



HEATERCORE™ TURBINE DRIVEN FLAMELESS HEATER FOR OIL AND GAS COMPLETIONS

In the oil field, having access to reliable, portable heat is essential to ensuring continuous operations. But the full cost of getting heat from traditional infield sources—indirect furnaces or diesel engines—can run from \$40 to \$50 per MMBTU. In real dollars, a single heater can cost \$80,000 to run over a winter season.

Reduce the cost of heating with flexible heating solution

Runs on Any-Fuel™ — The unit's reverse flow, vortex-stabilized combustor fully combusts gaseous fuels—everything from LPG and CPG to flare gas as well as diesel. Dynamo's proprietary auto-configure software provides real-time engine management, which allows the unit to quickly switch to a different fuel type without any hardware or configuration changes. This provides the cost savings of running on lease gas while maintaining the reliability of diesel.

Reliable operation —With parts selected from the automotive and jet engine industries, the HeaterCore is built for reliability, efficient operation, and ease of maintenance. Each unit has an average uptime of 99%, compared with 80% or less for diesel engines. The mean time between failure (MTBF) is 40,000 hours, roughly five times the MTBF of diesel units. In addition, Dynamo's Extended warranty and maintenance program ensures maximum reliability.

Robust construction — The unit's heavy-duty steel construction is designed to withstand the rigors of the oil field. The turbines are rated to operate at ambient temperatures of -40°C to 38°C (-40°F to 100°F) with no problems, and provide a continuous flow of clean, dry, heated air for thousands of hours.

Low cost of ownership — By reducing the need to buy and transport diesel fuel to the field, the unit saves money and eliminates logistics headaches. In-field trials have lowered heating bills by \$10,000 per month. In many cases, these savings translate to a payback period of less than one year.

Safe and Green heating —Each unit meets all EPA standards while operating on associated petroleum gases ranging from 700 BTU/scf [33 MJ/Nm³] to 2400 BTU/scf [89 MJ/Nm³]. And with its ability to burn flare gas that would otherwise be burned and vented, HeaterCore has an 80% smaller environmental footprint versus conventional heaters by reducing greenhouse gas emissions (GHGs).



Applications

- ◇ Completions Heating
- ◇ Floor Heating
- ◇ Equipment thaw and repair
- ◇ Emergency Heating
- ◇ Personnel Heating
- ◇ Concrete curing
- ◇ Ground thaw

HEATERCORE™ MODELS

Model	Heat Rating (BTUs)	Air Flow (ACFM)	Optional Auxiliary Power	Weight (Dry)	LxWxH (inches)
HC-700AF	350,000 – 750,000	1,500 – 3,000	5kW	2,500 lbs	124 x 79 x 72
HC-1250AF	350,000 – 1,250,000	1,500 – 6,000	20kW	9,500 lbs	192 x 84 x 104

STANDARD EQUIPMENT & PACKAGE

STANDARD PACKAGE CHARACTERISTICS	
Max Temperature Rise	200°F
Output pressure (H ₂ O)	10 inches
Heater Efficiency	95%
Ducting	2x 12" duct at rear
Auxiliary Power	480V 3-ph
Operating Temperature	-40 F [-40 C] to 113 F [45 C]
Gaseous Fuel Requirements	APG, NG, LPG, Wet Gas
Fuel Temperature	-20F [29 C] to 250F [121 C]
Dew Point Suppression	18F / 9C ° above dew point
BTU Range	700 – 2,400 BTUs/ SCF
Liquid Fuel	Diesel #2, Gas, Kerosene
Auxiliary Generator Fuel Requirements	Diesel #2
Auxiliary Generator runtime	30 hours
Altitude	0-2,000m
Plug-in Electrical Requirements	3-phase 480
Sound Level	85 dB @ 10m

Standard Features

- ◇ Gas Turbine Heater
- ◇ Any-Fuel™ Combustor
- ◇ Push to start fully automated control
- ◇ Independent temperature and airflow control
- ◇ Data Display
- ◇ Status Light
- ◇ Fuel Filter
- ◇ DOT Trailer Mounted
- ◇ Cellular RTU
- ◇ Shore Power for Blower
- ◇ Annual Maintenance
- ◇ Safety blow off valve (positive air shut-off equivalent)
- ◇ High efficiency direct air heating

Standard Options

- ◇ Natural gas auxiliary genset
- ◇ Enhanced Emissions reduction
- ◇ 25 & 50-ft insulated duct
- ◇ 20" duct
- ◇ +20 hour auxiliary tank
- ◇ Fan upgrade to 20" WC
- ◇ Predictive maintenance
- ◇ Satellite Data plan
- ◇ Remote fleet management
- ◇ E-stop extension cable
- ◇ Fuel Booster

Shore Power Interface

- ◇ 4 Wire Terminal
- ◇ Import/Export safety switch
- ◇ Optional: Camlock Connector
- ◇ Ground

Fuel Gas Connection

- ◇ 3/8" NPT Female



Dynamo Micropower's HeaterCore provides portable, flameless air heating—and at a fraction of the price of diesel engines. Powered by the advanced TurboCore™ gas turbine engines, HeaterCore generates reliable heating in the field by running on Any-Fuel™—from propane to wet gas to flare gas—while emitting far fewer greenhouse gases.

Monthly savings on 1 Million BTUs: \$21,000 a month

	Diesel GPH	Fuel Cost / Hour	Cost per day
HC-1250 with Aux Generator	1.5	\$6	\$144
Comparable Diesel Heater	9	\$36	\$864

