

PREDICTIVE MAINTENANCE

COST TYPES and BENEFITS

PdM program costs may be at startup, or be ongoing. Consult the list in Table A to ensure the team will be ready to properly calculate costs/benefits or return on investment (ROI).

TABLE A: Cost Types						
	Category	Cost Areas	Included in Program?		Cost Estimates	Actual Costs
	Tools & Equipment	Computerized Maintenance Management System (CMMS)	yes	no		
		Sensors (permanent, portable, remote)	yes	no		
		Implementation, setup, calibration	yes	no		
		PdM Technologies	yes	no		
		Accessories	yes	no		
		Labor costs for operation	yes	no		
		Data collection instrument(s)	yes	no		
			yes	no		
			yes	no		
			yes	no		
	PdM Program	Development of PdM Charter	yes	no		
		Program communications	yes	no		
		Ongoing status meetings	yes	no		
		Metrics reporting/review	yes	no		
		FMEA for identified assets	yes	no		
		EMP for identified assets	yes	no		
			yes	no		
			yes	no		
			yes	no		

	Education & Training (delivery and participation)	PdM Program awareness	yes	no		
		Operation of new tools & equipment	yes	no		
		Change Management	yes	no		
			yes	no		
			yes	no		
			yes	no		
	Data Collection & Analysis	Baseline asset performance data collection	yes	no		
		Labor cost for data collection	yes	no		
		Labor cost for data analysis and reporting	yes	no		
		CMMS data management and reporting	yes	no		
			yes	no		
			yes	no		
			yes	no		
	Lost Opportunities and Costs of Transition	Reduced production and/or quality	yes	no		
		Potential for increased short-term maintenance	yes	no		
		Acquisition/preparation of updated procedures, processes and other materials	yes	no		
			yes	no		
			yes	no		
			yes	no		
Notes:						

Sometimes PdM program benefits can be slightly more complex to calculate. Consult the list in Table B to ensure the team is evaluating the program from many perspectives.

TABLE B: Benefits						
	Category	Cost Areas	Included in Program?		Savings Estimates	Actual Savings
	Labor	Reduced overtime for urgent/emergency work	yes	no		
		Increased worker safety from fewer emergency activities	yes	no		
		Elevated worker skills	yes	no		
		Increased employee engagement due to improved practices	yes	no		
			yes	no		
			yes	no		
			yes	no		
	Operations & Maintenance	Reduced cost of catastrophic failures	yes	no		
		Increased energy savings (air leaks, steam traps, heat exchanger efficiency)	yes	no		
		Reduced contract maintenance	yes	no		
		Decreased parts costs	yes	no		
		Decreased parts inventory	yes	no		
		Increased asset reliability	yes	no		
		Extended asset life	yes	no		
		Increased operational efficiencies	yes	no		
		Reduced overall maintenance expenses for reactive or urgent work	yes	no		
		Proactive work planning resulting from informed, metrics-driven decision making	yes	no		
			yes	no		
			yes	no		
			yes	no		

TABLE B: Benefits (continued)						
	Category	Cost Areas	Included in Program?		Savings Estimates	Actual Savings
	Production	Increased production	yes	no		
		Reduced unscheduled downtime	yes	no		
			yes	no		
			yes	no		
			yes	no		
	Other	Vendor/supplier efficiencies	yes	no		
		Improved inter-departmental relationships	yes	no		
		Culture of continuous improvement	yes	no		
			yes	no		
			yes	no		
			yes	no		
Notes:						