

“At A.T.E., sustainability is a major driving philosophy”



A leading player in the field of textile machinery, A.T.E. today is also known for eco-friendly industrial and commercial cooling systems, a complete range of wastewater treatment and recycling solutions, flow technology solutions for fluid transfer and other applications, etc. In addition, through its Industrial Internet of Things (IIoT) solutions, the company helps its customers to enhance quality and realise savings. The benefits of IoT for all industries are several and the potential of this technology is vast, says **Anuj Bhagwati**, Head, A.T.E. Group. In this interview, Bhagwati explains the importance of sustainability for industries and how A.T.E. is helping its customers to walk on the “green” path of industrial development.

Congratulations on completing 80 years! Can you give us an overview of A.T.E. and what A.T.E. has been doing in the sustainability space?

Thank you. We attribute our business sustainability to our long history of top notch customer service, and the resultant confidence our customers and business partners repose in us.

On the subject of environmental sustainability, we feel that this is a major concern, not just for India, but for the world at large. We have always been concerned about the pressure placed on our land, water, and air. Therefore, one of the core themes of all our businesses is ‘reduce-reuse-recycle’. Our solutions help improve the bottom lines of our customers through cost savings and improved productivity and at the same also help the environment.

We are known for many years for our eco-friendly textile machinery solutions. But today we also have eco-friendly industrial and

commercial cooling systems, a complete range of wastewater treatment and recycling solutions, flow technology solutions for fluid transfer and other applications, concentrated solar thermal solutions for industrial process heat, industrial internet of things (IIoT) that enhances operational equipment effectiveness in manufacturing, print control and vision systems that improve productivity and reduce waste, and a range of systems that enhance quality, safety, and productivity.

To sum up, for us at A.T.E., sustainability is a major driving philosophy.

HMX has been making huge strides in sustainable cooling. Could you elaborate on your efforts in that area?

Various studies show that using air conditioners for space cooling account for one fifth of the electricity used in buildings around the world today. Especially for a warm country

like India, where demand for cooling is rising rapidly, it is essential to cut down on the energy consumed for cooling so as to reduce our costs and also our greenhouse gas emissions.

HMX is a business unit of A.T.E. HMX’s cooling solutions not only provide energy efficient cooling, but also improve worker productivity through creating healthy work environments. This is because HMX’s cooling solutions provide excellent IAQ, as we use all or mostly fresh air. HMX’s indirect direct evaporative cooling (IDEC) and indirect evaporative cooling (IEC) technologies find applications in industrial, commercial and residential buildings. These products have as their core our patented - patents are now granted in US, Australia, India - DAMA (Dry Air Moist Air) heat exchangers.

HMX’s technologies make use of nature’s own coolant – water, unlike chlorofluorocarbons usually used in air conditioners. Our solutions provide comfort that is close to air

conditioning, while using significantly less energy as compared to air conditioners.

At HMX we have built an in-house laboratory to evaluate and improve the performance of our core technology DAMA. With this, we have achieved the major milestone of being the first Indian company to type-test our DAMA heat exchanger, which was witnessed and verified by Underwriters Laboratories (UL), a global leader in testing and certification. Our test facility is built as per ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) standards for measurement, and is one of few such facilities by a manufacturer of evaporative cooling products.

HMX's solutions are well-proven. We have the largest industrial installed base of 45 million CFM, cooling more than 8 million sq ft area of over 400 customers. We have installations in companies like ABB, Wipro, Forbes Marshall, Amazon, Bosch, Honeywell, and many more.

What are your thoughts about the water crisis being faced by India today? Could you please tell us something about A.T.E.'s joint venture with HUBER? What other technologies are provided by A.T.E. in the field of water management?

The water situation in India is very tight and is set to worsen in the years ahead. It is projected that the country's water demand would be twice the water available today, meaning severe water scarcity for millions of people. Water scarcity is accentuated because of the unsafe discharge of a high volume of untreated wastewater generated by households and industries. It is reported that 70% of India's surface water is thus contaminated. To mitigate this alarming situation, it is absolutely necessary to ensure that industrial and municipal effluents are treated with efficient and reliable water and wastewater treatment and recycling technologies for reuse or safe disposal of water.

A.T.E. HUBER Envirotech (AHET) is a joint venture between A.T.E. and

HUBER SE, Germany. Through this joint venture, we provide innovative technologies for industrial wastewater treatment, recycle, and zero liquid discharge as well as for municipal wastewater treatment and sludge management systems.

Another water related challenge is efficiently transferring water to points of use. This is something that A.T.E. has long years of experience in as over the past 30 years, A.T.E. has built deep domain knowledge in a range of industrial applications that involve fluid transfer. Today, we are recognised as experts in flow technology solutions. We not only offer high technology pumps, but also provide hydropneumatic systems and controllers.

A.T.E. has also been providing solutions to the printing and converting industry, which has witnessed a lot of growth in the recent past. Can you give us an overview of what A.T.E. has been doing there?

A.T.E. has partnered with the print and packaging industry for more than 35 years now. We have played an important role in contributing to the growth of the industry by bringing innovative technologies that have improved productivity and reduced waste in gravure, offset, and flexo printing.

This is another sector where A.T.E.'s technologies provide multiple benefits to our customers. Our range of web video and print control systems focus on reducing waste for printers and converters. This not only improves productivity, as rework is reduced, but also translates into savings, as the waste of expensive raw material is minimised. Another 'green' bonus is the reduction of plastic waste.

Valence Electronics, a part of the A.T.E. Group, has developed a cross flow heat exchanger, called Lamiflow. Lamiflow recovers the waste heat from the exhaust of driers in the coating and laminating machines and uses it to warm the inlet fresh air with minimal pressure drop. Another Valence product, the ink temperature stabiliser, is useful in reducing solvent

consumption and ink consumption. Over time, all of these applications translate into operational savings, while also helping printers and converters reduce their carbon footprints.

What are some of the challenges that are being faced by the industry today, in terms of alternative and renewable sources of energy? What is A.T.E. doing to address these challenges?

Fossil fuels are still widely used in the industry for a number of process heat applications. In line with our sustainable ideology, and in order to reduce the dependency on carbon-intensive fuels, we have developed a concentrated solar thermal dish that provides steam up to 160°C and 6 bar pressure for process heat applications for both industrial and the commercial sectors. We also provide systems based on high efficiency concentrated parabolic concentrators (CPC). CPC is cost-effective for large scale hot water (up to 120°C) applications in a range of industries.

Our passion for sustainability is what drives us to create such products and solutions that have a positive impact on both the environment as well as our customers' bottom lines.

A.T.E. is also into industrial IoT solutions. What are your thoughts on the potential benefits and adoption of IIoT in India?

IIoT can deliver insights that enable manufacturing companies to more efficiently manage processes from granular to large scale levels. IIoT can help make it easier to manage your assets, facilities, and resources. It can enhance safety, optimise supply chains, help with better decision making, improve profitability, and more. The benefits of IoT for all industries are several and the potential of this technology is vast. In fact, our customers in India and abroad have already started realising savings and quality improvements through our joint IIoT deployments.

In IIoT, EcoAxis – a part of the A.T.E. Group – delivers remote monitoring and advanced analytics solutions to focused customer segments, significantly impacting the way they manage their assets. We focus on our customers' needs to continuously optimise their resources by understanding their processes and applications in-depth.

We call this 'unlocking the intelligence of things' and our efforts in the IIoT space have been recognised by our customers and the industry as well. We have delivered more 50 data-to-decision projects in more than a dozen domains and

processes. We won the 2017 Frost & Sullivan Growth Excellence Leadership Award due to our performance in providing customised solutions for the diverse IIoT needs of our customers.

How is A.T.E. ensuring better engagement from its customers and stakeholders?

A.T.E. has consistently maintained a high level of customer satisfaction. Customer focus is built into the culture of our company and stretches across teams through KPIs and other metrics. We engage with our customers and stakeholders at every

level. We have recently launched an e-commerce site for some of our products to give our customers easy access to buy products online.

To help keep our ear to the ground, we have set up a Customer Contact Centre as well – a single point of contact for enquiries, service requests, and feedback related to our products and services. We regularly carry out customer surveys to gain insight into our performance and devise improvement strategies. We keep trying newer approaches, to make sure that we create and nurture mutually beneficial relationships with our customers and stakeholders. 