

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: 24.5 MWh
- Daily average power consumption: 401.6 kWh

Parameter	Average	Min	Max	Std Dev
Operating Power	23.2 kW	22.02 kW	28.33 kW	1.28 kW
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 parameters show flat trends with stable operation
- Operating power remains within normal range at 77% of rated capacity
- Both drive end and non-drive end temperatures maintain consistent levels
- Vibration levels at both ends demonstrate stable mechanical condition
- Recent data indicates continued stable performance across all parameters

Risk Assessment

- Pump drive end overall vibration velocity RMS operates within API 610 Preferred Operating Region with maximum 5.55 mm/s RMS below the 5.0 mm/s RMS threshold for Alert zone
- Pump non drive end overall vibration velocity RMS shows maximum 5.66 mm/s RMS, slightly exceeding API 610 Alert zone threshold of 5.0 mm/s RMS but remaining below Danger zone of 6.5 mm/s RMS
- Pump drive end temperature and pump non drive end temperature reach maximum values of 72.22°C and 72.58°C respectively, requiring monitoring for thermal management
- Close monitoring recommended for non-drive end vibration levels as they approach Alert zone limits, with maintenance planning advised to prevent progression into Danger zone