

“Workplace health promotion is gaining momentum in India”



A.T.E. Group has evolved into a multifaceted engineering group offering products and solutions spanning several segments. A.T.E.’s businesses encompass manufacturing, industrial sales, distribution, and service in fields like textile engineering, cooling, wastewater treatment, IoT for industry, flow technology, print and packaging equipment. In a conversation with **IPF, Anuj Bhagwati, Head of the A.T.E. Group** discusses about the company plans to set up business in HVAC sector and develop IEC technology.

A.T.E. has been a ‘one-of-its-kind’ service provider in textiles for over 75 years. What inspired you to explore the HVAC sector?

Yes, textile engineering has been our foundation, and we have carefully nurtured this business with an unwavering focus on technology, customer service, and good relationships with all stakeholders.

In the 90s, when I joined the company, I was sure that sustainability was going to become a critical issue for India in the near future. I was concerned that our country stands to lose much from climate change. To this end, A.T.E. began to develop sustainable products and solutions in cooling, wastewater treatment, and energy efficiency.

Cooling – either for people or processes – is important in a tropical country like India. People are more productive when they work in a comfortable environment, which in India means cooling a lot of the time. Similarly, certain processes require

specific RH and temperature conditions to be maintained. However, cooling with conventional methods such as chillers and air conditioners can be very energy intensive. HMX’s products are designed to be more energy efficient, using only 40 - 60% of the energy consumed by air conditioning systems, while providing 100% fresh air at the same time! Since our products deliver cooling with less energy, we contribute to climate change mitigation as well.

A.T.E.-HMX now has the largest installed base of Indirect Evaporative Cooling (IEC) worldwide. Can you please explain how A.T.E.-HMX has evolved to occupy such a prominent position?

HMX has pioneered the application IEC – a technology with tremendous potential. At the core of every HMX product is the DAMA (dry air moist air) – a cross-flow plate type sensible heat exchanger for IEC – which cools

the air without the addition of any moisture to it. Our DAMA-based products are designed to be an upgrade from air washers, and an energy-efficient alternative to air conditioners. HMX’s DAMA has received US and Australian patents and is widely accepted by some of the biggest names in sectors as varied as automobile, engineering, print and packaging, food and beverages, FMCG, e-commerce, pharmaceuticals, and more.

R&D deserves special mention. We are constantly exploring new approaches and improving our products. One example of this is the newly launched HMX IDECool, which is designed to cater to the cooling needs of small and medium establishments and works on two stage evaporative cooling technology.

Can you highlight the applications of this IEC technology?

Most of HMX’s IEC based solutions are highly customised to our

customers' applications and specifications, as well as local climate and site conditions. Also, our suggestions for a suitable solution and unit size to our customers depend on the applications. We have dedicated proposal teams in place at different locations for assessing and recommending suitable solutions.

In auto and auto ancillaries, the HMX-Ambiator, the HMX-IEC, and the HMX-FAAC find application in the cooling of assembly lines, body shops, paint booths, inspection areas, panel rooms, and more. For the plastics industry and for moulding in general, the HMX-DMA and HMX-Ambiator ensure dissipation of heat from the moulding machines. For the pharmaceutical industry, HMX's products are applicable in raw material and finished goods warehouse and laboratory cooling.

In print and packaging, the HMX-Ambiator has been particularly successful in positive pressure applications and help in maintaining a dust-free environment, reduce solvent losses, and prevent fires by reducing the build-up of static.

In commercial applications, these products are suitable for cooling and ventilation of kitchens, auditoriums, and the like.

Various studies have clearly established a correlation between people comfort and productivity. Are Indian businesses ready to invest in enhancing people comfort at the workplace?

Yes, the close correlation between comfort and productivity is a fact. Many researchers show that workers are less productive in too-hot environments – they are more likely to take extended lunch breaks and take longer to complete tasks. While some of the early adopters of our technology were MNCs, we're seeing similar thinking among Indian companies as well. Companies are becoming more aware of the importance of fresh, clean, and cool air for optimal worker productivity. While it's true that the practice isn't widely prevalent, it is slowly catching on.

Indoor air quality enhancement is still not a popular concept in India. How do you think the awareness can be spread?

Many people spend a greater part of their day indoors. Air in a poorly ventilated space can become 2 to 5 times more polluted than the outside air. In poorly ventilated factories, where there are many sources of pollutants, such as chemicals like VOCs (volatile organic compounds) and particulates, this number can be many times higher. Thus indoor air, if not properly maintained, can be hazardous to health.

The very places most people consider 'safe' paradoxically exposes them to the greatest amounts of potentially harmful pollutants. Apex bodies for the HVAC industry like ASHRAE, ISHRAE, RAMA and others, have laid guidelines for maintaining healthy indoor air quality.

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Going forward, what are the HMX's growth plans in terms of new markets and applications in the domestic sector?

We have strengthened our presence in industries such as automobile, auto ancillaries, engineering, print and packaging, pharmaceuticals, retail, and more.

For IEC solutions, one of the markets we are looking at is residential and small commercial establishments such as showrooms, marriage halls, small offices, restaurants, bungalows. The energy efficient HMX IDECool will be targeted at these segments. The IDECool will be a standard product available in two different capacities and will be positioned as an upgrade over conventional air coolers.

A.T.E.-HMX's primary focus has been the Indian market, but we understand that you are now ready to go global. Could you please throw some light on this?

We have already made some headway into the international market. We have multiple installations in countries such as the UAE, Egypt and Thailand. The company is quite active in the Middle East, where it has an authorised channel partner. While we started with targeting some of the hotter countries based on proximity, we have the capabilities to supply and install worldwide.

Can you please highlight in brief the short and long-term plans of the A.T.E. group, covering all your businesses?

We will continue to consolidate and grow our business in textile engineering, taking advantage of the growth of the textile sector and our technologically superior products. In cooling, we will grow with our current products in more markets and we will explore new products for the residential and commercial sectors.

In wastewater treatment, we have developed specialised processes and we will grow by deploying these more widely. We are also working with our partner, Huber, for exploring opportunities to expand Huber's footprint in India. We see huge potential in our IoT business and so we are focusing on the textile, plastic, print and packaging sectors, where our deep domain knowledge and synergies with allied businesses allow us to deliver a lot of value for our customers. We have also got into solar segment, where we have some exciting offerings and have landed landmark orders for our products.

Our print and packaging equipment vertical, in addition to our existing register control systems, has also introduced a new line of products built on our expertise in vision systems. The company's specialised value-added systems unit is continuously finding new applications and markets based on our core knowledge of static, ink transfer and heat exchange.

