



Lifts - Overview

- ▶ 14 Lifts
 - ▶ 4 in Block A
 - ▶ 4 in Block B
 - ▶ One in each of the 6 “C-Blocks”.
- ▶ Average life of 20-25 years
- ▶ Lifts now 11 years old.
- ▶ We need to plan now for the requirement to refurbish or replace the lifts in future years.



Lifts – Engineer's Opinion

*"The lifts are approximately 10 years old. They are a first generation geared machine room less lift. **The lifts unfortunately are at the very lowest range made by the manufacturer** – Schindler Lifts. This lift has been replaced completely by a later model using entirely different gearless machine, controls, belt/roping and outsourced door system.*

It is my professional opinion that the door drive system is of particularly poor quality and the control system is the poorest of any the large multinational lift manufacturers. It is no surprise to me that Schindler has moved to newer equipment.

On the positive side most of the units in Rathborne are low rise and all lifts have relatively low usage. The geared machine and landing door equipment should be capable of a 30 year life span. But the controls and door operators should be renewed, particularly on the heaviest used blocks, at a maximum of 20-23 years or sooner if reliability levels show a perceptible deterioration over the next number of years."



Questions to Lift Engineer

Questions

1. Does a replacement typically occur because a refurbishment is not an option?
2. We would need to estimate what proportion of lifts would need to be replaced rather than refurbished.
3. If we have the option of choosing between refurbishment and replace, what factors should we consider?

Answers:

1. Replacement typically occurs when it makes more practical or economic sense to carry out complete replacement rather than a refurbishment of a lift installation.
2. All lifts are ageing in tandem; but obviously the heavier traffic units wear out sooner
3. You need to consider costs; either pay a large amount for new lifts Replacement or spend half that amount for Phase 1 of a Modernisation, Replacing the Controls and the Door drive system and upgrading Lift car interior and other smaller works. 10 years later Renew the Main Hoist machine and landing doors as part of phase 2 of the Modernisation.

Refurbish Cost vs Replacement Cost

Refurbishment Cost

- ▶ Phase 1 Modernisation
 - ▶ Replacing the Controls and the Door drive system and upgrading Lift car interior and other smaller works
 - ▶ Ex VAT Cost €310,000 (€351,850 incl VAT @ 13.5%)
- ▶ Phase 2 Modernisation
 - ▶ 10 years later Renew the Main Hoist machine and landing doors
 - ▶ Ex VAT Cost € 250,000 (€283,750 incl VAT @ 13,5%)
- ▶ Total Cost inclusive of VAT @ 13.5% = €635,600 (€45,400 per lift)

Replacement Cost

- ▶ Total Cost inclusive of VAT @ 13.5% = €715,050 (€51,075 per lift)



How to Budget for Lift Expenditure?

- ▶ Opt for refurbishment when possible – saving of €5,675 per lift (€79,450 in total)
- ▶ Refurbishment in two phases
 - ▶ Phase 1 costing €351,850
 - ▶ Phase 2 costing €283,750
- ▶ Refurbish over two 3-year periods
 - ▶ Phase 1, €351,850 split as follows:
 - ▶ 6 lifts in Year 2024 - €150,793
 - ▶ 4 lifts in Year 2025 - €100,529
 - ▶ 4 lifts in Year 2026 - €100,529

How to Budget for Lift Expenditure?

- ▶ Refurbish over two 3-year periods
 - ▶ Phase 2, €283,750 split as follows:
 - ▶ 6 lifts in Year 2034 - €121,607
 - ▶ 4 lifts in Year 2035 - €81,071
 - ▶ 4 lifts in Year 2036 - €81,071
- ▶ 20 year time horizon to budget for €635,600 implies an annual provision requirement of €31,780 from 2016 to 2036
- ▶ Risks of this approach
 - ▶ Some lifts may require replacement at an additional cost of €5,675 per lift
 - ▶ VAT rate of 13.5% may increase
 - ▶ Inflation over 20 years will increase final costs
 - ▶ Assumption budgeted sinking fund will be collected each year