# Pump Optimization



# Minimize Electricity Consumption and Reduce Pump Wear and Tear

## Application

The pump optimization solution helps water and wastewater treatment processes improve pump efficiency and lower electricity usage, while reducing pump wear and tear. The solution can be applied down to individual pumps up through pump stations and interceptor lift stations.

# Strategy

#### **Energy Reduction**

The energy reduction solution offers real-time visibility of pump efficiency along with advanced algorithms to minimize the amount of electricity being consumed by the process requirements.

#### **Pump Allocation Strategies**

Parallel pump stations often have differing characteristics and unique performance curves. Our pump allocation strategies can suggest the ideal pump configurations to satisfy the flow and pressure requirements within your network for the lowest total cost of power.

#### **Pump Advanced Monitoring**

By leveraging OEM pump design data and control system process data, our software provides information to help understand how the operations impact the reliability and efficiency of the pumps. The application improves maintenance expenditures by predicting unit maintenance requirements and minimizing equipment burden.

#### **Reduce Pump Wear**

When pumps don't run close to their best efficiency point, they not only use more energy but also incur unnecessary wear. Advanced algorithms can enable pumps to run as close to their best efficiency point, while also enabling overrides for abnormal situations. These control strategies help prevent vibration and reduce pump wear.

## Results

- Reduce electricity consumption
- Increase pump reliability by extending Mean Time Between Failure (MTBF)
- Empower your operators and add transparency of pump health between the operations group and the maintenance group



OVATION<sup>TM</sup> ADVANCED APPLICATIONS

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