

Asset Details

- Asset ID: PMP02
- Asset Name: Water treatment pump 2
- Maker: 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: 26.1 MWh
- Daily average power consumption: 428.3 kWh

Parameter	Average	Min	Max	Std Dev
Operating Power	24.74 kW	24.23 kW	25.13 kW	0.17 kW
Temperature DE	67.97°C	64.22°C	70.76°C	1.37°C
Temperature NDE	71.37°C	67.43°C	74.3°C	1.44°C
Vibration DE	5.55 mm/s RMS	5.09 mm/s RMS	5.98 mm/s RMS	0.17 mm/s RMS
Vibration NDE	6.38 mm/s RMS	5.85 mm/s RMS	6.88 mm/s RMS	0.2 mm/s RMS

Operational Status

- All monitored parameters show upward trends during the 2025-10-01 to 2025-11-30 period
- Operating power demonstrates stable operation with minimal fluctuation (std 0.17 kW)
- Temperature readings show moderate variation with upward trend on both DE and NDE sides
- Vibration levels exhibit upward trend with NDE side consistently higher than DE side
- Asset maintains continuous operation with no missing data points

Risk Assessment

- Pump drive end overall vibration velocity RMS operates within API 610 Alert - Allowable Operating Region (5.0-6.5 mm/s RMS range) with values 5.09-5.98 mm/s RMS
- Pump non drive end overall vibration velocity RMS operates at upper Alert zone boundary with maximum 6.88 mm/s RMS approaching Danger zone (6.5+ mm/s RMS)
- Pump drive end temperature and pump non drive end temperature levels require monitoring as upward trends observed
- NDE vibration approaching API 610 Danger threshold warrants close monitoring and maintenance planning
- Ebara OEM thresholds not available for comparison
- Recommend immediate attention to NDE vibration levels and schedule maintenance inspection to prevent exceeding allowable operating limits