

# TRINITY *Ti*

**95.1% AFUE**

*Ultra Efficient  
Boiler and  
Water Heater*



**NTI**  
NY THERMAL INC.

IN THE NTI TRADITION OF QUALITY...

# Introducing the all-new, ultra-compact, high-efficiency TRINITY Gas Ti Boiler

When you choose the **TRINITY** Boiler, you choose the ultimate in top-quality, high-efficiency boilers. Count on years of trouble-free, safe and comfortable heat, from North America's hot water heating leader: NTI.

**Great Savings...** The superb efficiencies and state-of-the-art combustion systems of the **TRINITY** mean little heat is wasted, less natural gas or propane is used, and homeowners save money.

**Lots of Hot Water...** The **TRINITY'S** high-capacity heat exchanger coil provides ample hot water for every household need, at very low cost.

**Years of Dependability...** NTI customers know... our boilers are built to last a lifetime! With an advanced ignition system, and a top-quality heat exchanger, the **TRINITY** represents the highest standard in top-quality boilers.

**Environmental...** The **TRINITY** meets or exceeds North American energy and emissions regulations. We're doing our part to protect the environment for the future.

## *The Unparalleled NTI Combustion System*

NTI's combustion system produces the highest industry modulation rates, which allows the **TRINITY** to modulate the burner to the exact size required to meet the conditions of the system. The **TRINITY** incorporates an electronic state-of-the-art combustion system to reduce the amount of gas that is injected into the burner to ensure proper combustion throughout the full range of modulation. This system also compensates for extended venting; therefore, adjustments are not required between short and long vent runs. The **TRINITY** is a totally sealed combustion system: all combustion air is drawn from outside, used for combustion and then expelled. This eliminates any need for fresh air intake into the room, thereby decreasing heating costs.

## *Patented Heat Exchanger*

NTI has developed a sophisticated heat exchanger that provides virtually endless hot water, at unheard-of efficiencies. The condenser does not use aluminum but is constructed totally from stainless steel, which is a proven material for condensing appliances.

The **TRINITY** utilizes its modulation combustion system to electronically increase or decrease the flame size, depending upon the required flow and water temperature. As the water is instantaneously heated and regulated, a storage tank is not required, and energy is not lost due to typical tank standby losses. The **TRINITY** can deliver up to 5.5 US gallons of water per minute at a constant temperature of 110°F. The **TRINITY** system automatically gives priority to the domestic hot water system to ensure that all your family's hot water needs are met.



Ti-400 Boiler





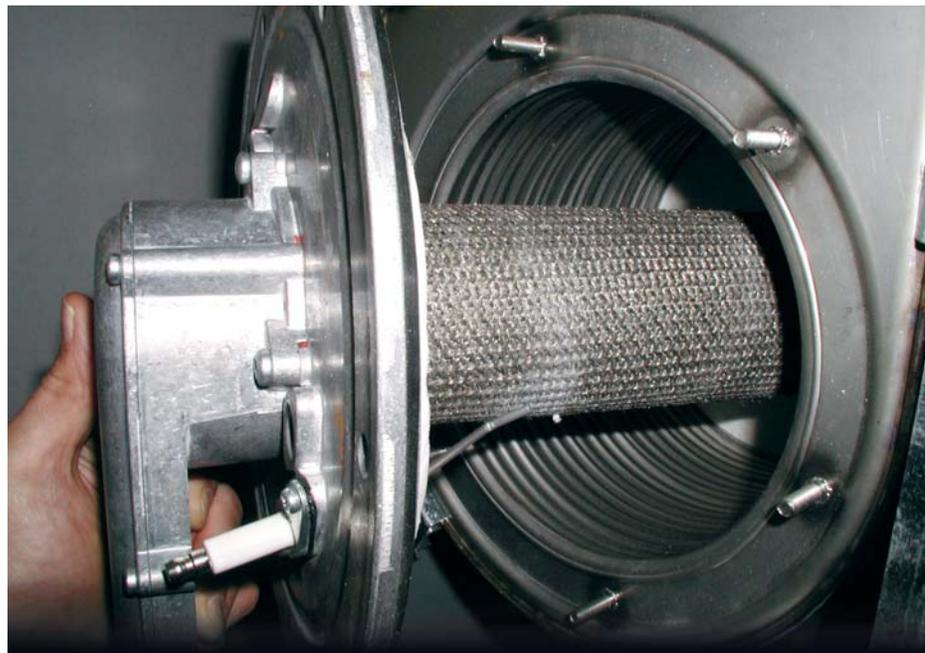
Ti-150 with floor-mounting stand

## The NTI Commitment to Service

- Established in 1966 in Sussex, NB, today's NTI remains a privately owned family business with the same original mandate to manufacture top-quality central heating equipment.
- We design our products with easy installation and servicing in mind. The **TRINITY** is pre-assembled and wired, with easy access to key components.
- At our 72,000 square-foot research, development and training laboratory in New Brunswick, engineers constantly strive to improve efficiency and serviceability on all our new and existing products.
- NTI maintains a strong commitment to providing installer leadership and ongoing support through our training programs and technical assistance available to contractors.

## Additional Features

- Provided with outdoor sensor for automatic boiler temperature reset
- Control is fully enclosed in impact-resistant enclosure
- Multifunctional LED display system
- Digital set point for unmatched accuracy
- Provides all safety and operational functions
- Operates burner, heating pump, and auxiliary indirect pump or valve
- Pump exerciser routine activates pump for five seconds every 72 hours to prevent seizing
- Internal diagnostic system continuously monitors for errors
- Designed to withstand power dips and spikes



The Trinity uses a stainless burner with a metal fiber coating to produce extremely high modulation rates. This interior view of the combustion chamber illustrates the water tube heat exchanger, which is constructed of 316L stainless steel.

# TOP TEN LIST

*The Advantages of the*

# TRINITY

1. Available in both Natural Gas and Propane versions with a modulation system that eliminates additional models.
2. State-of-the-art sealed modulation combustion system with hot surface ignition.
3. Patented 316L stainless condensing heat exchanger provides ultimate efficiencies.
4. All connections are conveniently located for ease of installation.
5. Superior mounting configuration allows wall or floor mounting.
6. Vents easily with conventional ABS, PVC or CPVC plastic piping.
7. The TRINITY has industry-leading modulation rates, which significantly increases comfort while reducing cycling and fuel consumption.
8. The distinctive casing design reduces costly standby losses, while virtually eliminating combustion noises.
9. High-capacity plate heat exchanger on combination models provides ample domestic hot water.
10. The TRINITY is certified, designed and rated to strict CSA, AGA, ASME and CSAus codes.

## GENERAL SPECIFICATIONS

	Ti100	Ti150	Ti200	Ti400
<b>Size (D x W x L)</b>	14" x 15.5" x 22"	14" x 15.5" x 22"	17" x 15.5" x 22"	23.5" x 21" x 36"
<b>Weight</b>	80 lbs.	80 lbs.	110 lbs.	205 lbs.
<b>Max. Pressure</b>	30 PSI	30 PSI	30 PSI	145 PSI
<b>Gas Type</b>	Natural, Propane	Natural, Propane	Natural, Propane	Natural, Propane
<b>Max. Vent</b>	105' equivalent	105' equivalent	105' equivalent	4"-30", 6"-65' eqv.
<b>Gas Connection Size</b>	1/2" NPT	1/2" NPT	1/2" NPT	3/4" NPT
<b>Max. Supply Water</b>	200°F	200°F	200°F	200°F
<b>Min. Return Water</b>	40°F	40°F	40°F	40°F
<b>Oxygen Tube Barrier</b>	Required	Required	Required	Required
<b>Certification</b>	CSA, AGA, CSAus, * ASME	CSA, AGA, CSAus, * ASME	CSA, AGA, CSAus, ASME	CSA, AGA, CSAus, ASME

\* Optional

## HEATING SPECIFICATIONS

	Ti100	Ti150	Ti200	Ti400
<b>BTU Input x1000</b>	15 - 100	25 - 150	25 - 200	75 - 399
<b>BTU Output x1000</b>	14 - 95	23 - 142	23 - 190	71 - 379
<b>S.S. Efficiency</b>	98%	98%	97%	96%
<b>AFUE</b>	95.1%	95.1%	95.1%	95.1%
<b>Head Loss @ GPM</b>	12' @ 8	12' @ 8	13' @ 10	9' @ 20
<b>Supply - Return</b>	3/4" NPT	3/4" NPT	1" on H, 3/4" on C Models	1 1/4" NPT
<b>Boiler Modulation Ratio</b>	6.6:1	6:1	8:1	5.3:1
<b>Flow Switch</b>	Optional	Optional	Optional	Installed

## DOMESTIC HOT WATER

(Combi Version)

	Ti150	Ti200
<b>Supply - Return</b>	3/4" NPT Outlet 1/2" Inlet	
<b>DWH Pressure Drop</b>	1 PSI	
<b>Head Loss @ GPM</b>	15' @ 8	18' @ 10
<b>Temperature Regulation</b>	Electronic Modulation	
<b>D.H.W. Outputs at 45° Inlet Water (GPM @ Water °F)</b>	4.0 @ 110°F	5.5 @ 110°F
	3.5 @ 120°F	4.8 @ 120°F
	3.1 @ 130°F	4.5 @ 130°F



DISTRIBUTED BY:

**NY THERMAL INC.**

31 Industrial Drive, Sussex  
New Brunswick E4E 2R7 Canada  
Tel: 506-657-6000  
Fax: 506-432-1135

[www.nythermal.com](http://www.nythermal.com)