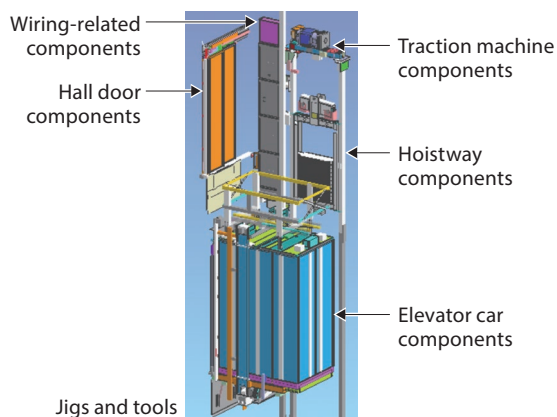


4. Building Solutions

4.1 Reduction in Standard Installation Period for SPACEL Standard-Type Elevators



Structure of standard-type SPACEL elevator

Category	Number of improvements implemented	Workload reduction (%)
Traction machine components	5	0.8
Hall door components	4	0.7
Hoistway components	24	2.2
Wiring-related components	14	1.5
Elevator car components	6	0.4
Jigs and tools	5	0.5
Total	58	6.1

Number of improvements implemented for each elevator component and resulting workload reduction

In recent years, labor shortages at construction sites have become a serious issue for the elevator industry. To address this issue, Toshiba Elevator and Building Systems Corporation has focused on reducing the installation period for SPACEL, its standard-type elevator that accounts for the majority of shipments. We conducted ethnographic observations of on-site work to identify areas requiring improvement and surveyed installation personnel to collect feedback on operational challenges associated with site activities. Based on these findings, a total of 58 improvement measures were implemented.

Furthermore, we identified processes where there were significant discrepancies in work time between experienced and junior workers and standardized efficient procedures in manuals to reduce variability in task execution. As a result, over approximately six months, we shortened the standard installation period for SPACEL elevators by about 6%, contributing to an increase in the number of annual installations. Moreover, as demand for new installations remains flat in Japan, this efficiency improvement has enabled the redeployment of on-site personnel to address anticipated growth in elevator modernization projects.

Going forward, under our mission of “Creating smiles beyond safety and security,” we will continue to develop and introduce products that further reduce installation time and enhance customer satisfaction.

4. Building Solutions

4.2 Installation of FLOORNAVI Eliminating Need for Destination Buttons Inside Elevators at Akasaka Trust Tower



Akasaka Trust Tower mixed-use skyscraper



Elevator cabin

In response to a customer request to enhance building value and tenant appeal, Toshiba Elevator and Building Systems Corporation has delivered FLOORNAVI, an elevator destination floor registration system, to Akasaka Trust Tower(*). FLOORNAVI allows passengers to register their destination floors before boarding the elevator, eliminating the need to press destination buttons inside the elevator and thereby improving convenience.

FLOORNAVI is designed for buildings with multiple tenant floors and incorporates a device that switches between automatic and manual registration modes based on signals from security gates that recognize floor information pre-recorded on cards. Furthermore, FLOORNAVI features a screen layout and button arrangement harmonized with the building's architectural design, and employs a touch panel interface to improve visibility and operability. Since passengers are directed to board the assigned elevator upon registering their destination floor, operational scenarios were developed in consideration of pedestrian traffic flow within the building to define specifications that ensure smooth and efficient operation.

(*) The Akasaka Trust Tower is a high-rise building located in Minato City, developed by Mori Trust Co., Ltd. and NTT Urban Development Corporation.