

A.T.E. – Single Source For The Best Textile Engineering Technology

A.T.E. has been catalysing technological evolution in the Indian textile engineering industry for over 80 years, and has long been recognised as an indispensable partner in this field.

A.T.E., in partnership with world leaders from across the globe, offers a complete spectrum of machinery, accessories, and utilities for the textile industry. A.T.E.'s range extends from fibres to finished textiles. It enjoys the unique distinction of being a one window solution provider encompassing every textile process – spinning, weaving, knitting, processing, printing, home textiles, non-wovens, synthetic, carpets and technical textiles. A.T.E. is the only company in India, and perhaps in the world, with such bandwidth in textile engineering solutions.

A.T.E.'s impressive line-up of marquee customers includes Arvind, Himatsingka, Indorama, Indo Count, KPR, Nahar, Premier, Raymonds, Reliance, RSWM, Ramco, Sintex, Sutlej, Trident, Vardhman, Welspun and many more, which is a testimony to the world class products and services offered by A.T.E.

Spinning Machinery

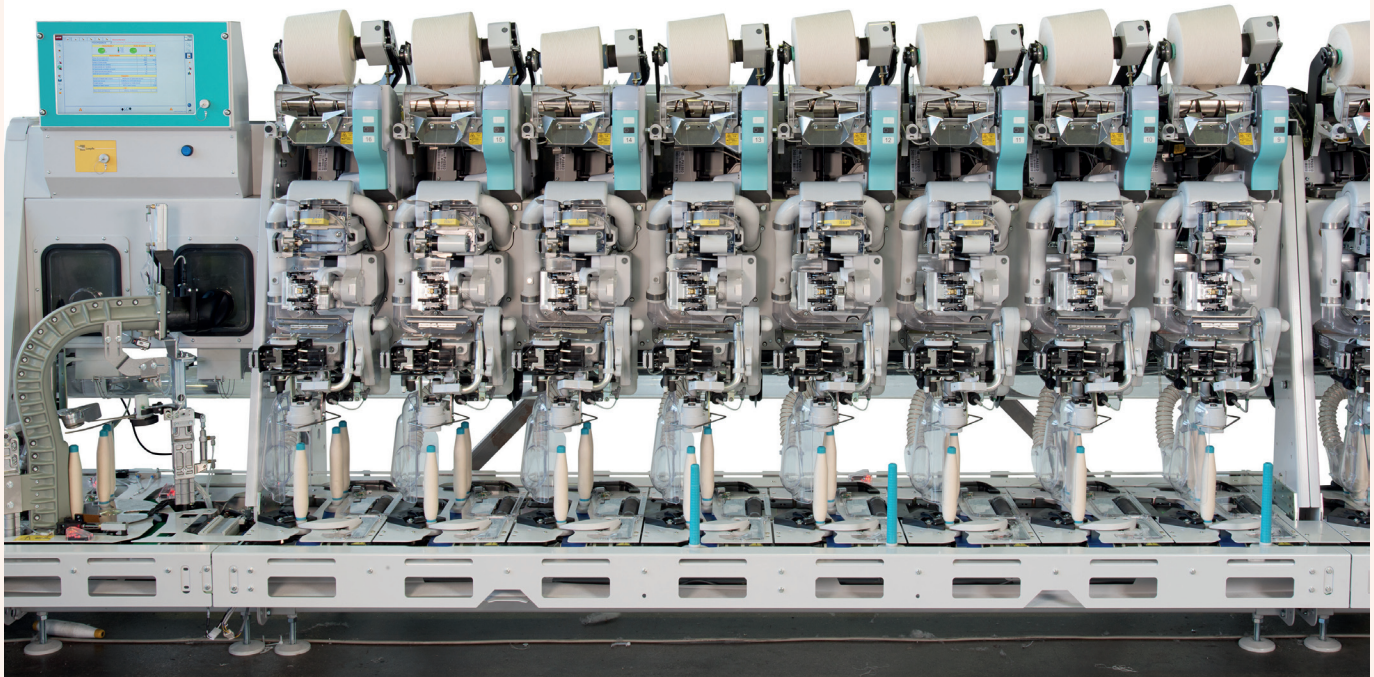
In the spinning machinery segment, A.T.E. represents world leaders such as Truetzschler, Savio, Sara Elgi, SSM, Luwa, and Godrej

Consoveyo to offer the latest technology blow rooms, cards, draw frames, combers, automatic cone winders, twisting machines, bobbin transport



Truetzschler - Blowroom

Savio - EcoPulsarS



systems, assembly winders, humidification systems, material handling and also automated storage and retrieval systems. Truetzschler is the market leader in blow room and cards for many decades. This German group has step-by-step expanded its portfolio and today its drawframes and combers are fast growing in their popularity amongst customers, Truetzschler has also recently introduced T-DATA, an online data monitoring system, which enables spinners to access real time data from their machines from anywhere in the world.

Savio offers the latest automatic cone winding machine, **"EcoPulsarS"** with SIS (Spindle Identification System) by which spinners can identify the position of faulty spindles in their ring frame. EcoPulsarS is also the longest automatic cone winding machine with 110 spindles which helps spinners save energy, reduce manpower, and optimise their process. Savio is also a world leader in TFOs and the current range covers two

models, **"SIRIUS"** and **"COSMOS"**.

SSM is renowned for its assembly winders, rewinders and soft package winding machines. Elgi offers state-of-the-art bobbin transport systems (BTS) that help transport bobbins from speed frames to ring frames automatically, with a lot of flexibility.

LUWA is the market leader in air engineering/humidification covering spinning and weaving segments.



Savio - "SIRIUS"

Spinning Accessories

High quality accessories and spares help achieve higher machine productivity and excellent quality output by reducing disruptions in manufacturing. A.T.E. is committed to provide the best spinning accessories and spares to enable the consistent production of yarn conforming to the highest standards.

TeraSpin, a business unit of A.T.E., manufactures high precision, extremely reliable spinning machinery components such as spindles, inserts, top rollers, weighting arms, drafting systems, smart cradles, and smart yarn catchers that help spinning mills improve their productivity while maintaining excellent quality. Its state-of-the-art manufacturing facility is located in Ahmedabad, India, from where it

supplies its components globally. Through constant R&D, these products are continuously developed and upgraded for ensuring high performance and durability.

A.T.E.'s portfolio also includes original spares from Truetzschler, and products like card clothing and mounting accessories from Truetzschler Card Clothing that fundamentally draw on Truetzschler's decades of knowledge in carding technology.

Other value added products include testing equipment from MAG Solvics for continuous monitoring and optimising resources, thus improving productivity and quality; and DeChang's compacting system which helps in the production of high quality compact yarn with a lower cost of production.

All TeraSpin Product

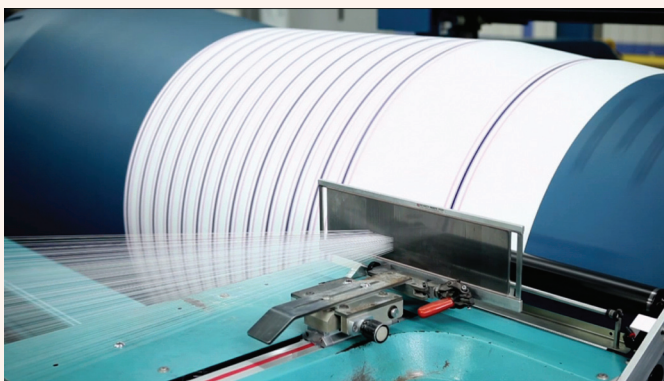


Fabric Forming

Fabric forming includes the processes of weaving, warp knitting, and circular knitting. A.T.E. provides the latest machinery from reputed world leaders for the major fabric forming processes to achieve high speed, cost efficient, and high quality production. Solutions are offered for the manufacturer of both conventional as well as technical textiles.

Weaving

Warp preparation is a crucial step for fabric formation. It could involve the processing of spun yarns or synthetic yarns. A.T.E. offers the complete range of world class warp preparation solutions from KARL MAYER for the weaving industry. The range includes machines for direct warping and sizing, sectional warpers for both standard and technical textiles, warp sampling solutions, slasher and rope dyeing ranges, ball warpers, long chain beamers, assembly machines, and creels. These weaving preparation solutions guarantee efficient production combined with the highest warp quality. Moreover, these solutions help in the reduction of production costs in terms of reduced labour, lower yarn wastage, less inventory, and reduced consumption of water. A.T.E. also offers LUWA humidification systems, as optimally controlled humidity is an essential aid to efficient weaving.



KARL MAYER - Warping Machine

Knitting

Knitting is a precision fabric manufacturing process which involves interlacing of yarns to produce different textures and designs. A.T.E. offers a complete series of warp knitting machines from KARL MAYER, a name synonymous with warp knitting. The products include tricot, raschel, jacquard raschel, jacquardtronic lace, textronic lace, rascheltronic, double bar and multi bar raschel, multiaxial and bi-axial machines for warp knitting, and single and double jersey circular knitting machines.



KARL MAYER - Warp Knitting

KARL MAYER's warp knitting technology is one of the most versatile and highly productive systems in the textile machinery sector. It is the world's number one in warp knitting solutions and has 1100+ successful installations of machines pan India, covering both conventional and technical textiles.

KARL MAYER products have a wide range of applications such as technical nets, automotive textiles, medical textiles, geotextiles, industrial textiles, building textiles, etc.

A.T.E. offers the most advanced and cost effective circular knitting machines from Jingmei (Santoni Group). The machines ensure high performance with various yarn types and under various operating



Jingmei - Circular Knitting Machine

conditions, excellent price-performance ratio, low maintenance cost, and reduction in costs related to raw material as well as wastage during the sampling process. The machines are easy to operate and are highly efficient.

Carpets

A.T.E. has established long standing relationships with its principals worldwide, which are all at the forefront of carpet making technology. A.T.E. supports its clients in creating niche products and new developments by offering innovative machinery solutions. From manufacturing carpets to packing,



Zimmer - Digital Printing Machinery

A.T.E. has it all.

A key part of the range is carpet yarn manufacturing (BCF) from Truetzschler, Switzerland, with its decades of experience in spinning systems for BCF yarns as well as technical yarns for varied industrial applications.

A.T.E. also works with Zimmer of Austria, a pioneer in the carpet machinery industry. This enables Indian customers to choose from the best digital printing lines for carpet, ChromoJET carpet printing machine, Colaris inkjet carpet printing machine, ChromoJET blanket printing machine, and digital printing for narrow fabrics. These machines are durable, easy to maintain, long lasting and, provide high resolution prints.

Rounding off the carpet package are other essentials such as carpet shearing machines, confection lines for carpets, and robo-tufting solutions.

Processing

A.T.E. has established itself as a one-stop source for end-to-end solutions in natural and man-made textile processing due to its long standing tie-ups with leading manufacturers such as A. Monforts, Corino, Color Service, Danti Paolo, Guarneri Technology, Fong's, Goller, J. Zimmer, Mahlo, Monforts Fong's, Osthoff-Senge, Stalam, Screen-O-Tex, Texpa, THEN, Luescher, Godrej and Union International.

The wide range of machinery that A.T.E. offers is extensively used in leading processing houses for production of high quality finished fabric and made-ups.

A.T.E. covers every process from singeing and desizing, scouring and bleaching, mercerizing, dyeing, printing (both analogue and digital), to finishing including coating, process control systems,

Monforts - Continuous Dyeing Range



auto dispensing of dyes and chemicals, inspection and packaging of finished goods, making up of home textiles, and effluent treatment. A.T.E. also covers every fabric type - woven, knit, terry, denim, etc. No wonder then that A.T.E. has installed 3000+ processing machines which are working successfully across India.

The Fong's Group consists of A. Monforts, Fong's, Goller, Monforts Fong's, and THEN. Their products cover the full range for wet and dry finishing of knitted and woven fabric. These green finishing products provide their users with the low power and water use, and therefore the lowest life cycle costs.

A.T.E. also offers state of the art singeing machines from Osthoff-Senge, surface finishing machines from Danti Paolo, calendars from Guarneri, colour kitchens from ColorService, screen printing machines from Zimmer, RF driers from Stalam, knit fabric handling machines from Corino, and automation solutions from Texpa.

Mahlo is one of the world's leading producers of



Osthoff-Senge - Singeing Machinery

measurement, control, and automation systems for the textile industry with products such as weft straighteners, pattern detection systems and online process monitoring and control systems.



Fong's - Dyeing Machine

A.T.E. also provides a range of accessories, retrofits, material handling systems, and consumables such as screen from Screen-O-Tex that are designed to save cost and energy, improve productivity, and quality at substantially low investments and with fastest ROI. The range covers cooling systems, material handling systems, static discharging systems, drum and spring filters, metal detectors, lubricants and grease, automation solutions, remote monitoring, pumps, process control equipment, heat recovery, retrofits, and automatic storage and retrieval systems.

Effluent Treatment Plants

A.T.E. HUBER Envirotech (AHET), a joint venture between A.T.E. and HUBER SE, Germany, offers state-of-the-art solutions for wastewater treatment, recycling and sludge management covering both industrial and municipal sectors. Huber, with over 175 years' experience and over 40,000 installations across 60 countries, and A.T.E., with close to 20 years' experience and with over 300 projects across 10 countries, together bring unparalleled expertise in the field to provide the most effective solutions for wastewater treatment.

AHET's pioneering AAA (registered) technology for the textile industry, membrane bio-reactors, sludge thickening, dewatering and solar drying technologies are a few examples of the technologies available

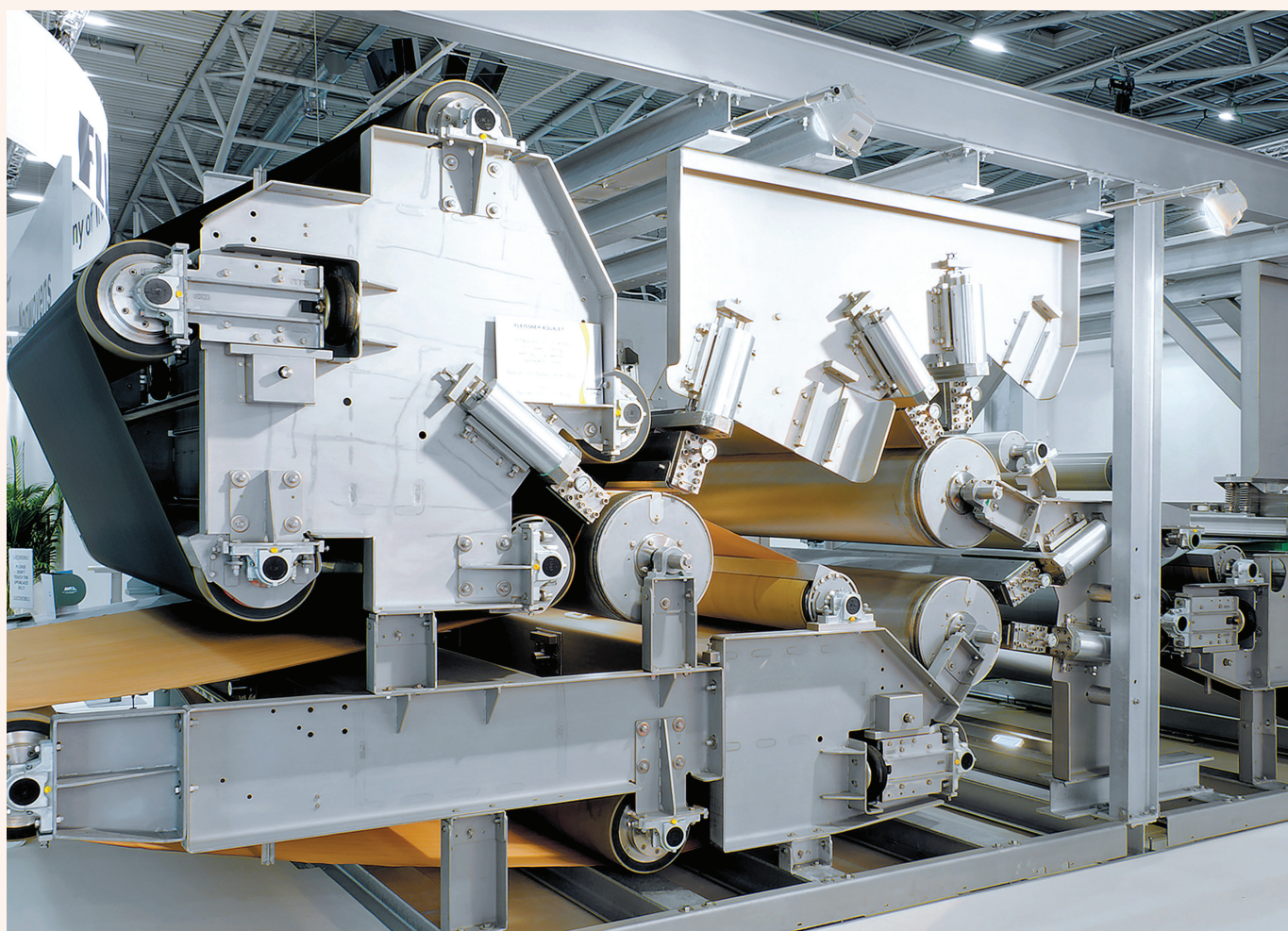
for the textile industry. AHET has natural and eco-friendly technologies to tackle BOD, nitrogen and phosphorus. In textile mills, high ammoniacal nitrogen is seen in printing effluent due to the

usage of urea. AHET has designed several anoxic biological treatment systems for textile industry (as well as for other chemical industries), that offer treatment and reduction of these constituents.

Non-woven and Synthetics

A.T.E. has been in the nonwoven segment since the 1990s providing latest technology solutions for manufacturing non-woven and synthetic fabrics. Widely used in medical textiles, geotextiles, hygiene textiles, and other applications, nonwovens and technical textiles offer many opportunities for fast growth and profits.

A.T.E. provides assistance right from project planning to commercial production. The wide ranging technology solutions offered by A.T.E. cover opening and blending, needle punch nonwovens, thermal bonded nonwovens, spunbond, melt blown & SMS, spun lace nonwovens, chemical bonded nonwovens, nonwovens bleached cotton products, filament lines (POY and FDY), thermal cleaning equipment, BCF yarn manufacturing lines, IDY yarn manufacturing lines, and automation solutions.



Truetzschler - Nonwovens

Truetzschler Nonwovens offers complete lines and solutions for needle punch, spun lace, chemical and thermal bonding. Over the years, Truetzschler Nonwovens has gained tremendous experience and expertise in specialised applications. Together with Voith, Truetzschler Nonwovens can also supply complete lines and solutions for wet laid spun lace nonwovens.

A.T.E.'s principals in the technical textiles segment include Truetzschler Nonwovens for spun lace, thermo-bonding and chemical bonding; LUWA for air handling systems; Guarneri Technology (Italy) for calendaring systems; Mahlo (Germany) for GSM monitoring and moisture measurement systems; Fong's for bleaching vessels and Zimmer, Austria and Monforts, Germany, for different types of coating systems.

Textile ERP and plant monitoring

A.T.E. also offers specialised textile ERP solutions from Datatex, online spindle monitoring systems from MAG Solvics, and MES (Manufacturing Execution Systems) for the textile industry from BMSvision.

Machinery upgrade/automation solutions for old textile machines

Textile mills with old machines which are in good mechanical condition can take advantage of the machine upgrade and automation solutions provided by A.T.E. These solutions cover a range of retrofits and upgrades comprising hardware and software that will significantly improve the performance of older machines. Thus the mills can boost the overall performance of their installed base of machines with minimum investment, which would ensure a fast ROI. A.T.E. also supplies indigo dosing systems for the denim sector.

A.T.E.'s highly experienced team of engineers with deep domain knowledge in textiles and electronics can execute such upgradation projects smoothly and successfully and also provide quick services post execution.

A.T.E. Group

A.T.E., which was founded in 1939 in India, has grown into a multifaceted engineering group offering world-class products and solutions spanning several segments. A.T.E. operates in the domains of textile engineering, space cooling, wastewater treatment, solar heating, internet of things for industry, flow technology, print and packaging equipment, and value enhancing solutions.

A.T.E.'s businesses encompass manufacturing, industrial sales, distribution and service, while it also has expertise in handling turnkey projects. A.T.E. has developed several cutting-edge technology products and solutions and has several patents to its credit.

A.T.E.'s foray into businesses such as cooling, wastewater treatment, energy efficiency, and IIoT, are driven by its deep commitment to the environment and sustainable development. Living by its theme of 'Partnering People & the Planet', A.T.E. seeks to achieve critical social goals through its eco-friendly businesses.

As A.T.E. celebrates its 80th year, it is renewing its efforts to make long term contributions to all its stakeholders with its focus on technology, service, and sustainability!