

## **Energy Cost Comparison**

## **Electric Motor**

0.7457 KW/hp 95.0% Efficiency

## **Diesel Engine**

18.0 hp-hr/gal
Brake Specific Fuel Consumption

		Hourly				Hourly		
		per KWH	per KWH	per KWH	BSFC	per Gallon	per Gallon	per Gallon
<u>HP</u>	<u>KWH</u>	\$0.12	\$0.14	\$0.16	GAL/HR	\$3.75	\$4.00	\$4.25
1	0.7849	\$0.09	\$0.11	\$0.13	0.0556	\$0.21	\$0.22	\$0.24
75	58.9	\$7.06	\$8.24	\$9.42	4.2	\$15.63	\$16.67	\$17.71
100	78.5	\$9.42	\$10.99	\$12.56	5.6	\$20.83	\$22.22	\$23.61
125	98.1	\$11.77	\$13.74	\$15.70	6.9	\$26.04	\$27.78	\$29.51
150	117.7	\$14.13	\$16.48	\$18.84	8.3	\$31.25	\$33.33	\$35.42
200	157.0	\$18.84	\$21.98	\$25.12	11.1	\$41.67	\$44.44	\$47.22
250	196.2	\$23.55	\$27.47	\$31.40	13.9	\$52.08	\$55.56	\$59.03
300	235.5	\$28.26	\$32.97	\$37.68	16.7	\$62.50	\$66.67	\$70.83
350	274.7	\$32.97	\$38.46	\$43.96	19.4	\$72.92	\$77.78	\$82.64
400	314.0	\$37.68	\$43.96	\$50.24	22.2	\$83.33	\$88.89	\$94.44
500	392.5	\$47.10	\$54.95	\$62.80	27.8	\$104.17	\$111.11	\$118.06
600	471.0	\$56.52	\$65.94	\$75.35	33.3	\$125.00	\$133.33	\$141.67
700	549.5	\$65.94	\$76.92	\$87.91	38.9	\$145.83	\$155.56	\$165.28
800	628.0	\$75.35	\$87.91	\$100.47	44.4	\$166.67	\$177.78	\$188.89
900	706.5	\$84.77	\$98.90	\$113.03	50.0	\$187.50	\$200.00	\$212.50
1000	784.9	\$94.19	\$109.89	\$125.59	55.6	\$208.33	\$222.22	\$236.11

		@ 160 Hours per Month				@ 160 Hours per Month		
		per KWH	per KWH	per KWH	BSFC	per Gallon	per Gallon	per Gallon
<u>HP</u>	<u>KWH</u>	\$0.12	\$0.14	\$0.16	<u>GAL/HR</u>	\$3.75	\$4.00	\$4.25
1	0.7849	\$15.07	\$17.58	\$20.09	0.0556	\$33.33	\$35.56	\$37.78
75	58.9	\$1,130	\$1,319	\$1,507	4.2	\$2,500	\$2,667	\$2,833
100	78.5	\$1,507	\$1,758	\$2,009	5.6	\$3,333	\$3,556	\$3,778
125	98.1	\$1,884	\$2,198	\$2,512	6.9	\$4,167	\$4,444	\$4,722
150	117.7	\$2,261	\$2,637	\$3,014	8.3	\$5,000	\$5,333	\$5,667
200	157.0	\$3,014	\$3,517	\$4,019	11.1	\$6,667	\$7,111	\$7,556
250	196.2	\$3,768	\$4,396	\$5,024	13.9	\$8,333	\$8,889	\$9,444
300	235.5	\$4,521	\$5,275	\$6,028	16.7	\$10,000	\$10,667	\$11,333
350	274.7	\$5,275	\$6,154	\$7,033	19.4	\$11,667	\$12,444	\$13,222
400	314.0	\$6,028	\$7,033	\$8,038	22.2	\$13,333	\$14,222	\$15,111
500	392.5	\$7,535	\$8,791	\$10,047	27.8	\$16,667	\$17,778	\$18,889
600	471.0	\$9,043	\$10,550	\$12,057	33.3	\$20,000	\$21,333	\$22,667
700	549.5	\$10,550	\$12,308	\$14,066	38.9	\$23,333	\$24,889	\$26,444
800	628.0	\$12,057	\$14,066	\$16,076	44.4	\$26,667	\$28,444	\$30,222
900	706.5	\$13,564	\$15,825	\$18,085	50.0	\$30,000	\$32,000	\$34,000
1000	784.9	\$15,071	\$17,583	\$20,095	55.6	\$33,333	\$35,556	\$37,778