



economic alternative fuel options



Control No. 3120734

## multi-fuel furnace - model f240

INOV8 Multi-fueled Furnaces provide unlimited options for heating. For 23 years this popular sized furnace has provided low cost heating solutions with available waste petroleum and vegetable based oil. Recently it was been paired with INOV8's newest gas-oil burner and successfully completed listing for burning waste fryer oil and other biofuels. It is the only system in the world with such certifications. The gas-oil burner can use as fuel - gas only, oil only or gas and oil in combination. The PLC control system senses a loss of oil and automatically reverts the fuel to gas for no interruption to your furnace operation. Savings from energy and disposal costs typically provide a one year payback.



**Combustion Engineering** makes the difference for the successful burning of used fryer oils. INOV8 burners that have been designed for this purpose (shown at right), combined with an extra hot combustion zone in the F240 furnace assures complete combustion of these high flashpoint oils. Vegetable oils yield about 90% of the BTU value of petroleum oil. When burned properly they are an excellent source of renewable energy that is as GREEN as it gets. Nearly 20 years of experience assures these uncompromised results:

- **Economic Results**—Typical payback periods are within a couple years of purchase. Savings come from utilizing available waste oil as fuel, eliminating disposal costs & storage mess and low operating costs.
- **Environmental Results**—All reports show biofuels to significantly reduce carbon emissions. INOV8 burners (burning any oil) yield even lower emissions than clean fuels because of these design features: higher oil temperature, filtering & vapor removal of heated oil, and a patented needle valve to prevent dripping.
- **Safety Results**—INOV8 has never yielded to pressure to use a low cost flame safeguard but has provided customers with the highest protection available, such as: 90 second pre-purge, 10 second trial for ignition, three-second fuel shutoff, seven electronic checks, UV flame sensor, main flame trial-for-ignition.
- **Burner Options** — The model S200 will burn nearly any liquid that has BTU value. If you want complete reliability while burning your waste oil, then INOV8 offers the furnace with the model G-200 gas-oil burner. It can burn gas only, oil only, or the combination if the oil is of poor quality or quantity. A control senses a loss of oil pressure and automatically reverts to the natural gas or propane as a backup.



INOV8 model S200 (above) & Gas-Oil Model G200 (below)



The unique design of the model F240 furnace addresses two of the main challenges the industry has faced with cabinet fatigue and loss caused by the heat transfer inefficiency. The heat exchanger sections expand independently to accommodate the extreme varying temperatures that can destroy the steel in a furnace. The aluminized steel construction protects against the corrosive tendency of the ash and is the best heat transfer steel. The cabinet is designed to accommodate cleaning with a hinged clean-out panel located above the burner. This popular size furnace is great for any space and when mounted on an INOV8 tank has a small footprint and allows for an easy and fast installation. All that's needed to complete the installation is the chimney, electrical connection and compressed air line.

#### The INOV8 model F240 furnace includes:

The cabinet with a propeller type fan, INOV8 model burner, barometric damper, floating pick-up assembly (which includes a check valve, a UL listed in-line filter, tank fittings, piping & a float device), 120 volt wall thermostat, hanging brackets & bolts, automatic cleanout needle, and an automatic vent system.

The optional INOV8 300-gallon tank supports the furnace at the required 8 feet. The tank has 4 top & 2 bottom openings, includes complete oil supply & return lines, oil level gauge, support stands and a specially designed settling area inside the tank.

This product is fully tested and listed by Intertek ETL-Semko to latest safety standards in the United States and Canada - specifically to UL296A and CSA B140.0-03, B140.4-04 and B140.2.1-M90. The tank is listed to UL80 and CAN/ULC-S602-03. The gas-oil burner is listed to UL296, UL296A, UL795, CSA B140.0, ANSI Z21.17\*/CSA 2.7-M90 Domestic Gas Conversion Burner, and AEI, CSA 3.4. The warranty provides two years on parts and ten years limited warranty on the heat exchanger and cabinet.



#### F240 Furnace Specifications

Input – BTUH	240,000
Output – BTUH	200,000
Stack Size	8"
Cabinet Dimensions	37"L/38"W/36"H
Fuel Consumption	1.68 GPH
Weight	450 pounds
Electrical Voltage	120 volts (burner)
Amperage Required	17
Compressed Air	2.0 / 30 CFM/PSI
Cabinet Finish	Powder coated

#### Additional Features:

Three-pass, aluminized steel, swedged heat exchanger, ceramic target, 3600 CFM propeller fan, swing-out burner, quick-change control module, vapor eliminator, integral fuel pump, hour meter, industrial control, UV sensor, digital temp control, (a ductible blower is available)

Tank Model No.	T300 HB (F125 & F240)
Tank size inches	60Lx34 Wx37 H
Tank and Stands	300 gallon bench type
Tank Finish	Powder coated
Weight	450 pounds