Example PSAT

Last Modified Jul 20, 2017, 2:13:09 PM

ASSESSMENT RESULT DATA

	Baseline	2000 hp Motor	Baseline Optimized	Opportunities Modification
Percent Savings (%)	— —	0 %	8 %	8 %
Pump efficiency (%)	80.26	106.12	86.75	86.75
Motor rated power (hp)	200.00	2,000.00	100.00	100.00
Motor shaft power (hp)	101.19	76.53	93.61	93.61
Pump shaft power (hp)	101.19	76.53	93.61	93.61
Motor efficiency (%)	94.36	71.36	95.03	95.03
Motor power factor (%)	76.46	15.28	85.98	85.98
Motor current (amps)	125.86	629.73	102.81	102.81
Motor power (hp)	80.00	80.00	73.49	73.49
Annual Energy (MWh)	**700.80**	**700.80**	**643.78**	**643.78**
Annual Cost	**49,056.00**	**49,056.00**	**45,064.41**	**45,064.41**
Annual Savings	**— —**	**$00.00**	**$3,991.59**	**$3,991.59**
			*Optimized	*Optimized

ASSESSMENT INPUT DATA

	Baseline	2000 hp Motor	Baseline Optimized	Opportunities Modification
Pump & Fluid				
Pump Type	End Suction ANSI/API	End Suction ANSI/API	End Suction ANSI/API	End Suction ANSI/API
Pump RPM	1,780.00	1,780.00	1,780.00	1,780.00
Drive	Direct Drive	Direct Drive	Direct Drive	Direct Drive
Kinematic Viscosity (cST)	01.00	01.00	01.00	01.00
Specific Gravity	01.00	01.00	01.00	01.00
Stages	02.00	02.00	02.00	02.00
Fixed specifc speed?	No	No	No	No
Motor				
Line Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Horse Power	**200.00 hp**	**2,000.00 hp**	200.00 hp	200.00 hp
Motor (RPM)	1,780.00	1,780.00	1,780.00	1,780.00
Efficiency Class	Specified	Specified	Specified	Specified
Voltage	460.00	460.00	460.00	460.00
Full-Load Amps	**225.00**	**2,204.40**	225.00	225.00
Size Margin	00.00	00.00	00.00	00.00
Field Data				
Operating Fraction	01.00	01.00	01.00	01.00
Cost (kW/hr)	00.07	00.07	00.07	00.07
Flow Rate (gpm)	1,840.00	1,840.00	1,840.00	1,840.00
Head (ft)	174.85	174.85	174.85	174.85
Load Estimated Method	Power	Power	Power	Power
Motor Power (kW)	80.00	80.00	80.00	80.00
Voltage	480.00	480.00	480.00	480.00