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PUMP TRAINING COURSE

Education is a vital part of any operation. We have prepared two courses which we can present to any of our customers.

These courses can be presented to either engineering or maintenance staff and deal with a number of vital issues. Knowing how the pumps operate will insure lower downtime and increased MTBF (Mean Time Between Failure). This translates to higher productivity and lower maintenance costs.

A nominal fee, which covers course material and off site expenses such as training rooms might apply.

ENGINEERING COURSE

This course covers the following topics. It can be customized to focus on specific subjects in order to meet customer requirements.

- **Pump Selection Procedure**
  - **Selection range on a typical curve**
  - **Selection range when handling abrasive solids**

- **Effects of Air, NPSH, Viscosity, Suction Piping**
  - **Published curves are based on water and corrections need to be made**

- **Pump Life Cycle Cost**
  - **Review of various factors which determine Pump Life – i.e. rotational speed, duty point selected, imbalance etc.**

- **Variable Speed vs. Control Valve**
  - **Current and past variable speed control methods**
  - **Payback calculation using ITT PumpSmart software**

- **Sealing Methods**

- **Magnetic Drive Pumps**

- **Trouble Shooting**
  - **List of various signs of pump trouble and methods to identify**

Course Duration Approx. 3-4 hours

Nominal Fee $ to be advised

MAINTENANCE COURSE

This course covers the following topics. It can be customized to focus on specific subjects in order to meet customer requirements.

- **Review of Pump Systems**
  - **Understanding pump operation is a key factor in understanding failure modes**
- **Review of Pump Components**
  - **Liquid end and power end parts and their function**
- **Cause of Problems**
  - **Discussion of cavitation, recirculation, abrasive particles, corrosion etc.**
- **Failure Mode and Solutions**
  - **What components fail, why they fail and solutions**
- **Proper Installation – Foundation and Piping**
  - **Recommended installation procedures, shaft alignment and proper piping layout**
- **Shaft Sealing Options**
  - **Review of available sealing option and how to select the right choice**
- **Proper Lubrication**
  - **Lubrication types and frequency of change**
- **Trouble Shooting**
  - **Review of how to analyze failure modes and examples of trouble shooting**
- **How to Increase Pump Life Cycle Cost (LCC)**
  - **Proper system design and methods of increasing LCC**

Course Duration Approx. – 6 hours

Nominal Fee $ to be advised