

Sumiyoshi Engineering Pte Ltd 住吉エンジニアリング株式会社



A Brand of Sumiyoshi Engineering Pte Ltd Energy Division



Leading In Motor Driving System

# **Technology Principle**

umption



#### Reasonable matching Efficient between water pump operation of and system water pump PRINCIPLE Optimization of Remote online pipeline resistance monitoring in water system platform technology

SUMIYOSHI

### □ Analysis

Find out the cause of high energy consumption from the whole circulating water system. Points such as circulating water pump set, pipe network, cooling tower, and water equipment etc..

### □ Solution

Through the rectification of adverse factors in the system and the principle of the best operating conditions, customize "High-Efficiency Energy-Saving Water Pump" way to the circulating water system for energy-saving transformation.

### □ Monitoring

The remote online monitoring system is adopted to continuously monitor the operation of the water system, maintain the efficient operation of the energy-saving water pump, and achieve the best energy saving effect.

## **Technical Characters**





**4**: Online monitoring system



©©



# **Core: High Efficiency & Energy Saving Water Pump**

According to the actual operation requirements of customers, the high-efficiency energy-saving water pump is customized to ensure the high-efficiency operation, combining the theory of Ternary Flow and CFD (Computational Fluid Dynamics).

- A. The operation efficiency of the energy-saving water pump is high, up to more than 90%;
- B. High material configuration, reasonable structure and long service life of energy-saving water pump;
- C. The energy-saving water pump operates well with low vibration and noise.



















## Case



**Steel Plant** 

Wastewater plant, cooling water system, total 78 units water pump. Optimize water system and replace High efficient energy saving water pump.

Annual Saving Rate: 21.19% One site achieved 49%. Annual power saved 28.438 million KWH



**Coking Plant** Circulating water system, total 24 units water pump. Optimize water system and replace High efficient energy saving water pump.

Annual Saving Rate: 41% Annual power saved 17.39 million KWH



**City Water Plant** Makeup pump station, total 2 units water pump. Optimize water system and replace High efficient energy saving water pump.

Annual Saving Rate: 33.7% Annual power saved 0.819 million KWH





Sumiyoshi Engineering Pte Ltd 住吉エンジニアリング株式会社



Head Office – Singapore Address:13A Tuas Road, JTC Terrace Factory, Singapore 638513

**Contact Person - Gordon Zheng** H/P: +65 9757 7527 Email: zw@sumiyoshi.com.sg

#### Website: www.sumiyoshi.com.sg











8