Textile Trends

67TH YEAR OF PUBLICATION, NO. 07 OCTOBER 24, 2024, ISSN 0040 - 5205, Rs. 60/-

VOL. LXVII. NO.07, TEXTILE TRENDS, OCTOBER - 2024

E-mail : indiandyesprings@gmail.com

Whenever There's a need for Dye Spring

Always think of.....

INDIAN DYE SPRINGS CO.

Product Range :

Dye Spring

Yarn Perforator Steel Tube & Gravity Lock Nut

INDIAN DYE SPRINGS CO.

MANUFACTURERS OF S.S.DYE SPRINGS

Address : B-1102, Ratnatej, Dhaval Hills, Gawand Baug, Pokhran Road No.2, Near Gawand Lawns, Thane West, Maharashtra, Pin: 400 610.

Phone : +91 98920 87026 / 97691 11988 / 77384 61456

AUTOTEX

100 MILLION BOBBIN HOLDERS

HISTORY HAS BEEN MADE
THANKS
FOR YOUR TRUST

Proven
Solution

AUTOTEX - BLS

The World's First Bobbin Holder with Bobbin Locking System - BLS

Not just Holding... It is a system to hold and lock.

www.autotex.net

RINGMANN is a leading manufacturer and Exporter of Rings for Spinning, Doubling and Twisting frames for the past 30 years. Rings confirming to any profile is manufactured as per customers request.

RINGMANN is the foremost company to introduce **"STERLING RINGS"** with a Special Coating.
SIGMA EXCEL is a new generation ring developed through R&D.

SIGMA EXCEL

- Fine surface finish with low friction
- Low Running-In Period
- Instant start-up Speeds
- Longer Life
- Less Hairiness
- Fewer End-Breaks
- Less Pneumafil waste
- High Production of Yarn

EXCEL

BLACK DIAMOND

- A Simple rust Preventive treatment
- High Surface Finish
- Low Price and affordable by all
- Gradual Start-Up Speeds
- Normal Life for Higher Speeds
- Normal Production of Yarn
- Average End-Breaks
- Less Hairiness

SPICON RINGS

CONICAL RINGS

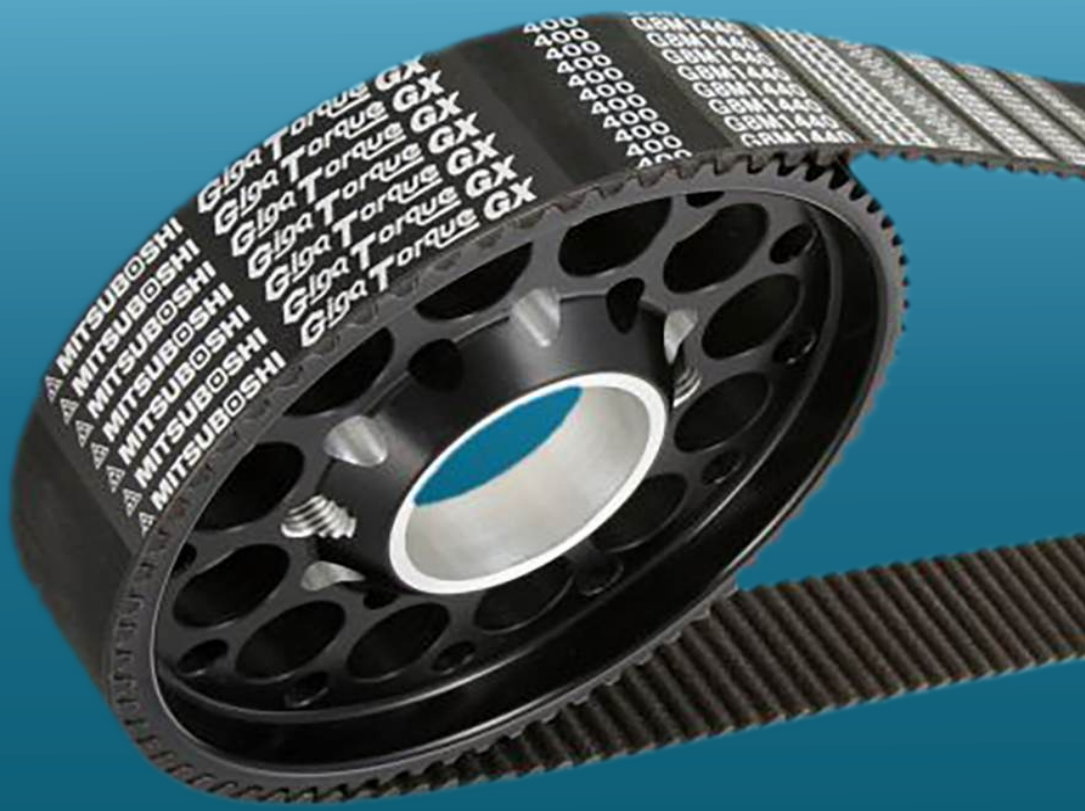
RING LIFE for Cotton above 50s NE

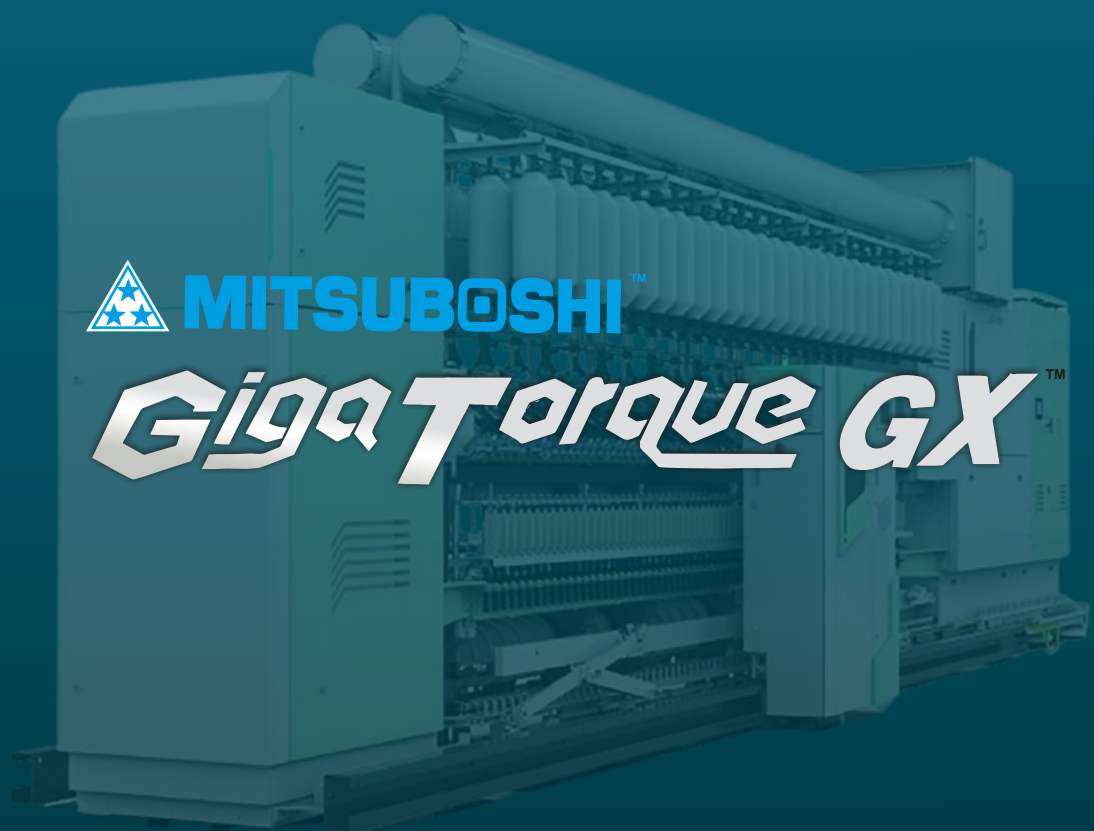
RINGMANN

S.F 192, Airy Garden, Kannampalayam Road, Ravuthur Pirivu,
Coimbatore - 641 402, Tamil Nadu, INDIA.
Mobile : +91 93626 41101, 93626 41102
Email : sales@ringmann.in | Web : ringmann.in

MSB

OEM Spec





MITSUBOSHI™

Giga Torque GX™

MANGAL SINGH BROTHERS PRIVATE LIMITED

Plot No. A33, TTC Indl. Area, MIDC, Thane-Belapur Road, Khairane, Navi Mumbai 400 710

Mobile : 9322804895 | Website: www.mangalsingh.com | E-mail: sales@mangalsingh.com

SIMTA JACOBI

"Where there is a Need of Flexiblity, Think About

SIMTA

Bobbin Transport System"

- OHTC
- Spindle Tapes
- Flocked Clearer Roller
- Cone Transport System
- Bobbin Transport System

SIMTA

SIMTA GROUP OF COMPANIES
S.F No. 683 A, Railway Feeder Road,
Ravathur Post, Sulur Via
Coimbatore 641 103, INDIA
Ph : 0422 2680705 | +91 98422 31483
www.sales@simta.com | info@simta.com

aspire excel

Keep trust, We care rest

Delivering the Ultimate Perfection

Auto Doffer Retrofit

Bobbin Transport System

Autocone Packing System

EXCELspin Compact

Aspire Excel's understanding and relationship with customers has driven us to create products that add value to your business and increase in productivity. Our renowned, customised products offer Reliability, Flexibility, Space Saving and Low Maintenance.

OUR PRODUCTS OFFER:

- ✓ Saving in Man Power
- ✓ Increased Efficiency
- ✓ Reliability
- ✓ Best in Class After Sales Support
- ✓ Value for Money

ASPIRE GRAND EXCEL AUTOMATION

111/109A, Civil Aerodrome Road, SIHS Colony
Coimbatore 641014, Tamil Nadu, India

+91 97509 55133
+91 97509 55131

aspiregrandexcel@gmail.com

www.aspireexcel.com

PEFFIMILL

Monitoring System for Spinning Mills The solution for your spinning mill management, by reducing costs, quality and optimization of labour.

HARDWARE
PTIFIL OPTICAL YARN DETECTOR

Another big LED with two colors for every 24 spindles alarms the personnel about any irregularity from long distance.
RED LED : Alarms the Operator

By detecting the movement of the traveller it controls continuously the status and RPM of each Spindle

One LED in front of each Spindle shows the STATUS of the yarn by the use of different COLOURS.

BLUE: Low Twist

VIOLET: Rogue

YELLOW: Obstacles/dust

BLINKING BLUE: Idle spindle

RED COLOR: Broken

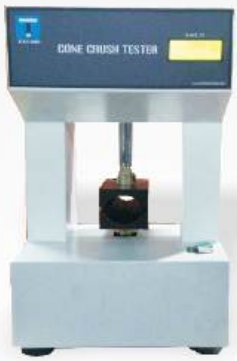
LED display can be installed on each ring frame. It shows the Ring frame production data in real time

From the New Touch Screen control unit it is easy to manage setting, options, troubleshooting.

+91 73393 64999 / 82204 98555 info@pintersa.in www.pintergroup.net

TECCHNO®

TOTAL QUALITY CONTROL SOLUTIONS FOR TEXTILE INDUSTRY



CONE CRUSH TESTER

SPLICE MONITOR

TENSO MINI

ELECTRONIC WRAP BLOCK

BURSTING STRENGTH TESTER - DIGITAL

- GINNING
- SPINNING
- KNITTING
- WEAVING
- APPARELS

TECHNO ELECTRONICS & INSTRUMENTS. TECCHNO QUALICON SOLUTIONS (P) LTD.

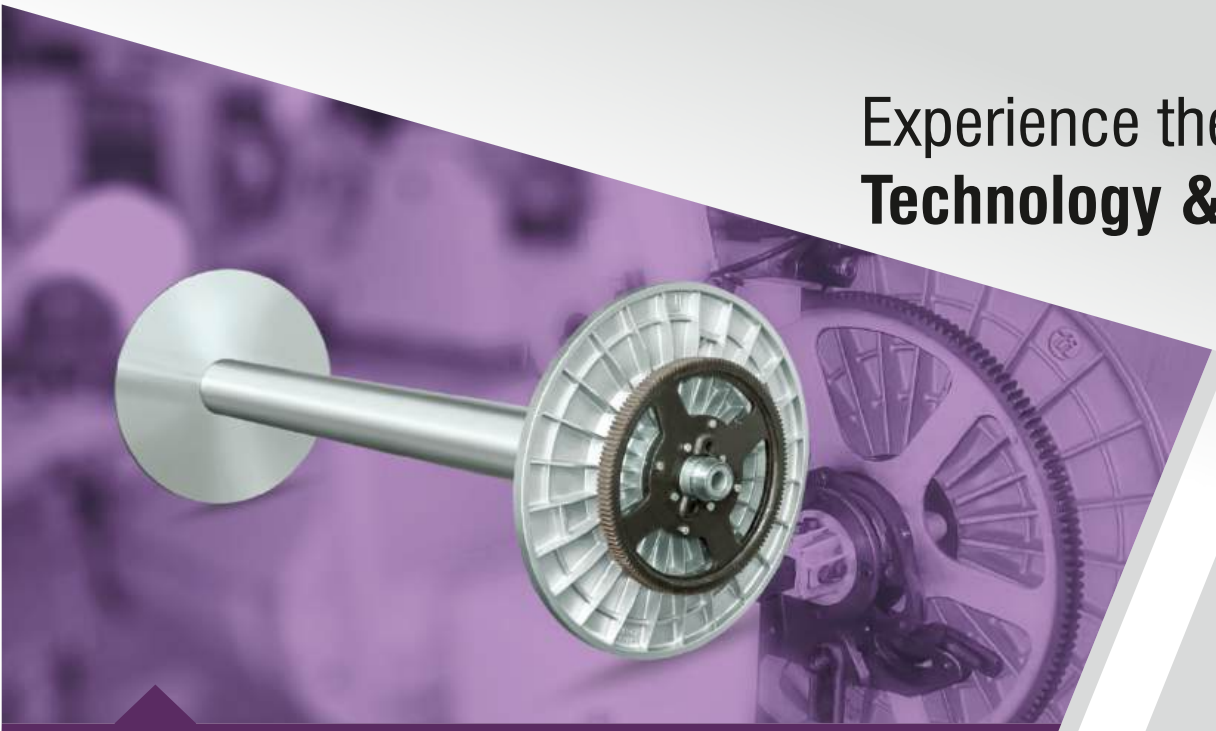
Address : S F No. 690/2A, 691/1A, S & P Industrial Area,
Madukkarai Market Road, Sidco industrial Estate Post, Coimbatore 641 021
Phone : +91 422 4518158, 81220 73158
Mobile No.: +91 98422 19650, 98422 21415
Email : sales@technotesting.com, contact@technotesting.com

CE

An ISO 9001:2015 Organization

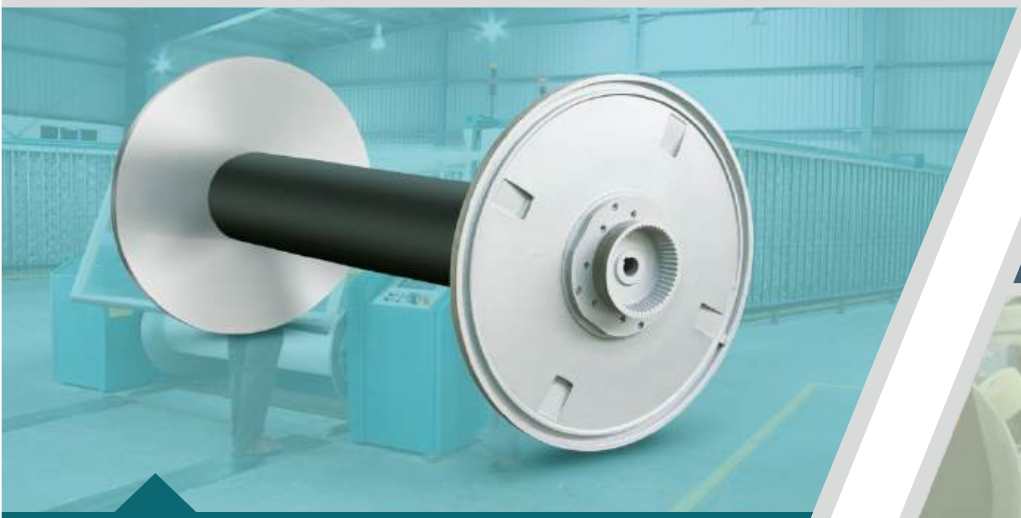
www.technotesting.com

Experience the **Technology & Perfection**



WEAVER BEAMS
Die-casted Aluminum Alloy Flanged Beams in Single/Twin Section

FULL FUNCTIONED PLC CONTROLLED FABRIC SAMPLE /SWATCH CUTTING M/C.



DYNAMICALLY BALANCED WARPER BEAMS
For high speed warping Machine

WARP BEAM GAITING TROLLEY

PNEUMATIC CLOTH GUIDER

TECHNOCRAFT
TEXMACH PRIVATE LIMITED

www.technocraftind.com

Plot No.: A-34, Bileshwar Industrial Estate, Opposite G.V.M.M.,
Near Kathwada G.I.D.C., Odhav, Ahmedabad-382 415. (Gujarat) INDIA
+91 79 2290 2499 +91 99099 26091
info@technocraftind.com www.technocraftind.com

DYEING INTELLIGENCE

AN ISO 9001:2015
CERTIFIED COMPANY

AUTO SPRAY HANK DYEING M/c.

ARM TYPE HTHP AUTO SPRAY
HANK DYEING MACHINE

CONVEYOR TYPE CONTINUOUS
HANK YARN POLE DRYER MACHINE

CONVEYOR TYPE CONTINUOUS
LOOSE FIBRE DRYER MACHINE
(ABSORBENT SURGICAL COTTON))

Our Range of Products

- Auto Spray Hank Dyeing Machine
  Machine made of Stainless Steel 304 &
  Have 7" HMI Touch Screen
- Roller type Hank Dyeing Machine for cotton
- Continuous conveyor type Hank yarn Dryer
  suitable for 54" & 90" Hank Size
- Cone Dryer Machine
- Thread Polishing Machine
- Kier with Pre-Heater
- Airflow Dryer (Cotton Dryer)

King of Light JTE

JAY-TEX ENGINEERS

Unit 1: 56, Abhishek Industrial Estate, Girnar Scooter Compound,
B/h. Sabri Restaurant, S.P. Ring Road Circle, Odhav, Ahmedabad-382415. Guj. India.
Unit 2: 57-58, D.K. Industrial Park 1, Opp. Gopal Charan Estate, Bakrol,
Ahmedabad-382430
Phone: 98241 20516, 98241 11516, +91 81608 69721
Emal: jay.tex_eng@yahoo.com, chetanpanchal185@gmail.com
www.jay-texengineers.in, www.indiamart.com/jaytex-engineers

HYDRO EXTRACTOR

Textile Trends

67TH YEARS OF PUBLICATION

INDIA'S WIDEST CIRCULATED MONTHLY ON TEXTILE & ALLIED INDUSTRIES

Single Copy : Rs. 60.00
Annual Subscription (Post Free) : Rs. 650.00
Overseas (Air Mail Post Free) : ST £ 75.00 / US $ 145.00
Bangladesh (Post Free) : US $ 60.00

Vol. LXVII
No. 07
OCTOBER 2024

Publisher : Shri D. J. Dutta

Editor : Dr. Tapan Kumar Banerjee

Shri John C Nathan
Manager - Marketing
Ph. : +91 98940 14500

Bangladesh:
COMMERCE & COMMODITY (PVT) LTD
Eastern Plaza, 8th floor, Suite No. 9/22
Bir Uttam C R Dutta Road, Dhaka – 1205, Bangladesh
Tel. : 0088 037 72012027 e-mail: ckd@bangla.net
http : ecpl.webjumb.com

Published Monthly by

Eastland Publications Private Limited

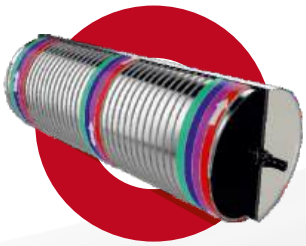
44, Chittaranjan Avenue, Kolkata - 700 012, India
Phone : 91-33-2212-2233, 91-33-2212-1096, Fax : 91-33-2212-1096
E-mail : textrend58@gmail.com/textiletrendsindia@gmail.com | *Website : www.textile-trends.in*

QUALITY
THAT'S
INSPIRES

Cylinder Drying Range Machine

Heating Cylinder/ Can

Jacketed Cooling/ Heating Cylinder



Jacketed Cooling Cylinder

Guide Rollers

Size Cooking Vessel

Size Storage Vessel

Size Premixing Vessel

Plot no:- 3703/E, Phase -4, behind new Nirma G.I.D.C,
Vatva, Ahmedabad - 382445. Gujarat, INDIA.
+91 9824006569 | +91 9687655699
sales@dhtextileeng.com www.dhtextileeng.com

CONTENTS

Textile Trends
R NI No. 2815/58
OCTOBER 2024

Celebreting 45 Years

Technical Textile Weaving Reeds

A GOOD TEAM • EXCELLENT PRODUCTS • PROMPT SERVICE ®

MAYUR

SINCE 1977

REEDS I HEALDS I DROPWIRES

Mayur Reeds And Heals Pvt. Ltd.

HOUSE OF EXCELLENT WEAVING ACCESSORIES

Office :
L-57, G. I. D. C. Estate, Odhav,
Ahmedabad-382 415. Gujarat. (India)

Tele. : (+91)-79-2287 1502, 2287 6502, 2287 6503
E-mail : info@mayurreeds.com
Web Site : www.mayurreeds.com

HARNYEE / 05-2023

EDITORIAL

Focus on technical textile because of its huge potential

Technical textile has immense potential in carrying forward textile industry to new height in India, therefore, technical textile industry is considered to be sunrise industry where by India is the 5th largest market in the world, the worth for 247 technical textile items in export basket is US $715.48 million. To boost up this industry government of India has adopted various dynamic schemes. Various initiatives such as forming a Technology Cell of Industry Experts, Textile Research Institutes and Associations to help textile machine manufacturing companies to transform into technical textile field have been taken by private sector.

Traditionally investors and suppliers of textile machines, producers of yarn of fabric, the finishing, and garment workers and retailers all are hailed from Textile Industry. But in technical textile industry buyers will come from a totally different industry; their language, their terminology would have to be adopted, expertise may need to be hired to meet up the needs of end users. Technical textile is a performance-oriented execution and it will have some empirical values to be gained with dexterity. In making a sustainable business model of technical textile industry benchmarking quality, compliance to standards and patenting have to be involved as a collateral objective.

Entrepreneurs open up the opportunity to curve costs, introduced innovation and provide value for which they seek good sustainable investment. Technical textiles offers the objective strategically. Entrepreneurs desire more innovations by the machine and equipment supplier that suites their needs. National Technical Textile Mission has to adopt scheme to develop local machines and equipments for opportunities that opens with technical textile as a whole, and it would take supplies to the domestic and world too. Technical textile uses synthetic in excess. The synthetics are hydrocarbons and a source of energy. Textile industry has many systems for reuse or recycle of its wastage coming out of the production process. Entrepreneurs in textile industry have to explore technology and business opportunity for technical textiles either starting with new start—up or modifying their existing business set up for the manufacturing of technical textile.

China's factory output shrinks to six-month low

China's manufacturing activity sank to a six-month low in August as factory gate prices tumbled and owners struggled for orders, an official survey showed of late, pressuring policymakers to press on with plans to direct more stimulus to households. The National Bureau of Statistics purchasing managers' index slipped to 49.1 from 49.4 in July, its sixth straight decline and fourth month below the 50 mark. After a dismal second quarter, the second-largest economy lost momentum further in July, prompting policymakers to signal they were ready to leave their playbook of pouring funds into infrastructure, instead targeting fresh stimulus at households. Sentiment remains gloomy among manufactuers as a years-long property crisis keeps domestic demand in the doldrums and Western curbs loom on exports such as EVs. Producers reported factory gate pricces were the wrost in 14 months, while new order and new export order sub-indices stayed in negative territory and firms retained a hiring halt. ❐

Through the amicable settlement the trade dispute among India, US, China, Australia possible to be solved as shown at WTO: officials

The amicable settlement of about seven trade disputes between India and the US at the WTO through bilateral discussions is evidence of dispute settlement at the multilateral body still producing value, despite non-functionality of the appellate body, according to Geneva-based trade officials. Intense discussions are going on at the WTO on the future of dispute settlement with the WTO appellate body dysfunctional for over four years and over 30 disputes appealed "in void" by members with no chance of an immediate verdict, the official said. "As the WTO's appellate body has not been US blocking the appointment of members, a lot of discussion is happening around whether there should be an appeal and review process at all. Many members say yes, but there are some, including the US, that have quite a different view," the official told recently. While the appellate body is not functioning, there is no problem at the level of dispute panels at the WTO, which give the initial verdict on a dispute, the official pointed out. Talks are therefore, happening around how to proceed beyond the panel phase and what could be the scope and standard of review, the official added. "There is a view that once a panel gives a verdict and a wants to appeal, then instead of appealing in void to the appellate body, the countries could sort out the matter bilaterally," the official pointed out. "India's successful settlement of seven disputes with the US and China's settlement of dispute with Australia indicate that bilateral settlement following establishment of panels can work and dispute settlement still produces value," the official said. The WTO disputes the US had been filed over a decade in key sectors such as steel, aluminium, renewable energy, poultry, solar products and certain key export-related measures. China and Australia recently settled a dispute on penal import duties imposed by China on Australian wine after a dispute panel was set up on Australia's request. These success stories notwithstanding, a large number of members see merit in continuation of the appeal and review process. "Members wanting continuation of the appeal and review process say it adds legitimacy to the system, gives opportunities to correct errors and better ensures that decisions are correct," the official said. ❐

BoE kept rates at 5%, extends bond sale plan

The Bank of England (BoE) kept interest rates at 5.0% recently, saying it would be careful about future cuts, and also held off from running down its bond holdings at a faster pace, avoiding extra budget strains for finance minister Rachel Reeves. The Monetary Policy Committee voted 8-1 to keep rates on hold. Only external member Swati Dhingra voted for a further quarter-point rate cut after the BoE in August delivered its first reduction to borrowing costs since 2020. Economists polled by Reuters had forecast a 7-2 vote for a hold after August's tight 5-4 decision to cut rates

from their previous 16-year high. Sterling briefly jumped above $1.33 to its highest since March 2022 and investors scaled back bets on further rate cuts. Of late the US Federal Reserve cut rates by a larger than expected 0.5 percentage points, reflecting the Fed's confidence that inflation pressures are cooling. BoE governor Andrew Bailey struck a more cautious tone as wage growth looked set to remain too high for comfort and policymakers remained divided over how fast longer-term inflation pressures were fading. "It's vital that inflation stays low, so we need to be careful not to cut too fast or by too much," he said. Bailey later told broadcasters he was "optimistic" rates would fall further, but that the BoE first needed more evidence of cooling price pressure. ❐

EU pledges up to $39 b loan to Ukraine

The European Union (EU) pledged recently to lend Ukraine up to €35 billion ($39 billion) as part of a loan package organised by the Group of Seven major industrial nations, as it seeks to help the country rebuild its economy and its war-shattered power grid. G7 leaders agreed in June to engineer a $50 billion loan to help Ukraine in its fight for survival. Interest earned on profits from Russia's frozen central bank assets would be used as collateral, but progress in distributing the loans has been slow. "We should make Russia pay for the destruction it caused," European Commission President Ursula von der Leyan told reporters at a news conference in Kyiv with President Vlodymyr Zelenskyy in Kyiv. Von der Leyen said that the EU has already provided Ukraine with more than €118 billion euros ($132 billion) in military and economic assistance since the war began in February 2022, "but Russia's relentless attacks mean furthere support is necessary.""Crucially, this loan will flow straight into your national budget. This will improve Ukraine's macro-financial stability and it will provide you with significant and much-needed fiscal space. You will decide how best to use the funds, giving you maxium flexibility to meet your needs," she said. The loans would be underwritten by the windfall profits earned on almost $300 billion in Russia assets, which have been frozen over its full-scale invasion of Ukraine. The vast majority of that money is held in EU nations, notably Belgium. Von der Leyen said that the EU is "confident that we can deliver this loan to Ukraine very quickly." The 27-nation bloc hopes that other G7 countries will flow its lead and start providing loans too. Zelenskyy said that his priorities are to rebuild Ukraine's energy network, erect more bomb shelters, improve schools and buy more weapons and ammunition. Von der Leyen arrived in Ukraine recently focused on helping the country to restore and reconnect its electricity grid and boost its heating capacity as winter approaches. Around half of Ukraine's energy infrastructure has been destroyed during the war with Russia, and rolling electricity blackouts leave parts of the east in darkness for four hours at a time. Von der Leyen said it was the equivalent of all of Latvia, Lithuania and Estonia losing electricity. Meanwhile, winter is approaching. "Heating season starts in two weeks and Russia's relentless attacks on Ukraine's civilian energy infrastructure aims to inflict maximum damage," von der Leyen said. "We will help Ukraine in its brave efforts to overcome this." The main aim is to help Ukraine decentralise its power grid, and to become less reliant on the big power stations that make easier targets for Russian forces. Around 260 missiles rained down in a major attack on energy infrastructure late in August. ❐

China's exports considerably increase to two-year high in August

China's exports unexpectedly accelerated in August, reaching their highest value in nearly two years and providing a rare boost to an economy weighed down by deflationary pressure. Exports climbed nearly 9% from a year earlier to about $309 billion, the highest since September 2022. Imports expanded just 0.5%, the customs administration said, leaving a trade surplus of $91 billion for the month. Chinese exports have been a bright spot for an economy struggling with a housing slump and deflation. However, the influx of cheap

goods to global markets has sparked backlash in the US, South America, and Europe, casting doubt on the sustainability of Beijing's growth strategy. ❐

Core US inflation ups more than expected

Underlying US inflation unexpectedly picked up in August on higher prices for housing and travel, undercutting the chances of an outsize Federal Reserve interest-rate. The so-called core consumer price index — which excludes food and energy costs — increased 0.3% from July, the most in four months, and 3.2% from a year ago, Bureau of Labour Statistics figures showed recently. The three-month annualised rate advanced 2.1%, picking up from 1.6% in July, according to Bloomberg. Economists see the core gauge as a better indicator of underlying inflation than the overall CPI. That measure climbed 0.2% from the prior month and 2.5% from a year ago in August, marking the fifth straight month th eannual dragged down by cheaper gasoline prices.❐

EU to slap tariffs up to 45% on EVs from China

The European Union voted recently to impose tariffs as high as 45 per cent on electric vehicles from China in a move set to increase trade tensions with Beijing, according to people familiar with the process. The European Commission, the bloc's executive arm, can now proceed with implementing the duties, which would last for five years, said the people, who spoke on the condition of anonymity. Ten member states voted in favour of the measure, while Germany and four others voted against and 12 abstained. The decisioin by the EU comes after an investigation found that China unfairly subsidised its industry. Beijing denies that claim and has threatened its own tariffs on European dairy, brandy, pork and automobile sectors. The bloc is actively trying to reduce its dependencies on China, with former European Central Bank President Mario Draghi warning in September that "China's state-sponsored competition" was a threat to the EU that could leave it vulnerable to coercion. The EU, which did €739 billiion ($815 billion) in trade with China last year, was split on whether to move forward with the duties. The EU and China will continue negotiations to find an alternative to the tariffs. The two sides are exploring whether an agreement can be reached on a mechanism to control prices and volumes of exports in place of the duties. The European Commission, the block's executive arm, has repeatedly said that any alternative to tariffs has to have strict requirements, including alignment with World Trade Organization rules, address the impact of China's subsidies and be something the EU can monitor for compliance. The new tariff rates will be as high as 35 per cent for EV manufacturers exporting from China. The new duties would be on top of the existing 10 per cent rate. Chinese EV makers will have to decide whether to absorb the tariffs or raise prices, at a time when slowing demand at home is squeezing their profit margins. The prospect of duties has prompted some Chinese automakers to consider investing in factories in Europe which might help them dodge tariffs. The additional tariffs already have slowed Chinese carmakers' momentum in Europe, with their sales plunging 48 per cent in August to an 18-month low. The region is a desirable destination for the nation's manufacturers because EVs sell in relatively high numbers and at much more robust prices than other export markets. The share of electric cars sold in the EU that were made in China climbed from around 3 per cent to more than 20 per cent in the past three years. Chinese brands accounted for around 8 per cent of that market share, with international companies that export from Chna including Tesla Inc. taking up the rest. Still, Europe's tariff hike will have a "minor impact" on Chinese manufacturers because the region accounts for only a fraction of their total sales, according to Daiwa Securities analyst Kevin Lau. Europe contributed between 1 per cent to 3 per cent of overall sales for BYD Co, Zhejiang Geely Holding Group Co and SAIC Motor Corp in the first four months of this year, he estimated. While Brussels has sought a level-playing field for European companies, Germany's automakers are concerned about a blowback that could exacerbate challenges they're already having in their most important market globally. ■

India ascended to ninth position in gold holding: WGC

The Reserve Bank of India (RBI) has ascended to the ninth position in terms of gold holdings as part of its foreign exchange reserves, surpassing Japan. This information was released by the World Gold Council, which collected data from the International Monetary Fund's international financial statistics. The latest data is till July 2024. Over the past three to four years, the RBI has consistently maintained its position as the tenth-largest holder of gold among global central banks. This list includes the International Monetary Fund (IMF), which holds a substantial 2,814 tonne, making it the third-largest holder globally. Following a decade of steady gold holdings since 2009, India has implemented a strategy to bolster its gold reserves over the past five years. As part of this strategic initiative, India procured 200 tonne of gold from the IMF in 2009. In the past three to four years, the RBI has swelled its forex reserves by 290 tonne of gold, which is more than twice the exposure to outstanding soverign gold bonds. According to Shekhar Bhandari, president of Kotak Bank, central banks acquire gold as part of their asset allocation and reserve requirements. The RBI has been acquiring gold in accordance with its philosophy of balancing reserves and asset-liabilities. In the current calendar years as of July 2024, the RBI has purchased 42.5 tonne of gold. Bhandari anticipates that this trend will continue for the foreseeable future, as gold remains an effective asset for hedging against uncertainty and macroeconomic challenges. In July, global central banks added net 37 tonne of gold of their forex kitty. The National Bank of Poland, which added a net 14 tonne in July, was the leading buyers for the month, followed by the Central Bank of Uzbekistan (10 tonne). The RBI purchased 5.4 tonne, according to the research by Krishan Gopaul, senior analyst for emerging markets at the World Gold Council. He said, "While the rally in gold price is very likely having some impact on central bank gold demand this year, the longstanding trend of net buying remains intact. This reinforces the findings from our latest ventral bank survey, which highlights several reasons (such as gold's role as a store of value and its performance in times of crisis) behind central banks' keenness to accumulate the yellow metal despite elevated prices. Based on these findings, we continue to be confident in our expectation that more buying is to come." ❐

'Fed rate cut to have limited impact on India'

Chief Economic Adviser V Anantha Nageswaran recently said the imapct of the U.S. Federal Reserve's interest rate cut of 50 basis points will be limited for India, and though it will be a positive for emerging economies in general, it cannot be construed as a "fillip for the global economy" as there are other factors at play. "If other things were constant, the rate cut by itself should be positive because it lowers the dollar cost of capital, increases the dollar liquidity... [but] with other things not staying constant, the Fed rate cut is not the only thing that matters," he said. "We have geopolitical conflicts everywhere and there is an all-important election that is coming up in the USA in November, and in general, the global economy has been slowing," the CEA pointed out. While the U.S. interest rate cut was "much awaited", Mr. Nageswaran highlighted that the implications would depend on how much of that cut was already "priced in" by the markets. "I think much of it was priced in already. So, in that sense, stock markets have moved ahead of that, and if you see the U.S. markets, they ended up in the red for the day after the rate cut was announced," he noted at the Deloitte India Government Summit. "On balance, I would say it is positive for emerging economies, and for India and its stock market, because it was already attracting a lot of investor interest and has been doing so for the last several years, on the margins, the impact will be limited because it is not something that investor interest for India was waiting for this to happen. It's already been there," the CEA averred. Mr. Nageswaran also dismissed concerns about private investors' reluctance and asserted that the private sector has already joined the investment party. "No matter what evidence we present, the stickiness of the belief that the private sector is yet to join the investment party refuses to go away." "That shows the power of anecdotes over evidence, and that is human nature. But the truth is the private sector has joined the investment party... If it is unfolding slower than, let us say between 2003 and 2008, it is better. We would rather have it slower and stronger for longer, rather than swifter and shorter," he underlined. ❐

World Bank elevates India's FY25 growth forecast to 7%

Noticing an improvement in monsoon and private consumption, the World Bank recently upped India's growth forecast for 2024-25 by 40 basis points to 7 per cent. Its previous forecast was 6.6 per cent. "Growth is forecast to reach 7 per cent in FY24-25 and remain strong in FY25-26 and FY26-27," the multilateral agency said in the India Development Update (IDU). Further, it said that with robust revenue growth and further fiscal consolidation, the debt-to-GDP ratio is projected to decline from 83.9 per cent in FY23-24 to 82 per cent by FY26-27. The current account deficit is expected to remain at around 1-1.6 per cent of GDP up to FY26-27. The report highlighted India's status as the fastest-growing major economy, with a "remarkable" growth rate of 8.2 per cent in FY23-24. This growth was primarily driven by significant public infrastructure investments and a surge in household investments in the real estate sector. On the supply side, a buoyant manufacturing sector, which expanded by 9.9 per cent, and resilient services activity played crucial roles in offsetting the underperformance of the agriculture sector. Urban unemployment rates have also seen gradual improvement, particularly among female workers, whose unemployment rate fell to 8.5 per cent in early FY24-25. However, the report notes that urban youth unemployment remains high at 17 per cent. On the external front, India's foreign exchange reserves reached a record high of $670.1 billion in early August, equivalent to over 11 months of import cover, bolstered by a narrowing current account deficit and strong foreign portfolio investment inflows. The IDU also highlights the critical role of trade for boosting growth. The global trade landscape has witnessed increased protectionism in recent years. The post pandemic reconfiguration of global value chains, triggered by the pandemic, has created opportunities for India. The report emphasises that India has boosted its competitiveness through the National Logistics Policy and digital initiatives that are reducing trade costs. However, it also notes that tariff and non-tariff barriers have increased and could limit the potential for trade focused investments. "India's robust growth prospects along with declining inflation will help reduce extreme poverty," said Auguste Tano Kouame, World Bank's Country Director in India. "India can boost its growth further by harnessing its global trade potential. In addition to IT, business services and pharma where it excels, India can diversify its export basket with increased exports in the textiles, apparel, and footwear sectors, as well as electronics and green technology products," he said. The IDU recommends a three-pronged approach towards achieving the $1 trillion merchandise export target by reducing trade costs further, lowering trade barriers, and deepening trade integration. "With rising costs of production and declining productivity, India's share in global apparel exports has declined from 4 per cent in 2018 to 3 per cent in 2022," said Nora Dihel and Ran Li, Senior Economists, co-authors of the report. "To create more trade-related jobs, India can Integrate more deeply into global value chains, which will also create opportunities for innovation and productivity growth." ❐

With 6.7% growth rate, India to become 3rd largest economy by FY31: S&P

Riding on structural reforms and investment, India is poised to become the third-largest economy and transition to the upper-middle-income category by FY31 if it is able to clock a growth of 6.7 per cent per year till then, S&P Global said recently. "The continuation of structural reforms to facilitate business transactions and improve the logistics sector will support private sector investment, making growth less dependent on public capital expenditure," read the first edition of the report by the global rating agency titled "India Forward: Emerging Perspectives". The rating agency forecasts the Indian economy to grow at 6.8 per cent in FY25. Douglas L Peterson, president & CEO, S&P Global, said that India's medium-term prospects are healthy and poised to deliver sustained growth, buoyed up by likely to structural reforms, opportunities within the AI sector, and more efficient agriculture. The report noted that government infrastructure buildouts and household investments have supported India's post-pandemic recovery and continued reforms are necessary to boost private investment and reduce reliance on public capital. ■

Cotton cheers on tight supplies, lower area of cultivation & fear of delay in crop arrival

Cotton prices have gained in recent days on tight supplies, a decline in khariff sowing and reports of incessant rain hurting prospects in parts of Gujarat and Maharashtra, the major producing States.

Spot prices have moved up by ₹1,500-2,000 per candy (of 356 kg each) or 2.5-3 per cent over the past fortnight.

Trade sources expct prices to rule steady in the days ahead as arrivals are likely to be delayed by some 15-30 days on account of excess rain.

Atul Ganatra, President, Cotton Association of India (CAI), attributed the recent increase in prices to factors such as shortage, tight Indian closing balance sheet and lower sowing, among others.

Closing stocks of cotton for the 2023-24 season ending September are expected to be below 20 lakh bales (of 170 kg each).

Also, the recent uptrend in cotton on the Intercontinental Exchange, where futures prices have gone up from 66.35 cents to 70.35 cents have contributed to the prices going up in Bengaluru, he said.

Ganatra said lower sowing will affect next season's production. Per Agriculture Ministry's data, cotton acreage in the ongoing khariff is down 9 per cent at 111 lakh hectares (lh) over 122.15 lh a year ago.

The decline in mainly of lower acreage in Punjab, Haryana and Rajasthan, besides the major producing States of Gujarat and Maharashtra.

While incessant rain is seen damaging the standing cotton crop in parts of Gujarat and Maharashtra, the trade is divided over the impact.

Ganatra said the heavy rain in parts of Gujarat and Maharashtra will definitely have an impact on the crop. "There is water logging in the fields as there has been heavy rain of 20-30 inches in the past 2-3 days," Ganatra said.

While the excess rain in some areas may spell trouble for the crop in parts of Gujarat, Maharashtra and Madhya Pradesh, overall the rain may prove beneficial, said Anand Poppat, a Rajkot-based trader.

He said the upward trend is likely to persist due to the tight stock position and delayed arrivals on account of late sowing across the country.

Though the excess rain is seen hurting the crop in parts of Maharashtra, higher yields will help offset the impact, said Pradeep Jain, President of the Khandesh Gin Press Association in Jalagoon. He said the crop, till now, is good with no or little incidence of pest attacks.

Ramanuj Das Boob, Vice President of the All India Cotton Brokers Association in Raichur, said the crop looks very good in Karnataka, Telangana and Andhra Pradesh, where the rain has been good and timely. ■

Road Map set to Make Textiles $350 b Industry by 2030

India has made a road map for its textile industry to grow to $350 billion by 2030 from around $164 billion now and create 4.5-6 crore jobs, textiles minister Giriraj Singh said. At the ministry's 100-day programme, he also said that the seven PM.

Mega Integrated Textile Region and Apparel (MITRA) parks approved earlier will have investment to the tune of ₹70,000 crore when fully functional, thereby creating 21 lakh jobs.

"To reach a size of $350 billion in the coming days, we need man-made fabric, whether it be synthetic, viscose or natural fibre, we are preparing for everything," Singh said, adding that over 350 brands globally procure clothes from India.

Singh also said that neither Bangladesh nor Vietnam was ever a challenge for India's textile exports and "there is this havoc being created about Bangladesh (posing a challenge to India's textile industry".

Setting a target of 50,000 metric tonne production and employment generation of 1 crore by 2030, he said that cultivation of silk is linked to employment generation of farmers.

India aims to achieve $600 billion of textile exports by 2047 from $44 billion in FY22 and the domestic market to grow to $1.8 trillion from $110 billion in 2022.

Officials said around a dozen companies are set to start receiving incentives under the Production Linked Incentive (PLI) scheme for the textile sector in the current financial year amid signs of a recovery in textile exports in August.

"The government will start disbursing the textile PLI incentives from this year," said textile secretary Rachna Shah, adding that a call is being taken on the next edition of the PLI scheme. The current scheme covers technical textiles and manmade fibre products. ■

SP Apparel to increase ₹100 crore through PE

SP Apparels, the Avinashi-based garment company, plans to raise private equity of ₹100 crore to fund its retail business. It will also exit HEAD, an Austrian brand, from December 2024.

"The fundng is primarily for our own premium kids' wear brand Angel & Rocket, based in the UK. The plan is to raise money to expand the brand in India and GCC," said the company's Joint Managing Director, S Chenduran.

"We are confident that SP Retail ventures will be able to raise capital during the current financial year to support their aspiration of growth and cash flows," he told reporters.

The company is existing the licensing arrangement with HEAD brand after five years. This business contributed to ₹4 crore revenue annually, but the losses were quite high because of the minimum guarantee royalty. The impact, going forward, will be signifcantly positive for the retail subsidiary SP Retail Ventures, he said.

The Austria-headquartered HEAD is a leading tennis, ski and other sports equipment brand and "we signed a licensing agreement for sportswear and footwear in 2020 (just before Covid pandemic)," he said.

SP Apparels manufactures and exports knitted garments, and men's garments in India under the Crocodile brand.

The company's 2023-24 annual report says that the year was a tough year for the retail sector. Inflation and higher interest cost created some stress in the retail industry.

For fiscal ended March 31, 2024, the company reported revenue of ₹964 crore against ₹962 crore in the previous year. Net profit was ₹104 crore (₹92 crore).

The company's 2023-24 annual report said that Indian apparel retail sector is posied for significant growth by 2027, with its value projected to increase to $89,219 million by 48.7 per cent from 2022. This growth is anticipated to occur at a compound annual growth rate of 8.3 per cent from 2022 to 2027.

A key factor driving this expansion is the escalating presence of international brands and retailers, which are entering the Indian market through various collaborations. International apparel giants like Hugo Boss, Diesel and Kanz have started their operations in India. ■

Carrefour to come back India, inks franchise partnership with Apparel Group

French retail chain Carrefour is set to re-enter India. It has inked a strategic franchise partnership with Apparel Group for the Indian market. Under this partnership, Apparel Group will open Carrefour stores, initially in North India and then expand.

Nilesh Ved, Owner of Apparel Group & Chairman of AppCorp Holding told reporters, "We're committed to bringing the true essence of Carrefour to India. Our stores will offer a wide range of products, including groceries, fresh produce and other food items. Depending on the store format, we'll also feature non-food items like household goods, electronics, and clothing."

The company plans to open the first Carrefour store in North India in the summer of 2025.

"Apparel Group will introduce Carrefour to India with five stors in the first year in Delhi-NCR region across three different formats, including hypermarkets, markets and specialty stores. This partnership with Carrefour, one of the world's leading retailers, represents a significant step in strengthening our position in India. Our goal is clear: to offer the best products at very attractive prices to all Indian customers and make Carrefour their preferred choice for shopping," Ved explained.

In a statement, Patrick Lasfargues, Carrefour's Executive Director of International Partnership, said, "We are very happy to launch in India through this partnership and grow our footprint in one of the fastest-growing economies in the world. We will be expanding with multiple formats across the country to adapt to this dynamic country's retail landscape. India is now the cornerstone of the Carrefour International Partnership 2026 development plan, marking a significant step forward in our strategy to expand into over 10 new countries by 2026."

This marks a re-entry of the global retail chain in India. Carrefour, which was running its cash and carry operations, had exited the market in 2014.

Meanwhile, in a recent interaction with reporters, Apparel Group has said it has plans to open 750 new stores in the country over the next three years. The Dubai-based lifestyle and fashion retailer earlier brought Canadian coffee chain Tim Hortons to India under a JV partnership. ■

Govt plans expansion of PLI for Textiles, solar PV

The government is actively considering expanding the Production Linked Incentive (PLI) scheme for textiles, pharmaceuticals and solar PV (photovoltaic) sectors by including more products that would be eligible for sops and extending the scheme period by one year for all three sectors, sources have said.

"Cabinet notes proposing the expansion of the list for PLI schemes for textiles, pharmaceuticals and solar PV and extending the scheme period by a year has already been sent to the PMO and the Cabinet Secretariat. Once they get the nod at the highest level, the notes will be put before the Cabinet for approval," an official tracking the matter told reporters.

The idea of expanding the PLI scheme to more products is to ensure higher investments, production and optimum use of the outlay.

The PLI scheme, announced with an outlay of ₹1.97 lakh crore in 2021 to promote domestic manufacturing and attract investments in strategic sectors, has not moved at an even pace for all the 14 sectors covered under it.

While the scheme has worked best for mobile manufacturing and is showing promise for electronics, telecom and food processing, for some others, including textiles and solar PVs, things are slower.

Since its launch, the PLI scheme has attracted investments of ₹1.5 lakh crore, resulting in the production of goods worth about ₹10 lakh crore and the disbursement of incentives worth ₹10,000 crore.

Textiles Sector

"Overall, if you go by total disbursement of incentives, things are going slow. But the investments already committed under the scheme and the production taking place are promising. The expansion of existing schemes, wherever needed, will ensure more investments, production and exports," the source said. In the textiles sector, while the original scheme announced with an outlay of ₹10,683 crore, covers MMF (man-made fibre) apparel, MMF fabrics and technical textiles, it is now proposed to extend it to garments made of all materials including cotton.

"It is hoped this will attract more domestic and foreign investments," the source said.

Similarly, in pharmaceuticals and solar PVs, Ministries want more items added for better use of the outlay.

"While the period of implementation of PLI is five years, it is proposed to extend it by one year for the three identified sectors. If more products are added, it is logical that more implementation time would be needed," the source said. ■

10-12 firms to receive first set of incentives for textiles PLI

About 12 textile companies are set to receive the first set of incentive payment under the production -linked incentive (PLI) scheme.

"Around 40 companies have grounded investment. We had a gestation period till March 2024. We hope this financial year 10-12 companies will be getting incentive payout (under PLI)," a senior government official said recently.

The schemes was launched in 2021 to boost the domestic manufacturing of man-made fabric (MMF), garments and technical textiles, with a budgetary outlay of ₹10,683 crore. The scheme, however, received a lukewarm response from private players.

The development is significant, considering that earlier this year a Cabinet secretary-led committee had also flagged the "shortfall" in progress in investment during 2023-24 in three, including textiles, of the 14 PLI sectors.

The textiles ministry had first released the guidelines of the scheme in December 2021. However, the government received 64 applications with commitments worth approximately only ₹6,000 crore. This was also because some players informed the government that they were not keen on investing in proposed textile categories due to lack of expertise.

MMF includes viscose, polyester, and acrylic, which are made from chemicals. Exporters say MMF accounts for a fifth of India's apparel export. Technical textiles, on the other hand, are a new-age sector that can be used for producing personal protective equipment (PPE) kits, airbags, and bullet-proof vests, and can be utilised in sectors such as aviation, defence, and infrastructure.

The textiles ministry has sought approval from the Cabinet for another PLI scheme for the textile sector, with focus on apparel. The budget for the scheme is expected to be ₹4,000 crore, the unutilised funds under the scheme.

The second edition of the PLI scheme will have special emphasis on micro, small, and medium enterprises. ■

Centre extends compulsory use of jute bags for packaging up to December 31

The Ministry of Textiles has extended the compulsory 100 per cent jute packaging for foodgrains and 20 per cent of the total sugar production upto December 31, 2024.

Issuing an order, the ministry also clarified that procurement of jute bags for packaging of initially 10 per cent of the foodgrains through reverse auction on the Government e-Market-place (GeM) portal will continue, subject to the Calcutta High Court passing its final order on the matter.

"Subject to the outcome of sub-judice matter pending in High Court of Calcutta, initially ten per cent of the indents for foodgrains are to be placed through reverse auction on the GeM portal." The Ministry of Textiles stated in its order dated October 1. Despite an ongoing legal battle, the order related to continuation of the reverse auction on the GeM has heightened concerns among the jute industry stakeholders.

Notably, the ministry, in its notification dated December 26, 2023, mandated 100 per cent jute packaging for foodgrains and 20 per cent of the total sugar production until June 30, 2024. It also introduced the reverse auctions for jute bag procurement through the GeM.

But the reverse auction system has faced backlash from jute mill workers and farmers. Concerns arose from trade unions and jute mills about the reverse auction's impact on wages, pricing and livelihoods. These issues particularly affected workers and farmers who depend on the current procurement system.

The West Bengal Permanent Jute Workers Union filed a petition in the Calcutta High Court, challenging the introduction of policy of the Central government for procurement of jute bags for packaging of food grains through the Government e-Marketplac (GeM) portal.

In response to the petition, the High Court issued an interim stay on the GeM reverse auction procurement of jute bags.

"Considering the entire facts and circumstances of this case, till the matter be resolved, the respondent authorities are hereby restrained to initiate the procurement of the jute materials/jute bags through GeM portal till the adjourned date," Justice Subhendu Samanta said in his order on September 20.

The matter is scheduled to appear before the court for further hearing on November 29. Significantly, in a ruling providing relief to the jute industry, a Division Bench of the Karnataka High Court in September quashed the order of a single judge Bench. ■

Shinde govt initiated ₹2,399 crore in subsidy to cotton, soya farmers

The Eknath Shinde government in Maharashtra has initiated the distribution of subsidies for cotton and soyabean producers for the 2023 kharif season.

The initiative was launched online during the State Cabinet meeting by Chief Minister Eknath Shinde, along with Deputy Chief Ministers Devendra Fadnavis and Ajit Pawar.

The government announced a subsidy of ₹5,000 per hectare for cotton and soyabean farmers, with a limit of up to two hectares per farmer.

This move aims to provide much-needed financial relief to farmers grappling with rising input costs and unpredictable weather patterns. In the first phase, ₹2,398.93 crore is being deposited into the accounts of 49.5 lakh registered farmers. Maharashtra has approximately 96,787 cotton and soybean farmers.

Of these, data for 68,06,923 farmers have been uploaded on the government portal, enabling the disbursement process.

Under the Namo Shetkari Mahasamman Scheme, 41,50,696 accounts have completed 70 per cent Aadhaar verification. An additional 17,53,130 accounts have been updated with Aadhaar consent forms.

Boost to Farmers

With the first phase of financial assistance reaching 63.64 lakh accounts, the State has allocated ₹2,398.93 crore to ensure timely relief.

"This is expected to provide a significant boost to cotton and soyabean farmers, helping them navigate the challenges of the ongoing season," said Chief Minister Shinde. ■

Centre plans to come up with revised pricing for jute bags in 2-4 months

The Centre is expected to come up with the revised pricing for jute bags used in packaging of foodgrains in two to four months, according to the Indian Jute Mills Association (IJMA).

The Cabinet Committee on Economic Affairs (CCEA) on August 28 approved the new pricing methodology for B-twill jute bags based on the report of a Tariff Commission. The new methodology for calculating jute bag prices was a long-standing demand of industry players.

"The notification of the revised price by the government will take some time. It is in the process. I see a timeline of anything between two and four months," Indian Jute Mills Association Chairman Raghavendra Gupta told recently. According to him, the new methodology will ensure enhanced pricing for jute bags purchased by government agencies.

Mills expect that the new pricing methodology would translate into a 4-5 per cent higher pricing for each bag, providing a big boost to the industry. On average, around 72-75 per cent of a jute mill's sales are happening through the Union government.

Industry participants said as the new pricing methodology is based on an authentic cost study, it is more transparent, dynamic and responsive to market changes compared to the existing one, whcih was being operated on a temporary pricing provision.

The existing pricing system led to a financial strain on jute mills because it did not keep pace with the rising costs.

The government purchases jute sacking bags worth ₹12,000 crore every year for packaging of foodgrains, ensuring a guaranteed market for the produce of jute farmers and workers.

The average annual production of jute sacking bags is about 30 lakhs bales (9 lakh tonnes), and the government has been procuring sacking production of the jute mills to protect the interest of jute farmers, workers and persons engaged in the industry. ■

Onam festivities boost up sales and bring litle cheer for weavers in Kerala

The accelerating crisis in the more than 300-year-old Chendamangalam handloom business is once again in the spotlight with primary cooperatives of weavers complaining of a significant fall in sales during the just-concluded Onam festivities.

The fortnight leading to Thiruvonam is crucial for hand weavers because about 60% of the business transacted during the year takes place during this small window of time.

Ajithkumar Gothuruth, a veteran of the business and secretary of the Handloom Weavers' Cooperative Society 191, says the sales are down about 30% to 40% compared to the previous year. The State government scaling down the official Onam celebrations in view of the massive landslides in Wayanad has played a role.

He says the society's business fell from last year's ₹17 lakh to ₹12 lakh.

The fall underscores the continuing crisis that has been deepened by a lack of recognition of a long-standing tradition, poor wage rates for weavers, and a lack of positive intervention by the Union and State governments.

The sales are just enough to keep the business afloat, says T.S. Baby, president of Society 3428, adding that the handloom sector in Ernakulam district expected sales worth ₹2.5 crore, but recorded only business worth ₹2.3 crore.

Lower-priced but poor-quality materials in the market affected the sales. Cooperative banks were reluctant to issue coupons this year.

Mr. Baby says there are 12 primary societies of handloom weavers in Ernakulam district, employing around 700 weavers and another 200 in ancillary activities. The wages hover around ₹400 to ₹600, lower than the daily wages offered in other segments of employment. ■

EVOLUTION OF PATTERN MAKING IN THE APPAREL INDUSTRY: A JOURNEY OF INNOVATION AND EFFICIENCY

Shreyas Ghunake, Assistant Professor
Prithviraj Yadav, Assistant Professor
Department of Textiles, D.K.T.E Society's, Textile and Engineering Institute, Ichalkaranji-416115

Abstract

Pattern making, a fundamental process in garment production, has undergone a remarkable evolution over time, transitioning from traditional manual techniques to modern digital methods. This review paper explores the historical roots, technological advancements, and current trends shaping the journey of pattern making in the apparel industry. Beginning with an examination of the origins of pattern making and its role in historical garment construction, the paper traces the development of traditional techniques such as manual drafting, draping, and grading. It then delves into the transformative impact of technological innovations, including the introduction of Computer-Aided Design (CAD), 3D modeling, artificial intelligence (AI), and 3D body scanning, on pattern making processes. Furthermore, the paper discusses the digital transformation of pattern making workflows, highlighting the benefits of digitization, cloud-based collaboration, virtual sampling, and Product Lifecycle Management (PLM) systems. Sustainable practices in pattern making are also explored, focusing on the integration of digital technologies to reduce waste and promote environmental stewardship. Additionally, the paper examines current trends and future directions in pattern making, including parametric design, 4D printing, smart textiles, and AI-driven design optimization. Finally, it addresses the challenges and opportunities facing the industry, such as accessibility to digital tools, skills development, ethical considerations, and the importance of collaboration. By providing a comprehensive overview of the evolution of pattern making, this paper aims to inform and inspire future advancements in the field, towards more efficient, sustainable, and innovative practices in the apparel industry.

Keywords: Pattern Making, Digital Transformation, Sustainable Practices, Technological Innovations, Apparel Industry.

Introduction

Pattern making is a foundational aspect of garment production, encompassing the creation of templates or blueprints that guide the cutting and assembly of fabric pieces into wearable garments. It bridges the gap between design concepts and tangible products, translating creative ideas into practical templates that ensure accurate construction and proper fit. Without effective pattern making, the integrity of the final garment may be compromised, leading to issues such as poor fit, structural flaws, and inefficient use of materials. The importance of pattern making in garment production cannot be overstated. It serves as the backbone of the manufacturing process, influencing everything from garment aesthetics to functionality and comfort. By providing precise measurements and construction guidelines, patterns dictate the shape, size, and structure of each garment component, allowing manufacturers to replicate designs consistently across various sizes and styles. As such, pattern making directly impacts the quality, cost-effectiveness, and marketability of apparel products. [1]

Understanding the evolution of pattern making is crucial for appreciating its current state and anticipating future developments. The journey of pattern making traces back to ancient civilizations, where garments were tailored individually to each wearer's measurements using basic tools and techniques. Over time, the demand for standardized sizing and mass-produced clothing led to the development of pattern making systems and techniques aimed at achieving uniformity and efficiency in garment production. This historical context sets the stage for exploring the technological advancements and innovations that have shaped contemporary pattern making practices. [2]

Historical Perspective

The origins of pattern making can be traced back to ancient civilizations, where garments were primarily crafted by hand using simple tools and techniques. In these early societies, garments were tailored individually to each wearer's measurements, with patterns often improvised based on trial and error. Skilled artisans and tailors played a central role in this process, relying on their expertise and craftsmanship to create garments that fit and flattered the wearer. As societies evolved and trade expanded, the need for standardized sizing and mass-produced clothing emerged. This demand drove the development of pattern making systems and techniques aimed at achieving consistency and efficiency in garment production.

EVOLUTION OF PATTERN MAKING IN THE APPAREL INDUSTRY: A JOURNEY OF INNOVATION AND EFFICIENCY

One significant milestone in the history of pattern making was the advent of sewing patterns in the 19th century, which provided standardized templates for cutting and assembling garments at home or in small workshops.

Figure 1. Tools for pattern making and draping
Source: Journal of Textile Science and Technology > Vol.10 No.1

Traditional pattern making techniques relied heavily on manual drafting, draping, and grading. Pattern makers would meticulously draft patterns on paper using measurements taken directly from the wearer or standardized sizing charts. Draping, another common technique, involved shaping fabric directly on a dress form to create the desired silhouette. Grading, the process of scaling patterns up or down to accommodate different sizes, required careful calculation and adjustment to maintain proportions and fit across size ranges.Skilled craftsmen and tailors played a crucial role in historical pattern making, passing down knowledge and techniques through apprenticeships and guilds. These master artisans possessed a deep understanding of garment construction and fit, allowing them to create bespoke garments tailored to each client's unique preferences and measurements. While labor-intensive, traditional pattern making methods allowed for a high degree of customization and attention to detail, resulting in garments of exceptional quality and craftsmanship.[3]

Technological Advancements

The introduction of Computer-Aided Design (CAD) revolutionized pattern making by digitizing traditional drafting processes and enabling designers to create, modify, and store digital patterns with unprecedented speed and precision. CAD software provided a range of tools and features for drafting, grading, and manipulating patterns, streamlining the design process and reducing reliance on manual techniques. This shift towards digital pattern making marked a significant milestone in the industry's evolution, paving the way for further advancements in technology and automation.With the rise of 3D CAD software, pattern making entered a new era of virtual prototyping and simulation. Three-dimensional modeling tools allowed designers to visualize garments in a simulated environment, facilitating more accurate design iterations and fit assessments. By creating virtual prototypes, designers could evaluate garment drape, seam placement, and fit without the need for physical samples, saving time and resources in the development process.[4]

Artificial Intelligence (AI) and machine learning algorithms are increasingly being integrated into pattern making software to automate repetitive tasks, improve pattern grading accuracy, and enhance design optimization. AI-driven pattern recognition systems can analyze vast datasets of garment measurements and fit feedback to identify patterns and trends, informing design decisions and improving overall garment quality. Machine learning algorithms can also assist with pattern grading by predicting size variations and optimizing pattern proportions for different body types. The adoption of 3D body scanning technology has further advanced pattern making practices by providing precise and detailed measurements of individual body shapes and proportions. 3D scanners capture data points from the surface of the body, creating digital models that serve as the basis for custom-fit garment patterns. By incorporating 3D body scanning into the design process, designers can create garments that fit more accurately and comfortably, reducing the need for extensive fitting sessions and alterations.[5]

Digital Transformation

Digitization has brought about a myriad of benefits to pattern making processes, revolutionizing traditional workflows and enabling new levels of efficiency, accuracy, and customization. One of the primary advantages of digital pattern making is its speed and scalability. CAD software allows designers to create, modify, and distribute patterns rapidly, reducing lead times and increasing productivity. Digital patterns can be stored, shared, and updated electronically, facilitating seamless collaboration between designers, pattern makers, and manufacturers across different locations and time zones. Cloud-based collaboration platforms have emerged as essential tools for streamlining communication and workflow management in

the apparel industry. These platforms provide centralized repositories for storing and sharing design files, pattern data, and fit feedback, enabling real-time collaboration and feedback exchange between stakeholders. By digitizing communication and documentation processes, cloud-based platforms help reduce errors, delays, and misunderstandings, leading to more efficient and transparent collaboration throughout the product development lifecycle. [6]

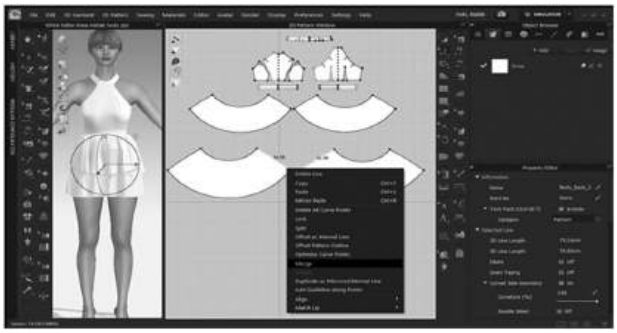


Figure 2. Automated Marker and pattern nesting in Clo3d.
Source: Journal of Textile Science and Technology > Vol.10 No.1

Virtual sampling and fit testing have become integral components of digital pattern making workflows, allowing designers to evaluate garment fit and performance in a virtual environment before proceeding to physical prototyping. Virtual sampling involves creating digital prototypes of garments using 3D CAD software, simulating fabric properties, draping, and construction details to achieve realistic representations of the final product. By conducting fit tests on virtual models, designers can identify fit issues, design flaws, and construction errors early in the development process, minimizing the need for costly and time-consuming physical prototypes. Product Lifecycle Management (PLM) systems play a crucial role in optimizing and automating pattern making workflows by integrating design, development, and production processes into a unified digital platform. PLM software enables end-to-end management of product data, from initial concept ideation to final production, providing visibility, traceability, and control over every stage of the product lifecycle. By centralizing data and workflow management, PLM systems help streamline collaboration, improve decision-making, and reduce time-to-market for apparel products. [7]

Sustainable Practices

Traditional pattern making techniques have often been associated with inefficiencies and waste in the garment production process, contributing to environmental degradation and resource depletion. However, the adoption of digital pattern making technologies presents opportunities for enhancing sustainability and reducing the industry's environmental footprint. Digital patterns can be optimized for material efficiency, minimizing fabric waste and reducing the consumption of natural resources. By leveraging digital tools and automation, manufacturers can optimize pattern placement on fabric rolls to maximize yield and minimize offcuts, scraps, and remnants. Digital pattern making also enables greater flexibility and customization in garment production, supporting on-demand manufacturing and reducing overproduction and excess inventory. [8]

Current Trends and Future Directions

Embracing parametric design principles allows for the creation of adaptive and responsive garments that can adjust to the wearer's body shape, movements, and environmental conditions. Parametric design methodologies leverage algorithms and computational models to generate dynamic patterns that can be tailored to individual preferences and requirements. By integrating parametric design techniques into pattern making workflows, designers can explore new possibilities for creating garments that offer enhanced comfort, performance, and functionality. The exploration of 3D printing and smart textiles represents an exciting frontier in pattern making and garment construction. 3D printing technology enables the fabrication of materials that can change shape, color, or properties in response to external stimuli such as heat, light, or moisture. By integrating 3D printed elements into garment design, designers can create dynamic, interactive textiles that adapt to the wearer's needs and preferences. Similarly, the development of smart textiles embedded with sensors, actuators, and electronic components opens up possibilities for creating garments that can monitor health metrics, adjust temperature, or provide feedback to the wearer in real-time. [9]

Advancements in AI-driven design optimization and predictive modeling are poised to transform pattern making processes further. Machine learning algorithms can analyze vast amounts of data to identify patterns, trends, and correlations that

inform design decisions and improve garment fit and performance. By leveraging AI-driven design tools, designers can generate more accurate and efficient patterns, reduce material waste, and enhance overall garment quality. Predictive modeling techniques enable designers to anticipate market trends, consumer preferences, and supply chain disruptions, allowing for more informed decision-making and strategic planning. The continued focus on sustainability and circularity in pattern making practices is driving innovation and collaboration across the industry. Designers, manufacturers, and consumers are increasingly prioritizing environmentally friendly materials, production methods, and supply chain practices. From recycled fibers and biodegradable materials to closed-loop recycling systems and zero-waste production techniques, sustainable initiatives are reshaping the way garments are designed, produced, and consumed. By integrating sustainability principles into pattern making processes, the industry can minimize its environmental impact and create more responsible, ethical fashion solutions. [10]

Challenges and Opportunities:

Despite the many benefits of digital pattern making technologies, challenges remain in terms of accessibility, affordability, and skill acquisition. Small-scale manufacturers and independent designers may lack access to the necessary software, hardware, and training resources needed to adopt digital pattern making tools effectively. Additionally, the upfront costs associated with investing in CAD software, 3D scanners, and other digital technologies can be prohibitive for some businesses, particularly those operating on tight budgets or in developing regions. The rapid pace of technological advancements in pattern making presents challenges in terms of skills development and workforce readiness. As digital tools and automation become increasingly prevalent, there is a growing demand for skilled professionals who can effectively navigate and leverage these technologies. However, there is a shortage of qualified pattern makers, designers, and technicians with the necessary technical expertise and digital literacy to fully capitalize on the potential of digital pattern making tools. Bridging this skills gap requires investment in education, training, and professional development programs that equip individuals with the knowledge and skills needed to thrive in a digital-centric industry.

Ethical considerations surrounding AI-driven design and automation raise questions about privacy, bias, and accountability. As AI algorithms become more sophisticated and pervasive in pattern making processes, there is a risk of perpetuating existing biases and inequalities in garment design and fit. Additionally, concerns about data security and intellectual property rights may arise as companies collect and analyze vast amounts of sensitive information related to consumer preferences, body measurements, and fit feedback. Balancing the benefits of AI-driven design with ethical considerations requires transparent governance frameworks, industry standards, and regulatory oversight to ensure accountability and protect consumer rights. Collaboration and knowledge sharing are essential for fostering innovation and driving positive change in pattern making practices. By collaborating across disciplines and value chains, stakeholders can leverage collective expertise, resources, and insights to address common challenges and seize opportunities for growth and sustainability. Open-source platforms, industry networks, and collaborative initiatives play a crucial role in facilitating information exchange, bestpractice sharing, and collective problem-solving within the global apparel community. [11]

Conclusion:

In conclusion, the journey of pattern making in the apparel industry reflects a dynamic interplay of tradition and innovation, craftsmanship and technology, creativity and sustainability. From its humble origins in ancient civilizations to its current state of digital sophistication, pattern making has evolved in response to changing societal needs, technological advancements, and environmental imperatives. As we look to the future, the challenges and opportunities facing the industry are vast and complex, requiring collective action and forward-thinking solutions. By embracing digital transformation, sustainability principles, and ethical practices, the apparel industry can chart a course towards a more inclusive, resilient, and responsible future of pattern making and garment production.

References

1] Jones, S., & Tam, M. Y. (2016). Fashion design: The art, process, and theory. Fairchild Books.

2] Sinclair, R. (2019). CAD for fashion design and merchandising. Bloomsbury Publishing.

3] Tortora, P., & Merkel, R. (2018). Fairchild's dictionary of fashion. Bloomsbury Publishing USA.

4] Kim, H. S., & Shin, S. (2019). The role of artificial intelligence in future fashion and its potential environmental impact. Fashion and Textiles, 6(1), 1-20.

5] Eswaran, P., Chandrasekar, P., & Hariprasath, R. (2020). Smart textile: An innovative technique for future fashion. International Journal of Engineering Research and Technology, 13(2), 289-292.

6] Chen, Y., Jin, X., & Yu, W. (2020). A cloud-based collaborative design platform for fashion product development. IEEE Access, 8, 187700-187712.

7] Schmitt, K. (2018). Digitalization in the fashion industry: A classification scheme for digital technologies. International Journal of Fashion Design, Technology and Education, 11(1), 25-34.

8] Shen, Y. H., & Lee, S. M. (2018). Sustainable fashion supply chain: Lessons from H&M. Sustainability, 10(4), 1204.

9] Lekakou, M. B., Papachristou, I., Papalamprou, A., &Boursinos, A. (2020). Additive manufacturing for fashion design: Conceptual framework for 3D printing applications. International Journal of Fashion Design, Technology and Education, 13(1), 64-76.

10] Rippel, T. (2017). 3D body scanning and digital clothing: A look into the future. International Journal of Fashion Design, Technology and Education, 10(3), 335-343.

11] Kennedy, A., & Rowley, J. (2018). An exploration into fashion and textile students' knowledge, behaviour and attitudes towards sustainable fashion. International Journal of Fashion Design, Technology and Education, 11(1), 46-56. ■

Core Sectors' Output contracts 1.8% in August

The output of eight core infrastructure industries shrank 1.8% in August from a year earlier, the first contraction in 42 months, compared with 6.1% expansion in the preceding month, according to the official data released recently.

Experts blamed heavy seasonal showers in August over large swathes of the country, on top of an unfavourable base effect, for the slump.

Given their 40% weight in the index of industrial production (IIP), the poor show by the infrastructure industries could limit the August index of industrial production (IIP) expansion to just 1-1.5%, against 4.8% in July, experts said. IIP data for August will be released shortly.

Apart from steel and fertilisers, six of the eight industries — coal, crude oil, natural gas, refinery products, cement and electricity- remained in the negative zone in August, the latest data showed.

A rainfall deficit in August last year had kept production and mining activities going, leading to an impressive 13.4% jump in output during the month from the previous year. Sequentially, the output of the core industries contracted 4.2% in August.

Steel production grew in August but at the lowest pace (4.5%) in 26 months, while fertilizer output rose 3.2%, against 5.3% in previous month.

However, the output of other industries, such as coal, crude oil, natural gas and refinery products contracted by 8.1%, 3.4%, 3.6% and 1%, respectively, in August. Electricity and cement output dropped 5% and 3%, respectively.

In July, only crude oil and natural gas had witnessed contraction while the other six industries recorded growth rates ranging from 5.3% to 7.9%.

With this, core sector growth in the first five months of the fiscal year touched 4.6%, against 8% a year before, the data showed.

Given the core infrastructure sector contraction, Icra chief economist Aditi Nayar expects IIP growth to have slowed to about 1% in August. "Core sector output may remain lacklustre in September 2024 given the late withdrawal of the monsoon, before normalising in the third quarter," she said.

A Bank of Baroda research note said: "Clearly, the base effect brought down growth and this will not be expected to continue as the infrastructure activity has picked up post-elections." ■

Dynamic Testing on Drawn Textured Yarns (DTY) with Dynafil ME

U. Mörschel, A. Paschen, W. Stein
Textechno Herbert Stein GmbH & Co. KG

Introduction

In a preceding publication the testing instrument Dynafil ME by Textechno was presented as a flexible, versatile and sensitive measurement tool for the analysis of yarn properties in the field of BCF yarns /1/. The most important quality problems of BCF yarns – differences in crimp and shrinkage properties leading to uneveness of the carpet both with regard to yarn bulk and dyability (for Polyamid yarns) – apply in the same way to DTY and the manufactured fabric.

The Dynafil ME has – due to a number of outstanding features – proved to be extremely effective in testing DTY, since it can determine reliable values for shrinkage and crimp properties in continuous testing and – in many cases – replace knitting and dying which is still the most common way of testing to identify faulty yarn packages.

The versatility and usefulness of the tester is greatly extended by additional modules for the measurement of friction, entanglement, broken filaments, linear density and capacitive evenness.

This paper gives a detailed example demonstrating the application of the Dynafil ME for testing DTY.

Defining defects in textured yarns

The Dynafil ME was applied in the context of a scientific research project carried out with the Hochschule Niederrhein in Mönchengladbach and the companies Barmag AG, Remscheid and TWD in Deggendorf. For this purpose textured yarns using 13 different machine settings on a Barmag AFKV-HTI texturing machine with high temperature (HT) heater were manufactured. These settings include the variation of the temperatures of the HT-heater and the SET-heater, starting from a reference setting. Furthermore packages with some typical process defects like a damaged texturing disc, a yarn remnant in the twisting device or surging were manufactured. To evaluate the variation within a particular machine setting 3 packages per setting were produced. All other parameters such as the feed yarn, texturing speed, draw and d/y-ratio were held constant. Table 1 shows an overview on the testing program.

The common approach to find out differences between yarns is the measurement of the force (yarn tension) at a constant rate of elongation or overfeed at stepwise increasing speeds with the Dynafil heater temperature being kept constant. As the effective yarn temperature is inversely related to yarn speed, this measurement delivers an information about the temperature dependency of the measured variable. Furthermore it is possible to carry out tests at particular yarn temperatures by choosing appropriate test speeds, without changing the heater temperature.

<table>
<tr><td colspan="2">1.</td><td colspan="5">Temperature HT-Heater</td></tr>
<tr><td colspan="2"></td><td>340 °C</td><td>360 °C</td><td>380 °C</td><td>400 °C</td><td>420 °C</td></tr>
<tr><td rowspan="5">Temperature SET-Heater</td><td>145 °C</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>155 °C</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>165 °C</td><td></td><td></td><td>Reference</td><td></td><td></td></tr>
<tr><td>175 °C</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>185 °C</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="7">2. Texturing disc damaged</td></tr>
<tr><td colspan="7">3. Yarn remnant in the device</td></tr>
<tr><td colspan="7">4. Surging</td></tr>
<tr><td colspan="2">Material:</td><td colspan="2">Polyester 167134</td><td colspan="3">Machine type:</td></tr>
<tr><td colspan="2">Texturing speed:</td><td colspan="2">900 m/min</td><td colspan="3" rowspan="2">Barmag AFK-V-HTI texturizing machine</td></tr>
<tr><td colspan="2">Draw ratio:</td><td colspan="2">1,745</td></tr>
<tr><td colspan="2">d/y-ratio:</td><td colspan="2">1,75</td><td colspan="3"></td></tr>
</table>

Table 1: Testing program

Fig. 2 shows these so called force-speed curves of all 39 analysed packages for an overfeed of 5 %. While the yarn temperature is equal to the heater temperature at test speed 0 m/min, the yarn temperature drops to about 80 °C at a test speed of 250 m/min. This applies to the heater temperature of 240 °C used in these tests and the yarn count of 167 dtex.

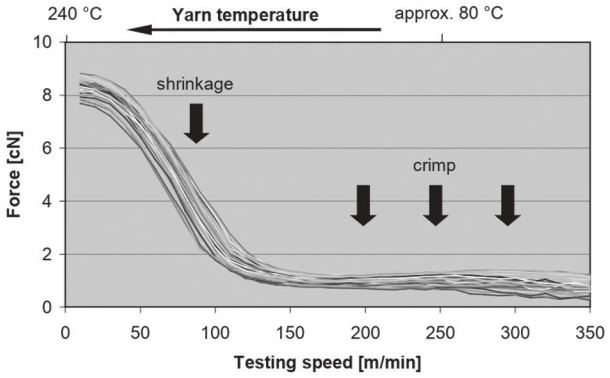


Fig. 2: Force-Speed curves

All curves show the same typical pattern. At lower speeds corresponding to higher yarn temperatures the forces decrease significantly up to a speed of about 120 m/min. Beyond this point the forces stay on a more or less constant level. So it can be distinguished between two sections of the curves representing the shrinkage forces, activated at higher temperatures, i.e. lower yarn speed, and the crimp forces, developed at lower temperatures, i.e. higher yarn speed.

As it is known from earlier investigations /2-8/ it is now possible to find out respectively one representative testing speed for each section, in which the curves differentiate significantly from each other. To characterise the shrinkage and crimp properties it is on the one hand possible to measure the tensile forces in the yarn that are caused by shrinkage and crimp performance at constant speed and overfeed. On the other hand the shrinkage and crimp contraction values in percent at a specific constant force can be analysed. In the context of this project both methods were applied and appropriate testing speeds were selected.

Influence of settings of the texturing machine on shrinkage and crimp properties

Fig. 3 shows the results of the shrinkage force and shrinkage tests as a function of the HT- and SET-heater temperatures. The results are displayed as the difference in percent from the reference packages. It is obvious that the shrinkage force as well as the shrinkage decreases with higher heater temperatures. Hereby these tendencies are more pronounced with regard to the force measurement.

In fig. 4 the results for the crimp force and crimp contraction are given. Here an explicit opposed tendency can be recognised. While crimp force and crimp decrease as a function of a rising SETheater temperature, they increase with an increasing HT-heater temperature.

Regarding the variation of the SET-heater temperature the force measurement is significantly more pronounced. Regarding the variation of the HT-heater temperature the percent measurement seems to be more distinct.

As a conclusion it can be pointed out that the variation of the SET-heater temperature causes the same characteristics regarding shrinkage and crimp properties while the variation of the HT-heater temperature results in opposed tendencies.

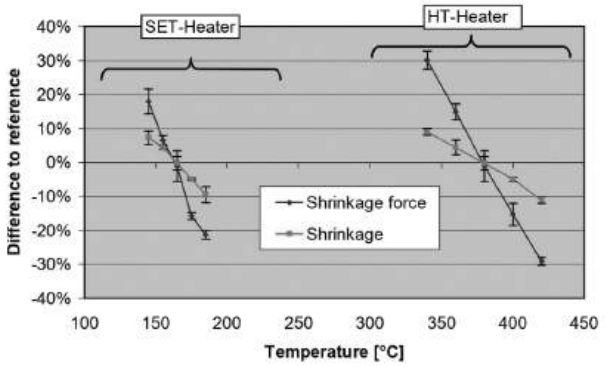


Fig. 3: Influence of the heater temperatures on the shrinkage properties

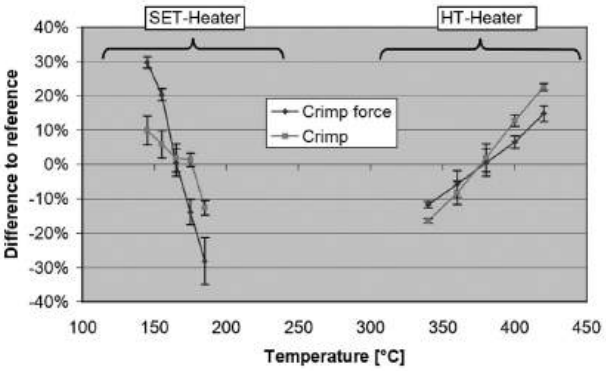


Fig. 4: Influence of the heater temperatures on the crimp properties

This finding could be applied and verified on the basis of an example from production. A textured yarn was supposed to feature periodic defects. These defects could be demonstrated by the shrinkage force and crimp force tests shown in fig. 5. As both curves show the same characteristics it could be concluded that a problem with the SET-heater caused the defect. If the HT-heater had caused the defects they would have lead to opposed tendencies in shrinkage and crimp force properties.

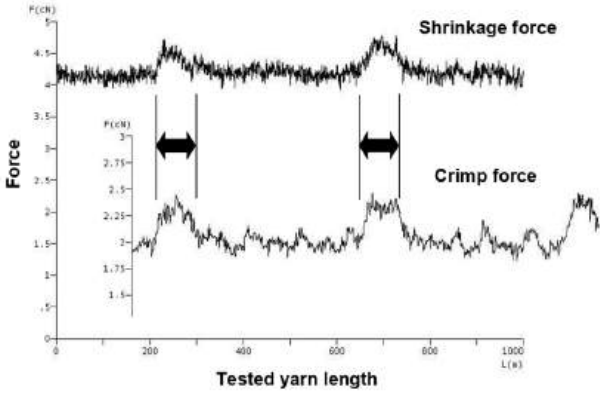


Fig. 5: Periodic defects in textured yarns

Dynamic Testing on Drawn Textured Yarns (DTY) with Dynafil ME

Fig. 6 shows the results for the yarns manufactured with specific process defects. Obviously surging leads to the most pronounced differences to the reference yarn. A reduction of far above 10 % regarding shrinkage and shrinkage forces as well as crimp forces could be detected. Concerning the crimp contraction differences of over 40 % could be measured.

The defective texturing disc as well as the yarn remnant in the device only caused smaller deviations from the reference. Here especially the crimp contraction and crimp force values are worth mentioning, because they are up to 10 % higher compared to the reference yarn.

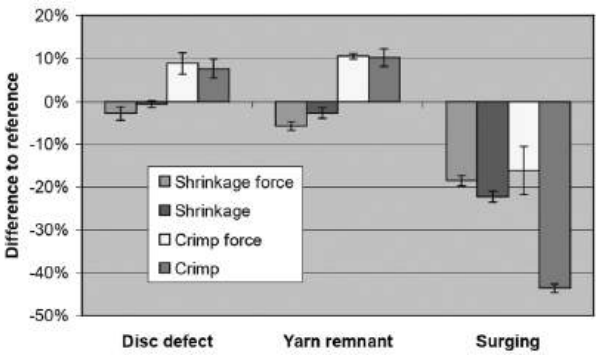


Fig. 6: Influence of process defects on shrinkage and crimp properties

Correlation to static measurement of shrinkage and crimp contraction

For the user of the Dynafil ME it is of main interest, to what extend the results of this method correlate with the results of the widespread used method of static measurement of shrinkage and crimp according to DIN 53840 and DIN 53866. For this purpose all packages were tested regarding shrinkage and crimp contraction with the Texturmat ME, and the results were correlated to the Dynafil results. In fig. 7 the correlation between the Dynafil shrinkage force and the Texturmat shrinkage percent values as well as the correlation between the crimp force and crimp contraction values are displayed. In both cases an impressing coefficient of correlation R^2 (squared) of over 0,9 could be found.

This coefficient of correlation to the shrinkage and crimp contraction results of the Texturmat can be calculated for the shrinkage force and crimp force values at all Dynafil testing speeds. Fig. 8 shows the coefficient of correlation as a function of the testing speed. It can be detected both for the shrinkage and for the crimp area a explicit maximum value with a very good correlation. The corresponding testing speeds confirm the choice of testing speeds according to the force-speedcurves.

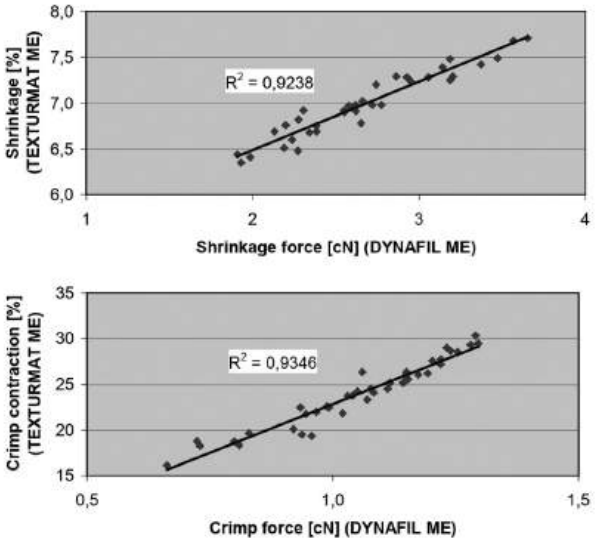


Fig. 7: Correlation between Texturmat and Dynafil results

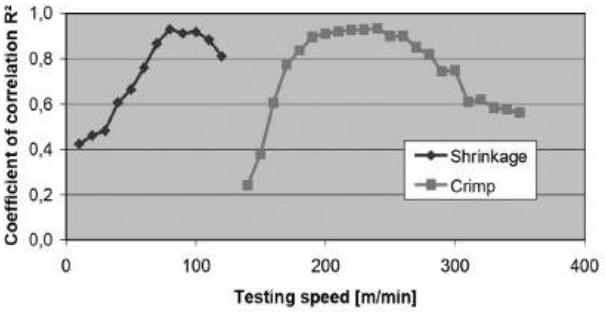


Fig. 8: Coefficient of correlation as a function of the testing speed

Correlation to knitting and dyeing tests

In practice knitting with successive dyeing and visual inspection is still the most common way of testing to identify faulty yarn packages. This procedure is cumbersome, time consuming, expensive and depends considerably on the personal experience of the inspector. For this project, it was carried out for all packages by the friendly support of the Textilwerke Deggendorf. The visually inspected criteria are the dye uptake which was correlated to the shrinkage properties as well as the yarn volume which was correlated to the crimp properties. The results dye uptake and volume were expressed as difference from the reference packages on a scale from -5 to +5.

Fig. 9 shows the results of the colour inspection assorted with the analysis of the shrinkage properties as well as the results of the visual

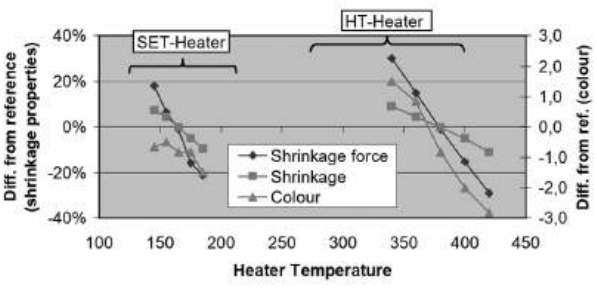
inspection of the volume assorted with the analysis of the crimp properties. First of all an amazing correlation between shrinkage properties and colour can be found both for the SET-heater and the HT-heater temperature variation. Regarding the crimp properties the correlation to the volume leads to a fairly good correlation considering the SET-heater temperature variation. As to the HT-heater temperature variation the crimp force and crimp contraction measurement are clearly more sensitive than the visual inspection of the volume.

In fig. 10 the results of the shrinkage force tests for all packages are assorted. It can be clearly seen that the differences between different settings are more pronounced than within a triplet of the packages. The packages that were sorted out by the knitting and dyeing test according to the standard criteria of TWD regarding dye uptake or volume are represented by red columns. They correspond to the results of the shrinkage force test with the highest deviations from the reference with the exception of two packages. So it is possible to give a criterion regarding critical values (+ 25 % and – 17 % deviation from the reference packages) for the shrinkage force that leads to the same sorting as the visual inspection.

Fig. 11 shows the same diagram regarding the crimp contraction. Again the faulty packages according to the visual inspection can also be found by deviations from critical values (+ 18 % and – 11 % deviation from the reference packages) regarding the crimp contraction.

From the packages with process defects such as damaged disc etc. only those packages processed with surging were sorted out in the knitting and dyeing test. This can be understood as another hint, that the Dynafil test showing deviations of about ± 10 % is more sensitive for this kind of defects.

It can be summed up that the testing of shrinkage and crimp properties by Dynafil ME has the potential to support or even replace knitting and dyeing tests.



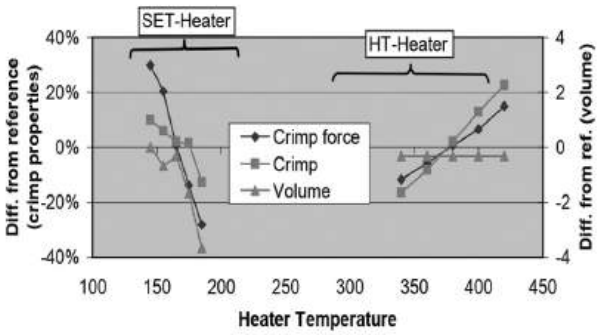


Fig. 9: Correlation between shrinkage and crimp properties and knitting and dyeing tests

Summary

With the Dynafil ME a measurement tool is available that enables flexible, versatile and sensitive analysis of yarn properties in the field of textured yarns. Its user friendly operating mode delivers informative and comprehensive results within very short testing periods. In the context of a specific research project elementary dependencies between texturing parameters and resulting thermomechanical yarn characteristics could be established. By comparative knitting and dying tests excellent consistencies to the visual inspection of colour and volume could be proved.

By means of options like a capacitive evenness sensor, the new Textechno Comcount system with sample preparation for spin finish analysis, as well as an optical interlace counter including stability testing, and automatic package changers with up to 20 positions Dynafil ME can become a complete testing station for the most important yarn properties.

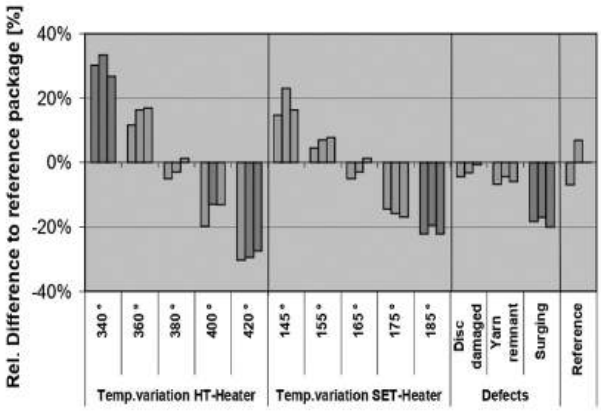


Fig. 10: Results of the shrinkage force tests regarding packages sorted out by the knitting test (red columns)

Dynamic Testing on Drawn Textured Yarns (DTY) with Dynafil ME

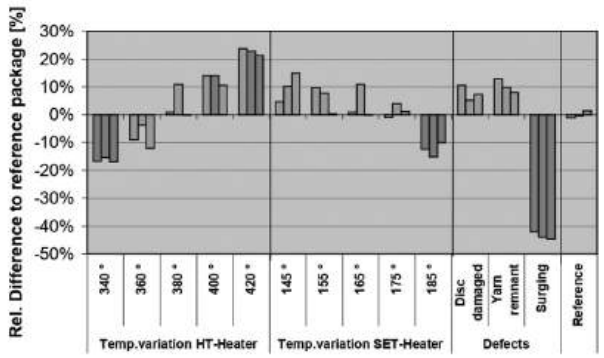


Fig. 11: Results of the crimp contraction tests regarding packages sorted out by the knitting test (red columns)

Literature

/1/ Mörschel, U.; Paschen, A.; Stein, W.: BCF yarn testing with Dynafil ME. Chemical Fibers International 53 (2003), 204-206.

/2/ Stein, W.: Neues universelles Prüfverfahren für Textilfäden. Melliand Textilberichte 55 (1974), 123-126.

/3/ Stein, W.; van der Weyden, H.: Einflußgrößen bei der Kräuselkontraktionsprüfung nach DIN 53840 an texturierten Filamentgarnen. Chemiefasern/Textilindustrie 25/77 (1975), 1126-1132.

/4/ Stein, W.; Wallas, K.: Kräuselkontraktions- und Schrumpfkraftprüfung texturierter Filamentgarne am laufenden Faden. Melliand Textilberichte 57 (1976), 97-103.

/5/ Stein, W.: Nachweis veränderter Spinnbedingungen an vororientierten Polyester- Filamentgarnen. Internationales Textil-Bulletin (1981), H. 3, 259, 260, 267, 268, 275, 276.

/6/ Stein, W.: Nachweis von Schrumpfunterschieden in technischen Filamentgarnen. Chemiefasern/Textilindustrie (1982), H. April, 266.

/7/ Rodgers, J. E.; Ghosh, S.: Dynamic bulk measuring system for textured nylon and polyester filaments. Textil praxis international (1987), H. April.

/8/ Stein, W.: New Universal Filament Yarn Tester. Chemical Fibers International 51 (2001). ■

Trade deficit becomes wider in India's Q1FY25 CAD to $9.7 billion

India's current account deficit (CAD) widened marginally to $9.7 billion (1.1% of GDP) in Q1 FY25 from $8.9 billion (1% of GDP) in the year-earlier period and a surplus of $4.6 billion (0.5% of GDP) in Q4FY24, as per Reserve Bank of India (RBI) data.

"The widening of CAD on a year-on-year basis was primarily due to a rise in merchandise trade deficit to $65.1 billion in Q12024-25 from $56.7 billion in Q12023-24," the RBI said.

Net services receipts rose to $39.7 billion in Q12024-25 from $35.1 billion.

Private transfer receipts, mainly representing remitances by Indians employed overseas, rose to $29.5 billion in Q12024-25 from $27.1 billion.

Net foreign direct investment (FDI) inflows climbed to $6.3 billion in Q1FY25 from $4.7 billion.

"India's balance of payments situation remained largely stable for Q1FY25 with net accretion of $5.2 billion to forex reserves compared with $24.4 billion last year," said Madan Sabnavis, chief economist, Bank of Baroda.

Stating CAD was marginally higher at 1.1% against 1% of GDP last year, he said "we may expect the deficit to be around 1.5% for the year. FDI flows were higher though FPI was lower. The latter will turnaround given the debt flows expected due to the inclusion of bonds in JP Morgan index." ■

AN ERGONOMIC SURVEY OF OCCUPATIONAL HEALTH HAZARDS PREVALENT IN HANDLOOM CLUSTER OF VARANASI

Dr. Sunita Dixit, Assistant Professor, Vasant Kanya Mahavidyalaya, Kamachha, Varanasi-221010
(Affiliated to Banaras Hindu University)

Abstract

The handloom industry is perhaps the most established in Varanasi where a significant number of individuals are occupied in handloom weaving. Long hours of static work with awkward posture at traditionally designed looms can lead high prevalence of musculoskeletal problems. A healthy economy, high quality of products, and long-term productivity are difficult to achieve in poor working conditions where workers are exposed to health and safety hazards. Keeping in view these facts the present research was planned and the survey was conducted to select four handloom weavers' clusters. This study was aimed at evaluating the different health problems, socio-economic conditions of the handloom weavers, and environmental factors i.e. noise, temperature, humidity in handloom clusters. The survey was conducted in different handloom clusters of Varanasi. The four selected areas after the survey were selected and Fifty (50) weavers from each cluster were randomly taken for the study. Thus the total sample size was 200. An ergonomic questionnaire was formulated and administered to the selected handloom weavers. It consists of a series of questions with several preferred responses and was administered to assess their socioeconomic status, health problems, and working conditions. It was observed that all types of weavers belong to low socio-economic conditions and suffered from health problems like pain in body parts (neck, shoulder, elbow, wrist, upper back, lower back, hips, knees, ankle, etc), poor vision, hearing problems, respiratory problem, allergy, eye irritation, etc.

Keywords : Ergonomics, Handloom weavers, Health problems, Socio-economic conditions Muscu-loskeletal problems, Environmental factors

I. INTRODUCTION

The handloom industry is perhaps the most established in Varanasi where a significant number of individuals are occupied in handloom weaving. Varanasi has rich customs, beliefs, and heritage of handloom industry & fine workmanship of hand-woven textiles. Throughout the weaving process, weavers adopt awkward postures, which is a crucial component of their poor working efficiency and skill effectiveness as well as the emergence and development of musculoskeletal disorders. Extended duration of static work with awkward posture at old traditionally designed looms can lead to elevated existence of musculoskeletal problems. A flourishing economy, premier quality of products, and long-term productivity are strenuous to attain in poor working conditions where weavers are vulnerable to health and safety hazards. Ergonomics aims to make sure that tasks, equipment, documentation, information, and the en-vironment suit each worker. It is absolutely a significant interdisciplinary field that assists the weaver to attain higher productivity due to less fatigue, a safer working environment (fewer mishappenings), lesser absenteeism, and reduced labor turnover. The ergonomic intervention comprises the human-machine interface, environmental surroundings, hardware, and work posture. Some of the factors that influence ergonomic attentiveness are Climate (Temperature, Humidity, and Airflow – Ventilation); Noise, Illumination, Vibration, and Radiation; besides Work Time/Shift, Work Overload, Ageing, Material Handling, Stress or Strain, and Load.

In the present era of advancement and commercialization, the handloom sector is also indicating the changes that a large number of women are adopting the weaving activity as their profession. The activity they performed previously during their spare time, has now been transformed into eight hours job. But, despite the increased weaving time spent on the weaving loom, the workstation design remains unaltered. [3]. In traditional old looms, normally there is no workstation adjustability and adjustment of weaving height is difficult that causes the awkward postures of the upper body. Inappropriately designed hand tools and the kind of task are the chief causes of awkward postures of wrists and fingers [9]. The handloom sector is aimed to generate and provide direct and indirect employment to over 4.3 million people all over India [4].

An amended Nordic Musculoskeletal Disorder Questionnaire and Oswestry Low Back Pain Disability Questionnaire along with a body part discomfort scale were administered to handloom weavers of Bengal. The working posture of the

respondents was evaluated by using the Ovako Working Posture Analysis System (OWAS). The study outlines the need for further research about the postural strain of weavers and also suggests the implementation of the ergonomic design into weaver workstations to minimize the adverse effect of their current working postures. By improving the weaver's work-posture would improve their quality of life. Handloom is one of the long-established cottage industries in India, especially in West Bengal, where a significant number of rural people are engaged in weaving. The outcome of the present investigation revealed that highly repetitive works carried out for a long time could increase the intensity of the pain felt and would lead to repetitive strain injuries.[1, 2].

The social and physical well-being of the weavers has not been much considered a priority in government policy. Musculoskeletal disorders (MSDs) are typically common to almost all the occupations and segments related to weaving, which leads to serious physical and economic aftermath for weavers, and their dependents. The Finnish Institute of Occupational Health (FIOH) identified musculoskeletal disorders as one of the most widespread work-related frailty, emphasizing that despite several parts of the body being involved; the back experiences most of the discomfort [5, 6].

Weaving is considered to be a highly labor-intensive task, with the labor cost ac-counting for up to an average of 65% of the production cost. Some of the MSDs that commonly occur are carpal-tunnel syndrome (CTS), tendonitis, and lower-back pain, which are generally caused by repetitive motions, awkward and non-neutral postures, poor working conditions, among other things [7]. There is a correlation between MSDs and occupation. Therefore, there is a critical need to evaluate the occupational risk factors among the unorganized sector, particularly the weaving industry in India. The postures of workers also need to be modified, and corrective measures need to be introduced to minimize the risk of musculoskeletal disorders in the long term [8]. The weaver has often been forced to adopt a squatting posture to operate the traditional carpet looms and as the width of the carpet increase and they have to lean forward to complete the task [10]. The present survey was aimed at the assessment of physical characteristics, health problems, socio-economic conditions, and environmental factors.

II. METHODOLOGY

Selection of Sample

The survey was conducted in different handloom clusters of Varanasi. The four selected areas after the survey were selected and fifty (50) weavers from each cluster were randomly taken for the study. Thus the total sample size was 200.

Development of tool

The socio-economic questionnaire was administered to the weavers for the evaluation of their socio-economic status. An exhaustive review of the literature assisted and enabled the investigator in the development of the tool. Care was taken to incorporate all the needed information as decided in the formulated objectives of the study. An interview schedule was prepared to get relevant information. It consists of a series of questions with several preferred responses. The questions sought information about the socio-economic background, educational status, knowledge, marital status, family member, attitude, experience, monthly income, working hours, work-related aspects, etc. The questions related to health problems were pains in body parts (neck, shoulder, elbow, wrist, upper back, lower back, hips, knees, ankle, etc), poor vision, hear-ing problems, respiratory problems, allergy, eye irritation, etc. [11].

Measurement of Physical characteristics

The basic physical parameters, such as height and the bodyweight of the weavers were measured using an anthropometric rod and a properly calibrated weighing machine respectively to assess body mass index (BMI). Most of the weavers were both semi-literate and illiterate, so interviews were carried out verbally and responses were noted. The questions were prepared in Hindi and communicated to them during working hours or either before or after work hours [12].

III. RESULTS AND DISCUSSION

Physical characteristics of handloom weavers of Varanasi

The primary survey was conducted in different handloom clusters i.e. Madanpura, Badi bazaar, Alaipura, Nati Imli, Lallapura, Ramnagar, Lohta, Baragaon, Basani, Ashapur, Bajardiha, Ausanganj, Golgada, Basani, and Saraiya. The selected areas after the survey were Lallapura, Bajardiha,

Ausnganj and Saraiya. Fifty weavers from each selected cluster were randomly taken for the study. Thus the total sample size was 200.

Table 1: Physical characteristics of handloom weavers of Varanasi

Physical parameters	Handloom weavers N=200
Age (years)	19-58
Height (cm)	142.5-179.0
Weight (kg)	42-87
BMI (Kg/m2)	16.5-32.4
Working hours per day	10-12

Table 1 shows the age, height, weight, BMI, and working hours per day of the handloom weavers.

Socio-economic status of handloom weavers in Varanasi

Table 2 : Socio-economic status of handloom weavers in Varanasi

Demographic parameters	Parameters	Handloom weavers, N=200 (%)
Educational level	Illiterate	92 (46)
	High school	73 (36.5)
	Intermediate	30 (15)
	Degree/Diploma	05 (2.5)
Marital Status	Married	160 (80)
	Unmarried	34 (17)
	Widow	06 (3)
Family members	1-3	28 (14)
	4	34 (17)
	5	55 (27.5)
	More than 5	83 (41.5)
Number of children	1	23 (11.5)
	2	38 (19)
	More than 3	139 (69.5)
Experience in weaving (years)	1-5	32 (16)
	5-10	40 (20)
	More than 10	128 (64)

The socio-economic status of the handloom weavers is given in Table 2. The economic condition of the handloom weavers was poor; therefore they did not have better educational opportunities. It was found that 46% of weavers were illiterate, 36.5% were high school, 30% were Intermediate and only 2.5% were having a Degree or Diploma. It was found that 80% of the weavers were married, 17% were unmarried and 3% were a widow. It is also evident from the table that 41.5% of weavers had more than five family members and 69.5% weavers had more than three members. It was found that that 64% of weavers had more than 10 years of weaving experience whereas 20% weavers had weaving experience between 5 to 10 years and 16% had weaving experience between 1to 5 years.

Health problems of handloom weavers of Varanasi

Table 3 : Health problems of handloom weavers of Varanasi

Health problems	Handloom weavers N = 200 (%)	
	Yes	No
Cardiovascular problems	103 (51.5)	97 (48.5)
Respiratory problems	137 (68.5)	63 (31.5)
Digestive problems	117(58.5)	83 (41.5)
Eye irritation	145 (72.5)	55 (27.5)
Hearing problem	134 (67)	66 (33)
Skin disease	108 (54)	92 (46)
Pain in body parts	176 (88)	24 (12)

It was observed during the survey that the weavers were exposed to different stressed working condition and hazardous environment. They have reported various occupational health-related problems and complaints which are given in Table 3. It was found that 51.5% weavers had cardiovascular problem, 68.5 had respiratory problem, 58.5% showed digestive problem, 72.5% reported eye irritation, 67% had hearing problem, 54% reported skin problem and 88% weavers complained about pain in body parts which ranged from moderate to severity. It is clear from the data obtained that eye irritation, respiratory problems, hearing problems and pain in body parts are the most common health problems in maximum number of weaver.

It can be concluded that these health problems are due to bad postures for long hours, use of hazardous dyes and chemicals, unsafe environment and working conditions. Therefore it is necessary to find the best ways and methods for the proper

health conditions of handloom weavers. It was found that the traditional handloom weavers and jacquard loom weavers were suffering from pain in body part and it was more prevalent than other health problems. The percentage of pain was much higher in case of jacquard loom weavers than the traditional handloom weavers. In the same way different health problems i.e., respiratory problems, cardiovascular problems, digestive problems, skin diseases etc were also more prevalent among the jacquard loom weavers [13]. The reasons identified include unnatural work postures, use of hazardous chemicals, unsafe working practices, long working hours and high risks of accidents at work place, caused by unsafe conditions [14].

Assessment of environmental factors (Noise, Temperature, Humidity, and Light)

Table 4: Measurement of Illumination level (Lux) at handloom workstation during four times a day in two months

Time	Lux (Mean) Month of January	Lux (Mean) Month of October	Standard Level of Illumi-nation recommended for conducting fine & me-dium type of work
10: a.m	114.26	143.53	BIS: 300 Lux - 700 Lux ISO: 300 Lux CIE: 300 Lux IES: 400 Lux - 750 Lux
1:00 p.m	129.34	178.74	
4:00 p.m	73.22	86.38	
6:00 p.m	52.26	65.24	

The mean values of the illumination of the handloom cluster are given in Table 4. According to the data obtained, it was found that during daytime there was a considerable variation in the illumination value at handloom clusters. It was also observed that the illumination value was maximum at 1:00 p.m i.e 129.34 and it was minimum at 6:00 p.m i.e 52.26 in January. The illumination value was found to be maximum at 1:00 p.m i.e 143.53 and it was minimum at 6:00 p.m i.e 65.24 in October. It can also be concluded from the data that the illumination reading value was more in October as compared to January.

Table: 5 Noise level at the handloom cluster

Examination Attributes	Sound level dBA (mean score)	Standard Level of Noise recommended at workplace
Maximum Value of Noise	82.29	Bureau of Indian Standard (BIS) 45 to 75 dBA
Minimum Value of Noise	48.37	

The noise level at the handloom cluster is shown in Table 5. The mean score of the maximum value of noise was 82.29 dBA which is elevated than the standard of BIS i.e 45 - 75 dBA. A high deviation and fluctuation were also experienced in the noise level at the handloom cluster.

This objective aimed to analyze the influence of prevailing illumination and sound level on the occupational health of the handloom weavers and recommend possible and attainable suggestions to reduce the problems. It was observed that there was a high influence of existing sound levels and illumination levels on the physiological, physical characteristics as well as cognitive attributes of the weavers' well-being. The results of this objective also showed that the weavers were also confronted with different types of problems, obstacles, and challenges which leads to the development of serious occupational health obstructions and an inadequate working environment.

It was found that the weavers were not aware of the effect of such environmental components at their workplace as well as about the personal protective devices and their uses. It is a fact which is to be considered that the weavers of a small scale cottage industries and unorganized segments experience and undergo different types of musculoskeletal disorders as well as psycho-physiological issues which leads to poor occupational working conditions. Based on the literature reviewed, it was found that the influence of illumination level and sound level on occupational health in the context of the handloom weavers has not been much reported.

The noise and illumination level are the significant criteria that possibly affect the accomplishment of the task, productive capacity, psychological and physiological well-being of the handloom weavers engaged in handloom sectors. Noise and illumination level were two main components among other environmental factors which were found to be constant throughout the year irrespective of the variation in season. The illumination level in the handloom cluster was remarkably poor and much below the standards which are recommended for proper working environmental conditions. [13].

IV. CONCLUSION

The hand-woven textiles of India have been recognized and mentioned since ancient times

and it is deeply rooted in our lives and traditions. In spite of the fact that it provides and creates employment opportunities for a large number of people, the handloom segment is contemplating asa dusk industry, and there are unavoidable circumstances and discuss of certainty which has given the continual stepping towards the motorization, advancement, and refinement. Still, there are many supporters of handloom for reasons including their logical justifications, beliefs, ethics and principles, sheer affection for handloom products, and economic viewpoint. Worker an integral part of this sector suffers from many health-related hazards due to nature of this work. Handloom weaving requires long hours of work in static and awkward posture which gradually leads to the risk of work-related musculoskeletal disorder. It has been broadly accepted that inappropriate and severely restricted postures result in musculoskeletal pressure on various body parts of workers in sitting positions and it is the crucial component in the evolution and growth of musculoskeletal problems. The type of work included in handloom necessitates high levels of workers, focussed and precise lighting condition also assures fewer errors and faults transferred to the next stage of work and which affects the quality of production.

References

1. Santu Durlov, Safarin Chakrabarty, Arijit Chatterjee, Tamal Das, Samrat Dev, Somnath Gangopadhyay, Prasun Halsar, Sant Gopal Maity, Krishnendu Sarkar and Subhasis Sahu, Prevalence of low back pain among handloom weavers in West Bengal, India. International Journal of Occupational and Environmental Health, 2014 October 20 (4):333-339.
2. Prasun Banerjee and Somnath Gangopadhyay. A study on the prevalence of upper extremity repetitive strain injuries among the handloom weavers of West Bengal. Journal of Human Ergology (Tokyo) 2003 June: 32(1): 17-22.
3. Sangeeta Pandit, Prakash Kumar, Debkumar Chakrabarti. Ergonomic Problems Prevalent in Handloom Units of North East India. International Journal of Scientific and Research Publications, Volume 3, Issue 1, Jan 2013.
4. India Brand Equity Foundation (2018): " Handloom Industry & Exports", https:/ibef.org/exports/handloom-industry-india.aspx.
5. H Miranda, L Kaila-Kangas and K Ahola (2011): Ache and Melancholy - Co-occurence of musculoskeletal pain and depressive symptoms in Finland, Edited by Finnish Institute of Occupational Health. Ministry of Social Affairs and Health. Finland.
6. M Gomez-Galan, J Perez-Alonso, AJ Callejon-Ferre and A Lopez- Martinez (2017): Musculoskeletal disorders: OWAS review, Indian Health, Vol. 55 (4) pp 314-337.
7. M.Motamedzade (2009): ergonomics in carpet weaving industry in Iran, In: Scott, P.A. (Ed), Ergonomics in developing regions: Needs and Applications, Taylor and Francis, Boca Raton, pp 253-262.
8. R parida and P K Ray (2012): Study and analysis of occupational risk factors for Ergonomic design of construction work systems work: A journal of prevention, assessment and rehabilitation, Vol. 41, pp 3788-3794.
9. Choobineh, A., Tosian, R., Alhamdi, Z and Davarzanie, M. 2004. Ergonomic intervention in carpet mending operation. Applied Ergonomics. 35 (5): 493-496.
10. Banerjee. P and Gangopadhyay, S. 2010. A study on the prevalence of upper extremity repetitive strain injuries among the handloom weavers of West Bengal. Ergonomics and work physiology, laboratory, Dept. Of Physiology, University of Calcutta.
11. Z. Shaikh, R. Pathak (2017), Revised Kuppuswamy and BG Prasad socio-economic scales for 2016, International Journal of Community Medicine and Public Health, Vol. 4 No. 4, pp 997-999, 2017.
12. R.C. Weasel, 2002, Body mass index as an indicator of obesity, Asia Pacific Journal of Clinical Nutrition, Vol. 11, Suppl. Suppl. 8 (58),pp.5681-5684.
13. Santu Durlov, Atanu Saha, Sasangbaha Mandi, Subhasis Sahu (2019) An ergonomic survey of health status of the handloom weavers. International Journal of scientific research in biological sciences. Vol. 6. Issue 1, pp 197-202.
14. S. Purnawati (2008). Occupational health and safety ergonomics improvement as a corporate responsibility of a Bali handicraft company. A case study. Journal of Human Ergology, Vol. 36. Issue 2, pp 75-80. ■

Exports decline 9.3% in Aug, trade deficit at 10-mth high

India's trade deficit widened to a 10-month high of $29.7 billion in August as imports hit a record high of $64.4 billioin on doubling of gold inflows, and exports contracted for the second month in a row to $34.7 billion due to softening of oil prices and muted global demand.

Merchandise exports contracted 9.3 per cent of $34.7 billion in August. Other factors that affected merchandise exports included a slowdown in China, falling petroleum prices, recession in advanced economies and transportation and logistics-related challenges.

"In the current global situation, exports have been a huge challenge... there is a slowdown in China, and recession is persisting in Europe and the US. Transportation cost because of trade routes getting diverted from Suez Canal to Cape of Good Hope is an issue, which persisting," Commerce Secretary Sunil Barthwal told reporters recently.

While imports grew 3 per cent on-year, gold imports touched $10 billion in August due to factors such as stocking ahead of the festive season, falling global prices, as well as due to the yellow metal's import duty cut from 15 per cent to 6 per cent in July.

Petroleum products, which have more than 17 per cent share in total exports, contracted 37.5 per cent in August at $5.95 billion. Apart from petroleum, gems and jewellery saw massive contraction of 23 per cent at 1.9 billion in August.

"With the unexpectedly sharp widening in the merchandise trade deficit in August, we are apprehensive that the current account deficit will rise to 1.5-2 per cent of GDP in this quarter (Q2FY25)," Aditi Nayar, chief economist at ICRA, said.

Non-petroleum and non-gems and jewellery exports, an indication of a clearer parameter of exports' health, grew 2.4 per cent at $26.76 billion. Sectors that saw growth were engineering goods (4.36 per cent), electronic goods (7.85 per cent), drugs and pharmaceuticals (4.67 per cent), and textiles (11.88 per cent).

Apart from gold, other items that saw high imports include coal (8.88 per cent), electronic goods (12.78 per cent), and non-ferrous metals (22 per cent). On the other hand, imports of petroleum and crude products contracted by nearly a third to $11 billion during the same month, data released by th ecommerce department showed.

According to Barthwal, widening of the trade deficit was not a matter of concern in the case of emerging economies like India.

Federation of Indian Export Organisation (FIEO) President Ashwani Kumar said that ongoing international trade disruptions along with drop in crude and metal prices have also played a key role in bringing down the value of exports.

"Some of the exporters have diverted to the domestic market as profitability in exports has taken a hit with a sharp rise in international freight (both ship and air). Had it not been for these trade disruptions led by logistical challenges such as lack of shipping space, irregular shipping schedule, ships skipping Indian ports and declining commodity prices, merchandise exports would have recorded growth," he said.

Services exports saw 6.9 per cent growth at $30.69 billion in August, while services imports witnessed 4 per cent rise to $15.7 billion, resulting in a surplus of $14.9 billion. Services trade data for August, however, is an "estimate", which will be revised based on the Rserve Bank of India (RBI)'s subsequent release. ❐

Global apparel deals flowing into India following Bangladesh crisis

The Tiruppur knitwear export hub was swung export orders worth ₹450 crore in the recent weeks from Bangladesh in the wake of the political unrest there. Global brands like KiK from Germany, Zeeman from Netherlands, and Pepco of Poland, among others, placed orders to be delivered before the Christmas and New Year and the average price of the garment ordered is to the tune of $3, said KM Subramanian, president of Tiruppur Exporters' Association (TEA).

Tiruppur has got orders for knitted garments like kids wear, nightwear, tops and pyjamas from these global brands in September. "This sort of a thing has not happened before. The global brands place orders in December-January for spring/fall season demand and during June-July for Christmas and New Year demand," added the TEA president.

The Noida Apparel Export Cluster (NAEC) too received 15% more orders from Zara in the August compared to the same period last year. Zara wants

to buy women's tops and dresses at a price ranging between $5-$9, said Lalit Thukral, president, of NAEC. "The brand has asked us to deliver the order within 60 days. These are fresh orders which are unusual at this time of the year," he said.

A Sakthivel, head of the sourthern region of Apparel Export Promotion Council said Tiruppur has received fresh orders from global brands as some of them have diverted orders from Bangladesh to India.

"But if there had been a free trade agreement between India and the EU, we would have seen more orders flowing in from the global brands. The sooner the government clinches an FTA with the EU, we will be able to grab more orders. Bangladesh has an FTA with the EU, which is helping them a lot." ❐

Technical textiles will exceed $10 bn in export

Annual export of technical textiles will cross $10 billion by 2030, said Giriraj Singh, Union Minister for Textiles, of late, inaugurating a conference and exhibition on technical textiles in New Delhi.

He spoke of the rise in consumption and importance of man-made fibres (MMF) and technical textiles globally and locally.

The Government has launched the National Technical Textiles Mission and PLI Scheme for MMF, Apparel and Technical Textiles and has sanctioned 156 research projects under the Mission.

According to the Union Textiles Secretary Rachna Shah global trade in technical textiles is around $300 billion, while India's domestic market size is $25 billion and annual exports are worth $2.6 billion.

Jt. Secretary Rajeev Saxena said Quality Control Orders where released for 57 technical textiles items, including fire retardant furniture fabrics and 37 new Harmonised System codes were introduced for technical textile products. ❐

Mills seek higher prices from new methodology for jute bags

Mills expect the new pricing methodology for jute bags used in packaging of foodgrain, which has been approved by the Central government, to translate into a 4-5 per cent higher price for each bag, providing a big boost to the industry.

Fulfilling a long-standing demand of industry players, the Cabinet Committee on Economic Affairs (CCEA) approved the new pricing methodology for B-twill jute bags based on the report of a Tariff Commission recently.

Government agencies purchase bags from jute mills every year for compulsory packaging of 100 per cent foodgrain and 20 per cent sugar to provide financial benefits to mills, which employ about 4 lakh workers. Currently, around 100 jute mills are operating across the country.

According to the Indian Jute Mills Association (IJMA), after nearly 22 years the CCEA has considered the Tariff Commission report and finalised the new methodology for calculating jute bag prices.

This would ensure enhanced prices for jute bags purchased by government agencies as the new methodology is designed to provide better pricing to jute mills, contributing to the overall growth and sustainability of the industry.

The CCEA approved the new methodology of pricing during its meeting on August 28.

Industry participants said as the new pricing methodology is based on an authentic cost study, it is more transparent, dynamic and responsive to market changes as compared to the existing one, which was running on a temporary pricing provision.

The existing pricing system led to a financial strain on jute mills because it did not keep pace with the rising costs.

"While the earlier formula for calculating prices of jute bags was based on estimation, the new methodoology will take into consideration every cost parameter for mills — raw material cost, wage cost and electricity cost. So, it is more dynamic and would be more remunerative for the industry. It should translate into close to 4-5 per cent higher pricing for each bag," Indian Jute Mills Association Chairman Raghvendra Gupta told reporters. Currently, prices of 580 grams jute bags are around ₹52-53 per bag. On average, around 72-75 per cent of a jute mill's sales are happening through the Union government.

"As the mills were supplying bags at provisional prices, the new pricing methodology will be effective since the provisional formula was invoked in September 2016. We will be raising supplementary bills for past dues," Gupta said,

adding that the mills would be able to calculate the amount accrued after the government comes up with the revised pricing.

The government purchases jute sacking bags worth around ₹12,000 crore every year for packaging of foodgrain, ensuring guaranteed market for the produce of the jute farmers and workers. The average annual production of jute sacking bags is about 30 lakhs bales (9 lakh tonnes) and the government has been procuring sacking production of the jute mills in order to protect the interests of jute farmers, workers and the other persons engaged in the jute industry.

"The revision of jute bag prices based on the Tariff Commission's recommendations marks a pivotal moment for the jute industry. After years of advocacy, studies and legal efforts, the industry is on the verge of receiving fair compensationn that reflects the current market realities. This reform is expected to revitalise the sector, securing its future and continuing its legacy as a key contributor to India's economy," said Sanjay Kajaria, former Chairman of the Indian Jute Mills Association. ❐

Cotton body inks MoU with ICA to promote fair business practices

Cotton Association of India (CAI), the apex trade body of the cotton industry in the country, and the Liverpool-based International Cotton Association Ltd (ICA) have signed an MoU for mutual cooperation and to combine their efforts for promoting fair business practices and contract sanctity in cotton.

The ICA is the world's leading arbitral body on cotton. Globally, majority of contton trading is done as per the ICA bylaws.

A delegation from ICA, headed by its President, Kimberlie Hanna, visited the CAI in India recently.

The ICA delegation met the CAI team led by its President, Atul S Ganatra, and interacted on various cotton-related matters of interest to both trade bodies, including the proposal to organise ICA training programmes in India.

The officials of both trade bodies discussed a proposal to organise ICA event and increase the member base of the global body in India. The team met Cotton Corporation of India officials.

Ready-made garment exports increase 11.9% to $1.26 in August

Ready-made garments (RMG) exports from India increased 11.9 per cent (year-on-year) to $1.26 billion in August 2024 despite the persisting Red Sea crisis and global headwinds pulling down overall goods exports.

Exporters are hopeful that the growth momentum will continue, as long-term policy support schemes focussed on garment exports and certain engagements with old FTA partner countries, like Japan and Korea, are starting to yield positive results.

"Apparel exports kept its growth momentum despite the global headwinds and persisting Red Sea crisis and other challenges such as logistic cost and global inflation Growing at an average of 7.12 per cent in the last five months (April to August 2024-25) RMG exports have bucked the trends of falling merchandise exports which has touched 13 months' low in August," said Sudhir Sekhri, Chairman, AEPC.

Total RMG exports for April-August 2024-25 were $6.39 billion.

In its wishlist submitted to the government, AEPC has sought flexibility in fabric import, PLI 2.0 for capacity augmentation, an extension of the interest equalisation scheme for at least five years with an increased rate of 5 per cent for all exporters, an Urban Area Employment Encouragement Scheme, an incentive for ESG compliance, and a level playing field in important markets such as the EU.

One of the "most heartening" developments was the news that engagement with old FTA partner countries like Japan and Korea had also started yielding positive results, Sekhri said.

RMG exports to Japan, Korea, Australia, Mauritius, and Norway grew by 7.7 per cent, 16.8 per cent, 12.5 per cent, 6.6 per cent, and 17.3 per cent, respectively, in the first quarter of this fiscal year. ❐

Cotton imports may hit 35 lakh bales this season

India's cotton imports may rise during the 2024-25 crop year (October 2024-September 2025) on lower carry-forward stocks and the likely impact on the output due to a drop in its acreage. Also, a section of the trade, taking advantage of lower global prices in the recent past, has contracted imports for November-March delivery, sources said.

"The expectation is that imports may touch 35 lakh bales this year," said Atul Ganatra, President Cotton Association of India, the apex trade body for the sector. As per the CAI data, imports till august-end in the 2023-24 season were 16.40 lakh bales of 170 kg each.

Imports are higher because of anticipated lower crop as the sowing is down by 12-13 lakh hectares. Mainly, there's no carry-forward stock of 2023-24, Ganatra said. "We are having carry-forward stock of 30 lakh bales of kapas (unprocessed cotton) with farmers of 2022-23."

As the per CAI cotton balance sheet as of end August, the closing stocks as of September 30, 2024, are estimated at 23.32 lakh bales against 28.90 lakh bales in the previous year.

Ganatra said the trade has already contracted shipments of 7-10 lakh bales for the November-March shipment period. With a customs duty of 11 per cent, the landed cost of Brazilian cotton of 28 mm for delivery on Indian ports in December works out to ₹64,880 as of October 1. Similarly, the landed cost for Australian cotton of 29 mm with 11 per cent customs duty works out to ₹69,120, while the West African cotton of 28.7 mm, which attracts a duty of 5.5 per cent works out to ₹63,480 for March 2025 shipment and delivery in April-May, he said. Spot rates, as per CAI data, for 28 mm cotton per candy (356 kg) on October 4 was down by ₹400 at ₹56,700, while the 29 mm is also down at ₹58,000.

Arrivals on October 3 stood at 37,500 bales across the country, as per CAI data, up from the previous day's 14,800 bales. The cumulative arrivals from October 1 stood at 80,300 bales.

Ganatra said it is too early to predict the 2024-25 crop size as of now. Ramanuj Das Boob, vice president of All India Cotton Brokers Association, said till now around 10 lakh bales have been contracted when the futures on ICE was around 66-67 cents per pound. Now the ICE futures are now hovering around 72/73 cents per pound. "Further imports will depend on how the Indian cotton prices react once the arrivals pick up. Already with the initial arrivals, the market has started coming down," he said. ❐

MIP extension to encourage local textile industry capacity

With 13 categories of knitted fabrics brought under Minimum Import Price (MIP) till December 31, the textile sector is hopeful of the domestic industry improving its capacity utilisation.

China is facing a down-turn in domestic demand for the last two years and hence, there is a surge in dumping of Chinese goods in the international markets, said Prabhu Dhamodharan, Convenor, Indian Texpreneurs Federation (ITF). By bringing a majority of knitted fabric categories under MIP, cheap imports from China are expected to reduce.

According to a notification issued on October 1, synthetic, man-made fibre, and cotton knitted fabrics under 13 HS codes are now in the prohibited list of imports. "The imports will, however, be free if the value of the fabric is $3.5 per kg or more," it said.

Industry sources said the Government introduced MIP for five categories of knitted fabrics earlier this year. It is extended till December 31 for these categories with eight more added based on representations from industry. This will bring down cheap import of fabrics, especially from China, they said.

Textile and garment industry bodies such as Tiruppur Exporters' Association welcomed the move. The ITF said imposition of MIP during the end of FY24 on certain HS codes cut imports of knitted fabrics from almost $30 million in February this year to $17 million in July.

However, the imports in some other HS codes jumped from $30 million to $57 million. Extension of the MIP to 13 categories of knitted fabrics will benefit stakeholders across value chain and improve domestic capacity utilisation. ❐

Garments, leather goods with make it to the shelves in US, Europe before winter

Despite the crisis looming over the Red Sea, Indian garments and leather products will make it to the shelves in the US and Europe in time for Christmas and New Year this year. Thanks to

proper planning, goods were shipped two months in advance to avoid delay during transit.

Usually, goods for Christmas and New Year are shipped by August, but this year it was completed in June and July due to the increased transit time and delays, said sources.

Last year, the Red Sea crisis hit many exporters leaving world's two largest markets dry as ships avoided the Suez Canal in view of the Houthi attacks, and went via the Cape of Good Hope in South Africa. This, added to voyage time.

Textile worth nearly $20 billion from India were exported to the US and Europe last year. Leather products worth around $1 billion and $2.3 billion were exported to the US and Europe respectively, according to government data.

Mithileshwar Thakur, Secretary General, Apparel Export Promotion Council, is relieved as the goods will hit the stores in the US and Europe in time for the winter season. Generally, by August they ship the goods to warehouses, from where the goods are delivered to stores. However, this time, they did it in June and July, he told reporters.

Israr Ahmed of Chennai-based Farida Group, a leading exporter of leather goods, and Vice-President, FIEO, said customers are now calculating 100 to 120 days transit time including clearances. Previously, they worked for 70 to 80 days. "We do not have any cushion for delays and if the exporter is late, he is asked to ship by air," he said.

Sivaramakrishnan Ganapathi, Vice-Chairman and MD at Gokaldas Exports, a leading apparel manufacturer, said, "We only did a couple of weeks' advancement. When we advance more than a certain period in fast fashions, the designers get into a problem, saying that their predictive accuracy of what will sell during the New Year season reduces."

Cargo had to be shifted from sea to air in 2022, due to a dearth of containers and delay in the ship's transit time. Now, there is no chance. People have burnt their fingers and are not going to do it. They would rather order early and buy early, he said.

Raja M. Shanmugham, former president of Tiruppur Exporters Association, said getting the goods in time to the US and Europe is the biggest concern. Geopolitical issues create tough situations.

Apparel products are season-oriented and on-time delivery is imperative.

The government should consider the disruption that geopolitical issues cause to fulfilling obligations like paying the dues on time and buyers extending the credit line.

This can be considered to handhold MSMEs as an exisgency factor. They can provide Emergency Credit Line Guarantee Scheme support, he said. ❐

India has underperformed in labour intensive industry interms of export and employment

Perhaps the biggest failure of India's development and an equally big puzzle is why India has under-performed in labour-intensive manufacturing whether measured in terms of output, exports or employment. For example, India's share of global apparel exports was 3 per cent in 2005 and almost two decades later, despite China's vacating its export sapce, it remained at 3 per cent.

Explanations abound on this udder-performance. One of the prominent ones relates to plant size, in particular that Indian plants are kept too small by regulations, especially labour laws. In our latest research, we discover a new clue that speaks to this aspect of plant size but focusing not on why plants are small but why they are not large, very large.

One of the most intriguing and relatively undocumented developments of the last 20 years has been "multiplants," whereby a single firm operates not one but multiple production facilities within a state. Recently Economist magazine spotlighted Shahi Exports, India's largest garment exporters whose CEO Harish Ahuja spoke of the compulsion to "split big investments across a number of factories."

The multi-plant phenomenon has expanded over the last two decades and today they account for a large share of non-managerial employment and output of private manufacturing plants.

Focusing on labour-intensive industries and large plants (devined as those employing more than 200 workers), the share of multiplants rose from 15 per cent in 2001 to 30 per cent of total plants in 2022, and from 17 per cent to 43 per cent interms of total non managerial employment.

Why is the phenomenon of multi-plants significant? For three reasons: They change our understanding of firmsize and its evolution; they

are associated with lower productivity; and they shed light on how regulations and labour markets work.

The Annual Survey of Industries (ASI), one of the key sources of data on India's manufacturing sector, is susceptible to misrepresenting the size of these firms. The ASI allows firms with multiple plants in a state (but not across states) to file joint returns if they have at least two plants, each with 100-plus employees. This leads to an overestimation of the size of plants, especially larger ones — what economists call the "right tail". As a result, official statistics often suggest that India's largest manufacturing plants are bigger than they actually are.

For instance, consider the employment profile of one of India's most successful exporting firms, and largest employers. In one state where it has a large presence, it has increased the number of plants from 11 to 58 between 2005 and 2023 with average employment per plant remaining broadly the same (with small variation during the intervening years). The same is true for the maximum size of these plants. But if this is not accounted for, the ASI data would suggest that the firm has one plant in the state that has increased its employment from 14,000 to 76,000 over this period and become Foxconn-like in size.

Indeed, accounting for multi-plants changes our understanding of the evolution of large firms over time. For example, important research by Bertrand, Hsieh, and Tsivanidis suggests that large plants grew in size over the last two decades in part because changes in the law and implementation allowed for greater contractualisation of the labour force. In this view, contractualisation allowed firms to circumvent some of the burdens imposed by labour laws, especially critical ones — relating to hiring and firing — which kick in above certain employment thresholds. And, it is true that the share of contract labour in total employment has increased from 22 per cent in 2001 to 41 per cent by 2022 (the latest year for which ASI data is available).

But there is the striking new finding: Despite massive contractualisation and indeed despite the massive deregulation of trade and other policies that has taken place since 2000 (reduction in tariffs, elimination of small-scale sector reservations, etc) we estimate (making some assumptions described in our paper) that large plants have not become any larger. Regardless of whether we think of plant size in terms of the number of employees or as the employment share accounted for by large plants they have not become larger and may even have become slightly smaller.

Consider now the costs of multi-plants. We find that in labour-intensive industries, multi-plants are about 5 per cent less productive on average than single plants of equivalent employment size (after controlling for the sector and state of operation) with this wedge rising as the number of employees rises. This finding illustrates the benefits of scale. Five hundred workers are more productive if they work in one plant than if they are split into two plants of 250 workers each.

So, this pattern of large firms not becoming larger and remaining low productive is consistent with India's stagnating export performance in labour-intensive manufacturing (where perhaps scale matters substantially). Consider the comparison between Bangladesh and India in the apparel sector. While India initially had the upper hand, Bangladesh's market share in global apparel exports skyrocketed from 2.5 per cent to 8 per cent over two decades, while India's share stagnated at around 3 per cent.

A closer examination of plant size data offers a possible explanation. Correcting for mismeasurement, we find that in 2013 Bangladeshi apparel plants were consistently larger than their Indian counterparts across all metrics. For instance, the 95th percent tile plant in Bangladesh was about 40 per cent larger than a similar plant in India. This size advantage is critical, as larger plants in Bangladesh are far more efficient, exporting 95 per cent of their output compared to just 37 per cent for Indian plants. This significant size differential may be one of several reasons why Bangladesh outpaced India in the global apparel market — larger plants lead to greater efficiency and stronger export performance, providing Bangladesh with a competitive edge.

We have shown that the phenomenon of multi-plants sheds light on the sobering facts relating to firm size; and multi-plants are also less efficient which affects India's manufacturing competitiveness. But they also profoundly affect our understanding of some aspects of India's regulatory regime, especially the debate about labour laws and plant size. ■

4S Sustainable Smart Solutions for Spinning Success

LMW®

Comber LK69 S with Lap Transportation System (LTS)

- Production up to **2.1 Tons/day** @ 600 NPM
- **PACT** for versatile operation
- Fully automated process ensure accurate positioning of laps
- **Increases** the comber machine **efficiency**
- **Reduced manpower** requirements, thereby eliminates manual errors
- One LTS can supply to 3 Lap formers & 18 Combers

INNOVATING VERSATILITY, RELIABILITY, AND SUSTAINABILITY ACROSS APPLICATIONS

FOLLOW US ON:

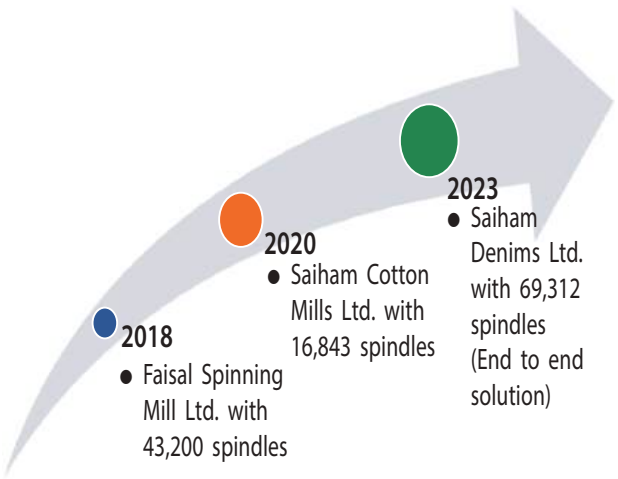
Saiham Group, Bangladesh and LMW Strategic partnership for Spinning Success

The enduring alliance between LMW and Saiham Group, Bangladesh has persevered through the changing tides of time while also adapting to the dynamic conditions of the industry.

With the outstanding performance of LMW's 60,000-spindles installed at Saiham Group over the years, the partnership has solidified further with Saiham Group choosing LMW's state-of-the-art machinery for their new plant, looking into the quality of deliverables and the value achieved through their existing project. The new facility, M/s. Saiham Denims Ltd. @ Noyapara, Bangladesh, boasts a planned capacity of 70,000 spindles for processing Carded Compact Cotton (Ne 16s to 40s).

Mr. Syed Ishtiaq Ahmed is the Director of Saiham Textile Mills Ltd and is a distinguished member of the Board of Directors at Bangladesh Textile Machinery Association (BTMA). He brings extensive expertise in technical, marketing, and financial facets of business.

LMW & Saiham Journey - A partnership that began in 2018, has been rapidly flourishing.



"Our experience with LMW has been exceptional. Their commitment to service and adherence to Japanese manufacturing standards sets them apart. Offering a strong cost-benefit ratio and rapid ROI, combined with quality products and unparalleled customer support, make them our top choice."

— Mr. Syed Ishtiaq Ahmed, Director, Saiham Textile Mills Ltd.

The journey started in the year 2018, with the installation of 43,200 spindles @ M/s Faisal Spinning Mills Ltd. entrusting LMW Ring Frame for its quality deliverables. This partnership flourished, leading to further investment with LMW Ring Frame in 2020 for their new plant - M/s Saiham Cotton Mills Ltd with the capacity of 16,843 spindles.

In 2023, Saiham group visited one of the LMW installations in Turkey and were impressed with the live performance of latest smart series machines. This visit, added to their experience with LMW, played a crucial role in finalizing the end-to-end spinning machinery for M/s Saiham Denims Ltd.

DEPARTMENT	MAKE	NO. OF UNITS
Blowroom line	LMW Bale Plucker Line	2
Card	LMW LC636 S	26
Draw Frame	LMW LDB3, LDF3 S	24
Speed Frame	LMW LF 4280/SX	8 (220 spindles)
Ring Frame	LMW LRJ 9/SXL	38 (1824 spindles)

Saiham Group, Bangladesh and LMW
Strategic partnership for Spinning Success

Mr. Syed Md. Faisal, a visionary entrepreneur, set up one of the most sophisticated textile mills – M/s Saiham Textile Mills Ltd., Dhaka in the early 1980s in Bangladesh i.e. Noyapara, Hobiganj. Currently the Saiham group has a completely integrated textile facility from spinning to garment production catering to domestic & international markets. They cater to various applications with a production capacity of 140 tons/ day.

Drawframe LDF3 S

LMW machines stand out for their cutting-edge technology, reliability, and exceptional efficiency. With intuitive user-friendly features and minimal power consumption, they align seamlessly with out operational requirements.

— Technical team @ Saiham Cotton Mills Ltd

As a trailblazer in yarn production, Saiham Group has seamlessly integrated LMW's complete machinery into its operations, setting new benchmarks in Bangladesh. The collaborative partnership between LMW and Saiham Group exemplifies a shared dedication to excellence in the textile industry.

With this expansion, Saiham Group affirms its position as a leader in the Bangladesh textile landscape. Through the continued integration of LMW's cutting-edge technology.

Ring Frame LRJ 9/SX

LMW's Smart Ring frame LRJ 9/SX Series, is built with Superlative Technology to spin high quality yarn. Compatible with Industry 4.0 standards, this advanced new age machine is flexible and engineered with smart features which ensures high productivity, enhanced quality, lower energy consumption and sustainable features for the future.

4S SUSTAINABLE SMART SOLUTIONS FOR SPINNING SUCCESS

LMW's Sustainable Smart Solutions for Spinning Success (4S), supported by a culture of innovation, empowers mills with a technological and competitive advantage. This is achieved through mission-critical automation, real-time data analytics from connected machines, compatibility with all applications, and reliable performance under diverse operating conditions.

For further information, please contact
LMW
Periyanaickenpalayam
Coimbatore-641020
Phone : +91 73976 88873
Email: info@lmwtmd.com
Website: http://www.lmwtmd.com/ ■

GLI-CLEAN

A OHTC for Spinning & Weaving

BUSBAR AND CHAIN DRIVE SYSTEM:

- Pioneer to install OHTC for Ring Frames with Auto-piecer by using a tilting mechanism.
- Travelling speed possible upto 22 mtrs/min.
- Conveniently suits upto 2400 Spindles/Ringframe and 280 Spindles/Speedframe.
- Achieve power saving through VFD for both traverse and blowing (optional).
- Improved blowing and suction.
- In house design and manufacturing of complete OHTC.

BELT DRIVE:

- Travelling speed possible upto 12 mtrs/min
- Patented design of self discharging (waste) unit
- Proven upto 1824 Spindles/Ringframe.
- In house design and manufacturing of complete OHTC.

LAKSHMI PRECISION TECHNOLOGIES LIMITED

(Formerly known as Lakshmi Precision Tools Limited)

Arasur- 641407. Coimbatore District, INDIA. Phone: +91 422 617 3500

Email: mktg_textile@lptindia.com | Website: www.lptindia.com

Spin Air Systems
COIMBATORE PRIVATE LIMITED

An ISO 9001:2008 & 14001:2004 Certified Company

Ph : 91 422 2900555, 2904755, 2905755, Mobile : +91 93611 59152
E-mail : spinaircbe@gmail.com. Web : www.spinair.in

An ISO 9001:2008 & 14001:2004 Certified Company

Enhance your Productivity & Quality

High Performance Air Management Systems

In collaboration with DVF Lenzing joins forces to bring responsible fashion into the mainstream

- The collaboration brings together DVF's timeless designs and Lenzing's signature specialty fibers to exemplify both companies' commitment to spotlighting responsible fashion choices and bringing real change to the fashion world
- Collections crafted with TENCEL™ and LENZING™ ECOVERO™ fibers can be found in DVF online store and global store locations, with new collections in the pipeline from Q3 2024 onward

Harold Weghorst

Jessie Chen

Lenzing Group, a leading global producer of wood-based specialty fibers, announced global collaboration with iconic fashion brand Diane von Furstenberg (DVF) to bring to mainstream fashion TENCEL™ and LENZING™ ECOVERO™ branded fibers made from sustainably managed wood

sources . Through the collaboration, these resource-efficiently made fibers significantly contribute to DVF's flagship collection of everyday fashion items and selected accessories. The current collections featuring the respective fiber brands are already available globally in DVF online store and global store locations. Upcoming collections made of both fiber brands will debut from Q3 2024. This partnership marks a significant milestone in both companies' commitment to environmental responsibility while raising awareness of conscious fashion choices.

Recognized for its timeless designs and commitment to empowering women, DVF is now expanding its impact by incorporating Lenzing's fibers into its collections, complemented by the adoption ofthese fibers' resource-efficient production that enables endless design possibilities.

Given Lenzing's TENCEL™ and LENZING™ ECOVERO™ branded fibers are certified with the EU Ecolabel for environmental excellence, by leveraging the low environmental impact of the fibers, the collaboration will help elevate DVF's iconic design aesthetic by creating clothing items that blend style and comfort with preferable sustainability performance.

Recognized for their versatility in design and usage, TENCEL™ and LENZING™ ECOVERO™ branded fibers have been featured extensively in various garment items in DVF collections since January this year,

especially with their support forrich colors in fabrics, breathability and softness. The 2024 Summer season collection of DVF, themed "The Festival of Color", featured a celebration of color and culture, inspired by summer festivals around the world, from Mexico's Cinco de Mayo to Sweden's Midsummer Festival to La Vandange in France. The collection features a number of stylish garment pieces with vibrant colors and patterns made of LENZING™ ECOVERO™ branded fibers, silk, linen and cotton.

"We are thrilled to partner with Lenzing to bring sustainable fashion to the forefront of the industry,"said Jessie Chen, DVF Global Strategic partner and CEO of Greater China. "At DVF, we are firm believers that fashion should not only make women feel confident and beautiful but also contribute positively to the world. The "Festival of Color" DVF 2024 Summer collection is just the beginning of a long-term commitment.By integrating Lenzing's signature specialty fibers into our designs, we are taking a significant step towards driving meaningful change and inspiring a shift towards conscious fashion choices."

"We are delighted to collaborate with DVF to bring resource-efficient materials made from sustainably managed wood sources1 to mainstream fashion,"said Harold Weghorst, Senior Director of Marketing and Branding, Global Textiles Business, Lenzing AG."TENCEL™ Lyocell fibers and LENZING™ ECOVERO™ fibers are made with at least 50% less carbon emissions and water consumption. As a leading producer of responsibly produced specialty fibers made from natural raw material wood, Lenzing is committed to driving product innovation and promoting environmental sustainability throughout the textile industry. By partnering with DVF, we are showcasing the potential for fashion to be both stylish and environmentally compatible."

Lenzing's commitment to revolutionizing the textile industry with pioneering fiber solutions and collaboration with like-minded partners aligns perfectly with DVF's vision for a more sustainable fashion industry.

For further information, please contact:
Reeti Mehta, Senior Account Executive
Lenzing Group
m: +91 9098373180
Reeti.Mehta@sixdegrees-bcw.com
WPP Gurugram, Level 7, Tower-B,
DLF Cyber Park, Phase III, Udyog Vihar
Sector 20, Gurugram-122016, Haryana
2023 Cannes Lion winner
bcw-global.com/locations/india ❐

Dondup ties up with Bluesign to Set a New Standard in Sustainable Denim

Dondup the renowned Italian designer denim brand, is excited to announce its official partnership with bluesign® (bluesign.com/en/). As the leading European denim company to join the bluesign® System Partner network, Dondup underscores its unwavering commitment to sustainability, responsible production, and environmental stewardship, setting a new benchmark in the fashion industry.

Bluesign® offers a comprehensive solutions system focused on sustainable chemistry, employing a holistic approach to drive environmental improvements, enhance worker safety, and increase resource efficiency. Through rigorous on-site assessments, management of input streams, and

verification of chemical inventories, bluesign® collaborates closely with its system partners to develop tailored solutions that ensure stringent safety and sustainability standards are met at every step.

Dondup is now part of bluesign's Denim Initiative, launched in March 2023, which includes a global network of leading denim brands, manufacturers, mills, and materials suppliers such as Everlane, Reformation, PureDenim, Saitex, Advance Denim, and ISKO. This initiative aims to revolutionize denim production by implementing clean chemistry and sustainable practices, ensuring the highest standards of safety and environmental responsibility.

Matteo Anchisi, CEO of Dondup, states, "At Dondup, our commitment to sustainability and responsible production is unwavering. By partnering with bluesign®, we are advancing our mission to minimize environmental impact and uphold the highest safety and responsibility standards in our supply chain. This collaboration allows us to produce stylish, environmentally conscious, and socially responsible premium denim."

The ripple effect of Dondup's partnership with bluesign® extends beyond the brand itself. As bluesign's clean chemistry practices are implemented throughout Dondup's supply chain, they inspire other stakeholders—suppliers, manufacturers, and even raw material providers—to adopt similar standards of environmental and social responsibility. This cascading effect ensures that every aspect of the production process, from chemical suppliers to material manufacturers, aligns with the stringent environmental and social criteria set by bluesign®.

"We chose bluesign® as a trusted partner to ensure our production processes meet stringent environmental and social criteria," Anchisi continues. "Together, we are setting a new standard for sustainability in the fashion industry, prioritizing transparency and accountability. We are proud to lead the way in sustainable denim and anticipate the positive impact this partnership will have on our products, industry, and the world."

Dondup's partnership with bluesign® is expected to create an echo effect throughout the fashion industry, encouraging numerous materials vendors, manufacturers, and other partners to join bluesign®. This collective movement towards cleaner and more sustainable production practices will further amplify the impact of this partnership, driving significant improvements in environmental and social responsibility across the supply chain.

About bluesign®:

The bluesign® SYSTEM is the solution for sustainable textile production. It eliminates harmful substances from the start of the manufacturing process and sets and controls standards for environmentally friendly and safe production. This ensures that the final textile product meets stringent consumer safety requirements worldwide, giving consumers confidence in purchasing sustainable products.

Founded in 2000, bluesign technologies ag has over 700 system partners, including leading textile and accessory manufacturers, chemical suppliers, and renowned brands in the outdoor,

sportswear, and fashion industries. These partners trust bluesign's extensive knowledge and services to collectively reduce the textile industry's impact on people and the planet.

About Dondup:

Founded in 1999 in Fossombrone, Italy, Dondup produces and distributes 100% Made in Italy ready-to-wear clothing for men and women. Since 2021, the majority of the company's shares are held by Made in Italy Fund, the private equity fund managed by Quadrivio & Pambianco. Built upon three pillars—product, planet, and people—the brand has structured its first Sustainability Plan for the period 2022-2027 with the aim of realizing sustainable growth ambitions.

www.dondup.com

For further information, please contact:
www.bluesign.com
Ken@chapter2agency.com ❐

Mad Engine Global, a Leading Provider of Licensed Celebrity and Branded Apparel, Expands On-Demand, Digital Production Fleet with Additional Apollo and Atlas Systems to meet growing demand from Kornit Digital

- Mad Engine Global adds an additional Kornit Apollo production line and multiple Atlas MAX PLUS systems - with additional investments planned for 2025.
- Leveraging Kornit's All-Inclusive Click (AIC) Model, Mad Engine shifts additional production volume from analog screen to on-demand digital, streamlining its supply chain to meet customer demand.

Kornit Digital LTD. (NASDAQ: KRNT) ("Kornit" or the "Company"), a worldwide market leader in sustainable, on-demand digital fashion and textile production technologies, announced today that Mad Engine Global, a major licensed merchandise apparel company and early Kornit Apollo beta customer, is expanding its investment in the Apollo production lines and Atlas MAX fleet, for growing its on-demand digital production capacity - with additional investments expected for 2025. Offering exclusive and non-exclusive apparel of major brands such as Disney and Marvel, Mad Engine Global is shifting more of its apparel production from legacy screen-printing processes to digital production, capitalizing on the performance, unit economics and quality of the Kornit technology. "Our business is built on delivering high quality merchandise to customers year-round. That includes producing volumes of all sizes and types," said Jaymes Clements, Executive Vice President, Print On

Demand Production at Mad Engine Global. "As the market demand shifts strongly to high quality mid-sized runs, our continued adoption of the Kornit Max technology, across platforms, is a perfect fit for our needs. Kornit's recently introduced innovative AIC Model, improves our predictability, and allows us to obtain faster and better-informed decisions as it comes to the type of production capacity we add." "The licensed apparel industry is at a critical inflection point, as screen printing is no longer a fit for the new market dynamics powered by accelerated customer demand, and agile production requirements," said Ronen Samuel, Chief Executive Officer at Kornit Digital. "Both the Apollo and Atlas MAX PLUS are game-changers in the world of direct-to-garment production. Both are designed to ensure customers can tackle their biggest production challenges head on and translate them into new business opportunities through the power of on-demand, sustainable digital production - no matter what their requirements. Backed by our All-Inclusive Click Model, Mad Engine can take the next step towards mainstream digital production."

About Kornit Digital

Kornit Digital (NASDAQ: KRNT) is a worldwide market leader in sustainable, on-demand, digital fashion and textile production technologies. The company offers end-to-end solutions including digital printing systems, inks, consumables, software, and fulfillment services through its global fulfillment network. Headquartered in Israel with offices in the USA, Europe, and Asia Pacific, Kornit Digital serves customers in more than 100 countries and states worldwide. To learn more about how Kornit Digital is boldly transforming the world of fashion and textiles, visit www.kornit.com.

About Mad Engine Global

Mad Engine is a leading global apparel and accessories company that caters to all genders and sizes across a full range of licensed, private label, branded and influencer/celebrity productions. With an evolving omnichannel distribution network, Mad Engine services direct-to-consumer, e-commerce, mass retail, mid-tier, department stores and specialty retail. Mad Engine has facilities dedicated to design, innovation, customer service, sales, sourcing, quality assurance and distribution strategically located around the world. For more information, visit: www.madengine.com

For further information, please contact:
Craig Librett
Public Relations, Kornit Digital Ltd
Craig.librett@kornit.com
Ingrid Van Loocke
Public Relations – Europe, Kornit Digital Ltd
ingrid@pr4u.be ❐

Aarti Vijay Gupta displayed Postcard from Kashmir collection using LIVA Reviva at London Fashion Week 2024

Liva Reviva is a recycled sustainable fabric from the Birla Cellulose group

Celebrated designer Aarti Vijay Gupta collaborated with Liva Reviva to showcase sustainable luxury fashion at London Fashion Week in September 2024. The debut of her Spring/ Summer 2025 collection, "Postcard from Kashmir," beautifully highlighted the fusion of sustainable materials with high-fashion design. Liva Reviva, known for its eco-friendly fibres, added a unique touch to the collection, captivating audiences with its versatility.

Aarti Vijay Gupta's collection was a stunning portrayal of Kashmir's landscapes and cultural heritage, with pieces meticulously crafted using LIVA Reviva-based fabrics. The garments, made from up to 30% recycled textile waste blended with FSC-certified wood pulp, offered a sustainable alternative to traditional viscose, while remaining soft, breathable, and luxurious. The collection featured Kashmiri miniatures, Papier Mâché art, and Namda embroidery, with traditional art forms modernized through innovative silhouettes and design sensibilities. Each piece, from flowing silk to elegant printed linen, all demonstrated versatile nature of LIVA Reviva based fabrics that can be seamlessly integrated with heritage fibres.

The runway showcased a harmonious blend of style and sustainability, with fluid drapes, intricate detailing, and 3D engravings bringing eco-conscious fashion to life. Both menswear and womenswear were included, with designs inspired by Kashmir's green pastures and towering mountains. The collection featured photo prints from Gupta's iPhone, capturing the region's essence, which contrasted beautifully with sophisticated dresses and co-ord sets. For the first time, Gupta ventured into mesh-printed dresses, introducing fitted bodycon styles adorned with striking photo prints—an exciting departure from her signature oversized, effortlessly chic designs. The collection's easy separates, cleaner silhouettes, and toned-down color palette make the pieces versatile, allowing them to be mixed and matched for different looks, while still paying homage to Kashmir's rich cultural tapestry.

Commenting on the successful collaboration, Mr. SreeCharan, VP Marketing, Global Head – Brands, Birla Cellulose, Aditya Birla Group, said, "We are

immensely proud of our partnership with Aarti Vijay Gupta. Her vision for combining sustainable materials with contemporary design has truly brought to life what LIVA stands for – fashion that is beautiful, functional, and environmentally responsible."

Designer Aarti Vijay Gupta also expressed her excitement, "Presenting my collection 'Postcard from Kashmir' at London Fashion Week using LIVA Reviva fibres was an incredible experience. These fibres provide the perfect canvas for expressing the beauty of Kashmir while remaining true to sustainable practices. I believe this is the future of fashion, where tradition meets innovation with a purpose."

LIVA's collaboration with Aarti Vijay Gupta is part of its ongoing efforts to lead the fashion industry towards more sustainable practices. With the introduction of fabrics made with advanced fibres that minimize waste and promote responsible manufacturing, LIVA continues to empower designers to create fashion that is as mindful as it is beautiful.

About Liva Reviva

LIVA Reviva are fibres comprising of wood pulp sourced from FSC-certified forests blended with up to 30% recycled textile waste, making it an innovative fiber that represents futuristic sustainable fashion. LIVA Reviva tackles textile waste, which makes up 15–30% of the fabric discarded during the production of clothing, a critical environmental issue. LIVA Reviva turns this waste into fibers that mimic the superior qualities of virgin viscose, saving it from ending up in a landfill or causing pollution. Garments crafted from fabrics enriched with Liva Reviva are characterized by their flawless drapes, impeccable fit and breathability while keeping you comfortable always.

For further information, please contact:
Nidhi Desai
White Marque Solutions
Creative Strategy, Public Relations,
Digital Outreach, Live Reviva
Birla Cellulose, Aditya Birla Group
Landline: 022-26335094-98, Extension: 13
Cell: +91 9167688918
Email: nidhi@whitemarquesolutions.com
Office No: 422/423, 4th Floor, Laxmi Plaza
Laxmi Industrial Estate,
Andheri (West), Mumbai-400053
Website: www.whitemarquesolutions.com ❐

Jeanologia gathers the strength in teaming up with HKRITA and the H&M Foundation in the new Open Lab in Hong Kong

◈ **The Spanish company is contributing its technology and R&D expertise to the lab to support the ambitious Green Machine 2.0 project.**

Jeanologia has joined the Open Lab initiative, aprojectled by the Hong Kong Research Institute of Textiles and Apparel (HKRITA) and the H&M Foundation. The initiative aims to create a dynamic hub for the entire textile value chain, driving innovations to tackle the challenges of climate change.

Located in Hong Kong's Advanced Manufacturing Centre, this pioneering lab spans 1,800 square meters and is dedicated to the research and development of sustainable textile solutions. It will host over 80 projects focused on sustainability and serve as a meeting point for brands, manufacturers, and suppliers to develop scalable technologies that promote greater circularity and efficiency in the industry. The lab bridges the gap between research-phase innovations and their practical application in textile production.

Jeanologia, aligned with HKRITA's values, is part of the Open Lab ecosystem, contributing its technology and R&D to advance the Green Machine project. As Enrique Silla, CEO and founder of Jeanologia, explains, "The creation of the Open Lab presents a unique opportunity to unite brands, manufacturers, and suppliers in a collaborative, innovation-driven environment. We

are confident that, together with HKRITA and the H&M Foundation, we will make significant strides toward a more circular and efficient textile future."

In this cutting-edge space, Jeanologia has introducedsome of its most advanced technological solutions aimed at reducing water, chemical, and energy use in the textile industry. Key innovations include the H2 Zero water recovery system, a closed-loop process that allows for the reuse of water without chemicals, while also minimizing energy consumption. The lab also features the eco-efficient Smart Box washing line, which significantly cuts water, energy, and chemical use during textile washing. Additionally, e-Flow technology uses nanobubbles to precisely apply chemicals to garments with minimal water and zero waste. Another highlight is the G2 technology, which uses atmospheric air to generate ozone that interacts with textile dyes to create authentic worn finishes on garments, all without emissions and with substantial savings in water and chemicals.

The new Open Lab, funded by the Innovation and Technology Commission of the Hong Kong government and housed at Hong Kong Polytechnic University, aims to become a global leader in applied research and industrial solutions. At the heart of the facility is the Pilot Plant, an industrial-scale recycling line designed for demonstrations and technology testing. It also features the Green Machine 2.0, which separates polyester fibers from PET-cotton blended textiles at scale, with the capacity to recycle up to one ton of material daily.

The Open Lab is expected to be fully operational by the end of 2024, cementing its status as one of the world's most advanced centers for sustainable textile technology R&D.

Globally recognized for its disruptive innovations, Jeanologia reaffirms its leadership in transforming the textile industry with its involvement in this ambitious project. The Spanish company emphasizes its collaborative approach to addressing the pressing sustainability challenges the sector faces. "We firmly believe that the future of fashion will be eco-efficient, and through partnerships like this one, we are building that future today," says Enrique Silla, adding that "technological innovation is key to solving the industry's most urgent challenges."

Jeanologia: over 25 years transforming the textile industry

Since 1994, Jeanologia's mission has been to create an ethical, sustainable, and eco-efficient textile industry. The company works closely with brands, retailers, and their suppliers on their transformative journey, offering disruptive technologies, innovative software, and a new operational model. Its revolutionary solutions, such as laser technology, G2 ozone, Dancing Box, e-flow, and H2Zero, have revolutionized the textile sector, offering unlimited design and finishing possibilities. These advances not only reduce costs but also save water, energy, and chemicals, ensuring zero pollution.

In 2024, Jeanologia celebrates the 25th anniversary of its pioneering laser technology, launched in 1999, which revolutionized denim finishing by replacing harmful practices and eliminating the use of harmful substances. With the same purpose, Jeanologia now faces the dual challenge of reducing the environmental impact of garment dyeing processes—one of the most polluting in the industry—through its revolutionary Color Box technology and implementing its ATMOS ozone washing process as the reference technique for eco-efficient denim aging.

For further information, please contact:
Jeanologia, SAPRISTI DÉCOM
Patricia Aguilar, patricia@sapristidecom.es ■

Textile Industry on Path of Wellness

There has been continued initiative on spreading wellness in the textile spinning industry for upgrading the quality standards of yarn quality, which will impact better fabric, better grey, better dyeing, better weaving, better printing, better finish reflecting on better garments and other such fabric end products. The aim is to have better demand and better price in the market. A group has taken up an upwardly steep mission to carry out the awareness to adopt these simple steps to adopt wellness and experience the joy of wellness.

Seminars were held from December 11th to 16th, 2023, at different cities, including Coimbatore, Udumalpet, Salem, and Erode in Tamil Nadu. Around 700 people participated in the same. It was enthusiastically attended by the participants and equally well presented. The organizers took care to explain the wellness in spinning mills concepts in very simple and

Wellness Seminar at Coimbatore

Wellness Seminar at Erode

Wellness Seminar at Salem

Wellness Seminar at Udumalpet

understandable language, and speakers had well conducted the show using slide projectors to show various examples and points in support of their statements. The points were presented using various case studies from the textile spinning mills and were very subject-oriented. The audience found these to be very interesting. The last part of the seminar included a questions-and-answer session. The questions were relevant & interesting, and were very well answered to their satisfaction.

Many myth-breaking informations were highlighted, which were equally well supported with valid results analysis. There were necessities to adopt new processes in the day to day work cycle on the spinning floor.

ITMA ASIA+CITME

Singapore 2025
28-31 October 2025 | Singapore Expo

The Leading Textile Technology Exhibition Driving Regional Growth

Tap Central Asia's Growing Textile Industry

Central Asia, the region consisting of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, stands at the crossroads of traditional cotton cultivation and cutting-edge textile innovation.

From understanding Kazakhstan's growing textile processing sector to Uzbekistan's rapid industrial transformation, read how Central Asia beckons textile machinery manufacturers with unprecedented opportunities for growth and collaboration.

Uncover the dynamic evolution of textile manufacturing in one of the world's most promising regions.

Showcase Your Cutting-edge Technologies

Singapore is an excellent gateway to growing textile manufacturing hubs in Asia and the Middle East.

With exhibits presented in 19 product sectors, spanning the entire textile and garment making value chain, exhibiting at ITMA ASIA + CITME, Singapore 2025 will enable you to ride the region's growth momentum and showcase your cutting-edge technologies to help buyers in the region modernise and upscale their production. To qualify, exhibitors must fulfil at least two of these key functions:

Apply for stand space by 12 November 2024 to secure a space in your sector!

Terms & conditions apply.

Be a Key Partner in Powering the Exhibition

Collaboration is the cornerstone of innovation in the dynamic textile and garment industry. We invite trade associations, influential media organisations, and trusted overseas travel agents to join us as supporting partners and play a pivotal role at ITMA ASIA + CITME, Singapore 2025.

Book Your Accommodation Now

Book your accommodation conveniently through the online booking site which caters to both individual and group bookings. Enjoy special rates and shuttle bus service from a selected list of hotels to Singapore Expo if you book with our official travel agent, Burnaby Solutions.

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

Bharat Print Expo 2025

The Total Print & Package Converting Exhibition

Bharat Print Expo earns Support From Andhra Pradesh Rastra Offset Printers Association

Supported by all major organizations, the entire industry is eagerly anticipating the inaugural edition of the Total Print & Package Converting Exhibition!

"We have immense confidence in this show, supported by a highly dedicated team with whom we have collaborated successfully in the past," says G. Raveendra Babu, Secretary, Andhra Pradesh Rastra Offset Printers Association. "The Bharat Print Expo will bring South India its largest and most significant print exhibition," he declared.

The association works actively towards enhancing the global competitiveness of offset printing professionals and businesses in Andhra Pradesh through continuous improvement, collaboration, and leadership.

Bharat Print Expo is scheduled from 24-26 April 2025 at BIEC Bengaluru. The Show is organised by ReEnvision Events Private Limited and Karnataka State Printers Association (KSPA). More than 100 leading companied have already reserved their stall at the Show.

In the next phase of development, a comprehensive promotional roadshow for the Bharat Print Expo will be organized, covering key regions of Maharashtra, Goa, and South India, and extending into Sri Lanka. This roadshow aims to generate widespread awareness and excitement about the event.

During these promotional events, all supporting associations will play an active role, engaging with industry professionals and stakeholders. The extensive outreach effort is designed to pave the way for a highly successful exhibition, which is scheduled to take place in April 2025 in Bengaluru.

"We are excited by the tremendous response from leading organizations across South India. The Bharat Print Expo is set to make a spectacular

debut," says Anil Arora, President of ReEnvision Events Private Limited.

For further information, please contact: info@reenvision.in or visit-www BharatPrintExpo.com ❐

HanoiTex 2024

Vietnam Hanoi Textile & Garment Industry Expo 2024
23 - 25 October, 2024, ICE, Hanoi, Vietnam

Vietnam is investing in textile machinery

Since Vietnam-made fabric only satisfy 10% production demand, the government is promoting investment in the weaving, dyeing and fabric infrastructure to fulfil the requirements of the Comprehensive Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Hanoi (North Vietnam) - New production base of Vietnam

- Lower cost (labour, production and land) compare to Hochiminh City
- Vietnam is promoting and investing the infrastructure of northern Vietnam
- Cheaper land transport for supplies from China based on its vicinity
- Many local & international textile and garment factories have already moved to the northern Vietnam

For further information, please contact: www.vhanoitex.com or contact Mr Jason Chow
Tel: +852 25117427
Fax: +852 25119692
Email: jason@cpexh.com, cpexh@yahoo.com,
Wechat: cpexhibition or representative of organising committee in your region ❐

Fabtex Georgia: A Promising Textile Fair in the Caucasia Region

We are proud to announce that the Fabtex Georgia 2024 International Textile Industry Fair has concluded with remarkable success, bringing together over 1,050 professional visitors from 11 countries, including Georgia, Russia, Armenia, India, China, Ukraine, Germany, Iran, Turkey, Poland, and Pakistan.

This year's exhibition featured 52 exhibitors from Georgia, Turkey, Azerbaijan, the UAE, Uzbekistan, and China, underscoring the event's international significance.

The exhibition's exhibitor profile primarily focuses on knitted fabrics, woven fabrics, fabrics for workwear and uniforms, various accessories, garment and sewing machinery, and ready-to-wear items.

Testimonials from Fabtex Georgia Exhibitors

Emre Çetin from SM Tekstil stated, "We are so happy to participate in Fabtex Georgia 2024. We met many new customers that will help us increase our exports to the region. The various free trade agreements in Georgia with the USA and Europe make the textile and apparel export sector very interesting."

Ali Yasin Sartık from Özsar Tekstil remarked, "It's fascinating that we received buyers and visitors not only from Georgia but also from neighboring countries. Georgia is a strategic location for re-exporting textile products to the Caucasus region. We will participate again next year."

Ayk Kazaroğlu from Kazaroğlu Tekstil noted, "There is strong demand for fashionable fabrics here in Georgia. Many medium-sized ateliers and fashion designers are key providers to European markets, and our special fabrics can help them produce high-quality materials."

Cahit Taşpınar from Telpa Tekstil added, "The demand for accessories in Georgia is high. Our products received a great response at the exhibition. We will definitely participate again next year, as there is a significant market for uniforms and military clothing that requires high-quality materials."

Sophia Angholadze from the Georgian Association of Fashion Designers (GAFA) stated, "We are thrilled to have Fabtex in Tbilisi. It is a significant support for apparel and garment producers in Georgia. While we have talented designers, the lack of quality fabrics and accessories is evident. This exhibition provides Georgian producers access to high-quality materials at competitive prices."

Why Georgia?

Georgia's strategic location at the crossroads of Western Asia and Eastern Europe, coupled with its rich textile history, makes it an ideal hub for textile manufacturing and investment. The country boasts several Free Trade Agreements (FTAs) with Turkey and CIS nations, as well as a Deep and Comprehensive Free Trade Agreement (DCFTA) with the EU, providing access to a market of approximately 900 million people without customs duties.

TEXTILE EVENTS

Georgia has a long-standing tradition in the textile sector, dating back to Soviet times, and is currently home to production for renowned international brands such as Tommy Hilfiger, Zara, Moncler, and Puma. The combination of political stability, a robust legal framework, and low corporate taxes makes Georgia an attractive destination for investors in the textile industry.

2nd Fabtex Georgia

We are excited to announce that the 2nd Fabtex Georgia International Textile Industry Fair will take place from September 26 to 28, 2025, at Expo Georgia, 118 Tsereteli Ave, Tbilisi.

For further information, please contact:
Aysenur Binici
sales / Marketing
T. +90 212 577 66 76
M. +90 539 234 63 24
İstanbul Ticaret Sarayı Oruç Reis Mah.
Vadi Cad. No:108
Kat: 4 / 240 Giyimkent Sitesi Esenler / İstanbul
Web: www.kuzeyexpo.com
Email: marketing@kuzeyexpo.com
info@kuzeyexpo.com
Phone / WhatsApp: +90 539 234 63 24 ❐

Heimtextil

14-17 January 2025
Frankfurt/Main

Heimtextil: Connected by Textiles

Our platform, your success! As the globally unique trade fair for home and contract textiles and textile design, Heimtextil sets the tone for the coming season: here you experience trends, textile sustainability, the world's largest variety of home textiles as well as product offers for interior design, hospitality, sleep and the carpet industry. Globally combined and passionately presented.

2024 Overview

- Heimtextil 2024 ended with 46,000 buyers from around 130 nations who took the opportunity to participate in the global textile market - from upholstery and decorative fabrics, bed and bathroom textiles, mattresses, functional textiles and carpets to wallpapers, outdoor fabrics, artificial leather, curtains, fibres, yarns, sleeping systems and decorative cushions.
- 2,838 exhibitors from 60 nations with 25 per cent growth compared to the previous year's event
- The top ten exhibiting countries were China, India, Turkey, Pakistan, Italy, Germany, Spain, Portugal, Great Britain and the Netherlands.
- On the visitor side, more visitors came from China, Germany, India, Japan, Croatia, Macedonia, Pakistan, Slovakia and Cyprus. The number of German trade visitors increased by around ten per cent.
- For the first time, the global carpet industry presented together in one hall, including numerous international market leaders who exhibited in Frankfurt for the first time or after a long time - with overwhelming satisfaction.

What's new for 2025?

- Carpets & Rugs on course for growth: At Heimtextil 2025, the successfully established product segment grows in quality and quantity - and is already recording an enormous increase in exhibitors six months before the upcoming event: more than twice as many companies have already registered compared to the previous year.
- The expanded range of high-quality hand-woven carpets and the international country pavilions are located in the additional Hall 5.0. Once again, Hall 5.1 is home to the growing segment of machine-woven carpets and also brings together the enlarged pre-production offer with fibres and yarns as well as technologies specifically for the carpet industry.
- Hand-knotted carpets and unique pieces, doormats and clean-off systems as well as textile solutions for outdoor areas and contract business round off the unique range.

For further information, please contact:
info@india.messefrankfurt.com ❐

Waste to Wardrobe – Sustainable Fashion

We delved into one of the most revolutionary topics in the textile industry—"Waste to Wardrobe – Sustainable Fashion." Are you curious to learn how discarded materials can transform into high-value fashion? Or how sustainability is becoming a key driver of profitability? This was your chance to gain exclusive insights directly from the experts shaping the future of textiles.

This enlightening event got powered by Aladdin365 and presented by Texcoms Textile Solutions in collaboration with Texcoms Worldwide.

Event Details:

- Date: 18th October 2024

- Time: 04:30 to 5:30 PM Indian Standard Time (IST) / 11:00 AM to 12:00 PM Greenwich Mean Time (GMT)
- Platform: Zoom(Link to be shared once you registered)

Moderator:

- Mr. Amitharaj Thettraravu Kumar – Chief Information Officer, Aladdin365

Distinguished Speakers:

- Mr. Ramakrishnan Sabhari Girish – Head of Sustainability, Sulochana Cotton Spinning Mills Pvt Ltd
- Mr. Sumeet Gill – Head of Sustainability, Winsome Textile Industries Limited

This was not just a conversation about fashion—it was a deep dive into how innovation can turn waste into opportunity and drive sustainability in textiles. Those who were eager to discover what the future of sustainable fashion holds, this was an unmissable opportunity to learn from industry leaders driving this change.

About Us

Texcoms Textile Solutions, end to end consulting firm under Texcoms Worldwide, is committed to advancing textile consulting and technology. Texcoms Worldwide, a renowned leader in the textile industry, amalgamates decades of industry expertise with cutting-edge solutions, redefining the textile landscape globally. Our commitment to innovation is exemplified through Aladdin365, a exclusive networking platform designed to connect like-minded professionals in the textile and apparel industry, and the Textile Auction platform, optimizing operational efficiencies across the textile value chain. ❐

SaigonTex 2025 (35th year)

Vietnam Saigon Textile & Garment Industry Expo

(including textile, garment, dye, and non-woven industries)

9-12 April, 2025

SECC, Hochiminh City, Vietnam

Vietnam

- VITAS – Vietnam Textile & Apparel Association (www.vietnamtextile.org.vn)
- VINATEX – Vietnam National Textile-Garment Group (www.vinatex.com.vn)
- AGTEK – Association of Garment Textile Emboridery Knitting in HCM.
- VCCI – Vietnam Chamber of Commerce and Industry (www.vcci-hcm.org.vn)
- International Relations Department

Expo Topics

Textile Equipment Machinery & Parts

- Air jet, Water jet, Rapier
- Auxiliary & Preparatory
- Bleaching, Dyeing, Printing
- Cordage & Rope Making
- Filament Plant & Machinery
- Finishing & Treatment
- Knitting (flat, circular)
- Loading
- Shuttle & Shuttleless
- Spindles, Bearings
- Spinning
- Weaving
- Winding & Reeling

Garment Machinery & Parts

- CAD/CAM Systems
- Cutting and Laying
- Embroidery
- Fusing and Pressing
- Home Furnishing
- Hosiery Upholstery
- Knitwear, Underwear
- Production System
- Seam Sealing, Pleating
- Sewing
- Steam Boiler
- Washing Drying Tumbler

Non-wovens

- Fabric for different industries
- Machines & parts
- Raw materials
- Bags
- printing solutions

Dyes & Chemicals

- Dyestuffs
- Auxiliaries & textile chemicals
- Intermediate
- Equipments & Instruments

New Production Technologies

Green Technology

Quality Control

For further information, please contact:
www.sgntex.com
Mr Jason Chow in Hong Kong
Tel : +852 25117427, Fax : _852 25119692
Email: jason@cpexh.com, cpexh@yahoo.com
Wechat: cpexhibition ■

ELGI ELECTRIC

A world-class solution provider at the forefront of Innovation and Dependability

ELGI YCS **PROFIX**

Yarn Conditioning System

- Well proven design with separate vessel for conditioning and steam generation
- Vaccumization up to 95% ensures uniform & maximum moisture gain
- Capable of low temperature yarn conditioning from 46°C to heat setting up to 120°C in the same vessel
- Capacities from 400 kgs to 2100 kgs / batch
- Platform arrangement for Automatic Loading & Unloading

vsbala@eeh.saraelgi.com 9842272511

OHTC | BTS | FPS | MDS | YCS

ITMA ASIA | CITME

中国国际纺织机械展览会
暨ITMA亚洲展览会
ITMA ASIA + CITME 2024

14 - 18 October 2024

National Exhibition and Convention Center
Shanghai, China

www.itmaasia.com | www.citme.com.cn

VISIT ASIA'S LEADING BUSINESS PLATFORM FOR TEXTILE MACHINERY

Source advanced manufacturing technologies to increase your competitive edge.

Enjoy early bird rate when you register online by 13 October 2024!

www.itmaasia.com
www.citme.com.cn

For more information, please contact

ITMA Services
Tel: +65 6849 9368
Email: itmaasiacitme@itma.com

Beijing Textile Machinery International Exhibition Co., Ltd (BJITME)
Tel: +86 10 5822 2655/5822 2955/5822 0766
Email: itmaasiacitme2@bjitme.com

Owners: CEMATEX

Organiser: BJITME

Co-Organiser: ITMA SERVICES

In Partnership With

Oerlikon

Growing interest in Oerlikon Barmag industrial yarn systems

Technical textiles on the strong position

As a traditional textile country, India has also established a strong position in the field of manmade fiber production in recent decades. The West Asian country has now become the second largest polyester yarn manufacturer in the world. The Indian textile industry covers the entire value chain from the melt to the finished textile end product.

The technical textiles sector in particular is regarded as a future market. With an average growth rate of 12% since 2013, this dynamic sector accounts for around 13% of the entire Indian textile and clothing market, according to the government organization Invest India. The market volume has almost doubled in the past ten years. In India, the production of industrial yarn has so far relied heavily on polyamide. Oerlikon Barmag has a strong market position here. "In recent years, we have commissioned plants for numerous customers," says Dr. Wolfgang Ernst, Head of Sales of the Oerlikon Business Unit Manmade Fibers Solutions.

Increasing demand for industrial polyester yarns

The construction boom and the increasing use of geotextiles and industrial textiles in various infrastructure projects as well as in agriculture and aquaculture show enormous growth potential. This is supported by the government's 2021 industrial development program, which includes technical textiles as one of ten priority sectors. The program is based on reducing dependence on imports. Until now, a large proportion of the technical textiles and yarns required in the country have been imported.

The trend towards high-quality technical textiles for the domestic market has also been noted by the Remscheid-based machine and plant manufacturer. "We are receiving more and more inquiries from Indian customers for spinning systems for industrial yarns," says Dr. Wolfgang Ernst. "What is new is the great interest shown by companies from downstream processes that are looking for backward integration. We attribute this to the stricter regulations of the Bureau of Indian Standards. Until now, industrial yarns were mainly imported from China. In order to guarantee the quality of the processed yarns, this has been strictly regulated by the government since last year. It therefore makes sense for Indian textile producers to enter the yarn manufacturing sector." This development was also noticeable at this year's Techtextil in Frankfurt, where the experts from Oerlikon Barmag were able to hold a disproportionately high number of technical discussions with Indian customers and interested parties.

Oerlikon Barmag supplies its industrial yarn systems individually configured; the system concept for High Tenacity (HT) yarns and its unique properties on the market ensure the production of high-quality yarn for the manufacture of seat belts.

Oerlikon Barmag's industrial yarn technology offers an extensive process window - without compromising on yarn quality. The flexible spinning concepts enable a variety of possible yarn products for numerous applications. The portfolio includes processes for the production of polyamide and polyester yarns with the required physical properties for a wide range of end applications. Whether HMLS yarns for car tires, yarns for geotextiles, safety belts or even airbags - yarn producers will find a tailor-made concept for every end application at the Remscheid-based solution provider.

Oerlikon Polymer Processing Solutions presents portfolio at Caitme

Oerlikon casts a focal point on complete solutions for the Central Asian textile industry

Caitme is considered one of the largest trade fairs for the textile industry in Central Asia. At its trade fair appearance in Tashkent, Uzbekistan, Oerlikon Polymer Processing Solutions will be focussing on customer- and market-oriented complete solutions from a single source. From 11 to 14 September 2024, the machine manufacturer's experts will be providing information about their sustainable machine and system technologies at the Textima Export Import GmbH stand in Hall 4, Stand F44 at the UEC Uzexpocentre.

Oerlikon Polymer Processing Solutions offers complete solutions ranging from polycondensation plants to texturized yarns, accompanied by automation and digital solutions. The supply of all process steps from a single source ensures a harmonised technology that guarantees the high quality of the yarn produced.

The revolutionary Oerlikon Neumag EvoSteam staple fiber process is bluesign® verified.

"The Uzbek market continues to develop well. The country has been known for decades for very good products in the cotton sector. However, market players are increasingly recognising the advantages and necessity of synthetically produced yarns and fibres. With our product portfolio, we offer precisely the technologies that the Uzbek textile industry needs to meet its requirements in the coming years,' explains André Wissenberg, Head of Marketing, Corporate Communications and Public Affairs. "It is important to us that we always make a contribution to sustainability with our technology solutions. Be it by increasing energy efficiency with each new generation of machines or by processing new materials,' Wissenberg continues. Oerlikon is proud of the fact that the company has been offering innovative solutions for the textile industry under the e-save sustainability label for 20 years and has saved over 15 million tons of CO^2 thanks to the machines and systems developed and installed on the market during this time.

Sustainable processes for POY and FDY production

POY yarns are the raw material for a wide range of fashion, sports, functional and home textiles. They are then textured and, at around 40%, make up the largest proportion of manmade fiber yarns produced worldwide. Oerlikon Barmag's WINGS POY technology guarantees outstanding yarn quality with high productivity and energy efficiency. With its particularly gentle yarn path, WINGS ensures that the yarn remains as high-quality as it was when it left the spinning mill. The minimized deflection angle has a positive effect on yarn evenness, yarn tension, CV% values and thus on dyeability. A perfect package structure ensures excellent further processing properties in downstream processes such as texturing.

Fully drawn FDY yarns are processed into textile surfaces without further finishing. They are used wherever textiles need to fall smoothly or glide. Oerlikon Barmag's WINGS concept for the FDY process stands for optimised production processes, low waste rates and energy consumption reduced by around 30 percent with the highest yarn quality. The technology can be used in the FDY process for polyester and polyamide.

The WINGS family from Oerlikon Barmag covers almost every process; standard, high-titer or micro yarns, polyester or polyamide, POY or HOY, 10-, 12-, 20- or even 24-thread.

DTY yarns - uncompromising quality and maximum flexibility

Texturized yarns can be used for a wide range of applications. They are used in clothing, home textiles, the automotive industry and many other areas. Oerlikon Barmag offers a wide range of different DTY machine configurations for the efficient and sustainable production of high-quality texturized yarns from various polymers, from polyester and polyamide to polypropylene, PLA and PTT. The modular DTY machines, equipped with sophisticated components, expertise and proven technology, enable the production of texturized yarns for excellent further processing in downstream processes at optimum OPEX costs.

Sustainable production of staple fibers with EvoSteam

The EvoSteam process from Oerlikon Neumag stands for both resource-efficient staple fiber production and excellent fiber quality. It offers impressive savings in energy, water and raw

material consumption as well as a reduction in operating costs (OPEX) and the CO2 footprint.

New bicomponent BCF yarn for the carpet market

Quality, efficiency and performance - with its latest development in the field of bicomponent yarns for carpet production, Oerlikon Neumag is meeting the carpet market's demand for new innovative BCF yarns. 'The new BICO BCF yarn is characterised by a richer and higher volume while at the same time significantly reducing the consumption of raw materials in carpet production,' explains Oerlikon Neumag BCF Sales Director for Uzbekistan Arnd Luppold. At the exhibition stand, interested parties can see sample yarns and carpets, find out more about the product range and have in-depth discussions with the experts about the advantages of BICO BCF yarn in various applications.

About Oerlikon Polymer Processing Solutions Division

Oerlikon is a leading provider of comprehensive polymer processing plant solutions and high-precision flow control component equipment. The division provides polycondensation and extrusion lines, manmade fiber filament spinning solutions, texturing machines, BCF and staple fiber lines as well as nonwoven production systems. It also develops and produces advanced and innovative hot runner systems and multi-cavity solutions for the injection molding industry. Its hot runner solutions serve business sectors, including automotive, logistics, environmental, industrial applications, consumer goods, beauty and personal care and medical. Moreover, Oerlikon offers customized gear metering pumps for the textile, automotive, chemical, dyes and lacquers industries. Its engineering competence leads to sustainable and energy-efficient solutions for the entire polymer processing value chain with a circular economy approach.

Oerlikon Polymer Processing Solutions Division serves customers through its technology brands – Oerlikon Barmag, Oerlikon Neumag, Oerlikon Nonwoven and Oerlikon HRSflow – in around 120 countries with production, sales, distribution and service organizations.

The division is part of the publicly listed Oerlikon Group, headquartered in Switzerland, which has more than 12 600 employees and generated sales of CHF 2.7 billion in 2023.

For further information, please contact:
André Wissenberg
Marketing, Corporate Communications & Public Affairs, Oerlikon
Tel. +49 2191 67 2331
Fax +49 2191 67 1313
andre.wissenberg@oerlikon.com
Susanne Beyer
Marketing, Corporate Communications & Public Affairs, Oerlikon
Tel. +49 2191 67 1526
Fax +49 2191 67 1313
susanne.beyer@oerlikon.com
Ute Watermann
Marketing, Corporate Communications & Public Affairs, Oerlikon
Tel. +49 2191 67 1634
Fax +49 2191 67 1313
ute.watermann@oerlikon.com
www.oerlikon.com/polymer-processing ❐

Trützschler Group

Unveil the latest innovations of the Trützschler Group at ITMA Asia 2024

From October 14 to 18, Trützschler Group presented its innovative machines and technologies in Spinning, Card Clothing and Nonwovens.

Trützschler Spinning

At this year's ITMA Asia, Trützschler Spinning presented the newest carding technology for China. Details about this innovation have been disclosed at the show. Visitors did not miss the opportunity to experience this new technology first hand. Experts from Trützschler's Spinning business unit also presented the third generation of our Integrated Draw Frame, the IDF 3. And of course, our teams also stood prepared to give up-close insights into the world's first 12-head comber, the TCO 21XL. These innovations achieve higher efficiency, lower energy consumption, digitalization and intelligent automation for fiber processing in spinning mills. Our technological expertise enabled customers to boost value and profit by producing sliver with higher levels of quality at outstanding production speeds.

TCO 21XL

Trützschler Nonwovens

Representatives from our Nonwovens business showcased solutions for more sustainable wipe materials made of pulp and other fibers from renewable resources. This includes results from our trials of bamboo pulp combined with viscose/lyocell fibers to make fine baby, body and flushable wipes with mechanical, haptic and visual properties comparable to traditional paper-grade NBSK (Northern Bleached Softwood Kraft) pulp. Bamboo is fast-growing and can be harvested after just three years. That makes it a more sustainable alternative to pulp from softwood trees like pine, spruce or larch because those trees take decades to grow – so harvesting them has a larger negative impact by depleting forest resources.

Our teams also put a spotlight on Trützschler's market-proven technologies for Wet-Laid/Spunlace (WLS) and Carded/Pulp (CP). These processes have proven effective in creating cost-efficient, biodegradable nonwovens for flushable wipes and single-use wet wipes.

Trützschler Card Clothing

Last but not least, Trützschler Card Clothing (TCC) presented a wide range of their comprehensive service portfolio, demonstrating how the combination of expertise in clothings, wires and service will bring machinery performance to the next level.

About the Trützschler Group:

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

For further information, please contact:
Shiladitya K Joshi
Deputy General Manager
Product and Marketing
Truetzschler India Private Limited
Truetzschler Spinning
phone: +91 93768 56949
email: skjoshi@truetzschler.in
www.truetzschler.in ❐

Textechno Herbert Stein GmbH & Co. KG

Textechno textile testing equipments

Automatic Package Changers for Yarn Testing

Textile- and technical yarn samples for testing are usually on packages. The yarn is fed directly from the package to the testing equipment, if the test conditions do not require a different sample presentation, e.g. yarn hanks for crimp contraction tests on textured yarns.

SCIENCE IN INDUSTRY

To secure a comprehensive quality evaluation of a yarn batch and high statistical significance of the test results, it is advisable to divide the total number of individual tests over as many packages as possible. As a result, it is necessary to supply successive yarn ends to the testing equipment as rapidly as possible. To increase efficiencies, therefore, package change should also be automated for test instruments that have a fully automatic test sequence. For this reason, modern automatic testing equipment for single- and twisted yarns, e.g. tensile-, twist- and yarn evenness testers, often incorporate an integrated package changer. Construction and functioning of such package changers are linked to the associated testing instruments and can only be used in conjunction with this equipment.

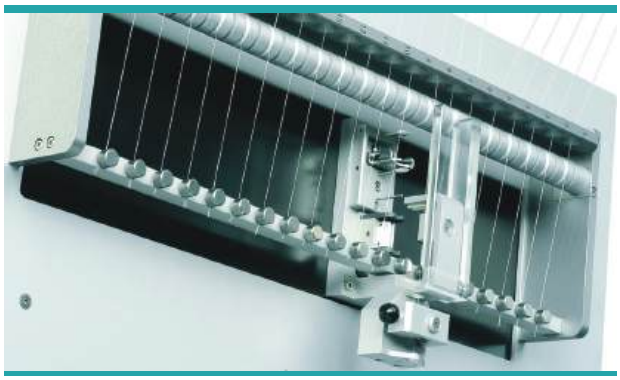
In addition to integrated package changers, there is also a need for autonomously operating package changers in textile testing, which can be used in conjunction with test instruments or other equipment that have no such integrated facility.

It is indeed advantageous if the changeover between packages can be carried out on the running yarn thus avoiding test stoppage, particularly for testing equipment with continuous yarn transport, like Textechno's dynamic thermal testers DYNAFIL ME or DYNAFIL C.

Package Changer, Model SE

This equipment uses the technology developed by Textechno where the running yarn is spliced. Here, two successive splicing jets continuously interlace the two yarns that are to be joined; the yarn that has already been tested is then cut automatically. The process is suitable for all types of non- or slightly twisted continuous filament yarns, e.g. for pre-oriented yarns (POY) or textured yarns.

Usually, secure splicing of two yarn ends is possible for yarn speeds up to 500 m / min.



The Model SE package changer features 20 positions for feeding 20 yarn ends, which can be processed in the order 1 – 20 or 20 – 1.

Package Changer, Model SM

Under certain conditions, e.g. when only few packages are transported by track-led shuttles or during conveyor belt transport of single packages, at least a part of the efficiency of a multi-position package changer is lost. Similarly, this applies for tests carried out on individual packages over a very short period, e.g. 30 secs or less, where even large creels are fully tested within a few minutes. In such cases, operator presence is required at all times to ensure both the threading-in of yarn ends from new packages and the removal of examined packages. For this reason Textechno developed the SM package changer, which - like the SE Model - works on the principle of splicing a running yarn; it has, however, only two positions, one for the running yarn and the other for the next yarn end. The change is triggered either automatically via a signal released by the tester or manually by push button switch.

With this method, only the currently running yarn and the new yarn end are positioned between creel, shuttle etc. and package changer. The danger of yarn snagging or mistakes regarding the sequence of the packages is, therefore, negligible.

Another advantage of the SM package changer process is that the next yarn can be fed simultaneously with the testing of the current yarn. As a result, and due to the "splicing of the running yarn" technology, test stoppage for each package change is unnecessary.

Technical data

Method:

- Automatic package change by splicing of the running yarn;
- Model SE for feeding 20 yarn ends;
- Model SM for 2 yarns with manual feed for each of the following yarn ends.

Yarn count range:

- approx. 20 – 500 dtex and 500 – 3000 dtex (interchangeable).

Mains supply:

- 220 V, 50 (60) Hz.

Compressed air supply:

- 5 bar.

Lacquer finish:

- RAL 7004 /7035.

Dimensions, weight:

- Height 935, width 800, depth 630 mm, approx. 65 kg (SE);
- Height 1100, width 600, depth 600 mm, approx. 15 kg (SM).

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

For further information, please contact:
TEXTECHNO
Herbert Stein GmbH & Co. KG
Dohrweg 65
D-41066 Mönchengladbach, Germany
Tel: +49 (0) 21 61-65 99-0
Fax: +49 (0) 21 61-65 99-10
info@textechno.com
www.textechno.com

Crealet AG

A short review of the Techtextil 2024

CREALET looks back at the Techtextil 2024 in Frankfurt

At Techtextil 2024 in Frankfurt, CREALET presented its comprehensive range of products in the field of electronic warp feeding at the joint stand of the Swiss Textile Machinery Association. Interesting discussions were held with customers from the most important European countries involved in the production of technical fabrics.

Focus on technical fabrics

Techtextil is not primarily a trade fair for textile machinery manufacturers, but an important platform for manufacturers of technical fabrics.

The exhibitors in this sector have impressively demonstrated their innovative strength.

The visitor audience, consisting of developers, textile engineers, decision-makers and entrepreneurs, emphasises the importance of this rapidly changing market.

Staying up-to-date in a dynamic market

It is essential for us to maintain and expand our contact with this dynamic market in order to recognise trends and requirements at an early stage and align our product development accordingly.

The numerous discussions about new projects and future expectations have provided us with valuable insights for the future.

We would like to thank all those who have been in contact with us and hope to further deepen these relationships and generate successful developments in our mutual interest.

For further information, please contact:
Crealet AG
Hüeblistrasse 418636
Wald, Switzerland
info@crealet.ch
Skype: info_crealet
Tel: +41 (0) 55 286 3020
Fax: +41 (0) 55 286 3029

❐

Mimaki Europe

Mimaki launches Four New Printers Developed to Enable Print Businesses to Expand, Diversify and Stay Ahead of Market Trends

- The latest Mimaki printers respond to market demand for high-quality, high-speed and versatile solutions in the sign graphic, textile and industrial markets
- Two of the new solutions will be demonstrated for the first time at The Print Show in the UK

Mimaki Europe, a leading provider of industrial inkjet printers, cutting plotters, and 3D printers, has recently announced four new printers for sign graphic, industrial and textile applications. The CJV200 Series, a range of roll-to-roll print and cut eco-solvent machines, and the TS330-3200DS, a hybrid direct and transfer sublimation printer, will both be demonstrated for the first time in Europe at The Print Show (September 17-19th, NEC Birmingham, UK). These two technologies, alongside an entry-level flatbed UV printer, the JFX200-1213 EX, and Mimaki's latest direct-to-film (DTF) solution, the TxF300-1600, will be commercially available in Europe in November 2024, and have been developed with new features, print formats and higher speedsto support customers ready to expand and future proof their business.

"At Mimaki, we are committed to driving innovation that meets the evolving needs of our customers and also anticipates future trends in the printing industry," comments Arjen Evertse, General Manager Sales at Mimaki Europe. "These four new printers were created to offer the industry new ways to expand and diversify print businesses with the confidence a high-quality, highly efficient Mimaki solution provides.

"Meeting various different challenges across the markets we serve, the CJV200 Series and the JFX200-1213 EX offer a stepping stone to businesses entering the sign graphic market, bolstering their production capabilities or looking to add new large format applications to their offering. The new TS330-3200DS and TxF300-1600 provide the flexibility, qualityand productivity customers need to attract new business across the textile sector, enabling them to expand their application portfolios or seamlessly sidestep into new markets.

SCIENCE IN INDUSTRY

We are confident that the availability of all four of these new technologies later this year will be highly anticipated by printers across the industry who are looking to take their businesses to the next level, whether that be in productivity, capacity, or application range."

CJV200 Series: Simplicity and Stability

Using the same print engine as the 330 Series, the CJV200 Series is Mimaki's new range of entry-level eco-solvent integrated printer/cutters. Designed to be more accessible for printers of varying levels of experience to operate and maintain, the model is equipped withseveral features to improve ease of use. These include an "ink saving function" that reduces ink consumption, a quicker print-head cleaning time and Mimaki'sDot Adjustment System (DAS), which automatically completes bi-directional print and media feed adjustments, simplifying media changes and reducing operator errors.

The CJV200-75 is one of the latest innovations from Mimaki's print and cut, eco-solvent CJV200 Series

With a high practical print speed of 17 m²/h, the CJV200 boasts one of the highest productivity levels for an entry-level printer and is able to handle seasonal variations in output volume. For improved efficiency and stability, the printer is equipped with Mimaki's core technologies,

including the Mimaki Advanced Pass System (MAPS4) to reduce banding and uneven colours, as well as the Nozzle Recovery System (NRS) to minimise downtime.

The CJV200 Series uses Mimaki's new SS22 eco-solvent ink, which will be released alongside the printer. This safety-conscious ink does not contain increasingly regulated ingredients such as GBL. Building on the success of the SS21 ink, it has achieved the industry's highest level of outdoor weather resistance and comes in an environmentally friendly paper cartridge.

TS330-3200DS: Versatility for Soft Signage and Home Textiles

The TS330-3200DS is a 3.2-metre-wide hybrid printer, capable of both direct sublimation printing on fabric and sublimation transfer printing on paper. This dual capability allows users to choose the most suitable printing method based on the fabric and the application, making it an excellent choice for both soft signage and home textile markets.

Mimaki's TS330-3200DS dual capabilites allows it to offer bothdirect sublimation printing on fabric and sublimation transfer printing on paper

With its increased width and dual modes, the TS330-3200DS supports a wide range of applications. In addition to producing vibrant, large-format fabric signs, it can also be used to print interior fabrics like curtains, carpets, and bedspreads. The hybrid nature of the TS330-3200DS allows seamless switching between direct fabric printing and sublimation transfer printing, which is easily achieved by attaching or removing a platen.

This printer is equipped with Mimaki's latest 330 Series engine and is capable of printing up to 150m2/h at a print resolution of 600dpi. Whether for short-run productions or high-mix orders, the TS330-3200DS ensures high-quality results in a short amount of time, making it a versatile tool for today's fast-paced textile industry.

JFX200-1213EX: High Productivity in a More Compact Size

The JFX200-1213 EX is an entry-level flatbed UV inkjet printer designed to meet the needs of businesses seeking a mid-size printing solution. With a print area of 1.2 m x 1.3 m, the printer's sizesits between Mimaki's smaller-format UJF Series and the larger-format JFX Series. Despite being approximately 30% smaller than the popular JFX200-2513 EX model, the JFX200-1213 EX delivers the same superior image quality with resolutions of up to 1,200 dpi.

The flatbed UV printer, the JFX200-1213EX, offers a smaller size that doesn't limit the applications possible for sign graphic and industrial printers

The JFX200-1213 EX can print within international A0 standards, adding to its versatility and making it an ideal solution for industrial customers who do not need to produce larger-scale items. It also benefits sign makers with limited installation space, allowing them to produce poster-size general-purpose signs and graphic panels effectively.

Offering a maximum print speed of 25 m^2/h, the JFX200-1213 EX is also well-suited for businesses looking to scale up their production from smaller flatbed printers to a larger machine. Additionally, the JFX200-1213 EX supports six-colour ink sets for a wide colour gamut and enhanced image quality.

TxF300-1600: Higher Productivity in Custom Fashion and Interior Fabrics

The TxF300-1600, the latest addition to Mimaki's Direct-to-Film (DTF) line of printers, is designed to meet the growing demand for high-productivity custom fashion and interior fabric printing. This latest model increases productivity by an impressive 30% compared to the TxF300-75. With a maximum print width of 1.6 metres, the TxF300-1600 is not only ideal for custom garment printing but also extends its application to large-scale interior fabrics, such as curtains and floor mats.

The TxF300-1600 incorporates Mimaki's core technologies to ensure stable and uninterrupted operation. Furthermore, the printer uses inks that are OEKO-TEX® ECO-PASSPORT certified, meeting the stringent criteria for chemical safety and environmental responsibility.

The TxF300-1600 is the latest in Mimaki's successful DTF series of printers

Additionally, Mimaki announces the EMEA launchof the CFX Series, a range of high-end flatbed cutting plotters previewed during FESPA 2024. Nowincludinga router option, the CFX Series enables precise cutting of commonly used materials within signage, such as acrylic and aluminium composite boards.

About Mimaki

Mimaki is a leading manufacturer of wide-format inkjet printers and cutting machines for the sign/graphics, industrial, textile/apparel and 3D 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, General Manager Marketing, 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 204627942
email: i.lesmana@emea.mimaki.com
Clare Porter, Associate Director, Bespoke
Tel: +44 1737 215200
email: clare@bespoke.co.uk

Itema S.p.A

Itema showcased at ITMA ASIA + CITME 2024 and reaffirms its commitment to provide Chinese and Asian markets with high-performances weaving solutions

Itema, leading global provider of advanced weaving solutions including weaving machines, spare parts and integrated services, announced its participation in ITMA ASIA + CITME 2024, took place from October 14-18, 2024 at the National Exhibition and Convention Center (NECC) in Shanghai. At this prestigious event, Itema exhibited in Hall 3 – Booth C11 its cutting-edge weaving technologies, including the GalileoRX rapier weaving machine and the high-performance P7300HP V8 projectile weaving machine.

The past, present and future of weaving on display

Born from the legacy of the most successful high-end rapier weaving machine assembled in China, the Itema R9000 and R9000-2, the GalileoRX features technological and design advancements to fully meet the needs of the market, reaching unbeatable levels in terms of performances, textile mastery and eco-efficiency. Launched in 2022 to address the specific needs of the Chinese and Asian textile markets, the Itema GalileoRX has rapidly gained recognition for its ability to weave a wide range of fabrics with superior quality and precision.

The GalileoRX on show at the Itema booth – in 2300 mm weaving width - weaved an Apparel style and got equipped with two of the latest Itema innovations: the New Generatione Machine Console, with a 15.6" wide touch, full glass, capacitive display, and the iSAVER®fancy. Based on the mechatronic technology of iSAVER®eco, iSAVER®fancy is available up to 6 weft colors and allows to eliminate the waste selvedge on the left-hand side of the rapier machine thus providing substantial costs saving and significant contribution to sustainable weaving by reducing raw materials and resources waste.

Moreover, in the year of its 70th anniversary, the legendary projectile weaving machine makes its grand return to an international trade fair.

The Itema projectile P7300HP V8, in 3900 mm weaving width, weaved a Denim style. Renowned for its unbeatable reliability and high productivity, the P7300HP V8 ensures excellent fabric quality even for heavy-duty textiles such as denim and technical fabrics. Itema is the only weaving machine manufacturer that offers projectile weaving technology - and continues to push the boundaries of projectile weft insertion technology, which still remains the best weaving machine for specific applications.

This year also marks a milestone for projectile weaving technology as we celebrate the 70th anniversary of the official unveiling of the TW11, the first projectile weaving machine, which was presented at the Mustermesse in Basel in 1954. The TW11 revolutionized the weaving industry with its unique weft insertion system and ability to efficiently produce extra-wide and heavy fabrics, laying the groundwork for subsequent generations of projectile looms like today's P7300HP V8.

Additional Machines Displayed at Partner Booths

Guests have had the opportunity to see eight additional Itema rapier weaving machines showcased at our partner booths, including Huzhou Hyundai (Julibao) at Hall 3 – C08, Lilai (Hall 3 – Booth A38), Tongxiang (Hall 3 – Booth E07), Changfang (Hall 3 – B35), Huling and Song&Song (Hall 3 – A67).

Itema Group's Complete Offer of Weaving Solutions

During their visit to ITMA ASIA + CITME 2024, visitors have been able to learn more about the full range of weaving solutions offered by Itema Group:

- HelloItema, the Itema customer portal – offering a comprehensive set of digital

functionalities and smart solutions and designed to make customers' working lives easier and add value to their investment. Accessible via browser or app from any device – and directly from the machine console on new generation Itema machines – users can order original spare parts, check order status in real-time, open service tickets, and access relevant machine documentation.

- The full range of OEM spare parts and the latest solutions for upgrading existing Itema looms, as well as previous brands such as Sulzer, Somet, and Vamatex.
- Lamiflex, part of the Itema Group, will showcase advanced weaving accessories, including rapier tapes and sprocket wheels.

Visitors to ITMA ASIA + CITME 2024 had earned the chance to experience firsthand how Itema continues to provide state-of-the-art solutions tailored to the evolving needs of worldwide textile industries.

About Itema

Itema is a leading global provider of advanced weaving solutions, including weaving machines, spare parts, and integrated services. Sixty percent of Itema is owned by the heirs of Gianni Radici, with the remaining 40% held by the Arizzi and Torri families.

Itema Group has expanded its business into industrial and innovation sectors, diversifying into high-growth markets through investments in companies such as Lamiflex®, Schoch®, and Itemalab®—Itema's advanced innovation hub, which offers systems engineering and business process re-engineering services to third parties. In 2023, Itema entered into a joint venture with the Asian biopharmaceutical giant Tofflon, forming Tofflonit, and establishing a new benchmark for biopharmaceutical industrial systems in Europe and Western markets.

With more than 1.000 employees worldwide, and world-class production sites in Italy, Switzerland, China, and India (the latter for Schoch products, ndr), Itema features a global presence with commercial and after-sales services in Italy, Switzerland, China, India, Japan, USA, Hong Kong, and Türkiye.

For further information, please contact:
Ms. Sabrina Brignoli
Marketing & Communications Specialist
Itema Group
sabrina.brignoli@itemagroup.com
Ms. Valentina Brignoli
Marketing & Communications Manager
Itema Group
valentina.brignoli@itemagroup.com ❐

Colorjet India Limited

Colorjet set to unveil Fabjet Pro at ITMA ASIA, Shanghai!

Expand your horizon with ColorJet's Ultra-Wide 3.2-meter Direct-to-Fabric Sustainable Printing Solution - the iconic FabJet Pro, making its grand debut at ITMA ASIA + CITME 2024 in Shanghai.

ColorJet India Limited, India's leading digital textile printer manufacturing co. Proudly announces the launch of its latest innovation in textile printing, the IconicFabJet Pro. With an impressive production capacity of up to 13,000 square meters daily, this advanced digital textile printer is specially designed for large format, high volume, color richness, and efficiency in fabric printing.

The FabJet Pro is designed to meet the demands of ultra-wide format direct-to-fabric printing, accommodating widths of up to 3.2 meters. It delivers high productivity without compromising precision or print quality, seamlessly blending cutting-edge digital technology with high-performance industrial capabilities. Equipped with 32 Kyocera or 48 Konica Minolta Print heads and a sticky belt system, the FabJet Pro ensures unparalleled accuracy and clarity with every print.

Available in configurations offering 8 color options, the FabJet Pro delivers print speeds of up to 654 square meters per hour, enabling quick turnaround times even for ultra-wide applications. Its versatility makes it ideal for producing large textiles such as bed sheets, curtains, and more. The FabJet Pro offers vibrant, high-definition prints on a wide range of materials including cotton, viscose, silk, and wool, and is mainly suitable for the customized home furnishing textile segment, particularly for producers of home décor products like curtains, bed covers, and sofa covers," the company said.

The printer's innovative Sticky Belt Technology provides a superior grip on low GSM fabrics, allowing for a diverse array of fabric applications. Moreover, the FabJet Pro is designed with sustainability at its core, reducing water and energy usage, and supporting eco-friendly textile production.

"We are excited to introduce the FabJet Pro to the market," said Mr. Arun Varshney, Vice President and Business Head. "This innovative solution represents a significant leap forward for the textile printing industry, addressing two crucial needs: increased production capacity and sustainability. By offering exceptional print quality and speed, the FabJet Pro allows manufacturers to meet the growing demands of the market while maintaining the high standards that customers aspire to.

Join ColorJet at ITMA ASIA + CITME 2024 in Shanghai, where the FabJet Pro will make its grand debut. Witness firsthand how this iconic solution is poised to redefine the future of digital fabric printing.

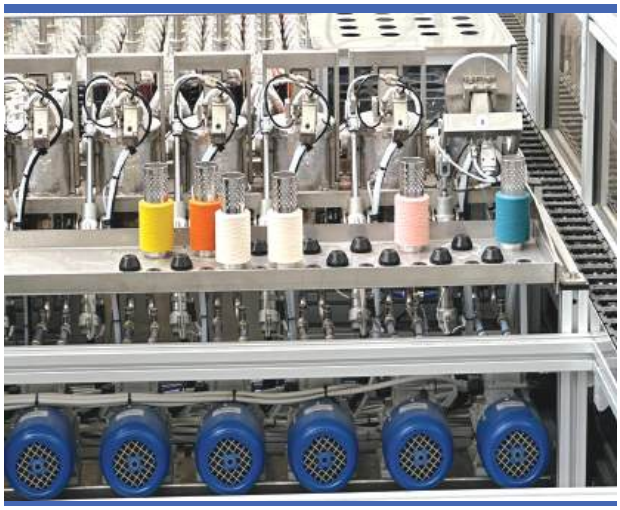
For further information, please contact:
Abhijeet Kumar, Colorjet Group
Ph: +91 9811992462 ❐

Tecnorama

Tecnorama at ITMA ASIA from 14 to 18 October 2024

Small batches dyeing automation: DOS&DYE® for just in time deliveries

At ITMA ASIA 2024, TECNORAMA presented to the vast international clientele its well-known automatic DOS&DYE® system specially designed for small-scale production dyeing. It is the absolute solution to decrease the production costs of small batches and at the same time speed up the delivery time of yarn to customers to meet pressing demands.



Composed by a DOSORAMA WSL dispensing machine + DYRAMA dyeing modules for yarn bobbins of different sizes, the DOS&DYE® 6000 is capable of continuous operation, 24 hours a day 7 days a week, even in the absence of assigned personnel, until the material still to be dyed in the parking lot is exhausted. It is possible to perform one dyeing after another proceeding without interruption, finish the set dyeing schedules, and go all the way to FINAL quality control.There is no "sampling" of color shade verification because the DOS&DYE® 6000 can guarantee a "RIGHT FIRST TIME" of 96%-98%, this peculiarity enables rapid production for fast deliveries just in timewith excellent technical quality. ■

PARAS
HEALDS & REEDS PVT. LTD
AHMEDABAD

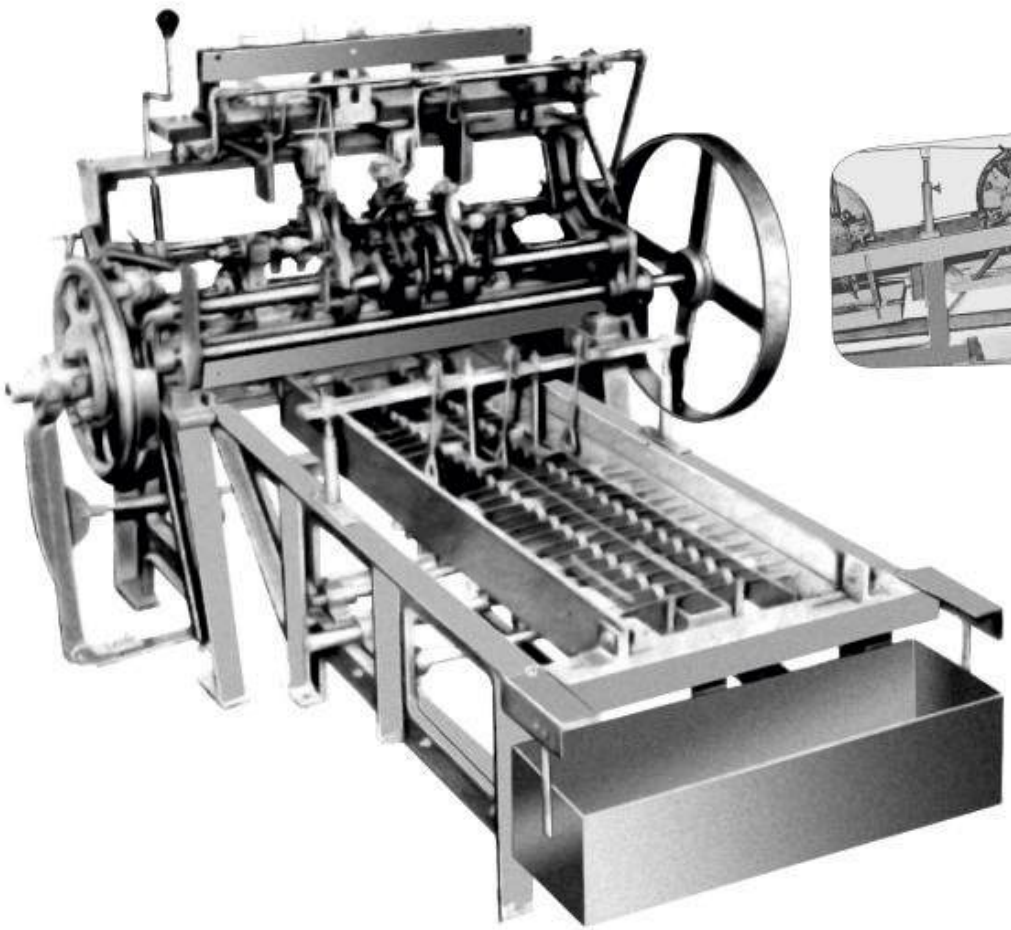
....ENGINEERING TO **EXCELLENCE**

WEAVING ACCESSORIES & PARTS

"SIW" TYPE

WIRE HEALD MAKING MACHINERY PLANT

HEALD LENGTH CAPACITY UP TO 900 MM. GAUGE 20 TO 34



Phone:
+91 80008 85522

Email:
info@healdindia.co.in

Website:
www.healdindia.co.in

INDEX TO ADVERTISERS

OCTOBER 2024

We are listing most common stressful events which majority Spinners are now facing. Here, we talk of one such event.

Theoritical and academic causes of inconsistency in Yarn productivity are known to all spinners. But they are unaware...

The reason for Inconsistent Productivity is a practical one, the Wellness of Spinning and Ring-frame. Spinning when not in wellness, the varying spinning conditions make difference, in spinning session after session, by which production efficiency runs down productivity. And changed spinning geometry creates major yarn faults.

Wellness is the fundamental thing, if not observed due to practical practices or due to ignorance it will defintitely initiate several problems in spinning, which can result in accumulating losses. And such losses, when numerically accounted, give shocking figures.

We have checked 400+ such cases by now, and acquainted them with Wellness and its problem. All such problems were resolved. All are happy with the results. Not only their problems are solved but have gained in Quality and Productivity. We are encouraging others to share their problems, if any, we will be glad to guide and assist. Together, we will be able to resolve all such problems, and in some time, lift up the industry's Quality and Productivity standards.

We are doing this free of cost for now.

However, we can be more precise in resolving your problem, after inspection at your Spinning Unit.
Please register at: **RCC@thexaxis.in**

RCC

Research & Counselling Center,

a social cause unit of the X-axis® for wellness of spinners.

Spinning Wellness Program For All

Lets Promote Quality®

EXPERT PERFORMANCE ELEVATORS

TEXTECH Specializes in the manufacture of Hi-Performance Retrofit kits to up-grade older generation Combers to the latest 4th generation for achieving Optimum Removal of Noils along with Improved Yarn Quality Levels. TEXTECH is the only company manufacturing all types of Technological Spare parts as OEM replacements for all models of Combers. TEXTECH is happy to be the only Expert Performance Elevator to more than 1000+ mills since 40+ years. TEXTECH with its rich technical experience will continuously offer profitable performance solutions with its core strategic value of the high-quality research-based products crafted with the latest technology for the Spinning Industry worldwide.

www.textechonline.com

CUSTOMIZED

High Performance Retrofit Kit for All Models of Combers

- PRODUCTIVITY
- QUALITY
- YIELD

Combing Technologist

We also manufacture all types of critical spare parts for all Models of COMBERS AND LAP FORMERS

TEX-TECH INDUSTRIES (INDIA) PRIVATE LIMITED

27 - D, V.N. Industrial Estate, Bharathi Colony Peelamedu, Coimbatore - 641 004. India.

Ph: +91 422 2562796 | M : 93606 65968 / 93608 66667 | E : textech@textechonline.com

M.K.®
Spindle
PAR EXCELLENCE

Manufacturers of all types of Spindles & Spindle Inserts for Ring Spinning, Doubling, Twisting & Heavy Duty Frames from the House of **M. K.**

The Optimum Choice

M. K. Spindles Manufacturers Pvt. Ltd. (MAHESH KUMAR SPINDLE)
9, Gujarat Laghu Udyog Vikas Mandal, Dhobighat, Dudheshwar Road, Ahmedabad - 380004 (Gujarat) INDIA
Phone : 079-25631854 | Mobile No : 9408245279 / 9898009018 / 8733009918
E-mail : maheshmkboss@gmail.com | Website : www.mkspindles.com

OUR SISTER CONCERNS: ■ M. K. SALES ■ MAHESH MECHANICAL MANUFACTURING INDUSTRIES ■ R. K. SPINDLES MFRS. PVT. LTD.

Registered with the Registrar of Newspaper for India R.N.I. No. 2815/1958
Postal Registration No. KOL RMS/264/2022-2024

Published & Printed by Shri Debajyoti Dutta on behalf of M/s. Eastland Publications Private Ltd.,
Published at: 44, Chittaranjan Avenue, Kolkata-700 012. Printed at: Gita Printers, 51A, Jhamapukur Lane, Kolkata-400 009
Editor : Dr. Tapan Kumar Banerjee