



***Supertech***



# PUMP ENERGY AUDIT

*Our energy audit services can help you save BIG!*

An energy audit of your pumping systems identifies potential energy savings and optimization of your system, leading to efficient pump performance and savings.



## WHY IS IT NEEDED?

A large number of pump sets are over-designed / operating in inefficient operating zones, due to which they consume a high amount of energy.

## WHAT DO WE OFFER?

We help you achieve:

- Reduction in operational cost
- Reduction in maintenance cost
- Reduction in CO<sub>2</sub> emissions



## OUR PROCESS

Our team comprises dedicated experts offering energy audit services for pump systems. We uphold all industry standards to recognise potential areas which can be improved to secure pump efficiency and savings.







## HOW DOES IT WORK?



### Stage 1: Survey and inspection

Upon receiving your confirmation, we will meet you to understand your requirements and undertake a survey. Also, you need to share the list of pumps that need to be audited. On receiving the same from your end, we depute our team for data collection. There will be no downtime when we collect data at your site.



### Stage 2: Reporting our findings

We analyse the data and submit a report on our findings with working details on your existing pumps, and a proposal for energy-efficient alternatives with ROI calculations. We may also suggest trimming of impellers or the use of variable speed drives, based on our findings.



### Stage 3: Post Audit Visit

After the implementation of our suggestions, we visit your plant to validate the performance & energy savings.

# WHAT WE REQUIRE?

- Pressure gauges at suction & discharge of the pump
- Straight pipe length for flow measurement
- Flow control philosophy
- Pipeline free of rust & insulation for mounting flowmeter
- Pipeline diameter to be 50mm-700mm

# WHAT WE MEASURE?

## PROCESS DATA:

- Pressure
- Power Consumption
- Flow Rate
- Motor Current
- Motor Temperature
- Rotational Frequency (Hz)
- Adjustment of control valve (%)





# EQUIPMENT WE USE

## POWER QUALITY ANALYSER

### Measures

- AC/DC Voltage
- AC/DC Current
- Frequency - 50, 60 & 400 Hz
- V & I Crest Factor
- kW, kVA, kVAR
- PF, Cos $\phi$ , Tan $\phi$
- Wh, VAh, VARh
- THDf on V, U, I, In
- Harmonics up to 50th order on V, U, I & In



## ULTRASONIC FLOWMETER

### Features

- High accuracy 1.0% reading
  - Easy installation
  - Wide measurement (0 ~ 12m/s)
  - Pipe size (DN 15 ~ 700mm)
  - Suitable for all pipe materials
  - Bi-directional measurement
- Totaliser display for the net, positive and negative flow



# CONTACT US

For appointments and related queries, please feel free to get in touch with us.



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