



Lift It Up

The elevator industry is taking centre stage as India continues the path of built architecture by merging aesthetics with functionality.

By Bindu Gopal Rao

The advent of technology, coupled with an increased demand for faster, safer, and bigger elevators, has made leading manufacturers around the world innovate elevator technology to introduce an array of products which bring a new edge to their offerings.

MARKET MUSINGS

The Indian elevator market is expected at 50,000-55,000 units yearly and an installed base of a quarter of a million. It is valued at about Rs 10,000 crore. By the year 2023-24, the Indian market is anticipated to rise 35-40 per cent, crossing the 80,000 elevators per annum mark. According to industry estimates, the split between the residential & commercial market for elevators is about 70-80 per cent vs 20-30 per cent. The trend in the elevator industry would include options wherein more companies will opt for a sustainable model with modifications in the way the elevators will consume electricity.

NEW TIDINGS

For buildings with complex traffic models, TK Elevator has created the AGILE solution to enhance the passenger experience. Passengers are intelligently assigned to lifts by the AGILE Destination Control system, which also increases capacity by 30 per cent while cutting waiting and travel time by 25 per cent. A new generation of AGILE kiosks, which can be personalised with specific visuals and messages to benefit building tenants and improve the overall building experience, has now been introduced by TK Elevator throughout the Asia Pacific region. The new kiosks have a clean, modern design with a simpler, more straightforward interface and display. They are available in two sizes for specific architectural needs and can be fixed on a wall or set up on a pedestal stand. Manish Mehan, CEO and MD of TK Elevator (India), says, "When combined with the cutting-edge Destination Selection Control (DSC) system from TK Elevator, the AGILE kiosks are most effective for both new

building projects and modifications to existing facilities. There are several structures that AGILE and DSC can be used in, including offices, hotels, flats, hospitals, and mixed-use complexes. To increase accessibility and raise the calibre of services, AGILE, which is made specifically for tall buildings and are compatible with most TK Elevator's products and solutions, can be seamlessly linked with building management and security systems. By reducing the length of the lines for passengers during rush hour, building owners can sell their homes for more money."

Meanwhile, NIBAV Home has launched the Series III MAX, the world's largest panoramic cabin, featuring cabin space of over 4 ft. Also, NIBAV Lifts is the only home lift manufacturing company in India with the coveted TUV certification.

NOW TRENDING

With the utilisation of magnetic levitation



Manish Mehan, CEO and MD of TK Elevator (India)



Amit Gossain, Managing Director, KONE Elevator India

1. NIBAV's Series III MAX is the world's largest panoramic cabin featuring cabin space of over 4 ft.
2. For buildings with complex traffic models, TK Elevator has created the AGILE solution where passengers are intelligently assigned to lifts by the AGILE Destination Control system, which also increases capacity by 30% while cutting waiting and travel times by 25%.

(maglev) technology to move elevators both vertically and horizontally, technology has made it possible to enable multiple cabins to move independently in a single shaft, offering increased capacity, reduced wait times, and new possibilities for building design. Integration of IoT (Internet of Things) technology, data analytics, and cloud-based services enable predictive maintenance, personalised experiences for passengers, and real-time monitoring for elevator performance optimisation. "ORONA NEXT integrates features such as DCS to optimise passenger flow and improve elevator efficiency. These algorithms learn passenger traffic patterns and dynamically allocate elevators, reducing waiting times and improving the overall transit experience. Our elevators are also equipped with advanced disinfection features including the air purifier using NANOe X technology that prevents virus activity, keeping the air



in the car clean and ensuring your well-being. The NANOe X technology is based on many hydroxyl radicals grouped into water droplets that inhibit the virus, transforming its protein. In addition, the high level of air ventilation in the lift reduces the risk of exposure. The higher the lift's ventilation rate, the lower the accumulated dose to which a passenger is potentially exposed, reducing the risk of transmission of pathogens and enhancing passenger safety," says Aman Moudgil, Director, Gilco Global.



Aman Moudgil, Director, Gilco Global

escalator. We are also pursuing carbon neutrality and targeting a 40 per cent reduction of greenhouse gas emissions and lifetime energy use of our product. These aren't just claims but aims that have been verified by Science Based Targets Initiative," avers Amit Gossain, Managing Director, KONE Elevator India. With the goal of developing sustainable smart cities and low-carbon communities, they provide multiple services and products. The KONE DX class elevators offer innovative and eco-friendly vertical transport for buildings of all types. "These elevators are retrofitted with LED lights and a novel energy regeneration technology that saves up to 70 per cent of energy. And our current machine room-less volume elevator, the KONE Monospace 500, is over 90 per cent more efficient compared to what we had back in the '90s," adds Gossain.

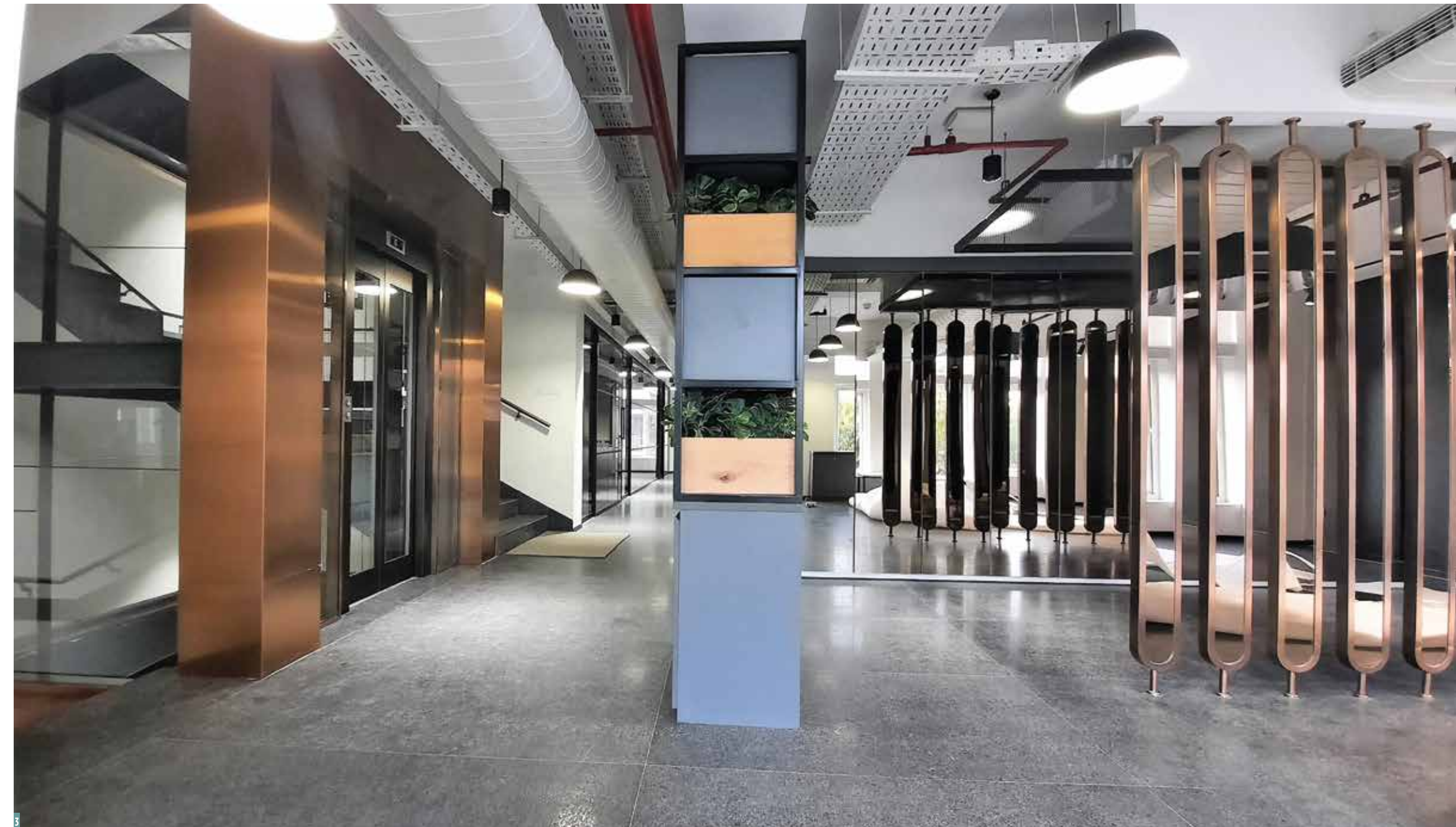
MATERIAL MATTERS

Elevator manufacturers are exploring innovative materials and designs to enhance aesthetics, durability, and functionality.

This includes the use of glass panels, carbon fibre composites, sustainable materials, and customisable interior options. "NIBAV uses galvanised steel and aerospace-grade aluminium. Apart from this, our polycarbonate glass is 250 times stronger than normal glass, making it unbreakable. There are some smart integrations in home elevators such as Alexa compatibility that ensures that you now command a lift to arrive and descend to a particular spot, without the need for a touch intervention," says Vimal R.



Vimal R. Babu, CEO and Founder, NIBAV Home Lifts



3. Gilco Global's elevators are equipped with advanced disinfection features including the air purifier using NANOe X technology that prevents virus activity, keeping the air in the car clean and ensuring your well-being.

4. NIBAV uses galvanised steel and aerospace grade aluminium. Apart from this, their polycarbonate glass is 250 times stronger than the normal glass making it unbreakable by nature.

Babu, CEO and Founder, NIBAV Home Lifts. Carbon Fiber Reinforced Polymer (CFRP) a lightweight and high-strength composite material is being used in elevator components such as doors, panels, and even elevator cars. It ensures an increased load-bearing capacity, improved energy efficiency, and resistance to corrosion. "High-strength glass panels are employed for elevator shafts, cab walls, and floors, providing a visually appealing and spacious atmosphere. LED glass or smart glass is a type of glass that can change its transparency or display images using embedded LED lights or electrochromic technology. It allows for privacy control, dynamic displays, and interactive experiences within elevator cabins. Stainless steel is commonly used for elevator car interiors, handrails, and elevator doors. Elevator manufacturers are increasingly incorporating recycled and sustainable materials into their products. Wood and natural finishes provide an elegant and warm appearance to elevator interiors. Sustainable woods like bamboo or responsibly sourced timber are being used for cab walls, handrails, and flooring, creating a natural and inviting ambience. Nano-coatings are being used to protect elevator surfaces and enhance their durability," adds Moudgil.

POST PANDEMIC IMPACT

In light of increasing concerns about hygiene and cleanliness, elevator manufacturers are incorporating anti-microbial surfaces into elevator cabins. These surfaces can help inhibit the growth of bacteria and viruses, providing a cleaner and safer environment for passengers. Anti-microbial surfaces in elevator cabins can help reduce the spread of bacteria and viruses by inhibiting their growth. Materials with inherent anti-microbial properties or surface treatments like coatings and films may be utilised. To minimise contact and the potential spread of germs, elevators now have touchless control systems. This could include hands-free technology such as motion sensors, voice recognition, or smartphone apps that allow passengers to select floors or call elevators without physically touching buttons or surfaces. Enhanced air filtration and ventilation systems to improve indoor air quality, Ultraviolet-C (UV-C) light proven effective in killing pathogens, including viruses and bacteria and hand sanitiser dispensers or integrated hand sanitisation stations are also a part of elevators. ■