

3.10 Combining Maintenance Approaches

A typical system uses a combination of maintenance approaches. The approach used for a particular piece of equipment is determined by the following factors:

- a) Criticality of equipment/process
- b) Safety and environmental issues
- c) Cost/Profit

Systems in general over-depend on preventive maintenance and under-utilize predictive / proactive maintenance resulting in higher reactive maintenance cost.

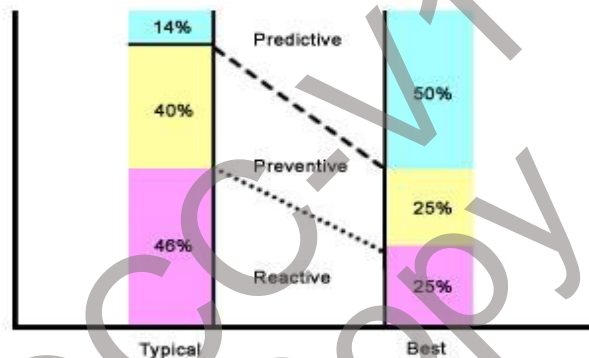


Figure 3-5: Comparison of the Philosophy for Maintenance

Best-practices systems improve productivity and reduce costs by emphasizing a predictive maintenance strategy.

3.11 Routine (Scheduled) Maintenance

3.11.1 Routine (Scheduled) Maintenance Philosophy

A routine (scheduled) program shall be implemented over a period of time to improve the utilization of the assets, reduce down time due to failure and therefore corrective maintenance costs. The approach to maintenance of assets should be based on the following philosophy:

- a) Retain the functionality of the assets in accordance with the performance requirements of the DMAT,
- b) Minimize the impact on public health,
- c) Customer and environmental consequences of asset failure are avoided or minimized,
- d) Maintenance programs take account of all aspects of business effectiveness, risk, safety, environmental integrity, energy efficiency, product quality asset life expectancy and customer service,
- e) Maintenance strategies are based on a proper understanding of the life performance of the assets in their operating context, and maintenance tasks reflect both technical feasibility and cost effectiveness,
- f) Condition based maintenance tasks will be preferred and will be based on the 'lead time to failure', not availability or reliability,
- g) Ensure that protective devices are effectively maintained, thus limiting the probability of multiple failures at acceptable levels,
- h) Ensure an appropriate balance between maintenance and capital solutions, i.e. cost effectiveness, asset capability vs. current and future required demand,