



Typical Flue Product Emissions Data for Power Flame Burners

	Natural Gas	L.P. Gas	# 2 Fuel Oil ⁽¹⁾
Carbon Monoxide - CO	.037 lb CO 10 ⁶ BTU input (50 PPM)	.037 lb CO 10 ⁶ BTU input (50 PPM)	.037 lb per 10 ⁶ BTU INPUT (50 PPM)
Sulfur Dioxide - SO₂	(1.05) x (% Sulfur by weight in fuel) = lb SO ₂ per 10 ⁶ BTU Input		
Particulate Matter	.0048 lb PM per 10 ⁶ BTU input	.0048 lb PM per 10 ⁶ BTU input	.0143 lb PM per 10 ⁶ BTU input
Hydrocarbons	.025 lb HC's per 10 ⁶ BTU input	.025 lb HC's per 10 ⁶ BTU input	.038 lb HC's per 10 ⁶ BTU input
CO₂	9 % to 10%	10% to 12%	10% to 13%
Nitrogen Oxides - NO_x			
Standard J, FDM & X4 Gas Burners	.088 lb NO _x per 10 ⁶ BTU input (75 PPM)	.092 lb NO _x per 10 ⁶ BTU input (75 PPM)	N/A N/A
Standard C Burners	.088 lb NO _x per 10 ⁶ BTU input (75 PPM)	.092 lb NO _x per 10 ⁶ BTU input (75 PPM)	.159 lb NO _x per 10 ⁶ BTU Input (90) PPM ⁽²⁾
LNIAC Burners	.029 lb NO _x per 10 ⁶ BTU input (25 PPM)	.031 lb NO _x per 10 ⁶ BTU input (25 PPM)	.12 lb NO _x per 10 ⁶ BTU Input (90) PPM
CM Burners	.070 lb NO _x per 10 ⁶ BTU input (60 PPM)	.074 lb NO _x per 10 ⁶ BTU input (60 PPM)	.146 lb NO _x per 10 ⁶ BTU Input (110) PPM
IFGR LNIC NO_x Burners	.029 lb NO _x per 10 ⁶ BTU input (25 PPM)	.031 lb NO _x per 10 ⁶ BTU input (25 PPM)	.126 lb NO _x per 10 ⁶ BTU Input (110) PPM
LNICM Burners	.029 lb NO _x per 10 ⁶ BTU input (25) PPM	.031 lb NO _x per 10 ⁶ BTU input (25) PPM	.12 lb NO _x per 10 ⁶ BTU Input (90) PPM
NPM Premix Burners	.029 lb NO _x per 10 ⁶ BTU input (25) PPM	.031 lb NO _x per 10 ⁶ BTU input (25) PPM	N/A N/A
Nova Plus Burners NVC AND NP2	.010 lb NO _x per 10 ⁶ BTU input (9) PPM	.015 lb NO _x per 10 ⁶ BTU input (12) PPM	N/A N/A

NO_x emissions at 3 % O₂ will vary based on the percent of fuel bound nitrogen (these are based on .02%) and boiler or heat exchanger configurations

90 PPM NO_x on cast iron sectional, fire box and water tube boiler, 120 PPM on fire tube boilers.

Burning natural gas the VOC are estimated at 0.003 # per million BTU and SO_x are 0.0005 # per million BTU.

These emission rates are general estimates and do not constitute guarantees by Power Flame Inc.

In instances where guarantees are required, please consult the factory with the specific application information.

All NO_x numbers stated are corrected to 3% O₂