

CUSTOM GAS
SOLUTIONS,
LEGENDARY
PERFORMANCE

TODAY'S
EFFICIENCY



NAGAS INNOVATION AT A GLANCE

NAGAS innovation manufactures **oil, natural gas and propane heaters** for the HVAC industry, specializing in providing solutions for businesses serving the **commercial, institutional and industrial** sectors.

The company takes its name from the legendary nagas of Southeast Asia—the dragon-like guardians of Earth’s treasures. It was created to meet the growing demand for energy efficient systems capable of providing the high level of comfort and precision that today’s consumer has come to expect.

Building on many years of industry experience, NAGAS innovation provides customizable, scalable solutions for the challenges that other suppliers are unable or unwilling to tackle. Ingenuity, experience our intelligent patented modulation technology and our condensing modules ensure that NAGAS innovation customers always get the right tool for the job at hand.

Whatever your requirements—from light-duty commercial to heavy-duty industrial— we have the expertise and the products to deliver the performance and quality you demand.

DT SERIES PROVEN CONSTRUCTION FOR LONG-TERM RELIABILITY



The DT version is shown with optional seal tight wiring, connection flange and painted gas train without the controls enclosure.



DT SERIES INDIRECT-FIRED DRUM AND TUBE HEATERS ARE DESIGNED FOR HIGH-CAPACITY APPLICATIONS IN VENTILATION SYSTEMS. CERTIFIED FOR INDOOR AND OUTDOOR INSTALLATION, THESE HEAVY-DUTY HEATERS HAVE A 40-YEAR TRACK RECORD AND AN EASY-TO-MAINTAIN DESIGN FOR OUTSTANDING RELIABILITY AND EXTENDED SERVICE LIFE.



FROM 200 TO 5000 MBH OUTPUT

The **DTR** is a simplified version of our trademark DT series. It offers an easily integrable design at a reduced cost with the same durability and reliability.



Front or back access panel for tube cleaning | Drain on one side for condensate removal
Removable lifting lugs for easy installation | Variable volume applications
409 HP, 304L or 316L stainless steel construction | Four-pass heat exchanger
Free-floating design

Natural or propane gas burner with up to 40:1 turndown



Oil-fired burner with up to 3:1 turndown

OPTIONAL FEATURES

- UV flame sensing
 - Epoxy or enamel coating
 - All stainless steel construction
 - Heated control box
 - Separated combustion air inlet
 - High altitude installation
 - Painted gas train
 - Wire identification
 - Variable air volume
 - BacNet compatible PLCs
- See specifications manual for more options

G90 galvanized steel cabinet | Structural steel frame | 2" thick high temperature insulation | 80% and above thermal efficiency
Riveted edges for flush mounted application | Horizontal and vertical airflow with horizontal, top or bottom discharge

THERMAL MODULES

THE NEW APPROACH TO GAS HEATING IN AIR HANDLING EQUIPMENT WITH THERMAL EFFICIENCIES UP TO 98%



An adaptation of two well-known technologies into one

The **Thermal Module** uses a small boiler equipped with a premix burner that heats a glycol loop with pump, coil, expansion tank and controls. The result is a simple and highly versatile product adapted to today's demanding market.

TM70 (239 MBH)
73" W x 47" H x 17" L

STACKED TM70 (478 MBH)



Features

- Redundancy
- Low NOx emissions
- 5:1 to 70:1 turndown
- Natural or propane gas
- High altitude installation
- Designed for up to 140F rise
- Designed for -40F incoming air
- SS condensing heat exchangers
- Can be used for ER wheel preheat
- Network capacity control of modules
- Helps meet ASHRAE 90.1 requirements
- Polypropylene 3" chimney with vent cap
- Air flow capacity from 1500 to 24600 CFM
- Very low pressure drop from .02 to .25" wc
- Independent PLC driven combustion control
- Can be installed on the negative side of the fan
- LEED points for low GHG emissions and efficiency
- Face dimension permit the installation of flat filters adjacent to the coil

FLEXIBLE DESIGN

The air tunnel and control enclosure are designed to be incorporated inside an AHU on the negative side of the supply fan.



MODULAR DESIGN

permits installation in series or in parallel with up to seven stacked modules. **239 to 3346 MBH**

The TM series is a recognized component especially constructed for integration in an AHU



DTH SERIES

THIS NEW SERIES OF HEAT EXCHANGER IS DESIGNED WITH EFFICIENCY AND LOW INSTALLATION COST IN MIND



This heater is built with a double-walled galvanized steel cabinet that is insulated with two inches of high temperature fiber glass insulation. It leaves the factory with pre-installed high limit, air baffles and removable lifting lugs.

It offers a two pass drum and tube heat exchanger with the choice of 409HP, 304L or 316L stainless steel material.

FROM 350 TO 1500 MBH OUTPUT

DTHR SERIES

DESIGNED TO BE EASILY INTEGRATED INSIDE AN AIR HANDLING UNIT



This new burner design offers high turn-downs up to **30:1** and is built with a cast aluminum fan and burner head with stainless steel baffles for corrosion-free operation.

Firing rate is controlled by a PLC that drives and analyses valve position, fan speed and pressure from low to high fire assuring clean and efficient combustion.

It uses non-proprietary electronic electrical components from renowned manufacturers for ease of servicing.

80 TO 87% THERMAL EFFICIENCY

OPTIONAL FEATURES

- Control and burner enclosure
- Aluminum chimney
- FM or IRI gas piping
- Propane gas
- Painted gas train
- High altitude installation
- Variable volume control



OPTIONAL FEATURES:

- FM or IRI gas piping
- Customized aluminium chimney
- Propane gas
- Painted gas piping
- High altitude installation
- Variable volume control

The DTH is a listed component especially constructed for OEM's that are looking for a quick integration and complete solution.



The DTHR is a recognized component especially constructed for experimented OEM's that can build non combustible walls around the heater.



TU-TW SERIES

PIONEERING INNOVATION, SUPERIOR PERFORMANCE



Vertical air flow arrangement shown with single stage control
Free-floating heat exchanger
Mounting flanges
Air baffles



Twin TW Listed version shown without control cabinet
Free-floating heat exchanger
Mounting flange for easy installation

TU-TW SERIES HEATERS ARE GAS-FIRED SERPENTINE COIL HEATERS WITH A HIGHLY FLEXIBLE STACKABLE DESIGN. THESE HEATERS ARE EQUIPPED WITH OUR PATENTED MULTI-STAGE MODULATION CONTROL. THIS INNOVATIVE SYSTEM SEQUENTIALLY CONTROLS INDIVIDUAL BURNERS SO THAT THEY CONSTANTLY FIRE WITHIN THEIR OPTIMUM RANGE. THE RESULT IS SUPERIOR PERFORMANCE, COMFORT AND HEATING STABILITY WITHOUT THE PROBLEMS NORMALLY ASSOCIATED WITH LOWER TURNDOWN HEAT EXCHANGERS.



Twin CTU-listed version shown with optional outdoor cabinet and 35:1 modulation ratio

Commercial, industrial and institutional, low-temperature process applications

New dimpled tube design eliminates turbulators

**82% THERMAL EFFICIENCY
FROM 90 TO 400 MBH
PER MODULE**



Patented multi-stage modulation control | Individually controlled venturi injection gas burners

OPTIONAL FEATURES

- Multiple units for better modulation and larger capacities
- Inverted mounting flange for 2" wall
- All stainless steel construction
- Multi-stage modulation
- 409HP, 304L or 316L SS
- PLC controls
- Variable air flow arrangement

NAGAS INNOVATION: WHERE YOUR NEEDS COME FIRST

At NAGAS innovation, we pride ourselves on our ability to see things from the customer's perspective and our willingness to go out of our way to satisfy customer needs.

No other company in the gas heater field offers such a comprehensive range of customizable products. Our experts will work with you to develop the most cost-effective solution for your project—specially tailored to your requirements and specifications.

Ask us "How custom can you make it?" We'll answer, "How custom do you need it?"

Heaters can be manufactured with modulation from 8:1 to 30:1 or more per module



TA-TB-TD-TG SERIES

THE COST-EFFECTIVE ALTERNATIVE FOR LIGHTER DUTY APPLICATIONS

TA-TB-TD-TG SERIES GAS-FIRED HEATERS ARE VERSATILE, SCALABLE UNITS DESIGNED TO MEET THE NEEDS OF OEM'S SEEKING ECONOMICAL BUT RELIABLE ALTERNATIVES FOR LIGHTER DUTY COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL APPLICATIONS.



Optional factory-packaged multiple units for better modulation and larger capacities



Commercial, light industrial and institutional applications | Tubular heat exchanger
Non-welded 409 stainless steel construction | Imbedded dimpled turbulators
Single-stage, double-stage, or modulation heaters with up to 10:1 turndown per module

DF SERIES

HIGH EFFICIENCY DIRECT-FIRED TECHNOLOGY

DF SERIES DIRECT GAS-FIRED DUCT HEATERS ARE DESIGNED TO HEAT MAKE-UP AIR, INDUSTRIAL PROCESS AIR, OR AIR CONSUMED BY OTHER BURNERS. IN BUILDINGS WHERE MAKE-UP AIR IS REQUIRED TO ADDRESS NEGATIVE PRESSURE PROBLEMS, THESE HIGHLY ENERGY EFFICIENT UNITS OUTPERFORM INDIRECT-FIRED HEATERS AND ARE THE MODEL OF CHOICE FOR BRINGING MAKE-UP AIR TO USABLE TEMPERATURES.



Adjustable profile plate | 30:1 turndown ratio | G90 galvanized steel construction



Optional constant velocity profile plate for variable airflow down to 25% of maximum airflow

OPTIONAL FEATURES

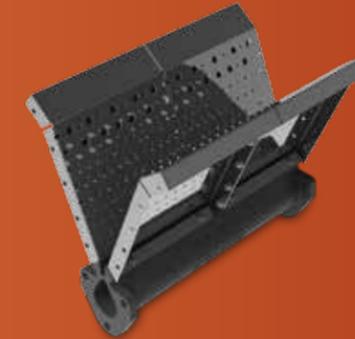
PLC-driven temperature controller for multiple unit systems
Control and gas cabinet
Variable volume applications
Multiple unit turndown of up to 50:1
See specifications manual for more options



Patented inshot gas burners | Natural or propane gas | Lightweight construction



Optional control and gas train enclosure
Right or left side control configuration



BURNER

Cast aluminium construction | Natural or propane gas compatible
Stainless steel diffuser plates | Flame rod detection

OPTIONAL FEATURES

100:1 turndown ratio with multi-unit configurations
FM gas train
IRI gas train
Stainless steel construction
Remote control panel
Heated control box
Cast iron and nickel plated burner
UV scanner flame detection
Customized dimensions
See specifications manual for more options



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