

Asset Details

- Asset ID: PMP01
- Asset Name: Water treatment pump 1
- Manufacturer: Ebara
- Model: EVMSL64-5\_2-30
- Rated Power: 30 kW
- Rated Voltage: 400 V
- Location: PUB Station Bedok

Performance Summary

- Data Period: 2025-10-01 to 2025-11-30
- Total Power Consumption: 24.5 MWh
- Daily Average Power Consumption: 401.6 kWh

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 minimal variation
- Temperature readings at both DE and NDE sides demonstrate stable thermal performance
- Vibration levels at both bearing positions maintain steady patterns
- Recent data shows normal operational parameters within expected ranges

The pump operates with stable performance across all monitored parameters.

Risk Assessment

- Vibration levels at both DE (3.89 mm/s RMS average, 5.55 mm/s RMS maximum) and NDE (3.97 mm/s RMS average, 5.66 mm/s RMS maximum) positions fall within API 610 Preferred Operating Region (0.28-5.0 mm/s RMS) with occasional excursions into Alert Operating Region (5.0-6.5 mm/s RMS)
- Temperature readings show maximum values of 72.22 °C (DE) and 72.58 °C (NDE) which require monitoring for thermal management
- Power consumption patterns remain stable with low standard deviation indicating consistent operational efficiency
- Recent vibration peaks approaching 5.55 mm/s RMS warrant continued monitoring to prevent progression into higher risk zones

Overall risk assessment indicates acceptable operational conditions with recommended continued monitoring of vibration and temperature parameters.