NOVA PLUS 2 ULTRA LOW NOX COMBUSTION SYSTEMS GAS

400,000 – 8,600,000 BTU

# Power Flame®Nova Plus 2<sup>™</sup>



# **The Power of Choice**

The Power Flame NOVA Plus 2<sup>™</sup> Combustion System employs a fully premixed, surface stabilized combustion technology to provide proven ultra-low NOx solutions –**Sub 9 to 20 PPM** – without FGR for commercial, industrial and process applications.

Premixing fuel and air assures complete combustion with minimal levels of CO and unburned hydro-carbons. The all metallic firing head

#### Power Flame's Premixed, Surface Stabilized Combustion Burner

guarantees reliable and consistent performance at the operating conditions necessary to provide single digit NOx emissions.

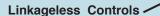
The NOVA Plus 2 is a simple, cost effective, field proven system designed to meet today's most stringent emissions requirements. Power Flame provides a U.L. listed, factory tested package, tailored to your job specific requirements. The NOVA Plus 2 is suitable for use on firetube and watertube boiler applications, as well as process heaters. It will operate with uniform heat flux and excellent flame stability over a broad range of operating conditions.

The modular concept that is the basis for all Power

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Flame burners keeps the initial investment low and maintenance costs at a minimum across the life of the burner.

The NOVA Plus 2 is equipped with a state of the art control system and integral panel. The parallel positioning combustion control safely operates the burner and minimizes the start-up time.



#### **Total Access Panel**

Swings out, easily removable top and front panels give total access to circuit board mounted operating controls

#### Metallic Firing Head —

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The metallic porous mesh provides surface-stablized combustion for excellent flame stability at ultra-low NOx operating conditions

Washable Stainless Steel Filter Assembly

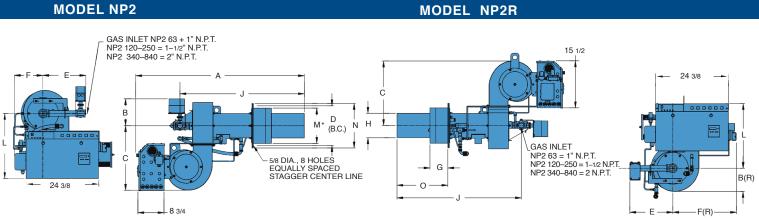


# STANDARD EQUIPMENT

- Metallic fiber combustion head
- Blower assembly with 3450 RPM motor
- Variable frequency drive (optional)
- Combustion control with UV scanner
- Gas electric pilot with ignition transformer
- Main and pilot gas trains
- Linkageless controls
- Washable stainless steel filter assembly



Nova Plus 2 is furnished with the exclusive Alpha System LED display. Modulating control is achieved through the use of linkageless controls mounted in the control panel.



\* ADD 3/8" TO "M" FOR OPENING IN HEAT EXCHANGER FRONT PLATE

## DIMENSIONS (Inches) Standard Models

### **RATINGS & SPECIFICATIONS**

																CAPACITY <sup>1</sup>							
Burner Model	А	в	B(R)	с	D(B.C.)	Е	F	F(R)	G	н	J	L	М	N	0	BLOWER MOTOR H.P. MAX.	STD. GAS TRAIN SIZE	NAT. GAS MBH MAX.	Nominal Boiler BHP	GAS PRESS (IN.W.C.) <sup>2</sup> MIN.	NAT. GAS MBH MAX.	Nominal Boiler Bhp	GAS PRESS. (IN. W.C.) <sup>2</sup> MIN.
			. ,	_	· · · /			``										9 PPM			20 PPM		
NP2-G-63	<b>48</b> %	107⁄8	<b>6</b> 1/2	<b>16</b> 5/8	<b>11</b> <sup>1</sup> /8	137/8	11	<b>19</b> 7/8	4	<b>5</b> <sup>3</sup> /4	331/4	<b>19</b> 1/2	<b>9</b> 5/8	125/8	<b>10</b> 1⁄4	1/2	1"	700	16.7	7.7	750	17.9	8.3
NP2-G-120	<b>53</b> %	10%	<b>6</b> <sup>1</sup> /2	<b>16</b> 5/8	<b>11</b> 1/8	<b>13</b> 7/8	11	<b>19</b> 7/8	4	<b>5</b> 3/4	<b>38</b> 1/4	<b>19</b> 1/2	<b>9</b> 5/8	<b>12</b> %	<b>15</b> 1/4	3/4	<b>1</b> ½"	1,230	29.3	8.4	1,360	32.4	9.7
NP2-G-170	<b>56</b> %	10%	<b>7</b> ¾	<b>21</b> 1/4	<b>13</b> 1/8	<b>14</b> 1/4	<b>9</b> 1/2	<b>21</b> 1⁄4	6	<b>8</b> 1/8	<b>41</b> 1/4	<b>21</b> 1/2	<b>11</b> 5/8	145/8	<b>17</b> 1/4	1.0	<b>1</b> 1/2"	1,740	41.4	11.4	1,900	45.2	12.7
NP2-G-250	<b>62</b> %	101%	<b>7</b> ¾	<b>21</b> <sup>1</sup> /4	<b>13</b> 1/8	143/8	<b>9</b> 1/2	<b>21</b> 1⁄4	6	<b>8</b> 1/8	<b>47</b> 5/8	<b>21</b> 1/2	<b>11</b> 5/8	145/8	<b>23</b> 1/4	2.0	11/2"	1,998	47.5	12.5	2,770	66.0	13.7
NP2-G-340	<b>66</b> %	10%	<b>7</b> ¾	<b>21</b> <sup>1</sup> /4	<b>13</b> 1/8	143/8	<b>9</b> 1/2	<b>21</b> 1⁄4	6	<b>8</b> 1/8	515/8	<b>21</b> 1/2	<b>11</b> 5/8	145/8	<b>27</b> 1/4	2.0	2"	3,200	76.2	13.1	3,470	82.6	14.1
NP2-G-420	67	101/8	7¾	<b>21</b> <sup>1</sup> /4	<b>15</b> 1/8	<b>14</b> 3/8	<b>9</b> 3/4	21	6	<b>9</b> 7/8	<b>53</b> 7/8	<b>21</b> 1/2	<b>13</b> 5/8	<b>16</b> 5/8	<b>28</b> 1/4	3.0	2"	4,375	104.2	14.4	5,020	119.5	15.8
NP2-G-520	<b>74</b> 7⁄8	<b>11</b> ½	7¾	<b>23</b> 3/4	<b>15</b> <sup>1</sup> /8	<b>14</b> 1/2	<b>9</b> 3/4	21	6	<b>9</b> 7/8	59	<b>24</b> 1/8	<b>13</b> 5/8	<b>16</b> 5/8	331/4	5.0	2"	4,998	119.0	20.0	6,100	145.2	21.4
NP2-G-630	86	<b>11</b> ½	<b>11</b> 1⁄8	29	<b>21</b> <sup>1</sup> /2	<b>14</b> 1/4	<b>11</b> 3/4	<b>40</b> 1/8	<b>8</b> 1/2	12	<b>60</b> 3/8	<b>29</b> 7/8	20	23	<b>33</b> 7/8	7.5	2"	6,300	150.0	16.0	7,350	175.0	18.0
NP2-G-840	94	<b>11</b> ½	<b>11</b> 1⁄8	29	<b>21</b> <sup>1</sup> /2	<b>14</b> 1/4	<b>11</b> 3/4	<b>40</b> 1/8	<b>8</b> 1/2	12	<b>68</b> 3/8	<b>29</b> 7/8	20	23	<b>41</b> 7/8	10.0	2"	8,400	200.0	32.0	8,600	209.7	32.5



# <sup>®</sup> Power Flame Incorporated

2001 South 21st Street Phone 620-421-0480 Parsons, KS 67357 Fax 620-421-0948 Web Site: http://www.powerflame.com E-Mail: csd@powerflame.com Note 1. Capacities listed are based on + 1.0" W.C. positive pressure. Refer to capacity curves for derates based upon combustion chamber pressure.

 At inlet to main manual shutoff cock to obtain P/F certified ratings with standard U.L. gas train. Optional gas trains available for lower pressures.

3. Maximum Gas Pressure 56 in wc.