

# LIFT IT UP

THE LIFTS AND ELEVATORS SPACE IS ABUZZ WITH NEW LAUNCHES, TECHNOLOGICAL ADVANCES AND GREEN CONSIDERATIONS.

BY BINDU GOPAL RAO



1. Elite Elevators with its patented Cog belt technology gives you the smoothest and quietest ride possible.

Several innovations have been made to make elevators futuristic for homes and commercial buildings. Some of the leading elevator companies like Otis, Thyssenkrupp, Johnson, Schindler and Kone have come up with some amazingly innovative lifts and elevators.

#### DO THE NEW

The elevator space is rapidly changing and ever evolving. It is expected to grow more in the coming years and key drivers for it would be residential and infrastructure. Designing

an elevator is crucial to modern buildings. Ashok Ramachandran, CEO & President, Schindler India says, "we are entering into the digital-out-of-home (DOOH) industry as a network owner to enhance the passenger experience in the elevator. With the Schindler Media Network you can keep in touch and communicate in real-time with your tenants, residents, and visitors via in-lift screens, perfectly positioned for maximum attention." Arrchana Chellappa, Operations Head, Elite Elevators, adds, "the H100 – Spindle, the smallest and most compact home lift in our product range has been designed to meet all requirements for comfort,

space and design in a narrow environment. H200 (Altura Platinum) – Hybrid is the perfect compromise in terms of solutions flexibility and cost efficiency. H300 (Altura Diamond) – Cog belt incorporates innovative cog belt technology: silent and efficient. The gearless drive system can offer unbelievable comfort and performance."

#### PANDEMIC PUSH

The pandemic reinforced the importance of elevators as the spine of the building and a vital requirement for mobility of people. With remote working and significant focus on



COURTESY: ELITE ELEVATORS



2. Nibav Home Elevators come with their own self supported structure. This ensures that this elevator needs zero civil work.

3. Every elevator is being tailor made to fit your requirement.

4. Ashok Ramachandran, CEO & President, Schindler India

5. Arrchana Chellappa, Operations Head, Elite Elevators



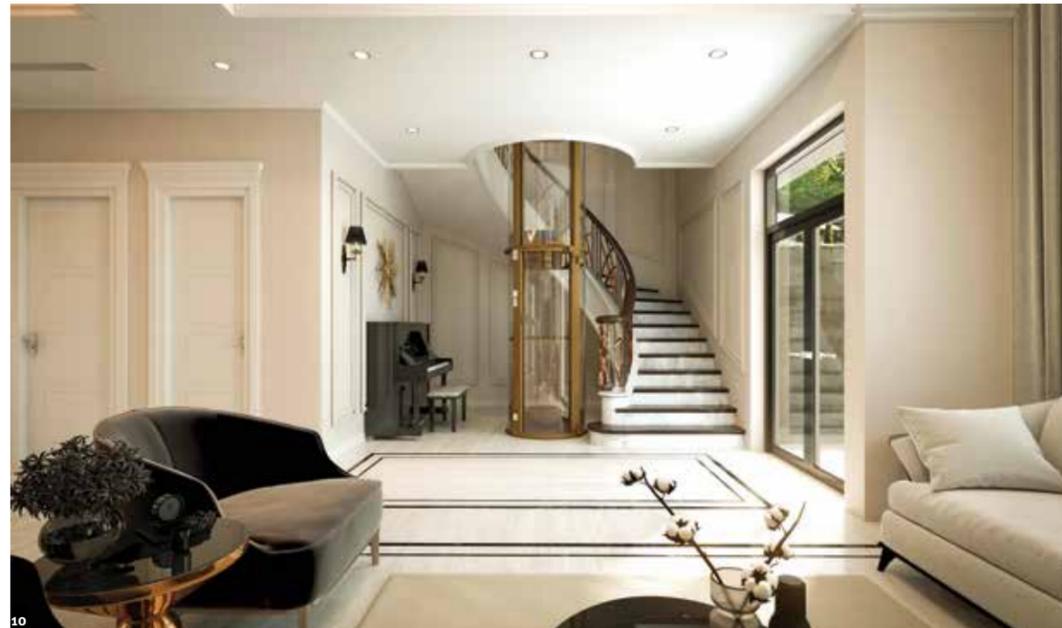
- 6. Sebi Joseph, President, Otis India
- 7. Dr. Vikram Mehta, Managing Director, Spartak Engineering Industries
- 8 & 10. Nibav Home Elevators use unbreakable glass technology called polycarbonate which is 250 times stronger than normal glass and is also the same material used for bullet proof glasses.
- 9. Elite Elevators offer a near-limitless number of options that allow you to hand-pick every colour, texture and accessory to make your home lift truly unique, reflecting your identity in every single detail.

with functional content. Some of these smart displays have taken passenger centricity to a whole new level by offering content such as weather, news and a building calendar or notices to passengers during their ride. And, in the event of an entrapment, it can even allow for a video-connection to a customer service professional – a boon to those passengers chary of confined spaces,” says Sebi Joseph, President, Otis India.

**RESCUE MISSION**

While the trend is changing the cityscape and making it more impressive, it also brings with it the share challenges,

which includes fire breakouts in the high-rise buildings. In the event of a fire breakout, evacuation in these multistoried buildings is the challenge. To control such situations, the most recent launch in the elevator space was ‘Fire Evacuation Lift’. A fire evacuation lift is designed to meet the demands of a rescue mission and complete it in record time. Dr. Vikram Mehta, Managing Director of SPARTAN Engineering Industries Pvt. Ltd. says, “fire evacuation lift is designed as per fire lift standards, the cabin is made of non-combustible material and all side enclosed panels are filled with ceramic wool for 2 hr. fire rating. Trap door is provided on the roof for emergency exit, whereas the ordi-



11



COURTESY: OTIS

nary fire lifts have no provision of trap door, and no vision panel is included. Most importantly in such life-threatening situations a person standing at any floor can communicate with the lift operator because of its two-way communication system. Fire Evacuation Lift has 15-30 minutes battery backup in case of power failure.” Thanumalaya Perumal, Vice President-Global Sales, Nibav Lifts says, “our lifts have Amazon Alexa Integration and advanced safety landing to the nearest floor. They come with three levels of door lock safety, three hours of battery backup and have increased life of the lift by 30%”

**TECH TALK**

A key advancement is that modern lifts think ahead for you. The latest systems are perfect for full-scale integration into smart buildings. Advancements in technology allow you to connect directly with the elevator systems by using your smartphone. The smart elevator can control load weighing capacity and even regulate the number of trips and door



12

COURTESY: SPARTAN ENGINEERING INDUSTRIES

11. Elevator design matters because it directly impacts how your property looks as well as the functionality of your elevator. Modern elevator design trends encompass both functional and decorative elements.

12. A fire evacuation lift is designed to meet the demands of a rescue mission and complete it in record time.

13. The fire evacuation lift is built with cutting-edge technology such as the Internet of Things (IoT), so when a fire breaks out in the building, a mass notification will be sent to the building tenants, fire safety system team/security team, lift operator and the nearest fire brigade office.

cycles needed in rush hours and otherwise. Thanks to AI-powered predictive maintenance, automatic updates, remote servicing and in person or digital support at your fingertips. The future of these systems will be more energy-efficient and safe. The intelligent home and office elevators of today are becoming smarter for tomorrow with every passing day. Furthermore, previously the lifts that moved only in upwards and downwards directions are now moving horizontally as well. Smart systems have reduced



14



15

14. Ridhima Khanna, Architect, Interior Designer, Co-founder, SpaceCode Architects.

15. Rishad Khergamwala, Director - Developments, MAIA Estates

16. Lift lobby view for an upcoming residence in Gurgaon, designed by SpaceCode Team. Not only is the elevator solving accessibility challenges for old parents to reach upper floors, it also becomes an important highlight for design details and lighting. The Elevator has created interesting lobby spaces that help bind the formal and informal spaces.

17. Advancements in technology allow you to connect directly with the elevator systems by using your smartphone, thereby eliminating the need for a key card or manually pushing buttons to ensure safe and contactless travel to your required floor.



16

the waiting time and improved energy efficiency. Anand Ojha and Ankit Ojha, Principal Designers, Anand Atelier Associate say, “new age technology will ask the passenger to input their destination floor before actually stepping foot inside the elevator. Then the lift system itself can more intelligently select which elevators should pick up which passenger to lower wait and transit times. Technologies like IoT allow predictive maintenance of the lifts. It can predict the lift’s need for maintenance services before it breaks down. Remote diagnostic and troubleshooting properties of smart lifts save a lot of time and cost. Also, with VR, the technicians don’t even have to go to the site for testing the problem. Proactive repair makes the lifts extremely time efficient.”

#### ECOLOGY MATTERS

Modern lifts incorporate Green Elevator Technology such as LED lights and use water-soluble paint and recycled construction materials. This significantly reduces our carbon footprint. Novel systems also reduce the number of light-load trips. Newer elevators already incorporate green features such as LED lights, water soluble paint and recycled construction materials. Magnetic motors are being used as an alternative for the traditional rope-and-pulley systems. Machine-room-less (MRL) technology is a room-less elevator that consumes less vertical and horizontal space; without a machine room, a building’s flat roof can more easily accommodate expansive green areas with plantings and solar panels. Double deck elevators can help save energy because one cab stops on even-numbered floors, and one stops on odd-numbered floors. This is a great option for mid-rise and high-rise buildings that are capable of high-speed operation. Mustafa Johar, Co-Founder and CEO, Makemyhouse.com adds, “we have been able to create newer demands and expectations from lift systems in our ever-changing technology ecosystem. Our modern lifts and elevators must be space-saving, energy-efficient, long-lasting, low-maintenance, cost-effective, safe, and robust, as well as provide reliable access control. Furthermore, rising urbanization has



17

increased the demand for the finest business lifts and best house elevators.”

#### DESIGN DETAILS

Elevators have played a crucial role in developing the vertical scale of buildings. There is no doubt that modernism in Architecture was possible by the addition of elevators. Ridhima Khanna, Architect, Interior Designer, Co-founder, SpaceCode Architects, says, “integrating elevators in space requires spatial planning and knowledge for the right capacity and requirement. Modern-day residences have started integrating elevators for functional and aesthetic values. With the idea of customizing floors, internal finishes, and lights, elevators in residences have become an important part of design planning. Lift lobbies have also become a binding element in the design as it is a common collection point for all floors.” Rishad Khergamwala, Director - Developments, MAIA Estates adds, “we believe in a seamless integration of elevators with living spaces. Innovative features like facial recognition and other safety elements make these smart elevators the present and future of luxury homes. At our lifestyle residences, private elevators open directly into the homes of our residents, making it a part of their foyer space. With high rises towering our cities, it is imperative that elevators too adapt and improve to meet the changing needs of today’s luxury residents.” <sup>MAIA</sup>

#### WEBSITES:

- **SpaceCode Architects:** [www.spacecode.co.in](http://www.spacecode.co.in)
- **MAIA Estates:** [www.mai estates.in](http://www.mai estates.in)
- **Spartan Engineering Industries.:** [www.spartanindia.com](http://www.spartanindia.com)
- **Anand Atelier Associate:** [www.facebook.com/anandatelierassociate](http://www.facebook.com/anandatelierassociate)
- **Schindler:** [www.schindler.in/en.html](http://www.schindler.in/en.html)
- **Otis Elevator Company:** [www.otis.com/en/in/](http://www.otis.com/en/in/)
- **Make my House:** [www.makemyhouse.com](http://www.makemyhouse.com)
- **Nibav Lifts:** [www.nibavlifts.com](http://www.nibavlifts.com)
- **Elite Elevators:** [www.eliteelevators.com](http://www.eliteelevators.com)

COURTESY: MAIA ESTATES