# National Heater Company

NATIONAL Champion DIRECT FIRED

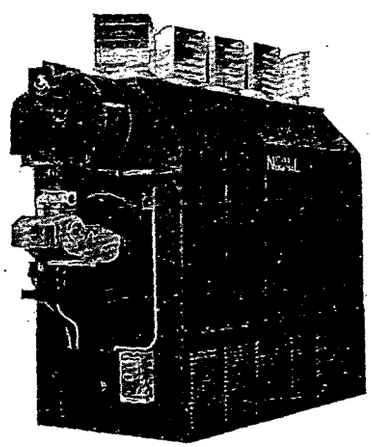
2180 Cleora Avenue **St. Paul 4, Minnesota**

**Engineered for industry—space heating, tempering make up air, and drying**

## NATIONAL CHAMPION HEATERS

200,000 to 2,000,000 Btu

Direct fired for oil, gas, or combination units



*MODEL H Available in ceiling suspended, inverted and portable units*

- **GUARANTEED 80 PER CENT OPERATING EFFICIENCY** — in factories, foundries, warehouses, garages, hangars, terminals and many other installations.
- **SAVE ON OPERATION** — National Champion Heaters circulate warm air at working levels, keep roof heat loss at a minimum. Low initial cost—no boiler house or power piping required. Low operating cost—standby losses eliminated, no licensed attendant needed!
- **SAVE ON FUEL**—National Champion Heaters burn fuel only when zone thermostats call for heat. Burner shuts off when temperature is attained. No fuel wasted to overcome transmission losses. No wasteful recycling to maintain steam pressure or water temperature.
- **SAVE ON MAINTENANCE**—National Champion Heaters feature simplified burner and controls and easily accessible clean-out plates—no problem to maintenance personnel. Spare parts are readily available.
- **SAVE ON INSTALLATION**—National Champion Heaters save 30 per cent to 70 per cent over systems requiring expensive ductwork, piping, condensate lines, traps, pumps, etc. Units are shipped completely wired, assembled and flame-tested at the factory to guarantee peak performance.

**TESTED CONSTRUCTION** — *Features high chrome nickel stainless steel combustion chamber, in efficient teardrop design.* Structure welded into rugged, one-piece steel unit with baked enamel exterior finish. Engineered for dependable, enduring service. *Underwriter's laboratories listed.*





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**Efficient heat exchange, high velocity discharge develop truly economical space heating.**

1. When thermostat calls for heat, induced draft blower starts first to purge combustion chamber and establish draft before burner is fired.

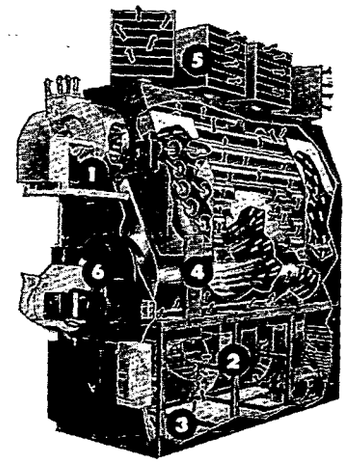
2. Main blowers—separate from induced draft blowers—start only when proper bonnet temperature is attained.

3. Cool air is drawn through louvered panels at floor level.

4. Air passes over National's stainless steel teardrop combustion chamber and then around multiple banks of economizer tubes.

5. After this full uniform heating, air discharges at high velocity from adjustable heads atop the heater.

6. Separate blower integral with burner, and separate induced draft blower, are independently adjustable for maximum combustion efficiency.




*Cutaway view of the National Champion Model H shows air flow from floor intake to adjustable discharge heads.*

**RESULT:** No "cold blasts" on start-up; proper, uniform heating of air; high velocity discharge keeps warmed air at working levels; minimum temperature differential between floor and roof.

*Underwriters' Laboratories Listed*

**WRITE FOR DESCRIPTIVE BROCHURE!**

| Heater Number | Btu Output Capacity | CFM at ⅝ in. S.P. | HP Blower Motor | Overall Dimensions | | | Shipping Weight |
|---|---|---|---|---|---|---|---|
| | | | | Width | Length | Height | |
| TD-20 | 200,000 | 2,400 | ½ | 28 | 52 | 66 | 950 |
| TD-25 | 250,000 | 3,200 | ¾ | 28 | 52 | 66 | 1020 |
| TD-30 | 300,000 | 4,000 | ¾ | 32 | 60 | 81 | 1400 |
| TD-40 | 400,000 | 5,400 | 1 | 32 | 60 | 81 | 1500 |
| TD-50 | 500,000 | 6,600 | 1½ | 32 | 80 | 81 | 1750 |
| TD-70 | 750,000 | 8,800 | 2 | 32 | 80 | 81 | 1900 |
| TD-80 | 800,000 | 10,200 | 3 | 48 | 80 | 81 | 2400 |
| TD-100 | 1,000,000 | 12,500 | 5 | 48 | 80 | 81 | 2600 |
| TD-125 | 1,250,000 | 15,300 | 5 | 54 | 100 | 98 | 3200 |
| TD-150 | 1,500,000 | 19,400 | 7½ | 54 | 100 | 98 | 3450 |
| TD-175 | 1,750,000 | 22,000 | 7½ | 60 | 120 | 98 | 4150 |
| TD-200 | 2,000,000 | 26,000 | 10 | 60 | 120 | 98 | 4300 |