Burner Capacity Information, Hauck NMC 240

NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION, LOW PRESSURE ATOMIZATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	**(BTU/hr)**	**1,040,000**	**2,520,000**	**3,500,000**	**4,900,000**	**5,980,000**
	(kW)	**280**	**670**	**930**	**1,300**	**1,580**
Secondary Air Capacity	(scfh)	9,434	24,780	34,980	49,500	60,660
	(nm^3/hr)	253	664	937	1,326	1,625
Secondary Air Inlet Pressure	(in.w.c.)	1.0	6.9	13.9	27.7	41.6
	(mbar)	2.5	17.2	34.5	68.9	103.4
Primary Air Capacity	(scfh)	1,300	1,300	1,300	1,300	1,300
	(nm^3/hr)	35	35	35	35	35
Primary Air Inlet Pressure	(in.w.c.)	4.0	4.0	4.0	4.0	4.0
	(mbar)	10.0	10.0	10.0	10.0	10.0
Gas Inlet Pressure	(in.w.c.)	1.0	2.5	3.5	4.9	6.0
	(mbar)	2.6	6.3	8.7	12.2	14.9
Flame Length (at 10% Excess Air)	(in)	24	36	48	66	72
	(mm)	610	910	1220	1680	1830
Flame Diameter (at 10% Excess Air	(in)	8	10	12	14	16
	(mm)	200	250	300	360	410
Maximum Operating Excess	(Air)	200%	200%	300%	400%	500%
	(Fuel)	30%	30%	30%	30%	30%

Burner Capacity Information, Hauck NMC-H 240

NATURAL GAS, 800°F/427°C PREHEATED SECONDARY AIR OPERATION, LOW PRESSURE ATOMIZATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	**(BTU/hr)**	**710,000**	**1,660,000**	**2,300,000**	**3,200,000**	**3,890,000**
	(kW)	**190**	**440**	**610**	**850**	**1,030**
Secondary Air Capacity	(scfh)	7,367	17,237	23,797	33,135	40,313
	(nm^3/hr)	197	462	637	888	1,080
Secondary Air Inlet Pressure	(in.w.c.)	1.0	6.9	13.9	27.7	41.6
	(mbar)	2.5	17.2	34.5	68.9	103.4
Primary Air Capacity	(scfh)	1,300	1,300	1,300	1,300	1,300
	(nm^3/hr)	35	35	35	35	35
Primary Air Inlet Pressure	(in.w.c.)	4.0	4.0	4.0	4.0	4.0
	(mbar)	10.0	10.0	10.0	10.0	10.0
Gas Inlet Pressure	(in.w.c.)	0.8	1.9	2.7	3.7	4.6
	(mbar)	2.0	4.8	6.6	9.3	11.3
Flame Length (at 10% Excess Air)	(in)	18	27	36	50	54
	(mm)	460	690	910	1260	1370
Flame Diameter (at 10% Excess Air	(in)	7	9	11	13	14
	(mm)	180	230	270	320	370
Maximum Operating Excess	(Air)	160%	160%	240%	320%	400%
	(Fuel)	30%	30%	30%	30%	30%

NOTES:

1. Capacities based on Natural Gas with HHV of 1034 BTU/ft^3 (Standard) / LHV of 10.21 kWh/nm3 (Metric), 0.59 S.G.,and a stoichiometric ratio of 9.74:1 at 10% excess air; with burner firing into chamber under no pressure.
2. Air and fuel flows based on STP operating conditions at sea level and industry standard air and gas piping practices.
3. Fuel inlet pressures given for reference only and should not be used for measuring fuel flow to the burner.
4. Flame lengths measured from end of the combustion tile.
5. Flame detection via UV scanner; for detection limits refer to the Burner Operating and Ignition Window.
6. Ignition via IPG5411 gas pilot; for ignition limits refer to the Burner Operating and Ignition Window.
7. Burner is suitable for use on gaseous and liquid fuels other than those listed, and with combustion air other than ambient temperature or that listed; for further information consult Hauck.

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5/23/2018

Burner Capacity Information, Hauck NMC 240

NO. 2 FUEL OIL, AMBIENT COMBUSTION AIR OPERATION, LOW PRESSURE ATOMIZATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 20% Excess Air)	**(BTU/hr)**	**1,070,000**	**2,350,000**	**3,200,000**	**4,410,000**	**5,340,000**
	(kW)	**280**	**620**	**850**	**1,170**	**1,410**
Secondary Air Capacity	(scfh)	9,434	24,780	34,980	49,500	60,660
	(nm^3/hr)	253	664	937	1,326	1,625
Secondary Air Inlet Pressure	(in.w.c.)	1.0	6.9	13.9	27.7	41.6
	(mbar)	2.5	17.2	34.5	68.9	103.4
Primary Air Capacity	(scfh)	3,420	3,420	3,420	3,420	3,420
	(nm^3/hr)	92	92	92	92	92
Primary Air Inlet Pressure	(in.w.c.)	27.7	27.7	27.7	27.7	27.7
	(mbar)	68.9	68.9	68.9	68.9	68.9
Fuel Oil Flow(at 20% Excess Air)	(gph)	7.8	17.0	23.2	32.0	38.7
	(lph)	29	64	88	121	146
Flame Length (at 20% Excess Air)	(in)	24	42	60	78	84
	(mm)	610	1070	1520	1980	2130
Flame Diameter (at 20% Excess Air	(in)	8	10	12	15	16
	(mm)	200	250	300	380	410
Maximum Operating Excess	(Air)	100%	100%	350%	400%	400%
	(Fuel)	30%	30%	30%	30%	30%

Burner Capacity Information, Hauck NMC-H 240

NO. 2 FUEL OIL, 800°F/427°C PREHEATED SECONDARY AIR OPERATION, LOW PRESSURE ATOMIZATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 20% Excess Air)	**(BTU/hr)**	**790,000**	**1,610,000**	**2,160,000**	**2,940,000**	**3,540,000**
	(kW)	**210**	**430**	**570**	**780**	**940**
Secondary Air Capacity	(scfh)	6,067	15,937	22,497	31,835	39,013
	(nm^3/hr)	163	427	603	853	1,045
Secondary Air Inlet Pressure	(in.w.c.)	1.0	6.9	13.9	27.7	41.6
	(mbar)	2.5	17.2	34.5	68.9	103.4
Primary Air Capacity	(scfh)	3,420	3,420	3,420	3,420	3,420
	(nm^3/hr)	92	92	92	92	92
Primary Air Inlet Pressure	(in.w.c.)	27.7	27.7	27.7	27.7	27.7
	(mbar)	68.9	68.9	68.9	68.9	68.9
Fuel Oil Flow(at 20% Excess Air)	(gph)	5.7	11.7	15.7	21.3	25.6
	(lph)	22	44	59	81	97
Flame Length(at 20% Excess Air)	(in)	18	32	45	59	63
	(mm)	460	800	1140	1490	1600
Flame Diameter(at 20% Excess Air)	(in)	7	9	11	14	14
	(mm)	180	230	270	340	370
Maximum Operating Excess	(Air)	80%	80%	280%	320%	320%
	(Fuel)	30%	30%	30%	30%	30%

NOTES:

1. Capacities based on No. 2 Fuel Oil with HHV of 138,000 BTU/USgal (Standard) / LHV of 10.3 kWh/liter (Metric), 0.87 S.G., and a stoichiometric ratio of 1380:1 at 20% excess air; with burner firing into chamber under no pressure.
2. Air and fuel flows based on STP operating conditions at sea level and industry standard air and gas piping practices.
3. Fuel inlet pressures given for reference only and should not be used for measuring fuel flow to the burner.
4. Flame lengths measured from end of the combustion tile.
5. Flame detection via UV scanner; for detection limits refer to the Burner Operating and Ignition Window.
6. Ignition via IPG5411 gas pilot; for ignition limits refer to the Burner Operating and Ignition Window.
7. Burner is suitable for use on gaseous and liquid fuels other than those listed, and with combustion air other than ambient temperature or that listed; for further information consult Hauck.

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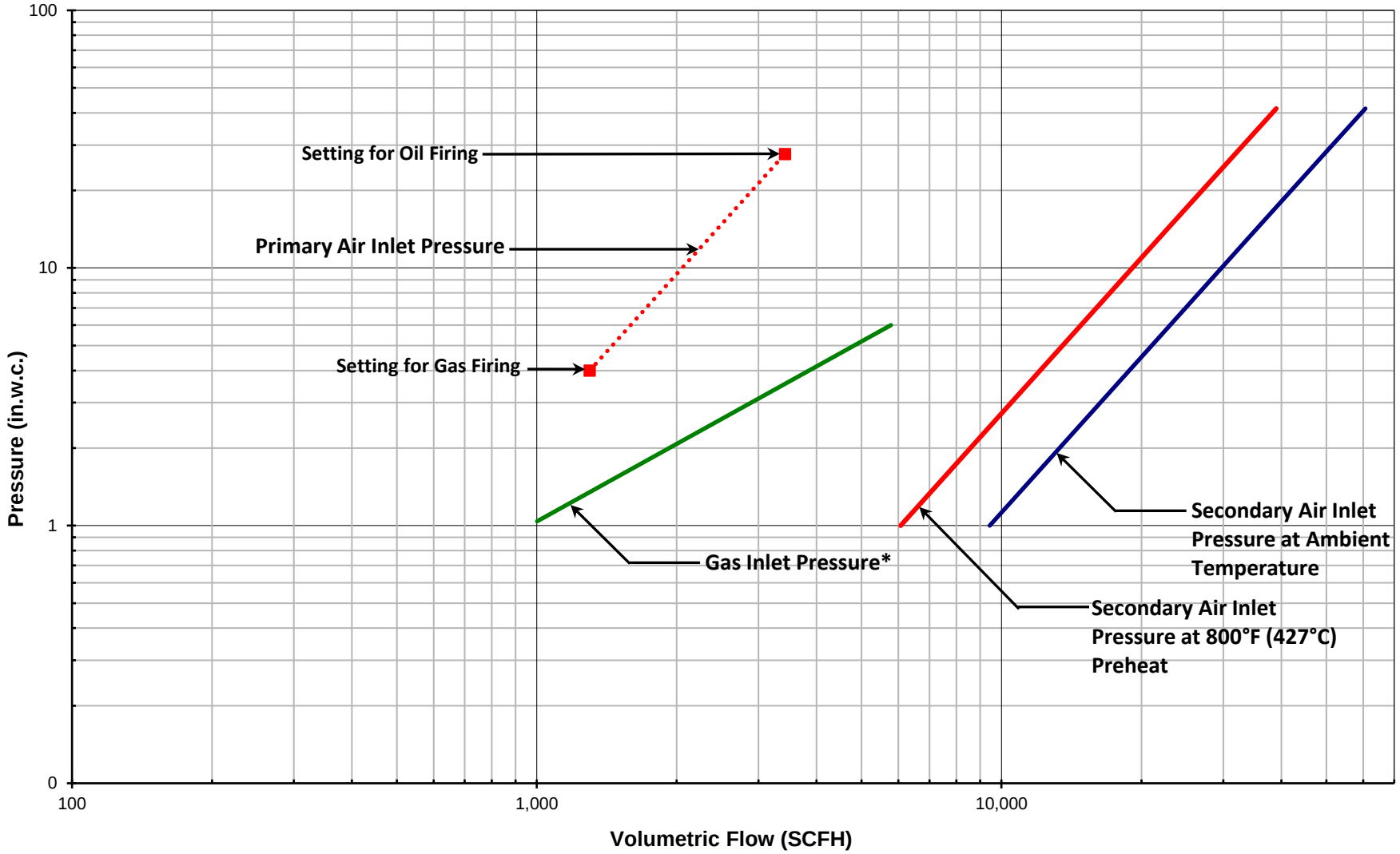
NMC/NMC-H 240 Pressure Curves

Natural Gas 1034 BTU/ft^3 (HHV Standard) / 10.21 kWh/nm^3 (LHV Metric), 0.59 S.G. and Ambient and Preheated Combustion Air



*Note: Gas Inlet Pressure for NMC burner is not suitable for fuel flow measurement and is given for component sizing and reference only

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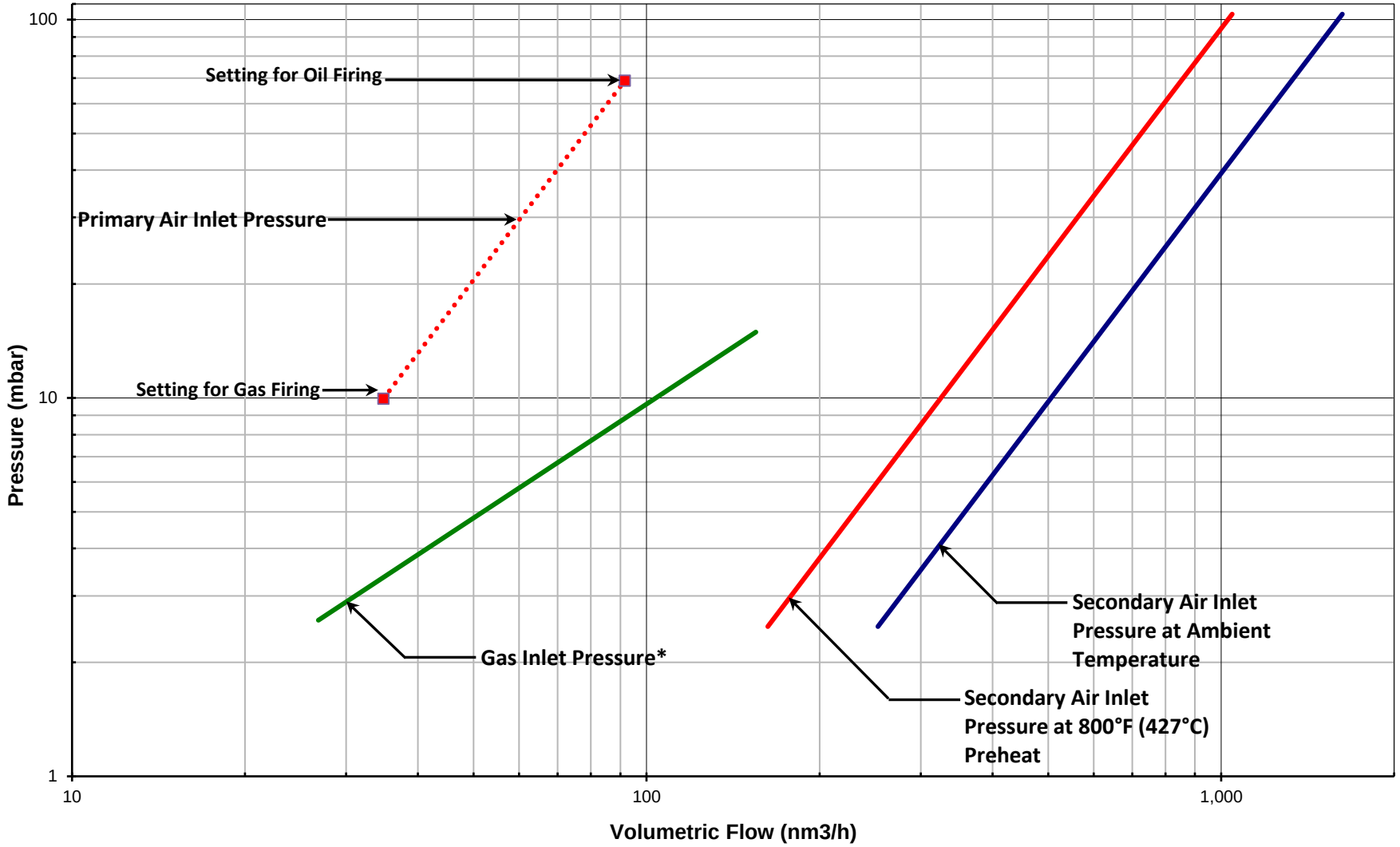
NMC/NMC-H 240 Pressure Curves

Natural Gas 1034 BTU/ft^3 (HHV Standard) / 10.21 kWh/nm^3 (LHV Metric), 0.59 S.G. and Ambient and Preheated Combustion Air



*Note: Gas Inlet Pressure for NMC burner is not suitable for fuel flow measurement and is given for component sizing and reference only

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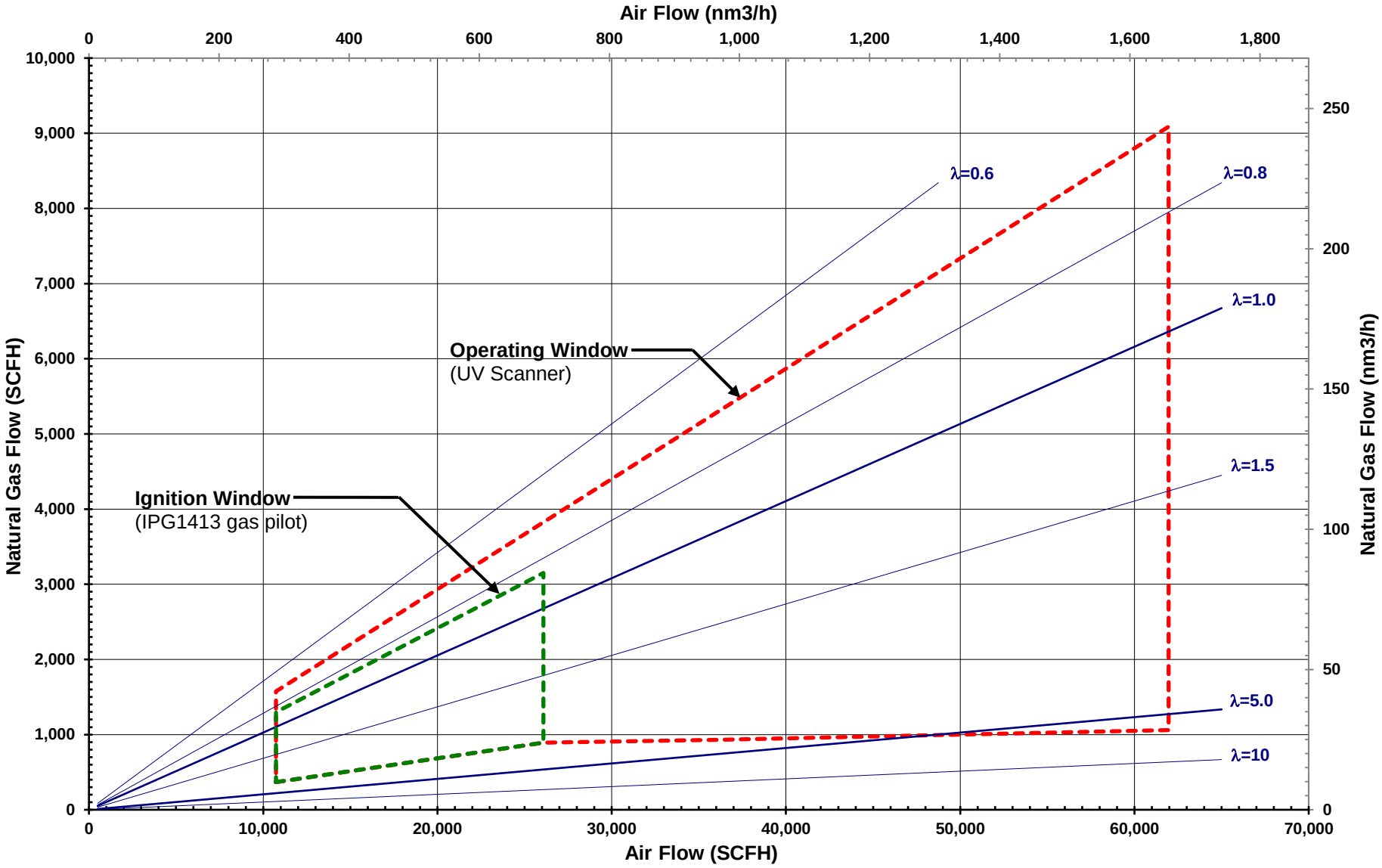
NMC/NMC-H 240 Operating and Ignition Window

Natural Gas 1034 BTU/ft3 (HHV Standard) / 10.21 kWh/nm3 (LHV Metric), 0.59 S.G. and Ambient Combustion Air



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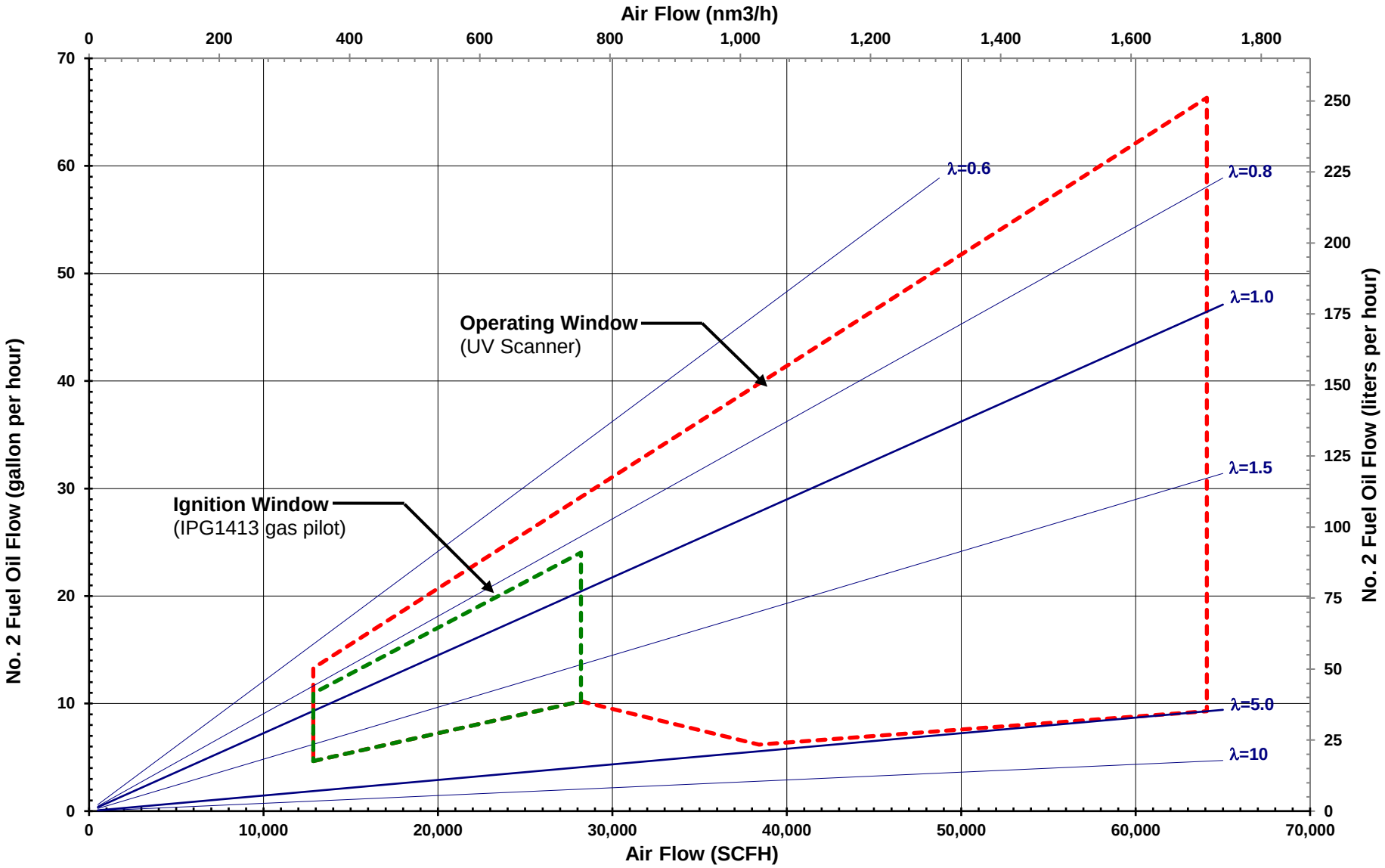
NMC/NMC-H 240 Operating and Ignition Window

No. 2 Fuel Oil 138,000 BTU/gal (HHV Standard) / 10.3 kWh/liter (LHV Metric), 0.87 S.G. and Ambient Combustion Air



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