MTH SERIES

2.5 TO 63.0 MMBTU/HR <15 AND <9 PPM NOx





Advanced Technology

Endless Possibilities.

Designed for process heating applications such as thermal fluid systems and hot oil heating. The MTH series features a low pressure drop firing head design and low blower motor horsepower requirement for increased efficiencies. Advanced technology allows the MTH series to offer low NOx, low CO emissions and up to 5:1 turndown on natural gas.

Engineered for maximized EFFICIENCY and fuel cost savings.



Swing-Away Air Housing

Provides easy access to the nozzle, scanner, and the pilot for inspection or removal. No disconnection of fuel or power lines required.

Removable Mantle

The mantle is easily removeable without disassembling the burner from the boiler. It can be serviced, inspected and replaced without disconnection of fuel or power lines.

Parallel Positioning

System includes a completely integrated burner control with fully modulating flame safeguard from a single source. High accuracy and resolution with repeatable actuator positions for efficient operation. Digital positioning feedback from actuators ensure precise control, repeatability, reliability and independent ignition position for greater flexibility.

High Turndown

Up to 5:1 turndown capabilities on natural gas allows for reduced heat loss due to short cycling, faster response times to meet load demands and less mechanical cycling of load components.

Low Blower Motor HP

Advanced engineering provides increased combustion air fan efficiency requiring lower blower motor horsepower, thus increasing electrical savings.

The MTH Burner Explained

The standard MTH series includes full modulation with parallel positioning and offers natural gas and propane gas from 2.5 to 63.0 MMBTU per hour. Capable of low NOx/CO *emissions* without FGR, the MTH series features a rugged alloy fiber material combustion element over a stainless steel frame, providing flexibility, longevity and trouble free operation for the life of the burner. The design is ideal for use with applications where low emissions are required and FGR is impractical or inaccessible. The MTH burner with surface stabilized combustion guarantees reliable, quiet operation and is capable of less than 9 ppm, meeting today's most stringent NOx emission levels.

MTH Burner

Parallel Positioning standard for optimal control throughout the firing range

Premix Fuel allows uniform flame distribution, low CO emission and high turndown

Hinged Air Housing for easy access to internal components

Combustion Air Fan efficient airfoil blade design smoothly lifts airflow over the entire blade, resulting in less motor horsepower requirements and significant noise reduction when compared to standard force draft fans

Ultra-Low-NOx Emissions up to 9 ppm achieved without FGR

Rugged Surface-Stabilized Premix Combustion Element ensures quiet combustion and ultra-low-NOx/CO emissions throughout entire firing range.

UL/cUL Listed from 2.5 to 16.0 MM BTU



Low NOx Emissions Configuration

Burner Model & Frame Size	25-2	35-2	42-3	52-3	63-3	84-4	105-4	126-4	147-4	160-4
Gas Input (MBtu/hr)	2,500	3,500	4,200	5,250	6,300	8,400	10,500	12,600	14,700	16,800
BHP @ 80% Efficiency	60	83	100	125	150	200	250	300	350	400
Blower Motor HP	2	5	5	7 1/2	10	10	10	15	20	25
Furnace Pressure (in w.c.)	4	4	6	6	6	6	6	6	6	6
Std Gas Train Pipe Size (in.)	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5
Min. Gas Supply Req'd (PSI)	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5
Est. Shipping Wgt (lbs)	700	700	900	900	900	1250	1250	1250	1250	1250

Burner Model & Frame Size	210-5	252-5	294-6	336-6	378-6	420-7	504-7	540-7	630-8
Gas Input (MBtu/hr)	21,000	25,200	29,400	33,600	37,800	42,000	50,400	54,000	63,000
BHP @ 80% Efficiency	500	600	700	800	900	1,000	1,200	1,300	1,500
Blower Motor HP	30	40	50	50	60	60	75	75	100
Furnace Pressure (in w.c.)	8	8	8	8	8	8	8	10	10
Std Gas Train Pipe Size (in.)	2.5	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
Min. Gas Supply Req'd (PSI)	3.5	3.5	3.5	4.0	4.5	5.0	5.0	5.0	7.0
Est. Shipping Wgt (lbs)	1,400	1,400	1,500	1,500	1,500	1,800	1,800	1,800	1,900

Input is based on fuel Btu content and altitude of 2,000 feet or less. If altitude > 2,000 feet and < 8,000 feet, derate capacity 4% per 1,000 feet over 2,000. Consult factory for higher altitudes. Gas input is based on natural gas with 1,000 Btu/cu.ft. and 0.60 gravity. Consult factory for 50Hz. applications. UL/cUL Listed from 2,500 to 16,000 MBtu/hr.



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