International Conference on
Automation and Robotics in Textile & Apparel Industry

FRIDAY, 15TH NOVEMBER 2024

Hotel The Lalit, Mumbai
Sahar Airport Road, Andheri (E), Mumbai - 400 059, India

MUMBAI UNIT

The Textile Association (India)
Mumbai Unit

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About Conference

Automation and Robotics in Textile & Apparel Industry

Automation and robotics have become buzz words in the textile industry during last 5-6 years. The textile and garment industries are not only labour intensive, but also have heavy consumption of precious energy and water. The textile researchers are working hard to reduce all these factors, so that the final product becomes competitive by increasing the production efficiency and reducing manpower costs. Added to that there is substantial rejection of products due to man/machine errors. Automation and robotics are the answer to overcome these issues.

Application of automation and robotics are not so new, these had begun almost two centuries ago, when John Kay invented 'flying shuttle'. It enabled in increase in the production and brought down the number of people required to operate by 50%.

The geographical distribution in the textile industry has seen a dramatic shift in the past 30-40 years. It has moved to Asian and far-east countries. While the textile industry in other countries have adopted and accepted automation & robotics, the Indian textile industries are slow in initiating automation & robotics. Though, there are partial automation and robotics in a few large textile industries, it is time that the automation should cover all sectors of the textile industry. The partial shifting does not give the desired benefits of automation. One will have to plan the complete automation with robotics for all sectors.

The major benefits of automation & robotics can be listed as:
- Improved production at lower cost and short turnaround time.
- Consistent and better quality.
- Faster customized products even for small orders
- Safety for humans and machines
- Low energy costs
- Predictable production and delivery schedules
- Less pollution
- Predictable machine maintenance, hence better machine uptimes and
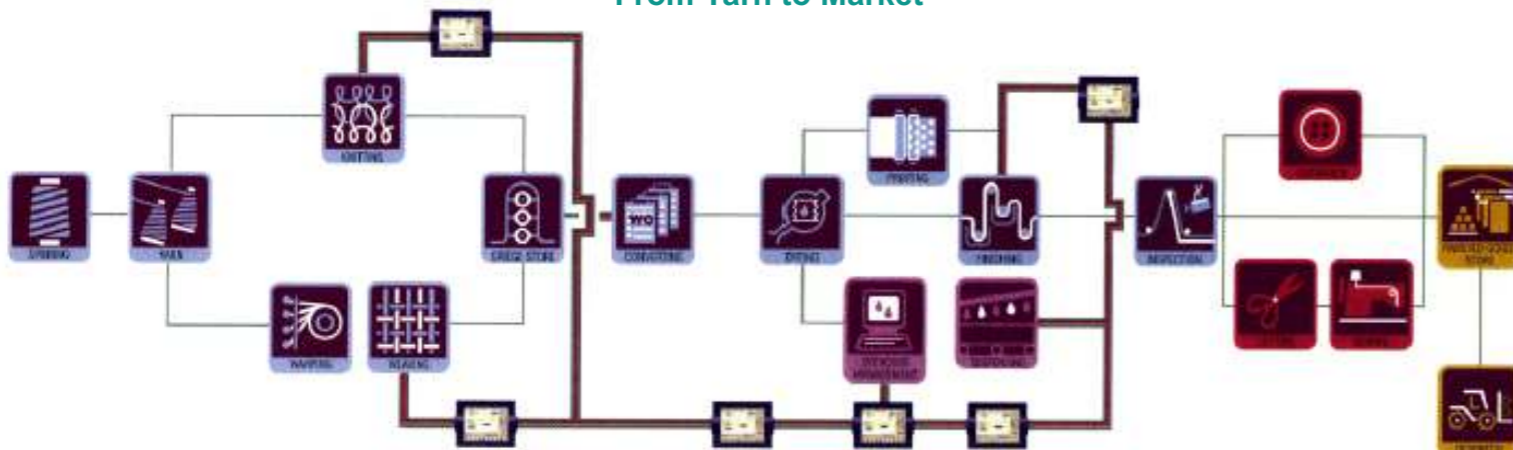- Improved customer satisfaction, so more orders

Despite these benefits one must also look at some of the main impacts. These can be listed as:
- Reduction in man-power, so unemployment
- Demand for skilled labour
- High investment costs

However, the benefits of automation and robotics outweighs the above impacts. The future of automation and robotics in the textile industry looks promising driven by continuous advancement in technology. The automation and robotics are aligned with Textile 4.0. It is the time that the Indian textile and garment industries should actively consider the automation and robotics for all sectors of Textile Industry to remain a frontrunner in the export of textiles and garments from India, as well as for huge domestic market.

This conference will explore the key applications, benefits and future outlook of automation and robotics in the textile industry.

From Yarn to Market

About TAI, Mumbai Unit

The Textile Association (India), Mumbai Unit is the largest Unit of the Association having around 4000 members. The Unit has reputation of organizing events of topical interest both at national and global level. In this pursuit, Mumbai Unit is organising one day International Conference on "Automation and Robotics in Textile & Apparel Industry".

An Appeal

The successes of our Conferences / Seminars depends on the financial support from our valued sponsors. You have been very supportive and proactive in the activities of TAI, Mumbai Unit and we look forward for the same support and active participation in this conference. We assure you to provide maximum publicity and visibility to your valued products / activities. Your participation in this conference by way of sponsorships, advertisements and delegates would provide a common platform to meet the experts from the industry. The main advantage will be an opportunity to exchange the views on the latest developments in the field of the textiles.

We appreciate your support to The Textile Association (India), Mumbai Unit in its activities and it is our pleasure to invite you to be part of this event. Let us join hands to make this conference a great success.

Topics to be covered

▶ **Role of Automation and Robotics in Textile Manufacturing**

▶ **Innovation in Apparel Production: Insights into Robotics**

▶ **End to End Automation opportunities in Textile Value Chain**

▶ **Textile Machinery Industry's role in automating the textile processes**

▶ **Automation applications in Textile Chemical Processing**

▶ **Concept of 'Smart Factory'**

▶ **New emerging trend: Storage Automation**

▶ **Role of Industry 4.0 in the textile machinery development**

▶ **Application of Artificial Intelligence and BlockChain Technology in the Textile Value Chain**

▶ **3D Printing and its textile applications**

▶ **Role of ERP in Textile and Apparel Production**

▶ **Upgradation of old machines through automation**

Speakers & Panelists

All the conferences organized by The Textile Association (India), Mumbai Unit have always selected contemporary & innovative topics presented by high profile speakers. This Conference is also no exception to this.

This conference will be addressed by policy makers, reputed textile professionals and renowned experts from different parts of the world and India who are experts in the technologies. This high profile conference will be attended by 400 quality participants who will get the rare opportunity to listen to such high quality experts.