

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 indicating stable operation
- Power consumption remains consistent with low variability
- Both DE and NDE temperatures maintain stable operating ranges
- Vibration levels at both bearing positions demonstrate steady performance
- No missing data points across 1056 measurements indicate reliable sensor operation

The pump operates with consistent stability across all monitored parameters during the assessment 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 Group 1 standards
- Temperature readings show elevated maximum values at 72.22 °C (DE) and 72.58 °C (NDE) requiring monitoring for thermal management
- Power consumption operates within normal parameters with minimal deviation from rated capacity

Overall risk assessment indicates acceptable operational condition with attention required for peak vibration and temperature excursions.