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lanned Preventative Maintenance

There are a variety of different maintenance strategies including Reactive, Corrective, Predictive, Condition-Based, Reliability-Centered and Business-Focused but one of the most common is Planned Preventative Maintenance, more commonly referred to as PPM.

Planned Maintenance is the term used for a regime where servicing activities are carried out to a pre-ordained programme, whether they are required or not. For example, filters may be routinely changed every six months regardless of how dirty they are. This kind of approach is common in the first year of a new building when occupiers are concerned about warranties and so on and the best approach is to “maintain in accordance with manufacturer’s instructions” which are often written in that time-bound manner.

Planned Preventative Maintenance takes this a step further by developing an activity plan which anticipates standard failure patterns on the assets in question and then implementing that plan regardless of asset condition or criticality. This is a low risk strategy that capitalises on the technical knowledge and experience of whoever creates the plan. If experience shows that the performance of a particular piece of equipment generally begins to deteriorate after four months of operation then it makes sense to carry out servicing after three. The objective is to avoid asset failure by pre-emptive action.

For a facility manager with limited technical knowledge the PPM plan becomes a useful performance management metric. The contractor or maintenance team just needs to report if all PPM tasks have been carried out according to plan or not. The most important thing is knowing whether the plan itself is correct. Some facility managers prefer to use trusted consultants to prepare the schedules and then include them in their tenders. Others ask their contractors to prepare schedules but then get them validated by a subject matter expert.

If the plan is too cautious the FM may find themselves paying for maintenance activities that are not actually required; If the plan is inadequate then the cost will be lower but there will be a higher risk of equipment failure. The more sophisticated maintenance strategies have evolved over time to address this particular conundrum.

An experienced FM may also wish to build in an occasional third-party audit to verify that the PPM activities are actually being carried out and that the maintenance provider is performing the tasks competently. Some facility managers build an audit regime into the contract requiring the supplier to pay for such audits but as the service provider will just include this cost in their overheads there is no real gain here other than convenience of administration.

Good PPM regimes should reduce the requirement for Reactive maintenance caused by asset malfunction or failure. Monitoring the ration of maintenance work between Planned and Reactive can be useful metric indicating the effectiveness of the PPM plan

A full description of different types of maintenance strategies is given in the “CIBSE Guide to Maintenance Engineering and Management” published by the Chartered Institute of Building Services Engineers. ISBN-10: 1903287936