

200,000 BTU/HR - 12,000,000 BTU/HR

CONDENSING BOILERS AND WATER HEATERS

HIGH-EFFICIENCY RADIAL PULSE TECHNOLOGY



## **RADIAL PULSE TECHNOLOGY**

#### **CUTTING-EDGE HEAT EXCHANGER DESIGN**

The Gasmaster heat exchanger uses our internationally patented radial pulse technology to offer the highest thermal efficiency possible.

Built using high-grade ASME approved 316L stainless steel, our heat exchangers are corrosion-resistent and thermal shockproof. They are suitable for a variety of applications, from food processing to wastewater treatment and more.



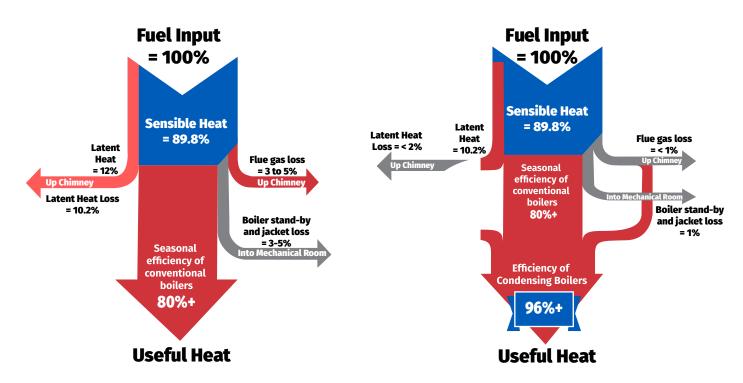
Internationally Patented Heat Exchanger

#### **EASY TO INSTALL, LOW MAINTENANCE**

Gasmaster boilers feature no moving parts, retain simple access for both commissioning and start-up, and require minimal maintenance.

For all controls, safety, and accessory components we have partnered with top brands including Siemens, Dungs, Honeywell, and Ametek, to offer the safest products available. In addition, the parts we use are non-proprietary with worldwide availability so in the event of an issue, repair is simplified for technicians.

#### **HEAT FLOW, CONVENTIONAL VS CONDENSING BOILERS**



#### GASMASTER

### **EFFICIENT AND VERSATILE**

#### **COMPREHENSIVE RANGE**

Our products are available in a flexible range of 600,000 BTU/hr to 12,000,000 BTU/hr. We also offer tailor-made configurations between 200,000 BTU/hr and 36,000,000 BTU/hr, including both customized skids and mobile boiler units.

#### **CERTIFIED KNOWLEDGE**

After over 25 years in business, we are proud to be certified with 10 different industrial manufacturer standard stamps.



















#### **COMPACT DESIGN, ECONOMIC FOOTPRINT**

HC Series and NX Series models are created with size in mind, offering configurations that can fit 6,000,000 BTU/hr into as little as 25 square feet of floorspace, and fit through standard industrial doorways.

#### **MODULATING BURNERS AND CONTROLLERS**

Our products come with a versatile range of burners from the best burner manufacturers available, including companies such as Oilon, Riello, Powerflame, Weishaupt, Carlin Combustion, Beckett, Elco, Limpsfield Combustion, and Heatwise.

We also offer a premix stainless steel mesh burner for low NOx (< 9 ppm) and a 20:1 turndown configuration.



Stacked HC 3000 Units, 6000 MBH

## **FUEL/GAS CONFIGURATIONS**

## **GMI SERIES FEATURES**

#### **VERSATILE FUEL OR GAS OPTIONS**

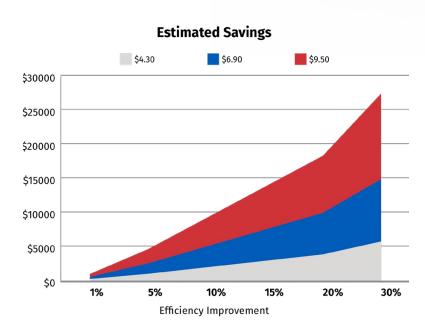
We brought the world the first 4,000,000 BTU/hr stainless steel dual fuel condensing boiler in 1998. This innovative position was maintained by our introduction of the 8,000,000 BTU/hr unit in 2004, and the introduction of the 12,000,000 BTU/hr unit in 2009.

We have always been committed to offering boilers that function using a variety of fuels and gasses.

Depending on our series line, you can expect our boilers to be available with the following fuel or gas options:

- **♦** Natural gas
- **b** Liquid propane gas
- **Biogas**
- No. 2 Oil
- b Dual Fuel/Gas

#### **SIGNIFICANTLY**





GMI 12M Dual-Fuel, 12000 MBH

#### **LOWER UTILITY COSTS**

Because our products run at an efficiency of up to 99.8%, you can expect to see sizable savings when upgrading from older machines. For instance, upgrading a 2M BTU/hr boiler in use 12 hours/day and 178 days/year with a fuel cost of \$9.50 and an efficiency improvement of 30%, you could expect to save around \$12,500 in your first year alone.

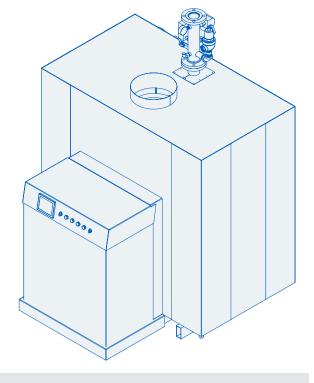
These savings can be raised even higher by purchasing a dual fuel/gas boiler, and using the most cost-effective option depending on availability.



#### **STANDARD**

GASMASTER

- ASME-approved SA 249 316L stainless steel heat exchanger
- Matural gas, propane, biogas, No. 2 Oil
- Siemens LMV37 Combustion Control
- UV flame detection
- Sealed combustion chamber
- NEMA-1 rated gas train
- High temperature limit with manual reset
- Water flow switch with low water cut-off
- 150 PSIG ASME-rated pressure relief valve
- Pressure gauge



#### **PREMIUM OPTIONS**

- 20:1 turndown ratio
- Dual fuel or gas
- ⊎ Ultra-low NOx: less than 9 ppm
- Modbus or BACnet interface
- Lead-Lag / Cascade (up to 8 units)
- Honeywell Sola or Autoflame Mini MK8
- Combustion air intake adapter
- Secondary low water cut-off

- CSD-1 gas train
- Auxiliary pump relay
- Alarm bell on lock-out
- Condensate neutralizer kit
- Circulating pump
- Air filter
- Automatic safety shut-off valve with proof of closure
- Custom skid designs

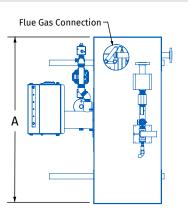
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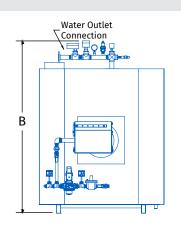
## **GMI SERIES SPECIFICATIONS**

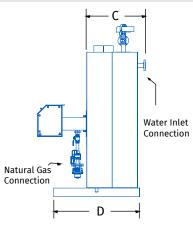
#### Water Inlet Connection **Water Outlet ∇**Connection Flue Gas Connection – Natural Gas Connection Water Condensate Drain Drain

		GMI 12M	GMI 8M	GMI 6M	GMI 4M			
Input	BTU/hr	12,000,000	8,500,000	6,000,000	4,500,000			
	Kw	3,517	2,344	1,758	1,172			
Output	BTU/hr	11,400,000	7,600,000	5,700,000	3,800,000			
	Kw	3,341	2,227	1,670	1,114			
Turndown Ratio <sup>1</sup>	X:1	5:1	5:1	5:1	5:1			
Boiler Eff. at Full	%	95	95	95	95			
Load <sup>2</sup>								
Electrical Rating <sup>3</sup>	V/Ph/Hz	230-460,3,60	230-460,3,60	230-460,3,60	230-460,3,60			
<b>Heating Surface</b>	Ft <sup>2</sup>	1536	911	680	444			
Side A	in/mm	68/1,727	68/1,727	68/1,727	68/1,727			
Side B	in/mm	89.5/2,273	89.5/2,273	89.5/2,273	89.5/2,273			
Side C	in/mm	84/2,134	56/1,422	47/1,194	40/1,016			
Side D <sup>4</sup>	in/mm	165/4,191	120/3,048	110/2,794	77.4/1,966			
Shipping Weight 5	Lbs.	11,000	5,200	4,100	3,500			
Supply Connections	Inches	6	4	4	4			
Return Connections	Inches	2x4	2x4	4	4			
Water Content	USG	320	170	126	92			
Gas Connection	Inches	3	2.5	2.5	2			
Gas Inlet Pressure	Inches WC	55-138	55-138	55-138	7-14			
Flue Connection	Inches	22	19	18	14			
Flue Duct	Material	All units use air-tight, corrosion-resistant stainless steel						
Max Working Pressure	PSIG	160	160	160	160			
Max Working Temp.	°F	210	210	210	210			
Min Inlet Water Temp.	°F	°F All units require any temperature above freezing point						

## **GMI SERIES SPECIFICATIONS**







		GMI 3M	GMI 2M	GMI 1.5M	GMI 1M	GMI 800			
Input	BTU/hr	2,000,000	2,000,000	1,500,000	1,000,000	800,000			
	Kw	586	586	440	293	234.4			
Output	BTU/hr	2,850,000	2,850,000	2,375,000	1,900,000	1,425,000			
	Kw	835	835	696	557	418			
Turndown Ratio <sup>1</sup>	X:1	5:1	5:1	5:1	5:1	5:1			
Boiler Eff. at Full	%	95	95	95	95	95			
Load <sup>2</sup>									
Electrical Rating <sup>3</sup>	V/Ph/Hz	230-460,3,60	115,1,60	115,1,60	115,1,60	115,1,60			
Heating Surface	Ft²	444	220	165	110	110			
Side A	in/mm	68/1,727	68/1,727	68/1,727	58/1,473	58/1,473			
Side B	in/mm	89.5/2,273	89.5/2,273	84/2,134	80/2,032	80/2,032			
Side C	in/mm	40/1,016	32/813	28/711	24/610	23.5/597			
Side D <sup>4</sup>	in/mm	118/2,997	63/1,600	57/1,448	50/1,270	50/1,270			
Shipping Weight ⁵	Lbs.	3,500	2,500	2,000	1,400	1,400			
Supply Connections	Inches	7	3	3	2	2			
Return Connections	Inches	4	3	3	2	2			
Water Content	USG	92	42	30	21	21			
Gas Connection	Inches	2	2	1.5	1	1			
Gas Inlet Pressure	Inches WC	7-14	7-14	7-14	7-14	7-14			
Flue Connection	Inches	13	10	10	9	9			
Flue Duct	Material	All units use air-tight, corrosion-resistant stainless steel							
Max Working Pressure	PSIG	160	160	160	160	160			
Max Working Temp.	°F	210	210	210	210	210			
Min Inlet Water Temp.	°F	°F All units require any temperature above freezing point							

Higher turndown ratios available
 Values can be higher depending on water inlet temperature
 Different voltages available upon request
 Size can significantly vary depending on preferred burner
 Approximate dry weight of unit

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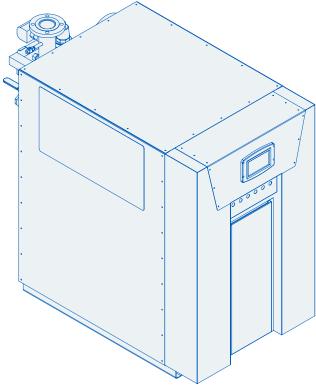
## **NX SERIES FEATURES**



NX 1000 NX 3000

#### **STANDARD**

- ♦ ASME-approved SA 249 316L stainless steel heat exchanger
- Matural gas or propane
- blow NOx (<30 ppm)
  </p>
- Honeywell Sola hydronic boiler controls
- UV flame detection
- Sealed combustion chamber
- NEMA-1 rated gas train
- High temperature limit with manual reset
- Water flow switch with low water cut-off
- 150 PSIG ASME-rated pressure relief valve
- Pressure gauge



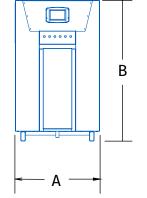
#### **PREMIUM OPTIONS**

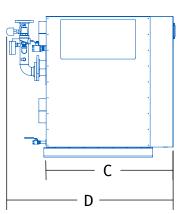
- 20:1 turndown ratio
- Ultra-low NOx: less than 9 ppm
- Modbus or BACnet interface
- Lead-Lag / Cascade (up to 8 units)
- Siemens LMV37 Combustion Control
- Combustion air intake adapter
- Secondary low water cut-off
- CSD-1 gas train

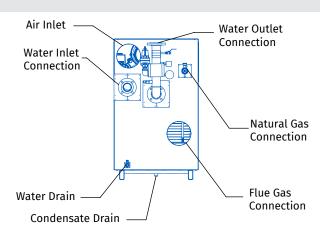
- Auxiliary pump relay
- Alarm bell on lock-out
- Condensate neutralizer kit
- Circulating pump
- Air filter
- Automatic safety shut-off valve with proof of closure
- Custom skid designs

#### GASMASTER

## **NX SERIES SPECIFICATIONS**







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		NX 3000	NX 2500	NX 2000	NX 1500	NX 1000			
Input	BTU/hr	3,000,000	2,500,000	2,000,000	1,500,000	1,000,000			
	Kw	879	733	586	440	293			
Output	BTU/hr	2,850,000	2,375,000	1,900,000	1,425,000	950,000			
	Kw	835	696	557	418	278			
Turndown Ratio <sup>1</sup>	X:1	8:1	8:1	3:1	3:1	5:1			
Boiler Eff. at Full	%	95	95	95	95	95			
Load <sup>2</sup>									
Electrical Rating <sup>3</sup>	V/Ph/Hz	208-480,3,50/60	208-240,3,50/60	208-240,3,50/60	110-240,1,50/60	110-240,1,50/6			
Heating Surface	Ft²	319	257	220	154	105			
Side A	in/mm	35/889	35/889	35/889	35/889	35/889			
Side B	in/mm	81.5/2,070	81.5/2,070	81.5/2,070	59/1,499	59/1,499			
Side C	in/mm	57.5/1,461	57.5/1,461	57.5/1,461	53/1,346	53/1,346			
Side D <sup>4</sup>	in/mm	81.5/2,070	81.5/2,070	81.5/2,070	69/1,753	69/1,753			
Shipping Weight 5	Lbs.	3,500	2,700	2,500	2,000	1,600			
Supply Connections	Inches	4	4	4	3	2			
Return Connections	Inches	2x3	2x3	2x3	3	2			
Water Content	USG	48	39	34	29	15			
Gas Connection	Inches	2	2	2	1.5	1			
Gas Inlet Pressure	Inches WC	7-14	7-14	7-14	7-14	7-14			
Flue Connection	Inches	13	12	10	10	9			
Flue Duct	Material	aterial All units use air-tight, corrosion-resistant stainless steel							
Max Working Pressure	PSIG	160	160	160	160	160			
Max Working Temp.	°F	210	210	210	210	210			
Min Inlet Water Temp.	°F								
Min Service Clearance	Inches Top 24", Front 18", Back 6", L. Side 18", R. Side 18", Floor Non-Combustible								
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Higher turndown ratios available
 Values can be higher depending on water inlet temperature
 Different voltages available upon request
 Size can significantly vary depending on preferred burner
 Approximate dry weight of unit

## **HC SERIES FEATURES**

#### GASMASTER GASMASTER GASMASTER GASMASTER GASMASTER GASMASTER HC 600 HC 1000 HC 1500 HC 2000 HC 2500 HC 3000

#### **STANDARD**

ASME-approved SA 249 316L stainless steel heat exchanger

Matural Gas or Propane

Uncontrolled NOx

Siemens LMV37 Combustion Control

UV flame detection

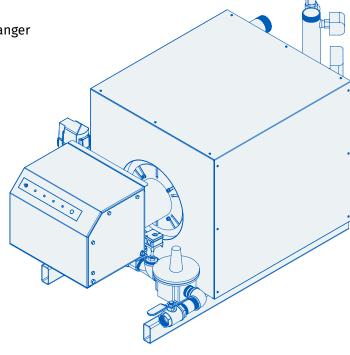
Sealed combustion chamber

NEMA-1 rated gas train

High temperature limit with manual reset

Water flow switch with low water cut-off

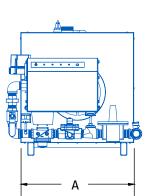
Pressure gauge

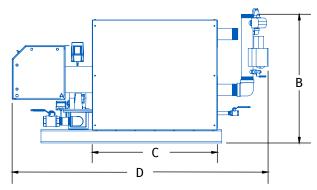


#### **PREMIUM OPTIONS**

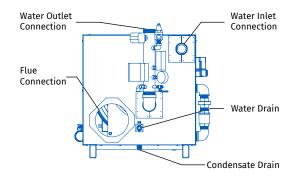
- 20:1 turndown ratio
- **Dual Gas**
- Ultra-low NOx: less than 9 ppm
- Modbus or BACnet interface
- Lead-Lag / Cascade (up to 8 units)
- Honeywell Sola or Autoflame Mini MK8
- Combustion air intake adapter
- Secondary low water cut-off

- Auxiliary pump relay
- Alarm bell on lock-out
- Condensate neutralizer kit
- Circulating pump
- Air filter
- Automatic safety shut-off valve with proof of closure
- Custom skid designs





**HC SERIES SPECIFICATIONS** 



		HC 3000	HC 2500	HC 2000	HC 1500	HC 1000	HC 600	
Input	BTU/hr	3,000,000	2,500,000	2,000,000	1,500,000	1,000,000	600,000	
	Kw	879	733	586	440	293	176	
Output	BTU/hr	2,850,000	2,375,000	1,900,000	1,425,000	950,000	570,000	
	Kw	835	696	557	418	278	167	
Turndown Ratio <sup>1</sup>	X:1	5:1	5:1	4:1	4:1	3:1	2:1	
Boiler Eff. at Full	%	95	95	95	95	95	95	
Load <sup>2</sup>								
Electrical Rating <sup>3</sup>	V/Ph/Hz	115,1,60	115,1,60	115,1,60	115,1,60	115,1,60	115,1,60	
Heating Surface	Ft <sup>2</sup>	365	229	200	172	105	67	
Side A	in/mm	40/1,016	35/889	35/889	35/889	35/889	35/889	
Side B	in/mm	43/1,092	39/991	39/991	38.5/978	38.5/978 <sup>3</sup>	40.5/1,029 4	
Side C	in/mm	41.25/1,048	41.25/1,048	37.75/959	35/889	26/660	20.5/521	
Side D ⁵	in/mm	86/2,184	80/2,032	78/1,981	68/1,727	60/1,524	60/1,524	
Shipping Weight <sup>6</sup>	Lbs.	2400	1,500	1,350	950	750	550	
Supply Connections	Inches	3	3	3	2	2	2	
<b>Return Connections</b>	Inches	3	3	3	2	2	2	
Water Content	USG	48	34	30	26	17	12	
<b>Gas Connection</b>	Inches	2	2	2	2	1	1	
Gas Inlet Pressure	Inches WC	7-14	7-14	7-14	7-14	7-14	7-14	
Flue Connection	Inches	13	12	10	10	9	7	
Flue Duct	Material	All units use air-tight, corrosion-resistant stainless steel						
Max Working Pressure	PSIG	160	160	160	160	160	160	
Max Working Temp.	°F	210	210	210	210	210	210	
Min Inlet Water Temp.	°F	°F All units require any temperature above freezing point						
Min Service Clearance	Inches	nches Front 16", Top 0", Side 0", Back 4"						

Higher turndown ratios available
 Values can be higher depending on water inlet temperature

<sup>3</sup> Different voltages available upon request

<sup>4</sup> To the top of the surface

Size can significantly vary depending on preferred burne
 Approximate dry weight of unit

## **CUSTOM ORDER CONFIGURATIONS**

#### GASMASTER

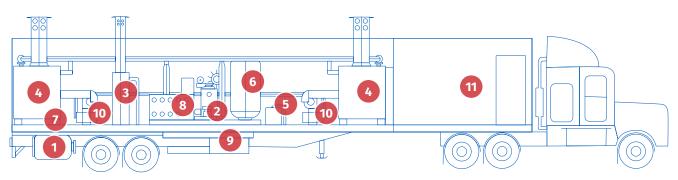
### **CUSTOM ORDER FEATURES**

#### **BUILT TO YOUR EXACT SPECIFICATIONS**

We offer custom boiler configurations to suit any heating or hot water application. Boilers are available as an uncovered skid, or as a fully containerized skid with industrial steel housing, easily transported via semi.

Ideal for both rural and urban applications, these units are made to be tough, versatile, and reliable. Past customers have utilized their custom designs for industries such as urban temporary event spaces, the oil & gas industry, mining, and others. For short term projects, these units are also available for rent and lease.





#### **TRAILER LEGEND**

- DOT/TC Rated Propane fuel tank(s)
- TransformerModbus or BACnet interface
- ASME propane vapourizer for boilers and the generating set fuel supply
- **4.** Stainless steel high-efficiency condensing boilers with fully modulating burners
- Propane fired generator set for all power requirements
- **6.** Expansion Tank

- CSD 1 Trim
- **8.** Supply and return manifolds with customized connections and cam lock fittings for quick and easy set-up or take-down
- **9.** Hose storage for 20 ft lengths
- **10.** Two sets of variable speed pumps providing 100% redundancy
- **11.** Optional room for controls, sleeping quarters, additional boilers, and/or storage



Custom skid with two GMI 4M units, totalling 8,000 MBH

#### **FEATURES**

- **1,000,000** BTU/hr to 36,000,000 BTU/hr
- ⊎ Up to 99.8% thermal efficiency
- Stainless steel units
- Direct or indirect heating
- Run with natural gas, propane, or oil #2

#### **PREMIUM OPTIONS**

- b Dual or tri-fuel/gas
- Remote monitoring
- 20:1 turndown ratio
- Carbon steel units



Custom trailer with two GMI 4M units, totalling 8,000 MBH

### **CUSTOMER SUPPORT**

### **BOILERS IN ACTION**

#### **EXCEPTIONAL WARRANTIES**

Our patented heat exchangers provide a unique counter-flow process that makes the vessel completely shock-proof, allowing water to be returned to the system at any temperature. Because of this, engineers can design heating systems for maximum efficiency without the return water temperature as a limiting design factor.

As a result, we offer the following warranty schedule for all qualified units:

- 20-year warranty on heat exchanger against thermal shock.
- 1-year warranty on non-proprietary components installed.
- **७** 10-year pro-rated warranty on heat exchanger against corrosion, mechanical defects and workmanship.

## STANDARD MAINTENENCE AND UPKEEP DOCUMENTATION

We take pride in offering a full set of documentation for our customers to aid in the maintenence and upkeep of our products. Some of the documentation you will find in your personalized Gasmaster Kit includes:



- Installation, Operation, and Maintenence Manual (IOM Manual)
- Electrical Drawings
- Standard Warranty Package
- Warranty Registration Form
- Field Start Up Report
- Controller manuals, parts lists, drawings
- **b** Burner manuals, parts lists, drawings













1480 Cliveden Avenue, Delta, BC, V3M 6K2 | Q gasmaster.ca

in Gasmaster-Industries

