

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: 2025-10-01 to 2025-11-30
- Total power consumption: 34.3 MWh
- Daily average power consumption: 562.5 kWh

| Parameter | Average | Min | Max | Std Dev |
|-----------------|---------------|---------------|---------------|---------------|
| Operating Power | 23.44 kW | 22.02 kW | 25.16 kW | 0.92 kW |
| Temperature DE | 60.25°C | 55.0°C | 65.0°C | 2.52°C |
| Temperature NDE | 60.55°C | 55.28°C | 65.33°C | 2.53°C |
| Vibration DE | 3.82 mm/s RMS | 3.3 mm/s RMS | 4.18 mm/s RMS | 0.27 mm/s RMS |
| Vibration NDE | 3.89 mm/s RMS | 3.37 mm/s RMS | 4.26 mm/s RMS | 0.27 mm/s RMS |

Operational Status

- All monitored parameters show flat trends during the 2025-10-01 to 2025-11-30 period
- Operating power remains stable with minimal variation (standard deviation 0.92 kW)
- Temperature readings at both DE and NDE sides demonstrate consistent operation with low standard deviations of 2.52°C and 2.53°C respectively
- Vibration levels at both bearing locations show stable performance with standard deviations of 0.27 mm/s RMS
- Asset maintains normal operational status throughout the monitoring period

Risk Assessment

- Pump drive end overall vibration velocity RMS and pump non drive end overall vibration velocity RMS readings fall within API 610 Preferred Operating Region (POR) with maximum values of 4.18 mm/s RMS and 4.26 mm/s RMS respectively, well below the 5.0 mm/s RMS Alert threshold
- Pump drive end temperature and pump non drive end temperature levels remain within acceptable operating ranges with maximum readings of 65.0°C and 65.33°C
- Ebara threshold data not available for comparison
- Current vibration and temperature levels indicate low operational risk with stable performance characteristics
- Continue routine monitoring as all parameters remain within normal operating zones