

SKILLS OF A PROACTIVE MAINTENANCE TECHNICIAN

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SKILLS OF A PROACTIVE MAINTENANCE TECHNICIAN

BY PARTNERSHIP WITH, CMRT
THE MAINTENANCE COMMUNITY BY UPKEEP



“A maintenance technician seeks no reward or praise; they take pride in knowing the equipment/assets are running to specifications.”

TECHNICIAN'S MAINTENANCE KNOWLEDGE REQUIREMENTS

What skills should a proactive maintenance technician possess?

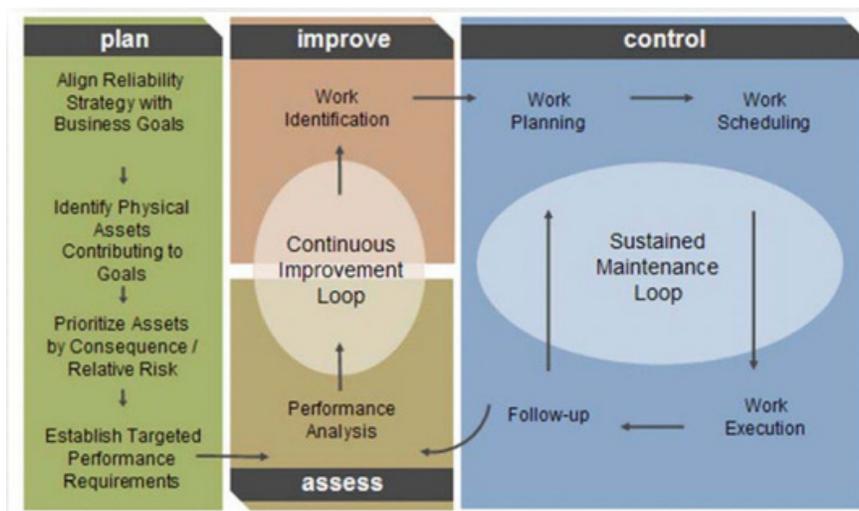
- Maintenance Best Practices
 - Proactive Maintenance Principles
 - Preventive Maintenance
 - Predictive Maintenance
 - Maintenance Planning and Scheduling

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- Maintenance Execution
 - Proactive
 - Reactive
 - Maintenance Rework
 - Repeatable Procedures
 - Maintenance Materials Management
 - Leading and Lagging Maintenance Metrics
 - Root Cause Analysis Techniques and
 - Triggers Safety / Environmental Compliance
 - Mechanical / Electrical Technical Knowledge
 - Discipline in Work Execution to Specifications
- Maintainability and Restoration Practices
 - Maintenance Process Maps are used to align everyone and to ensure processes are repeatable and provide the same results every time and if not, the process can be changed.



- Best Repair/Restoration Practices are followed based on "Known Best Demonstrated Practices"
- Use of Maintenance Balanced Dashboards to measure effectiveness and efficiency of Maintenance Processes



“A balanced scorecard is a strategy performance management tool - a semi-standard structured report that can be used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions.

(Source: *HP Reliability*)

Maintenance Technician KPI Dashboard



PM & PdM Compliance = PM & PdM work orders completed by due date ÷ PM & PdM work orders due

PM / PdM Yield = Corrective Work Identified from Preventive and Predictive Maintenance Work Orders (hours) ÷ PM & PdM (hours)

Schedule Compliance (%) = [Scheduled Work Performed (hrs) ÷ Total Time Available to Schedule (hrs)] × 100

Rework (%) = [Corrective Work Identified as Rework (hours) ÷ Total Maintenance Labor Hours] × 100

Stock Outs (%) = (Number of Inventory Requests with Stock Out ÷ Total Number of Inventory Requests) × 100

Emergency Labor Hours (%) = (Total number of EM Labor Hours ÷ Total number of Labor Hours Available

Technicians are motivated by knowing their "score in the game".

Roles and Responsibilities must be defined for all Maintenance Technician's role in Proactive Maintenance. How do you know you need to define Roles and Responsibilities?

You see people deviating from acceptable practices

Everyone blames everyone

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- Reactive Maintenance is apparent
- When you hear these phrases:
 - That is not my job
 - Everyone is accountable
 - I thought we agreed this equipment would be down today
 - Why is our wrench-time so low?
 - Everyone seems to be "dodging the bullet"



Create a Maintenance RACI Chart that clearly defines: Who is Accountable? Who is Responsible? Who is Consulted? And who is Informed? For specific maintenance tasks.

Maintenance Technician "Roles and Responsibilities"						
Task	Maint Tech	Maint Supervisor	Plant Manager	Stores Manager	Maint Planner	Reliability Engineer
Weekly Tech Training (30 minutes)	R	A	I	C	R	C
PM Execution	R	A	I			C
Scheduled Work Execution	R	A	I	C		
WO Close Out	R				A	
Maintenance Task Qualification	R	A			C	C
CMRT Certification	R		A			C
FRACAS Evaluation	R	R	A	C	R	R

<p>Responsibility</p> <p>Accountable</p> <p>Consulted</p> <p>Informed</p>	<p>"the Doer"</p> <p>"the Buck stops here"</p> <p>"in the Loop"</p> <p>"kept in the picture"</p>
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ELECTRICAL/MECHANICALTECHNICALKNOWLEDGE REQUIREMENTS

- Fundamental Requirements of Effective
- Preventive / Predictive Maintenance
- Safety First, Safety Always
- Failure Mitigation Strategies for:
 - Chain Drives
 - Compressors Control Valves
 - Conveyors
 - Couplings
 - Fans and Blowers
 - Gears and Gearboxes Hydraulics
 - Lubrication
 - Machinery Installation
 - Mixers and Agitators
 - Packing and Seals
 - Motors and Drives
 - Power Supplies
 - Fasteners
 - ...and so much more
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Join me for a three-day workshop on
“Best Maintenance Technician Practices”.
For more information, send your request to
rsmith@worldclassmaintenance.org.

Join me for “Maintenance Technician Best Practices” Workshop “February 22-24, 2022”



- Live at Southern Wesleyan University (4 miles from Clemson, SC and 30 Minutes from GSP Airport)
- and Virtual via Zoom

The objective of the course is to align Maintenance Technicians with Maintenance and Reliability Leadership in “Known Best Maintenance and Repair Practices”. This alignment will bring down barriers most organizations face when trying to optimize asset reliability.

- To enhance communication between maintenance, reliability, production, and plant leadership and maintenance technicians.
- To provide the vision of proactive and maintenance to all maintenance technicians.
- To increase knowledge and skills for maintenance technicians through education and knowledge sharing.
- To define roles and responsibilities between technicians and managers.
- To reduce turnover of maintenance technicians because of lack of understanding between management and hourly technicians.
- ...and so much more

For information send request to rsmith@worldclassmaintenance.org

If you are interested in hosting this public workshop or onsite send me email at rsmith@worldclassmaintenance.org

#1 Software for Maintenance & Reliability Teams

UpKeep is a service-first company that builds software designed to make maintenance easier for technicians and managers everywhere. Reduce downtime up to 18% by switching over to a preventative maintenance solution!

www.upkeep.com

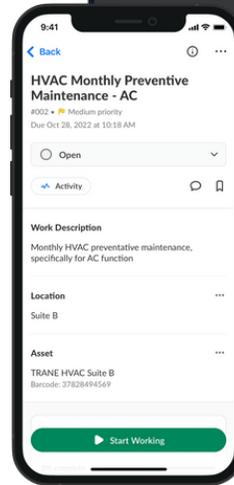
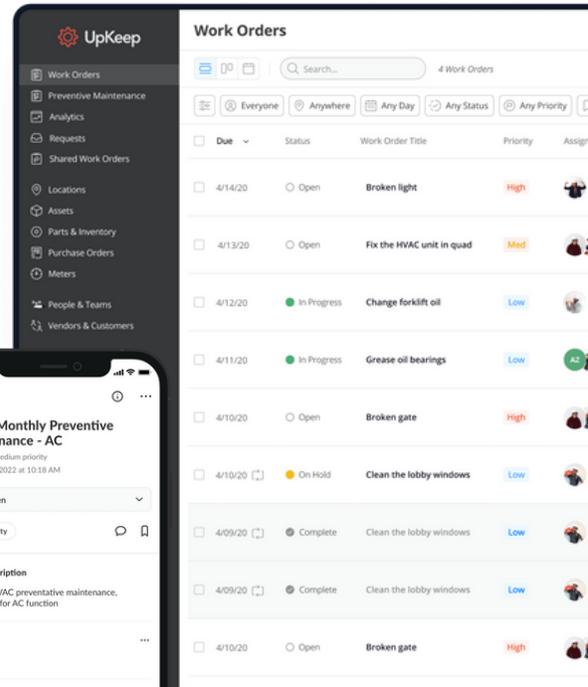
Our Products



Mobile-first maintenance management and collaboration across all location, assets, and teams

With nearly 340 different machines in our work environment, it's an impossible task to manually assign and track PM's. **With UpKeep we can schedule regular maintenance without overlapping tasks with other critical jobs."**

★★★★★ Paul D, Health and Safety Coordinator



An end-to-end solution for remote condition-based monitoring

Connected and secure IoT sensors for real-time remote condition asset monitoring



Integrated & Centralized Data Ecosystem for World Class Asset Operations

The only purpose built Asset Data Platform. Asset Focused ELT Solution for advanced analytics and integrated, real-time asset data.

The Maintenance Community Coalition was founded on the belief that working together will benefit everyone within our community

Committed to helping each other thrive in our individual professional journeys by sharing resources and expertise, granting scholarships, hosting events, and unlocking knowledge – always at no cost.

