

Pump Efficiency Monitoring System (PEMS)

Introduction

Pumping systems account for nearly 20% of the world's electrical energy demand. Energy and maintenance costs are typically about 90% of a pump's Life Cycle Cost. Studies have shown that 30% to 50% of the energy consumed by pumping systems and could be saved through monitoring the efficiency. CSIO, Chennai Centre has developed a Pump Efficiency Monitoring System (PEMS) will help any efforts in the energy conservation during pump operations.

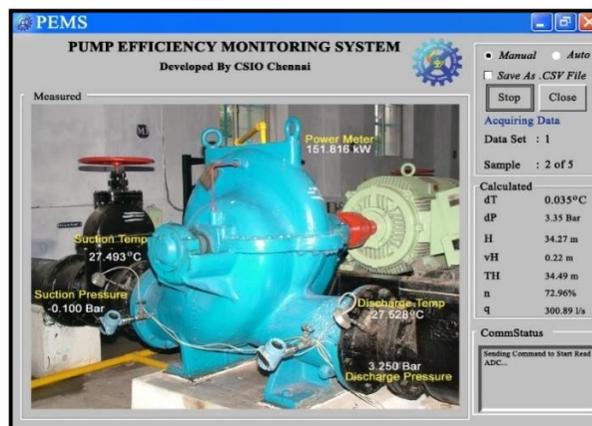
Features

- Single unit capable of on-line monitoring of suction temperature & pressure, discharge temperature & pressure, electrical power, head, efficiency & flow rate of the pump
- Temperature measurement with accuracy of 0.001°C
- Power measurement with an accuracy of 1%
- Capable of configuring the pump parameters
- Capable of displaying & logging data in *.CSV (Comma Separated Values) format for analysis

Product Differentials

- On-line Flow & Efficiency measurement with an accuracy of 1%
- Operation of pump with optimum energy consumption
- Proper Planning & Maintenance of the pump
- Refurbishment of the pump at the appropriate time periodically to increase lifecycle
- Operation of pump at Best Operating Point (BOP)

Status: TRL 6/7: Technology Transferred



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