

## AN OVERVIEW OF THE NEW ELEVATORING SYSTEMS FOR BUILDINGS



**Anandi Khandekar**  
TAK Consulting Pvt. Ltd.

### 1 INTRODUCTION

As the proverb goes, “necessity is the mother of invention”, every few years with the increased space crunch, especially in the cities, there are inventions in every field including the E&E (Elevator & Escalator) industry. This article is written to highlight the latest or the new technologies available in the E&E industry, their advantages and disadvantages.

In the past few decades many new technologies have been invented and are a boon to the rapidly growing urban infrastructure. Few of the technologies are double-deck elevators, TWIN elevators, MULTI elevator system, jump elevators, IoT (Internet of Things) and AI (Artificial Intelligence) for elevators & escalators and high speed elevators.

**These technologies are elaborated in the paragraphs below.**

### 2 DOUBLE-DECK ELEVATORS

Though the technology of Double-deck Elevator was invented way back in 1931, the reason this technology is detailed here is because till date there is not a single Double-deck installation in India. A few technical details of a Double-deck Elevator are:

- Double-deck Elevator is an elevator with two cabs attached together, one on top of the other,
- This allows the passengers on 2 consecutive floors to be able to use the elevator simultaneously,
- By virtue of the design of this Elevator, passenger capacity per hoistway increases significantly,
- For conventional Double-deck Elevators, the floor rise of each floor has to be equal

Customized option of Elevator serving unequal floor rise is available at an additional cost.



**Figure 1:** Double-deck Elevators at Midland Square, Nagoya, Japan (figure shown just to indicate the Double-deck design)