Pump Preventive Maintenance

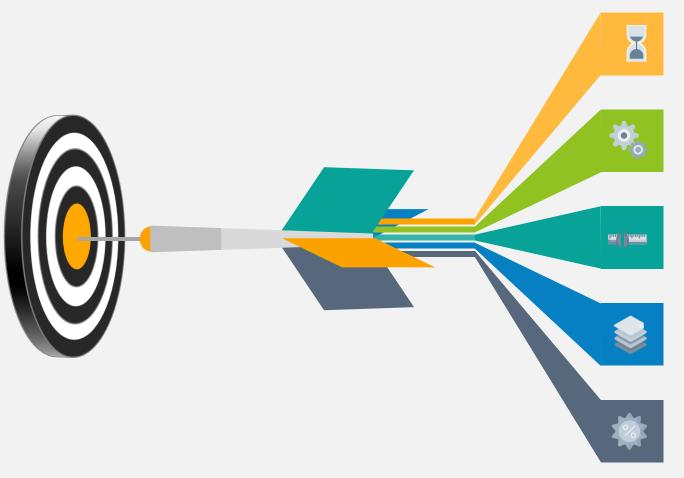






Pump Preventive Maintenance

Essential Elements of Pump Preventive Maintenance: A Comprehensive Approach



Regular Inspections

Regular inspection of pump components, including seals, bearings, and impellers, to identify wear or damage.

Lubrication

Lubrication of bearings and other moving parts to reduce friction and prevent overheating.

Alignment Checks

Alignment checks to ensure the pump is properly aligned with the motor.

Cleanliness and Filtration

Cleaning of pump intake screens and filters to remove debris and maintain proper flow.

Performance Testing

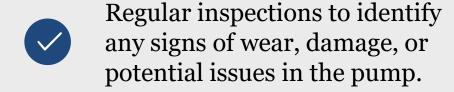
Pump performance testing to evaluate its efficiency and identify any deviations from the desired performance metrics.



Regular Inspections

Crucial for identifying potential issues early on and preventing major failures.





Components that should be inspected, such as seals, bearings, impellers, and motor connections.

Early detection prevent major failures and optimize pump performance.



Lubrication

Proper lubrication ensures smooth pump operation and reduces component wear.



Types of lubricants and recommended schedule.

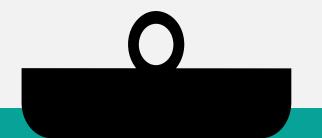
Lubrication points: bearings, shafts, seals.

Correct lubrication techniques and appropriate amount of lubricant.



Alignment Checks

Regular alignment checks prevent stress and premature failure.



Vibration analysis techniques to detect misalignment, unbalanced impellers, and other problems

Alignment methods: laser alignment, dial indicators

Step-by-step alignment checks and properly documenting vibration readings.





Cleanliness and Filtration

Clean fluid and effective filtration systems are essential for pump performance



- Filters help prevent solid particles or debris from entering the pump.
- Monitor differential pressure Cleaning intake screens, filters, and pump parts.
- Best practices for filter cleaning and replacement Establish a cleaning schedule.



Performance Testing

Evaluating pump performance through testing ensures optimal efficiency, identifies deviations, and enables proactive maintenance.



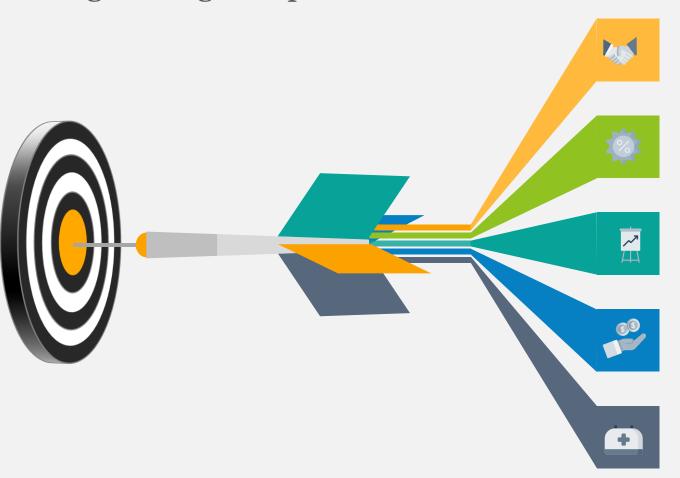
- Parameters to measure: flow rates, pressures, power consumption, pump speed.
- Benefits of performance testing: identifying deviations, troubleshooting, optimization.

Record-keeping and documentation.



Pump Preventive Maintenance

Safeguarding Pump Performance: The Power of Preventive Maintenance



Enhanced Reliability

Minimize unexpected breakdowns, reduce downtime, and ensure the reliable operation of your equipment.

Improved Efficiency

Pumps operate at peak efficiency levels leads to cost savings and improved overall process efficiency.

Extended Lifespan

Prolong the operational life of pumps, maximizing investment and avoiding premature replacements.

Cost Savings

By detecting and resolving issues early on, can avoid costly major repairs or replacements.

Safety and Compliance

Ensures that pumps are in proper working condition, reducing the risk of accidents or safety hazards.



GE Panametrics PT878:

- Clamp-on ultrasonic flow meter
- Measure a wide range of clean and dirty liquids
- Flow Range: -12.2 to 12.2 m/s (-40 to 40 ft/s)
- Pipe sizes: 2" to 300" (5 cm to 7.5 m) diameter
- High Accuracy:

Pipe ID>6 in (150 mm) - \pm 1% to 2% of reading Pipe ID<6 in (150 mm) - \pm 2% to 5% of reading



Ultrasonic Flow Meter



Prüftechnik SHAFTALIGN Touch:

- Single-laser technology
- Active Situational Intelligence (ASI)
- Work faster without sacrificing precision
- Real-Time Measurement Quality Enhancement
- Up to 8 measurement points for more precise alignment of vertical machines
- High precision



Laser Alignment Systems



Lutron DT-2236:

- Combined Photo Tachometer RPM) and Contact Tachometer (RPM, m/min., ft/min.)
- Wide measuring range: 0.5 to 100,000 RPM
- High accurate measurement & fast sampling time with MICRO-COMPUTER LSI circuit & crystal time base
- Accuracy: ± (0.05% + 1 digit)



Digital Tachometer



UNI-T UT315A:

- Highly accurate and precise
- Measures acceleration, velocity, displacement
- Velocity (RMS) Accuracy: ±(5%+0.02cm/s)





Vibration Tester



Kyoritsu Kew Snap 2017:

- Three functions in one unit; AC current, AC voltage and resistance
- Tear drop shaped jaws for ease of use in tight places and crowded cable areas
- Resistance range provides audible continuity test
- Frequency response from 40Hz to 1kHz on AC current and voltage ranges





Digital Clamp Meter



Kyoritsu 3005A:

- Perform insulation resistance measurements
- Continuity tests
- Bargraph to display insulation resistance
- 200mA continuity measuring current to IEC 61557
- Minimum 1mA current on insulation tests to IEC 61557





DIGITAL INSULATION / CONTINUITY TESTER



Fluke:

- Precision thermometer
- High repeatability
- Quick response
- Long measuring distance
- Selectable MAX, MIN, DIF and AVG functions
- Laser targeting for use from -30 °C to 350 °C (-22 °F to 662 °F)

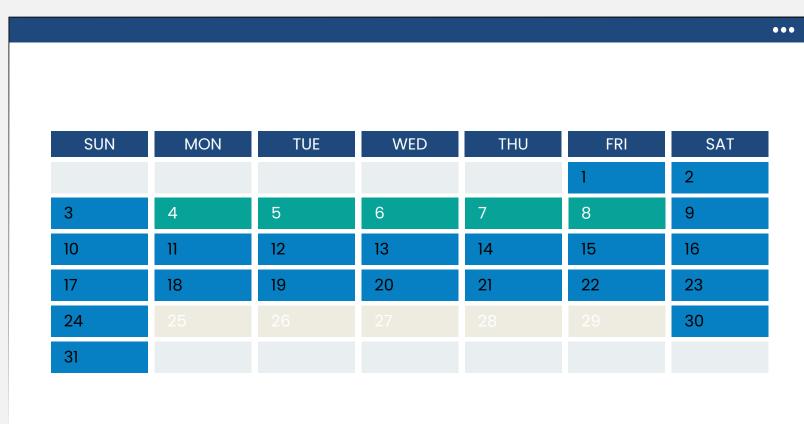




Infrared Thermometer



Pump Preventive Maintenance Schedule





Our Service Team





Our Service Team







Contact Us

Smooth Operations Start Here: Expert Pump Services at Your Fingertips



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