

Pump Efficiency Report: Example Pump

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Report Results

| | Baseline | Opportunities Modification | |
|-------------------------------|----------|----------------------------|--|
| Percent Savings (%) | | 8 % | |
| Pump efficiency (%) | 80.3 | 86.8 | |
| Motor rated power (hp) | 200 | 100 | |
| Motor shaft power (hp) | 101.2 | 93.6 | |
| Pump shaft power (hp) | 101.2 | 93.6 | |
| Motor efficiency (%) | 94.4 | 95 | |
| Motor power factor (%) | 76.5 | 86 | |
| Motor current (amps) | 125.9 | 102.8 | |
| Motor power (hp) | 80 | 73.5 | |
| Annual Energy (MWh) | 701 | 644 | |
| Annual Energy Savings (MWh) — | | 57 | |
| Annual Cost | \$35,040 | \$32,189 | |
| Annual Savings | _ | \$2,851 | |
| Implementation Cost | _ | \$80 | |
| Payback Period (months) | _ | 00 | |
| | | *Optimized | |

Input Data

| | Baseline | Opportunities Modification | | |
|---------------------------|----------------------|----------------------------|--|--|
| Pump & Fluid | | | | |
| Pump Type | End Suction ANSI/API | End Suction ANSI/API | | |
| Pump (RPM) | 1,780 | 1,780 | | |
| Drive | Direct Drive | Direct Drive | | |
| Specific Gravity | 1.00 | 1.00 | | |
| Stages | 2 | 2 | | |
| Motor | | | | |
| Line Frequency (Hz) | 60 Hz | 60 Hz | | |
| Motor Rated Power (kW) | 200 hp | 200 hp | | |
| Motor (RPM) | 1,780 | 1,780 | | |
| Efficiency Class | Specified | Specified | | |
| Voltage | 460 | 460 | | |
| Full-Load Amps | 225 | 225 | | |
| Field Data | | | | |
| Operating Fraction | 1.00 | 1.00 | | |
| Cost (kW/hr) | 0.05 | 0.05 | | |
| Flow Rate (gpm) | 1,840 | 1,840 | | |
| Head (ft) | 174.9 | 174.9 | | |
| Load Estimated Method | Power | Power | | |
| Motor Power (kW) | 80 | 80 | | |
| Voltage | 480 | 480 | | |
| Kinematic Viscosity (cST) | _ | 1.00 | | |
| Fixed specifc speed? | _ | Yes | | |
| Size Margin | _ | 0.00 | | |