

Asset Details

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

Performance Summary

- Data Period: 2025-11-01 to 2025-11-30
- Total power consumption: 7.4 MWh
- Daily average power consumption: 245.3 kWh

Parameter	Average	Min	Max	Std Dev
Operating Power	23.58 kW	22.02 kW	28.33 kW	1.97 kW
Temperature DE	59.35°C	55.0°C	72.22°C	5.15°C
Temperature NDE	59.64°C	55.28°C	72.58°C	5.17°C
Vibration DE	4.17 mm/s RMS	3.3 mm/s RMS	5.55 mm/s RMS	0.65 mm/s RMS
Vibration NDE	4.25 mm/s RMS	3.37 mm/s RMS	5.66 mm/s RMS	0.67 mm/s RMS

Operational Status

- All monitored parameters show upward trends during the November 2025 period
- Operating power increased from 22.02 kW to 28.33 kW with moderate fluctuation (std 1.97 kW)
- Temperature readings at both DE and NDE sides demonstrate upward trends with significant variation (std >5°C)
- Vibration levels at both bearing locations exhibit upward trends with moderate fluctuation
- Asset remains operational throughout the monitoring period with no missing data points

Risk Assessment

- Pump drive end overall vibration velocity RMS operates within API 610 Preferred Operating Region (POR) with average 4.17 mm/s RMS, below 5.0 mm/s RMS threshold
- Pump non drive end overall vibration velocity RMS operates within API 610 POR with average 4.25 mm/s RMS, below 5.0 mm/s RMS threshold
- Maximum vibration readings of 5.55 mm/s RMS (DE) and 5.66 mm/s RMS (NDE) approach API 610 Alert Operating Region threshold of 5.0 mm/s RMS
- Pump drive end temperature and pump non drive end temperature show elevated readings with maximum values of 72.22°C and 72.58°C respectively
- Ebara threshold standards are not available for comparison
- Recommend closely monitoring vibration trends as values approach API 610 alert thresholds and plan maintenance to address increasing temperature and vibration patterns