

Quick Comparison of Maintenance Types



Maintenance Type	Key Features	Best For	+	-	Adoption in MNCs SMEs	
Corrective	Reactive, post-failure approach	Non-critical equipment, when downtime is tolerable	Low initial cost, simple to implement	Higher costs and downtime		
Preventive	Time-based, scheduled; easy, intuitive	Predictable wear or legal/safety tasks; simple inspections.	Reduces unplanned downtime, prolongs equipment life	Risk of over-maintenance		
Predetermined	Life-limit / usage-based replacements predetm. intervals.	Parts w. proven life; assets with planned stops available.	Easy to plan; high confidence when life is known.	Can misalign with actual condition; risk premature x/c		
Condition-Based	Measured indicators for action	Critical equipment with major financial impact	Reduces unnecessary interventions, focused on actual needs	Needs instruments/ regular inspections + ensured response.		
Predictive	Data-driven, predictive analytics / AI	High-value equipment with sensors	Optimizes timing, reduces unnecessary maintenance	Expensive initial setup		
Autonomous	Operator-led CIL activities	Daily CIL lines, reduce small stops, lean/TPM friendly	Empowers operators, improves daily upkeep	Requires operator training		
Prescriptive	AI-driven solutions to prescribe specific actions	High-end equipment with advanced analytics	Directs exact actions, boosts efficiency and accuracy	Requires significant data and AI integration		
Reliability-Centered	Optimizes reliability based on failure modes	Complex systems with multiple failure modes	Maximizes equipment reliability, prioritizes resources	Complex analysis, costly implementation		
Risk-Based	Prioritizes resources based on risk to operations	Equipment with high operational or safety risks	Focuses on high-priority areas, improves safety	Requires in-depth risk assessments		
Remote	Performed remotely via connected systems	Equipment in remote or hazardous locations	Reduces travel and downtime, improves safety	Diagnosis must be viewed remotely; hands-on is local.		