



PM Evaluation Checklist

INTELLIGENT ASSET MANAGEMENT SYSTEMS

Preventive Maintenance Effectiveness: A task that consistently identifies the symptoms of a specific failure mode in sufficient time to plan and schedule the corrective action before the effects of failure impact asset or system performance.

PME

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| <p><input type="checkbox"/> Component Specific
The task clearly identifies the component or part needing to be maintained (i.e., Pump Shaft).</p> <p><input type="checkbox"/> Cause Specific
The task defines the condition needing to be inspected or tested to determine if the component or part is healthy or in a failed state (i.e., Misalignment).</p> <p><input type="checkbox"/> Action Oriented
The task describes the type of inspection or test in enough detail to eliminate ambiguity and ensure repeatability.</p> <p><input type="checkbox"/> Decisive
The task provides specific criteria to accurately determine the corrective action.</p> <p><input type="checkbox"/> Data Oriented
The task describes the data collection method and provides a format for recording data to ensure data integrity for trend analysis.</p> | <p><input type="checkbox"/> Proper Frequency
Mean Time Between Failure or Failure Rate Standard Deviation is the basis for determining task frequency.</p> <p><input type="checkbox"/> PM to CM Ratio
One (1) corrective maintenance action has been identified for every six (6) times the preventive maintenance task is completed.</p> <p><input type="checkbox"/> Corrective Action Compliance
Corrective maintenance is completed in 20 days or less.</p> <p><input type="checkbox"/> Repeatability
The average actual task duration is within $\pm 15\%$ of the estimated task duration.</p> <p><input type="checkbox"/> Reproducibility
Data trends indicate that the rate or frequency of component failure is not increasing.</p> |
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PROGRAM MATURITY	LEVEL 1 Reactive	LEVEL 2 Run-to-Failure	LEVEL 3 Good	LEVEL 4 Better	LEVEL 5 Best
STRATEGY	Troubleshooting	Time-based Replacement	Time-based Preventive Action	Condition-based Maintenance	Defect and Root Cause Elimination
CLEANING	Equipment not cleaned with any regularity	Informal, unwritten cleaning standards	Written cleanliness standards and routines	Periodic audits of standards and routines (e.g., 5S)	Operations takes responsibility for cleanliness
LUBRICATION	No standard of practice - skill of individual	Time-based intervals without measurement	Route-based and performed by trained Technicians	Triggered by Ultrasound Testing	Certified Lubrication Management System
INSPECTIONS	No standard of practice - skill of individual	Predominantly "Check Lists"	Quantitative inspection routines	Greater than 25% Predictive Maintenance (PdM)	Failure codes are recorded during work order closeout