

Asset Details

- Asset ID: PMP01
- Asset Name: Water treatment pump 1
- Manufacturer: Ebara
- Model: EVMSL64-5_2-30
- Rated Power: 30.0 kW
- Rated Voltage: 400.0 V
- Location: PUB Station Bedok

Performance Summary

- Data Period: 2025-10-01 to 2025-11-30
- Total Power Consumption: 24.5 MWh

| Parameter | Average | Min | Max | Std Dev |
|-------------------|---------------|---------------|---------------|---------------|
| Power Consumption | 23.2 kWh | 22.02 kWh | 28.33 kWh | 1.28 kWh |
| Temperature DE | 59.03 °C | 55.0 °C | 72.22 °C | 3.53 °C |
| Temperature NDE | 59.32 °C | 55.28 °C | 72.58 °C | 3.55 °C |
| Vibration DE | 3.89 mm/s RMS | 3.3 mm/s RMS | 5.55 mm/s RMS | 0.46 mm/s RMS |
| Vibration NDE | 3.97 mm/s RMS | 3.37 mm/s RMS | 5.66 mm/s RMS | 0.47 mm/s RMS |

Operational Status

- All monitored signals show flat trends with stable operation
- Power consumption remains consistent within normal operating range
- Both DE and NDE temperatures maintain stable flat trends
- Vibration levels at both bearing positions demonstrate flat trends with low variability
- Asset maintains continuous operation with zero data missing rate across all sensors

The pump operates with stable performance characteristics and consistent operational parameters throughout the monitoring period.

Risk Assessment

- Vibration levels operate within API 610 Preferred Operating Region (POR) with average values 3.89 mm/s RMS (DE) and 3.97 mm/s RMS (NDE), well below the 5.0 mm/s RMS AOR threshold
- Maximum vibration readings 5.55 mm/s RMS (DE) and 5.66 mm/s RMS (NDE) approach but remain within acceptable limits under API 610 standards
- Temperature readings show elevated values with maximum 72.22 °C (DE) and 72.58 °C (NDE), requiring monitoring for thermal management
- Power consumption operates within expected parameters for rated 30.0 kW capacity

Overall risk assessment indicates acceptable operational condition with vibration levels in preferred range and stable thermal performance.