

PERDEC FACTSHEET

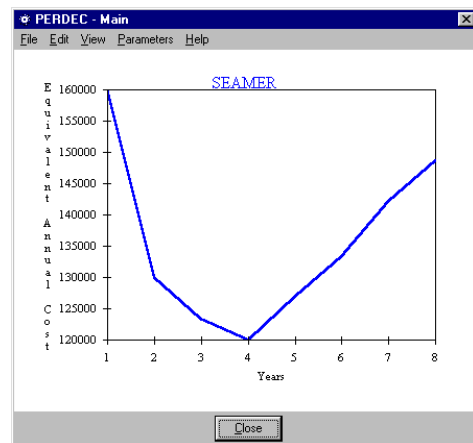
Optimizing Economic Life Decisions for Machinery and Fixed Equipment: Use of PERDEC

The PERDEC software is designed to assist managers of machinery and equipment establish the economic life of their assets, as well as assist in determining the optimal decision for difficult repair versus replace situations, along with monitoring individual equipment to establish its optimal replacement time.

The longer an asset is kept in service, the lower its ownership cost. However, there is a conflicting cost trend – that of an increasing operations and maintenance cost. The goal of PERDEC is to establish unambiguously the year at which the total cost takes its lowest value. That then is identified as the asset's economic replacement age.

Input

1. Purchase price of the asset
2. Trend in operations and maintenance costs – possibly parts, labour and costs associated with equipment being out of service due to failure
3. Trend in trade-in or disposal value of the asset at different replacement ages
4. Interest rate appropriate for discounting to take into account the time-value of money
5. Tax rules (if applicable)
6. Utilization trend of the assets – for example are they steadily used year-to-year, or is new equipment highly utilized with older equipment being used to meet peak demands?
7. Inflation rates (if applicable)



Output

The PERDEC software will enable you to establish the optimal time to dispose of an asset such that the Equivalent Annual Cost (EAC) is minimized. It will enable you to display the results graphically and undertake a variety of “what-if” analyses, such as changes in assumptions about interest rates, resale value trends, O & M cost trends and so on.

If you have no data and have just purchased a new piece of equipment, PERDEC will enable

Description: SEAMER
Number of Years: 8 Acquisition Cost: 250,000 Best Year: 4

Age of Machine(s)	O&M Cost	Resale Value	Resale Rate(%)	EAC
1 Year Old	60,000	150,000	60	160,000
2 Years Old	80,000	130,000	52	130,000
3 Years Old	100,000	120,000	48	123,333
4 Years Old	90,000	100,000	40	120,000
5 Years Old	130,000	75,000	30	127,000
6 Years Old	150,000	60,000	24	133,333
7 Years Old	175,000	40,000	16	142,143
8 Years Old	190,000	35,000	14	148,750

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you to monitor the EAC as each year passes to enable you to identify when its optimal replacement age is likely to occur.

If you are faced with a major repair, and need to decide whether or not to proceed with the repair, or advance the planned replacement time, PERDEC can be used to establish the most economically advantageous choice such that the long-run EAC is minimized.

Your Supplier

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