





Green Machine Heat Systems

Comparison of Cost to Operate, Strengths & Weaknesses Analysis

Manufacture	Green Machine Heat Systems	Wacker Neuson Ground Heater	Thawzall Heatzone	Crown Heat King
Images				
Model	GMHS285	E3000ES	TCH250	HK300
Cost and Capacity Comparison - MSRP Price	\$54,800	\$78,400	\$59,900	\$64,900
Heat Capacity gross btu/hr.	285,000btu's	252,000btu's	280,000btu's	290,000btu's
Efficiency %	95%	83%	83%	78%
Net btu's/hr.	270,750btu/hr.	209,160btu's/hr.	232,400btu's/hr.	226,200btu's/hr.
Fuel type	Propane/Natural Gas/Diesel	Diesel	Diesel	Diesel
Fuel Consumption max	2.8gph propane	2.2gph	2.15gph	3gph
Price per gallon (US 7yr avg)	\$1.05	\$1.96	\$1.96	\$1.96
Fuel Cost per hour	\$2.95	\$4.31	\$4.22	\$5.88
Fuel Cost per 24hrs	\$70.76	\$103.53	\$101.18	\$141.18
Fuel Cost per month	\$1,981.32	\$2,898.82	\$2,832.93	\$3,952.93
Additional Fuel Cost per month	-	\$917.49	\$851.61	\$1,971.61
Additional Fuel Cost per month	-	14.63%	14.30%	19.95%
Monthly rental rate average	\$6,000	\$6,000	\$6,000	\$6,000

Cost to operate per month Rental	\$7,981	\$8,899	\$8,833	\$9,953
Cost to operate per month Ownership (10yr life, 6 months per year usage)	\$2,894.66	\$4,205.48	\$3,831.27	\$5,034.60
Cost to Operate with Coverage Capacity Comparison				
Total Hose capacity feet	3000	3000	3000	2800
Hose loops	6 x 500ft	2 x 1500ft	5 x 600ft	4 x 700ft
Frost Thawing capacity 12' on center sq./ft.	3000	3000	3000	2800
Rental cost per sq./ft. to operate per month	\$2.66	\$2.97	\$2.94	\$3.55
Ownership cost per sq./ft. to operate per month (10yr life, 6 months per year usage)	\$0.96	\$1.40	\$1.28	\$1.80
Average additional cost to operate Rental	-	11.15%	11.07%	13.36%
Average additional cost to operate Ownership	-	14.53%	13.24%	18.64%

Other Specs				
Operating Weight lbs	5,350	7,190	5,600	5,750
Generator Available	Propane or Diesel	Diesel	Diesel	Diesel
Fluid Pumps	(3) 1/6 hp (1/2 hp total)	1/2 hp	1/2 hp	1/2 hp
Operating Temperature F	60-180	180	70-180	180
Operating Pressure psi	15-35	110	1-5	70-90
Advantages/Weaknesses				
Fuel type	Propane/Natural Gas or Diesel	Diesel	Diesel	Diesel

Fuel availability	Many options, easy delivery and bulk tank setup. Can be run on existing site source	Expensive, large quantities needed, gelling in cold temps	Expensive, large quantities needed, gelling in cold temps	Expensive, large quantities needed, gelling in cold temps
Fuel Maintenance	Clean burning, efficient	Heavy maintenance required, filter replacement costs	Heavy maintenance required, filter replacement costs	Heavy maintenance required, filter replacement costs
Size and Weight	Very durable steel frame, fork pockets & lifting eyes	Light shell, no fork pockets, lifting eyes	Light shell, no fork pockets, no lifting eyes	Light shell, no fork pockets, no lifting eyes
Pumps	3 pumps for variable flow and redundancy	1 pump, no redundancy	1 pump, no redundancy	1 pump, no redundancy
Digital Tempiture Control	yes	yes	yes	yes
Alarm System	Run/Alarm becon lights and optional callular alarm callout system for faults	Only run light	Only run light	Only run light
Electrical Power	(1) 15-20amp	(1) 20amp	(2) 15-20amp	(1) 20amp

