LP 240 – Life Cycle Costing (LCC)

Recommended for

Maintenance and production managers, procurement officers, engineering supervisors and managers, reliability & maintenance engineers.

Course objective

Life Cycle Costing can be used to inform decisions about acquiring, construction, operating, maintaining, modifying, and disposing of assets. Life Cycle Costing is a method for determining total cost of ownership of an asset. It is a structured approach that addresses all of the elements of this cost and used to produce a cash flow profile of the asset over its anticipated lifespan. It can also be used to model different scenarios such as rejuvenation versus replacement or adding new equipment to increase capacity versus modifying existing equipment to give the same increased capacity. Participants will become familiar in utilizing the results of a LCC analysis to assist in their decision-making process where there is a choice of options.

Course description

The through life costs of any purchase represent only a small part of the total cost of ownership. Decisions made during design without cognisance to Life Cycle Costing will inevitably lead to the commitment of higher operating and maintenance costs during the operational phase of the equipment.

The bulk of these costs, once committed, can never be recouped, although optimising operations and maintenance activities may achieve some savings. As the design and construction phases tend to be much shorter than the operations phase (5 years vs. 20, 30 or 40 years), moderate savings made during the design phase can have real impact on future cash flow.

Topics covered include:

- What is Life Cycle Costing (LCC), its principles, analysis and benefits
- Fundamental cost types
- Life cycle costing methodology (basis for LCC analysis, cost breakdown structure, cost estimating)
- Discounting and its effect (discounted cash flow, time value of money, net present value
- Internal Rate of Return
- Capital & operational expenditure

Course duration

2 days