malatya, Adıyaman, Tekirdağ and Istanbul, especially Kahramanmaraş.

The International KTM Fair, which has successfully made a name for itself with the stability it provides, will once again be the address

of important business connections for various investors and technology manufacturers in the textile industry between September 23-25, 2021.

For further information, please contact :

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TECHNOTEX 2021

Technical Textiles : Emerging Opportunities and Investments Prompted by the Production Liked Incentive scheme and National Technical Textiles Mission (NTTM) held on March 17, 2021 at 12.30 Hrs at ITC Maurya, New Delhi

We are thankful to you for your support to our various industry initiatives and particularly to Technotex series of exhibition & conference.

Government of India has ambitious plans and programmes to develop India as one of the leading hubs of Technical Textiles globally and set up a robust manufacturing base in India. Simultaneously, Government is also working towards a sustainable and healthy market growth in the domestic sector as well as encourage exports.

In this endeavor, Ministry of Textiles has been partnering with FICCI (Federation of Indian Chamber of Commerce & Industry) in organizing TECHNOTEX since past many years providing a unique platform for interaction amongst stakeholders from across the global, Technical Textiles value chain.

Government has taken many positive initiatives such as rolling out Performance Linked Incentives (PLI) and National Technical Textiles Mission (NTTM), which will provide much desired impetus to the Technical Textile sector. Technotex 2021 is an ideal platform to showcase the true potential and growth opportunities in Technical Textile sector.

Inauguration of Technotex 2021 got scheduled on March 17, 2021 in ITC Maurya, New Delhi at 12.30 Hrs. It gave me an immense pleasure to invite your physical/virtual presence at the Inaugural Ceremony. Your presence at the Inauguration Ceremony will exude positivity in the stakeholders.

For further information, please contact :

Monoj Mehta

**Director & Head - Chemicals, Agro-Chemicals, Petrochemicals and Civil Aviation
Federation House, 1, Tanseer Marg**

New Delhi-110001, India
 T : +91-11-23487440
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Hightex 2022

14-18 June 2022

HIGHTEX Postponed, New Dates: 14-18 June 2022

HIGHTEX International Technical Textiles and Nonwoven Trade Fair, which is planned to be held on June 22-26, 2021 was decided to postpone to June 14-18, 2022, considering the effects of the ongoing Covid-19 pandemic in the world. This postponement decision was taken as a result of intense discussions and evaluations with our participants and sector representatives.



The HIGHTEX Organization Team made the following statements: "We as HIGHTEX Organization Team, our priority is to protect your valuable exhibitors and visitors' investments and all rights, not our commercial earnings. In this regard, we believe that all of our participants will find this compulsory postponement decision taken for the HIGTEX Exhibition justified and will understand."

HIGHTEX 2022, which will be held in Istanbul Tuyap Fair and Congress Center between 14-18 June 2022, simultaneously with the ITM 2022 Exhibition.

HIGHTEX 2022 being the first and only exhibition in its field in Turkey will host the world's leading technical textile and nonwoven manufacturers in Istanbul for 5 days.

HIGHTEX 2022, where many companies from Turkey and abroad will exhibit their latest



technologies and products; will be visited by many industry professionals from medical to ready-to-wear, from decoration to cosmetics, from automotive to defense.

For further information, please contact :

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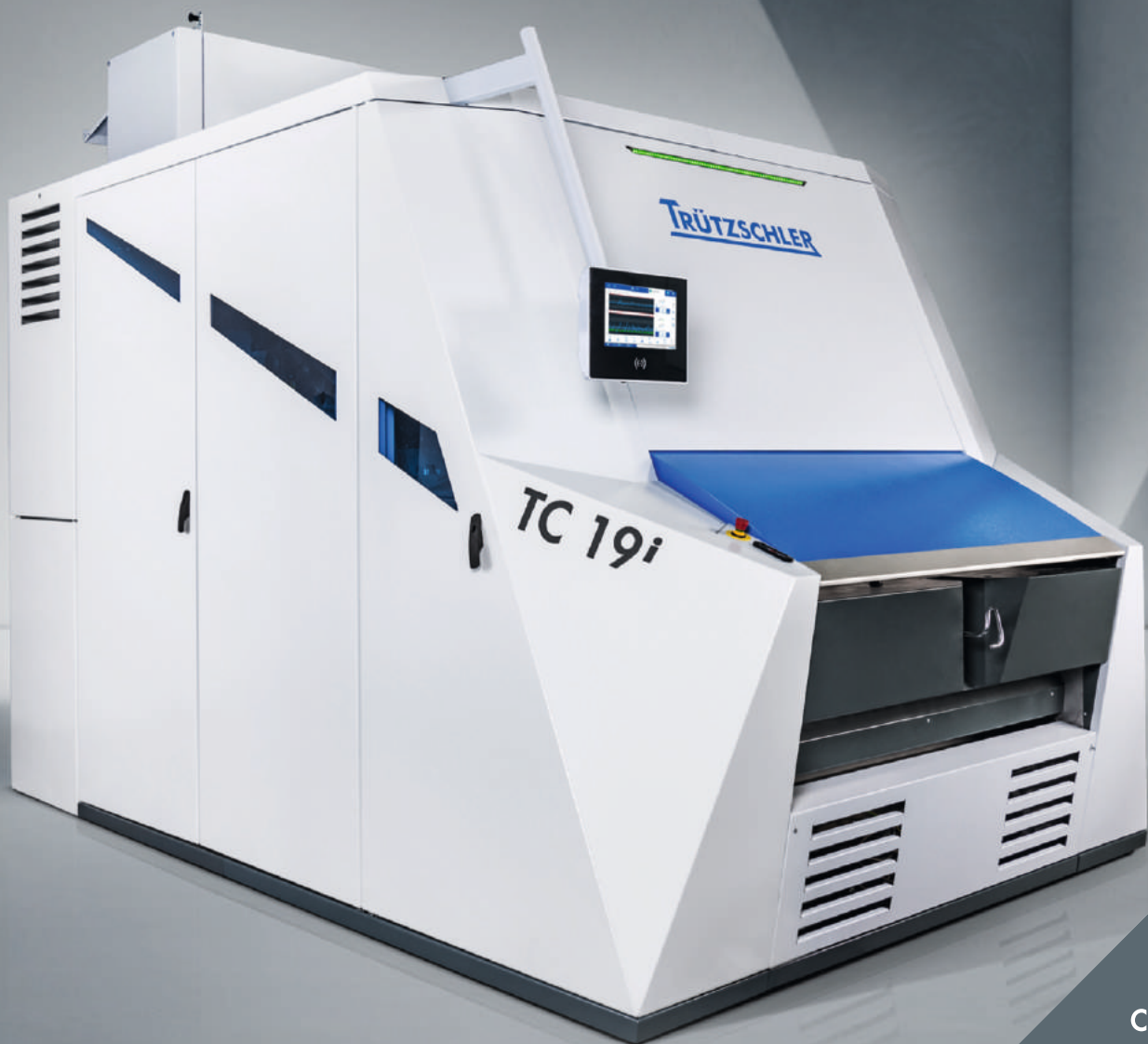
Textile Ministry Mulls of slashing yarn price

The Textile Ministry is examining and working to resolve the crisis arising out of frequent rise in yarn prices and disruption in supply, said president of Tirupur Exporters Association (TEA) Raja M Shanmugham on recently.

In a statement, Shanmugham expressed hope of a positive solution to the crisis.

International cotton prices have started coming down, of course not to the level of domestic cotton prices and in line with this, the Indian cotton prices have also been gradually reduced, he said.

He expected the normal price range would be witnessed in the near future. In a recent meeting with the textile mills associations, he had said the need of the hour was to reach a win-win situation and to come out of the woods. ■



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Oerlikon

Emphasis on home textiles

Oerlikon Manmade Fibers kicks off the new year with a series of webinars on the topic of home textiles. Traditionally, the company's event calendar begins with the DOMOTEX trade fair and the supplementary BCF Symposium. Due to the COVID-19 pandemic, the world market leader for BCF yarn systems has an alternative event for its customers this year. Those interested can register to take part in the webinars via the Oerlikon Manmade Fibers Division corporate Website.

» Manufacturing carpet yarn with the BCF S8 – 'Experience-based Innovation'

March 3, 2021: 2-2.45 CET

The series of webinars launches in March 3, 2021 with a presentation on the BCF S8 system. Nis Lehmann-Matthaei, Sales Director BCF at Oerlikon Neumag, introduces the latest development steps in the monocolour variant. Under the 'Experience-based Innovation' motto, this system technology sets new standards with never-seen-before spinning speeds, up to 700 filaments and fine titers of up to 2.5 dpf.



The BCF S8 sets new standards with regards to color separation.

» BCF S8 Tricolor – a massive step forward for your carpet yarn production

March 10, 2021: 2-2.45 CET

In his webinar, BCF Sales Director Michael Rübenhagen focuses on tricolor yarn production. Thanks to the patent-pending CPC-T unit (Color Pop Compacting), the BCF S8 is capable of manufacturing in excess of 200,000 different shades – from mélange through to strongly-separated.

» Heavy-denier applications – WINGS HD and eAFK Big V complete your home textiles portfolio

March 17, 2021: 2-2.45 CET

The carpet yarn portfolio is complemented by a POY-DTY solution for heavy-denier applications: using the WINGS HD and the eAFK Big V, carpet yarn manufacturers can efficiently and economically cater to increasing demand for heavy-denier DTY yarns. The technology is presented by Area Sales Director Oliver Lemke.

» Compact spinning system for heavy-denier POY and DTY – what the VarioFil can do for you

March 24, 2021: 2-2.45 CET

In a fourth webinar, Product Manager Ralf Morgenroth unveils the VarioFil R+ compact spinning system for recycled filament yarn, developed and built by subsidiary BBE. The system is available for producing POY.

Appearance of Oerlikon Manmade Fibers Division at ITMA ASIA + CITME in Shanghai, China

Hybrid trade show concept with various innovations for the entire manmade fibers industry

This year's trade fair appearance of Oerlikon's Manmade Fibers Division at ITMA ASIA + CITME will focus on the latest machine and plant developments as well as customer services around the motto "Clean Technology. Smart Factory." In Hall 7 of the China National Exhibition and Convention Center (NECC), Shanghai, Oerlikon will present as one of the leading suppliers for high-end technology solutions for the entire manmade fibers industry its innovations from 12 to 16 June 2021 at its hybrid booth A48 on more than 225 m².



Oerlikon offers its customers solutions along the textile value production chain. The division with the competence brands Oerlikon Barmag, Oerlikon Neumag and Oerlikon Nonwoven thus supplies technology "From Melt to Yarn, Fibers and Nonwovens" for PET, PP, PA6 and other materials. Accordingly, the offers at the ITMA ASIA + CITME booth will be.



Due to the travel restrictions in the context of the Corona pandemic, Oerlikon relies on a hybrid booth concept. In addition to various new component exhibits from the fields of continuous polycondensation including gear metering pumps, filament (POY, FDY, IDY, BCF) and staple fiber spinning, texturing as well as nonwovens production, the dialog with customers will now more than ever after such a long time without a fair be at the center of the trade show activities.



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

All Oerlikon experts from outside China will be able to be connected online in order to provide comprehensive support for the trade fair visitors together with the Chinese sales staff, technologists and engineers on-site. Especially in the field of digitalization and new solutions for the "Smart Factory", the intercontinental dialog at the whole time of the exhibition is a mandatory prerequisite for a successful trade fair.

Oerlikon Barmag precision metering pumps fulfill the highest demands of the chemical industry

Polyurethane (PUR) is conquering ever more areas of modern life – automobiles, furniture, shoes, medical technology and packaging. However, processing it is extremely complex and demands tailored solutions for the respective applications. Here, the Oerlikon Barmag precision metering pumps fulfill the very highest demands of the chemical industry – from highly-accurate metering all the way through to greater durability and superior efficiency. Visitors to the Polyurethanex trade fair (Pavilion 1, Stand 1A03), being held in Moscow between March 30 and April 01, 2021, will now also be able to convince themselves.

As soft foams, PUR in car seats, furniture upholstery and footwear and, as rigid foams, in insulation materials for buildings and cooling units. Vehicle manufacturers use it to produce composite components, while virtually every industry deploys cast PUR elastomers to create cushioning elements, rollers and many other items. This flexible material harbors huge potential and industrial competition is correspondingly dynamic: in demand are tailored PUR processing solutions for highly-efficient, rapidresponse and, above all, environmentally-friendly mass production.

GM and GA pumps series for challenging applications

Oerlikon Barmag has been catering to the growing requirements with its gear metering pumps for many decades now. At the Moscow trade fair, the Remscheid-based company will be presenting its GM and GA ranges, along with the corresponding components for the most diverse applications. These pumps also reliably master the most demanding processes in the chemicals, plastics and paints and lacquers industries. They are characterized by low-pulsation feeding of the conveying medium, which promotes more accurate metering.

High-speed pumping despite poor lubrication

One of the greatest challenges here is the highly-accurate metering of poorly-lubricating and abrasive media. The high-speed metering pump was developed especially for this: "It is beneficial above all in cases of chemical manufacturing processes that focus on aggressive acids", emphasizes Thorsten Wagener, the sales expert responsible for industrial and chemical application pumps.

SCIENCE IN INDUSTRY

The main advantage of this high-speed pump is its sealed product space. The space that comes into contact with the media is therefore limited to the area around the gears. This extends the lifespan of the pump considerably.



The metering pumps series for chemical applications is characterized by its short flow channels

About Oerlikon

Oerlikon (SIX: OERL) engineers materials, equipment and surfaces and provides expert services to enable customers to have high-performance products and systems with extended lifespans. Drawing on its key technological competencies and strong financial foundation, the Group is sustaining mid-term growth by addressing attractive growth markets, securing structural growth and expanding through targeted mergers and acquisitions. A leading global technology and engineering Group, Oerlikon operates its business in two Divisions – Surface Solutions and Manmade Fibers – and has a global footprint of around 11 000 employees at 182 locations in 37 countries. In 2019, Oerlikon generated CHF 2.6 billion in sales and invested more than CHF 120 million in R&D.

For further information: www.oerlikon.com

About the Oerlikon Manmade Fibers division

With its Oerlikon Barmag, Oerlikon Neumag and Oerlikon Nonwoven brands, the Oerlikon Manmade Fibers division 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.

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. 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. Worldwide, the division – with more than 3,000 employees – has a presence in 120 countries with production, sales and distribution and service organizations. At the R&D centers in Remscheid, Neumünster (Germany) 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/manmade-fibers

For further information, please contact :

Claudia Henkel, Marketing
Corporate Communications & Public Affairs
Tel. +49 4321 305 105

Fax : +49 4321 305 212
claudia.henkel@oerlikon.com

André Wissenberg, Marketing
Corporate Communications & Public Affairs
Tel. +49 2191 67 2331

Fax : +49 2191 67 1313
andre.wissenberg@oerlikon.com

James Li, Marketing
Corporate Communications and Public Affairs
Tel. +86-21-62371300

Fax : +86-21-62371309
James.li@oerlikon.com

Ute Watermann, Marketing
Corporate Communications & Public Affairs
Tel. +49 2191 67 1634

Fax : +49 2191 67 1313
ute.watermann@oerlikon.com



A.T.E. Enterprises Private Limited

A.T.E. teams up with Sieger Spintech, India

A.T.E. has entered into an exclusive partnership with Sieger Spintech Equipments Private Limited for sales and marketing of Sieger's products and solutions in India. Based in Coimbatore, India, Sieger offers many kinds of hi-tech textile machinery and textile engineering solutions. Sieger's range of products includes innovative automation solutions for the textile industry and tailor-made solutions for textile material handling from roving transportation to garments. Sieger also offers systems and solutions for roving transport – from simple loop to automatic creel change systems.

Sieger's product portfolio also includes an automatic cone packing system which has modules for weighing balance, buffer storage, cone labelling, wrapping, and bagging or boxing (both packing options are also possible).



Sieger offers a variety of solutions for yarn conditioning such as the latest generation, power saving YCP NG UF (pit not required), and the fully automatic YCP NG HI -cubical-palette yarn conditioning plant with and without pre-conditioning chambers.

Sieger's 'Cone to Container' automation is a tailor-made system that is completely untouched by hand – from winder to container. Solutions are provided based on the layout and requirements of the mills. Sieger also provides systems for automatic palletizing and stretch wrapping with barcode labelling, and automatic storage and retrieval for finished goods storage.

Additionally, SIEGER also provides automatic overhead travelling cleaners, designed with state-of-the-art aerodynamic CFD. Sieger's ADOF is an advanced doffing system with a doffing speed of less than 90 sec with minimum start-up breaks.

On the tie-up, Mr G V Aras, Director, A.T.E. Enterprises, said, "Sieger is a world-class innovative engineering company with a dedicated R&D centre. Considering the manpower shortage and the growing demand for process automation, I see a huge potential for Sieger's products in India."

Mr Kiran Hanchate, Vice President, A.T.E. Enterprises, added, "With over eight decades of experience in the textile industry, A.T.E. is a domain expert in textile spinning. This partnership between A.T.E. and Sieger will immensely benefit the Indian textile industry as it will make Sieger's solutions more widely available and give Indian customers a sustainable competitive advantage in their businesses."

Mr Radhakrishnan, Managing Director, Sieger Spintech, said, "Sieger is glad to partner with A.T.E. While automation is much needed in the textile industry, automation solutions should be well designed to get the best results. With strong, customer-focused technical teams at A.T.E. and Sieger, this association brings in the synergy to aptly address the needs of the customers and will help make the textile industry ready for a promising future!"

For further information, please contact :

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Baldwin and BW Papersystems to offer a free webinar on how to print offset more efficiently
Large-format sheetfed printers invited to learn about inline roll-sheeting, corona and LED-UV

Process-automation experts Baldwin Technology Company Inc. and BW Papersystems, both part of the Barry-Wehmiller family of companies, collaborate to offer a three-part webinar to discuss how to print offset more efficiently. The one-hour live educational session is offered twice on March 11, and registration is free: March 11 at 5 a.m. EST (US) / 11 a.m. CET (Europe)

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and March 11 at 11 a.m. EST (US) / 5 p.m. CET (Europe).





BW Papersystems, drawing on more than 20 years of experience, has developed a unique sheeter that helps customers maximize the efficiency of any large-format press in daily production by combining the benefits of web-fed and sheet-fed offset.

"In our part of the webinar, we will show how printers can maximize the return on investment on a 145-165cm press and increase output by 50 percent," said Steve Brimble, Vice President of Strategic OEM Accounts at BW Papersystems.

AMS Spectral UV, part of Baldwin, is the world's leading manufacturer of industrial-strength LED-UV curing solutions for wideformat offset printing applications, as well as for manufacturing and industrial use.

"With LED-UV, you can run at full speed and eliminate curing challenges, and we will explain how this is done," said Myles Le-Monte Shepherd, Sales Executive at AMS Spectral UV.

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Ahlbrandt, also part of Baldwin, is a world-renowned manufacturer of corona treatment systems for printing and industrial applications, offering reliable systems with unique features and benefits.

"In our part of the webinar, we will show how adding on-demand surface treatment for better adhesion is ideal with inline corona," said Alexander Rau, Product Manager at Ahlbrandt.

ABOUT BALDWIN TECHNOLOGY COMPANY INC.

Baldwin Technology Company Inc. is a leading global manufacturer and supplier of innovative process-automation equipment, parts, service and consumables for the printing, packaging, textile, plastic film extrusion and corrugated industries. As a total solutions provider, Baldwin offers our customers a broad range of market-leading technologies, with a focus on improving the economic and environmental efficiency of production processes. Through a global footprint of 21 company-owned locations and an extensive network of partners, our customers are supported globally, regionally and locally by dedicated sales and service team members who add value by forming long-term relationships. Baldwin is privately owned by BW Forsyth Partners, a Barry-Wehmiller company. For more, visit baldwintech.com.

ABOUT BW PAPERSYSTEMS

BW Papersystems, part of Barry-Wehmiller, combines extremely strong brands, innovative technologies and long-standing global experience in the corrugating and finishing, sheeting and packaging, folding carton and paperboard, and stationery, and security-documents industries. BW Papersystems brings together 12 brands — BW Bielomatik, BWP Zerand, Curioni, JAG SYNCHRO, K&H, Kugler-Womako, MarquipWardUnited, Questec, SHM, VortX, WillPemcoBielomatik and Wrapmatic—that synthesize manufacturing in the paper process industries. We offer market-leading technology for full corrugators in a variety of configurations, rugged rotary die cutters and flexo folder gluers, as well as starch-mixing systems. Customers rely on us for web fed die cutting systems, folio-size, cut-size and digital-size sheeting and packaging of paper, board and other materials. In addition, BW Papersystems' portfolio includes stationery, passport production and specialized paper-converting applications, as

well as RFID processing technology. For more, go to bwpapersystems.com.

For further information, please contact :
Christina Björkander, Dir.

Global Marketing & Communications
christina.bjorkander@baldwintech.com

Baldwin Technology Company Inc.

8040 Forsyth Blvd., St. Louis, MO 63105 USA

t. L +1 (314) 863-6640

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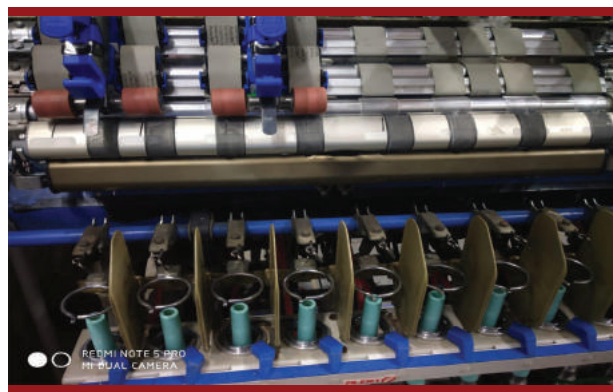
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 Ph : +91 4222912019, +91-9952401838
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Mimaki Europe BV

Mimaki to roll out New Product Innovations and Engage Visitors with High-Performance, High-Value 100 Series at virtual drupa

Mimaki Europe, a leading manufacturer of inkjet printers and cutting systems, today announces that it will exhibit its broad portfolio of cutting-edge digital print technologies at first ever virtual drupa (20-23 April 2021). The company's brand-new "100 series" will take centre stage on its interactive virtual booth alongside brand-new additions to its powerful product portfolio, unveiled at the event. In addition to that, Mimaki will launch a special promotion at virtual drupa for selected products, making its product portfolio even more appealing to those companies looking to diversify their business during these challenging times.

In line with virtual drupa's goal to help the industry keep in contact, grow their networks and generate leads in today's challenging times, Mimaki will use the event to demonstrate its latest business-enhancing digital printing solutions and to highlight numerous application opportunities.

"Faced with the current circumstances of the Covid-19 pandemic, we all need to adapt and come together to come through this challenging situation," says Danna Drion, Marketing Manager, Mimaki EMEA. "For the last 12 months, Mimaki has been at the forefront, supporting customers and prospects with virtual events, networking and educational opportunities to overcome the impact and challenges created by the Covid-19 pandemic. Online events remain central to our strategy and virtual drupa represents a key opportunity for us to share our expertise and encourage print service providers to join us and find new ways to drive their business forward."

The company's latest "100 series" portfolio will be one of the highlight technologies showcased at virtual drupa. Designed to enable users to drive success amid the current market uncertainty, the new printer series offers high productivity and reliability, extreme flexibility to diversify the application range, as well as a highly competitive

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price-performance ratio. The Mimaki's 100 series consists of three models, each equipped with a variety of renowned Mimaki features, including NCU (Nozzle Check Unit), NRS (Nozzle Recovery System), and DAS (Dot Adjustment System).

» **Mimaki JV100-160** : a roll-to-roll eco-solvent printer, the JV100-160 enables users to achieve high quality solvent printing at an entry-level price. The printer adopts the recently developed, fast drying eco solvent ink "AS5", available in both a dual CMYK 4 colour mode and 8 colour mode (CMYK Lc Lm Or Lk). Besides reducing graininess and allowing for fine details even when printing images with high volumes of ink, the new AS5 ink has superior scratch resistance and outdoor durability which allows printers to create a multitude of applications, whether they are for indoor or outdoor use.

» **Mimaki UJV100-160** : a roll-to-roll UV printer, the UJV100-160 combines high productivity, extreme versatility, and superior print speed. The printer uses a low-cost UV ink "LUS-190" which cures immediately after being exposed to UV light, enabling a faster turnaround without the need for a degassing period after printing. The LUS-190 ink can be printed onto not only PVC, but also uncoated substrates such as PET film and paper. This system is the ideal solution for print businesses introducing UV printing technology to their production line.



Part of the 100 Series, the Mimaki UJV100-160 aroll-to-roll UV-curable inkjet printer designed for high quality printing and maximum productivity.

» **Mimaki TS100-1600** : a dye-sublimation textile printer, the TS100-1600 offers an affordable, high-quality solution to those printers looking to explore digital sublimation printing and expand their production capacity. Featuring a print width of 1,600 mm and speed of 70 m²/h

in the fastest mode, the TS100-1600 uses a 1 litre ink bottle which helps reduce the running cost and enables stable, continuous operation due to the reduced need for ink replacement. The TS100-1600 is ideal for a diverse range of applications in fashion, soft signage, home and interior, sportswear, and personalised items.



The newest addition in the 100 Series, the TS100-1600 is a dye-sublimation textile printer designed for a diverse range of applications in fashion, soft signage, home & interior, sportswear, and personalised items.

As part of the company's long-term commitment to drive innovation in the digital printing space, Mimaki will also introduce two brand-new printing platforms at virtual drupa. Featuring cutting-edge capabilities to print special formats and onto special substrates, the new cutting-edge additions are designed to open new application opportunities in the large format and fashion industries. Mimaki's experts will also be on hand to provide an insight into the company's full colour 3D printing technology and relevant application opportunities.

"By showing our extensive portfolio of cutting-edge technologies at virtual drupa, we aim to demonstrate our clear commitment to the industry. Leveraging our flexibility, forward-thinking approach, and R&D expertise, we are able to adapt quickly to market changes and address new customer opportunities to deliver constant system improvements or brand-new innovations," comments Drion. "The '100 Series' excels when it comes to efficiency and high-quality, while also offering flexibility to produce a wide array of applications, from vibrant wallpapers to high-quality signboards. Further to that, the new additions to be unveiled at the show will break new boundaries in their market segments."

For more information about products and services from Mimaki, visit www.mimakieurope.com.

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About Mimaki

Mimaki is a leading manufacturer of wide-format inkjet printers and cutting machines for the sign/graphics, industrial and textile/apparel markets. Mimaki develops the complete product range for each group; hardware, software and the associated consumable items, such as inks and cutting blades. Mimaki excels in offering innovative, high quality and high reliability products, based upon its aqueous, latex, solvent and UV-curable inkjet technology. In order to meet a wide range of applications in the market, Mimaki pursues the development of advanced on-demand digital printing solutions. Mimaki Engineering Co. Ltd., (President: Kazuaki Ikeda) Nagano (Japan), is publicly listed on the Tokyo Stock Exchange, Inc.

For further information, please contact :
Danna Drion, Marketing Manager EMEA
Mimaki Europe B.V.
 Tel: +31 20 462 79 42

email: D.Drion@emea.mimaki.com
Ivan Lesmana,
Communication Coordinator EMEA
Mimaki Europe B.V.,
 Tel: +31 20 462 79 42
 email: i.lesmana@emea.mimaki.com
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properties which ensure trouble-free downstream processing as well as flawless final products. On the other hand, by routine testing of yarns it is possible to recognize faults in the production process early enough to analyze the causes of such defects and to take corrective actions.

The most important properties of yarns are tensile strength and elongation, mass unevenness, and yarn count (linear density). Static tensile tests, yarn evenness tests, as well as various methods of yarn count testing, e.g. by means of wrap reel and balance, serve for the assessment of these yarn properties. The operation of different test equipment to which the yarn samples are presented one after another, results in high expenditure of labour and, especially in case of modern automatic computer-controlled testing equipment, in considerable financial investment.

STATIMAT DS

This new model of the well-proven STATIMAT series of Textechno combines testing of tensile properties according to the CRE principle, unevenness, and count of yarn and thread in one tester. The essential advantage of such a combination of different test methods lies in the common use of peripheral components like package changer, threading mechanism for inserting the yarn sample into the test sections, yarn feeding device, waste yarn disposal, instrument housing with protective front panel, as well as control electronics including the PC-based Textechno TESTCONTROL system. The three tests on each package presented by the package changer are performed in succession.



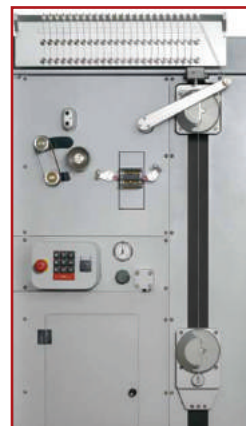
Test methods

Tensile test

The essential features of this STATIMAT DS test procedure are the high clamping force of the pneumatic jaws for tensile tests up to 1000 N, the long path of the draw-off clamp for breaking extensions up to 1000 %, the quick yarn threading reducing idle time between successive tests to only a few seconds, the force-measuring system within the force range of 1000 N (1500 N on request),

as well as high variability of the test process and the evaluation of the measured data. In addition to the static tensile test, for instance according to ISO 2062 or ASTM D2256, D885, alternating load tests (hysteresis tests) are possible according to freely selectable programs, as well as creep and relaxation tests.

A yarn feeding device enables high-speed take-off of selected yarn lengths prior to starting the test on a new package or between successive tests on the same package. This means that tests can be carried out on yarn lengths both from the package outer and inner layers.



Beside the standard automatic yarn clamps, various special clamps for manual introduction of the test sample are available. These enable tensile- and elasticity tests on fabrics and cohesion tests on slivers or rovings.

Yarn evenness test

A new innovative capacitor system enables capacitive testing of the mass unevenness according to ISO 16549 within a wide yarn count range by individual adaptation of the measuring sensor to the properties of the yarn material. As a new feature in yarn evenness testing the yarn tension can be monitored in order to ensure proper testing conditions. Measurable variables delivered by the system are the coefficient of variation of the mass distribution along the yarn length, the spectrogram, and for staple fibre spun yarns the numbers of neps, thick and thin places.

Yarn count test

In this test, e.g. according to ISO 2060 or ASTM D6587, a preselected yarn length, e.g. 100 m, is delivered by the yarn feeding device into a collection chamber, and subsequently the weight is measured. By using the principle of a vacuum conveyer the yarn is permanently in contact with the ambient (laboratory) climate. In this way drying of the yarn as would occur with a compressed-air system does not happen.

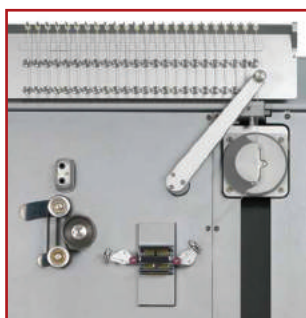
Another advantage is the yarn tension measurement during the test. If tension limits specified by the relevant standards are exceeded, a correction is automatically made based on the same yarn's tensile properties.

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Technical data

Tensile test :

- 2 pneumatic yarn clamps, automatic threading by rotating gripper arm, min. gauge length 80 mm, max. travel of draw-off clamp 1000 mm for 100 mm gauge length, draw-off speed 1...10.000 mm/min;
- Force-measuring device with easily exchangeable force transducers, max. 1000 N; (1500 N on request);
- Elongation-measuring device with resolver, resolution 2 µm.



Yarn evenness test :

- Capacitive measuring system, yarn count measuring range 5...150 tex, max. test speed 500 m/min with yarn feeding device;
- Optical sensor for interlace tests in multifilament yarns.

Yarn count test :

- Yarn collection chamber and electronic balance, weighing range 300 g, resolution 1 mg (higher resolution on request), yarn length selectable in the range 1...1000 m, max. test speed 500 m/min with yarn feeding device.

Package changer :

- Standard version with 24 positions (expandable on request), free selection of package changer positions to be tested in succession.

Yarn feeding device :

- Casablanca system with nip roller/apron, max. yarn delivery speed 500 m/min, resolution of length measurement 0.3 mm.

TESTCONTROL :

- PC system for control of the test processes and for evaluation of the measured data, connection via USB interface;
- Textechno software as a WINDOWS application, input of all parameters for testing and measured data evaluation, saving of selected parameter sets under code words;
- Easy integration into any network type.

Further technical data

Mains supply : 230 V, 50 (60) Hz, current requirement approx. 1 A

Compressed-air supply : 6 bar, 60 l/min (with yarn feeding device/
AUTOCOUNT: 150 l/min)

Lacquer finish : RAL 9006/5002

Dimensions, weight : Height 1680 mm,
width 825 mm,
depth 830 mm,
approx. 250 kg

The above technical contents can be subject to changes by Textechno.

For further information, please contact :

World Traders Mfg. Company

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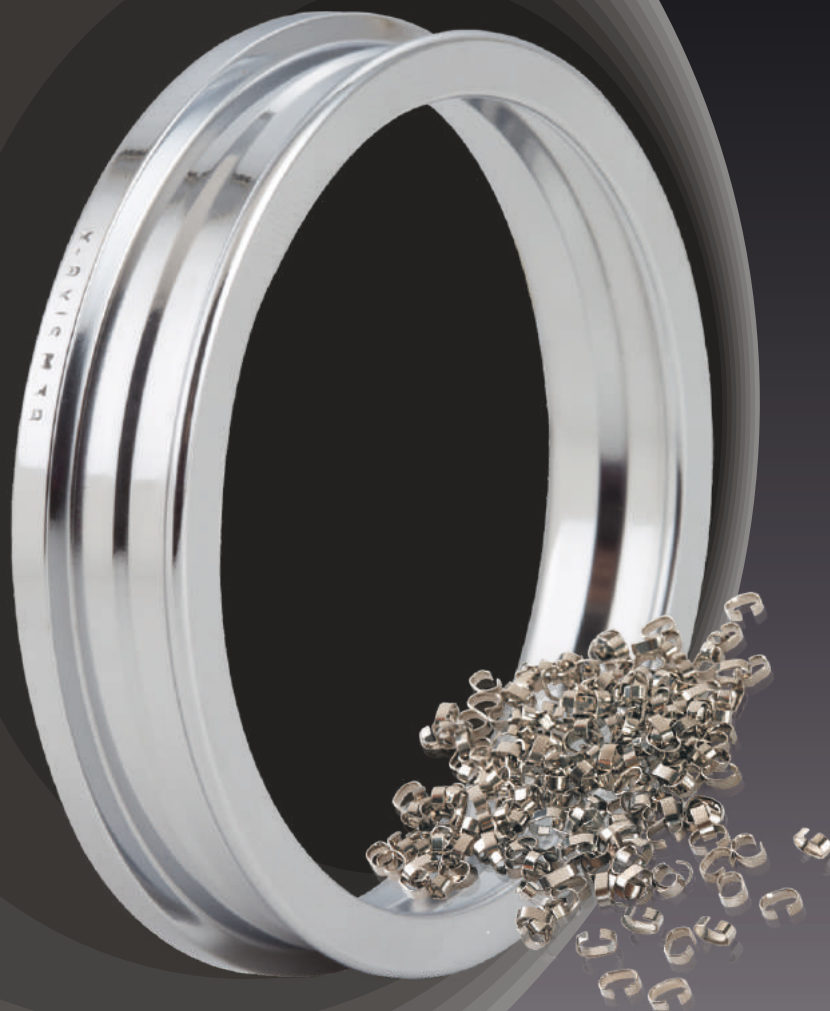
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Cot Grinding Machine
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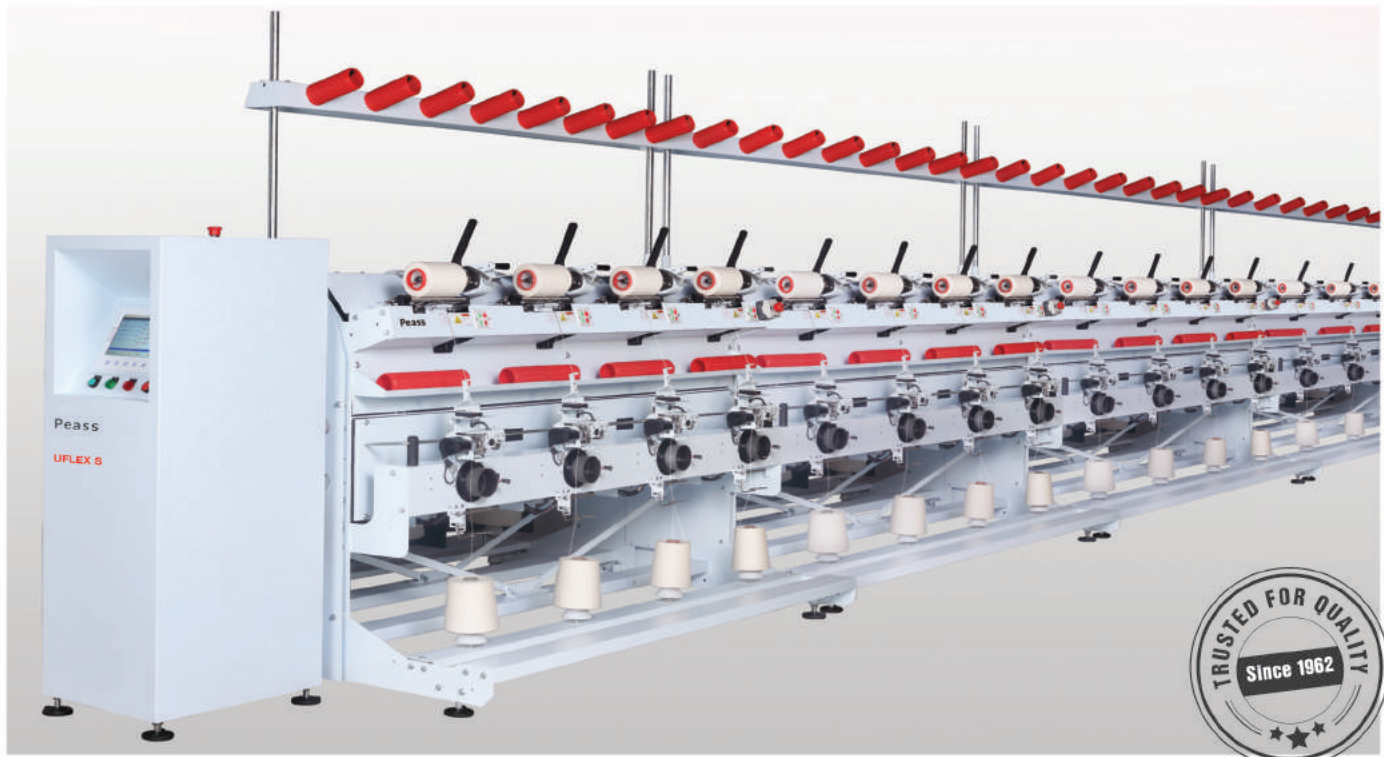


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website: www.peass.com

Regd. Office:

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396 445 (W.R.) Gujarat, INDIA
Tel: +91 2637 240843/
250811
Fax: 91-2637-257 321
E-mail: navsari@peass.com

Mumbai Office:

Merchant Chambers, 2nd Floor,
41, New Marine Lines,
Mumbai - 400 020 INDIA
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E-mail: mumbai@peass.com

Delhi Office:

729, Pocket 'E',
Mayur Vihar Phase II,
Delhi - 110 091 INDIA
Tel: +91 11 22773701/
22784749
Fax: 91-11-2277 4741
E-mail: delhi@peass.com

Coimbatore Office:

P-1, 3rd Floor, Red Rose Plaza,
509, D.B. Road, R.S. Puram,
Coimbatore - 641 002 INDIA
Tel: +91 422 2544097/98
Fax: 91-422-2544 097
E-mail: cbe@peass.com

Ahmedabad Office:

Samudra, B-201, 2nd Floor,
Sardar Patel Nagar Road,
Navrangpura,
Ahmedabad - 380 006 INDIA
Tel: +91 79 26427665
Fax: 91-79-2642 7665
E-mail: ahd@peass.com