



41st Annual Mine Safety Week Celebration - 2023

Technical Article-16 MAINTENANCE FUNCTIONS

WHAT IS MAINTENANCE?

- It guarantees all production-related machinery & equipment.
- It makes provisions for consumables & replacement parts for maintenance.
- In the industrial sector like function tests, maintaining, repairing, or replacing relevant devices, equipment & machinery processed.



Ranajit Ku. Mahakud DY.MANAGER (Mechanical) KASIA IRON MINES, M/s JSPL

OBJECTIVES OF MAINTENANCE:

- A. Reducing breakdowns & emergency shutdown.
- B. Optimising resource utilization
- C. Reducing down time
- D. Improving spare stock control
- E. Improving equipment efficiency
- F. Reducing scrap rate
- G. Optimising the useful life of the equipment.
- H. Providing reliable cost & budgetary control

TYPES OF MAINTENANCE:

- Breakdown Maintenance
- Preventive Maintenance
- Autonomous maintenance

BREAKDOWN MAINTENANCE:

- Done after the machine breakdown.
- Operator informs to his team leader/Supervisor to raise a complaint to the maintenance team
- The team rushes to the machine & fixes the issue.

SI.No.	Advantages	Disadvantages
1	Start-up cost low	Unpredictability
2	Lower maintenance expenses	Equipment not maximized
3	Higher potential margins	Indirect costs

PREVENTIVE MAINTENANCE:

- Done by maintenance team at regular intervals to keep the machine in working condition.
- Maintenance team would do scheduled based maintenance.
- Calendar should be created covering all major machine in the unit & person responsible for the same.

Advantages

- 1. The approach allows for scheduling modification to accommodate other works.
- 2. Energy Savings as a result of improving the efficiency of the equipment.
- 3. Reduced equipment or process failure
- 4. Overall saving

Disadvantages

- 1. When performing needless maintenance, there is potential harm.
- 2. Maintenance performed according to a schedule is not needed.
- 3. Savings are difficult to see without a base line.















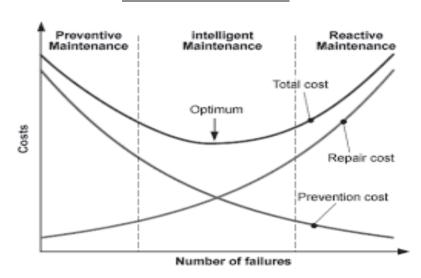


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AUTONOMOUS MAINTENANCE:

- ❖ It is part of preventive maintenance . Done by the operator by themself on daily basis.
- CLITA-Cleaning, Lubrication, Inspection, Tightening, Adjustment
- Minor spare change can come under AM (Autonomous Maintenance)

MAINTENANCE COST





41
Keep your eyes on Safety

















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