

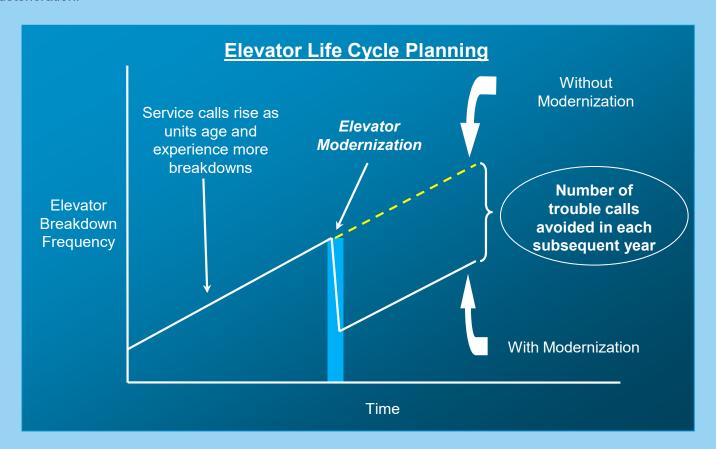
Elevator Modernizations

Life Cycle Planning

Building owners and management teams recognize the importance of reliable and efficient elevator systems in their building infrastructure.

However, despite regular service and component repairs, the overall operational integrity of elevator systems will deteriorate, due to operating environments, duty cycle, parts obsolescence, and electrical component deterioration. A modernization is one way to address this problem, even as the average age of residential tenants increases and as commercial tenant expectations rise.

Tenants will see a dramatic improvement in elevator operations. As illustrated in the chart, trouble calls decrease and elevator reliability increases.



Delta's modernization packages:

- · Extend your elevator's life cycle
- Improve your elevator's reliability
- Enhance your elevator's aesthetics





Upgrades

From simple cab upgrades to complete control system and total elevator modernizations, Delta has the solution you are looking for.

Door Operator: Door operators are prone to continuous wear and to abuse. When replacement parts are no longer available, an upgrade is required. This can include replacement of the entire door operator or of the door re-opening components only.

Cab: Cosmetic and/or functional cab modernizations to the elevator interior can include new or relocated elevator fixtures, resurfaced or replaced cab panels, replaced ceiling and lighting, and installation of emergency handsfree telephones.

Safety: Dramatic advances in personal safety-related devices and circuitry mean that rider safety has never been as sure. Upgrading safety devices such as CCTV, light detectors, and mirrors can translate into lower liability risk and insurance costs for building owners.

Accessibility: The Accessibility for Ontarians with Disabilities Act now provides legislated standards for accessibility lifts and elevators. In many cases, existing units may need to be re-designed to meet these important guidelines in order to provide full and equal building access.

Machine Replacement

A traction elevator machine may sustain sufficient degradation and obsolescence over the years that it will need to be modernized. A complete machine replacement or a partial modernization (such as converting from a DC voltage drive to a variable frequency drive) is possible when changing an existing controller.

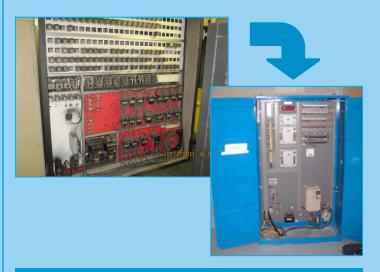






Controller Replacement

Controller components become obsolete even though elevators have a long service life. When this occurs, the solution is to replace the old controller with a state-of-the-art control system. Since Delta manufactures its own CSA-approved controller, we have the expertise and knowledge to replace virtually any control system with the right controller – from handicapped lifts to high-speed passenger elevators to freight elevators for industrial applications.



Cylinder Replacement

Newer in-ground hydraulic elevator cylinders are now protected from corrosion by encasing the cylinder in PVC. However, existing older installations without this effective corrosion protection could pose a serious safety or environmental issue for hydraulic elevators with an in-ground cylinder. The TSSA has issued Information Bulletin 243/10 which indicates that these unprotected cylinders will need to be addressed.

Hydraulic Pumping Units

Hydraulic elevator valves and pumping units may need to be partially or fully replaced. Frequent re-levelling, over heating, and erratic stopping at floor levels may indicate that this type of modernization is required. Options available for this type of modernization include:

- Replacement of the entire pumping unit (tank, motor, pump, and valve).
- · Replacement of the control valve.
- Replacement of the pump and motor.