

# oliver m. dean, inc.

- hygienic process equipment
- food, beverage, dairy, pharmaceutical & personal care

## Centrifugal Pump Energy Savings Program

Reduce energy consumption costs by upgrading to high efficiency centrifugal pumps and motors.

The majority of older centrifugal pumps are low efficiency, high energy consumption units. With the ever increasing cost of energy, combined with mandates to reduce operating costs, plants can save significant money through a planned program to upgrade to energy efficient centrifugal pumps and motors. Many of today's high efficiency centrifugal pumps can reduce power consumption by as much as 20% to 40%.

**Rule of thumb: 1 HP power reduction @ \$0.10/Kwh = \$1100/Yr. (continuous operation).**



### For Example:

Duty – 100gpm @ 100ft tdh  
Older models: 55% eff 5.18 bhp  
New model: 67% eff 3.37 bhp

### Pump Savings at \$0.10/kwh:

\$0.20 per hour / pump  
\$4.67 per day / pump  
\$1704.00 per year for cont. operation

Additional savings potential with Premium Efficiency motor vs Standard Efficiency Motor:  
5 hp motor ... \$153/yr.



### The OMDean Program

A team from Oliver M. Dean, Inc. will survey and catalog the entire population of centrifugal pumps and pump motors in your plant.

Our engineers will analyze your pump population and develop a database and calculate and compare your current energy operating costs with the new lower energy operating costs associated with using high efficiency centrifugal pumps and/or motors. We will then help you to prioritize the upgrades to maximize the annual energy cost savings.



### Power Company Rebates

Most electric utilities offer rebates and financial incentives to help with the upfront cost of upgrading to energy efficient pumps / motors. OMDean can prepare, or assist you in preparing the Applications and Supporting Engineering Data that the Power Company requires.

### Additional Cost Savings Benefits

As part of the plant survey and pump population analysis, the OMDean team will develop a pump standardization analysis, and the associated pump and spare parts inventory reduction savings potential that can be obtained from reducing the overall number of brands, makes, models and sizes of centrifugal pumps. One recent survey and analysis reduced the number of models by 50% and reduced the number of spare parts required to support the pump population by 80%.

