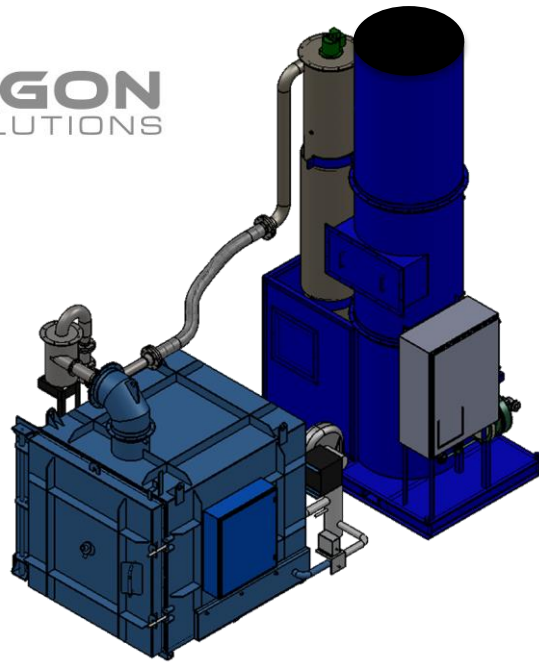




751 Pine Ridge Road
 Golden, CO 80405
 Tel: +1 (303) 974-2987
 paragonws.com



WASTE
 DESTRUCTION
 SYSTEM

MODEL M
 1.1.1.

CoronaLux™
 WASTE DESTRUCTION SYSTEM

**MODEL M
 1.1.1.**

KEY SYSTEM REQUIREMENTS	
Electrical Requirements	Building Requirements
3-Phase, 60 Hz, 480V Power, 30 Amp Circuit 6 kWh Wall-Draw Consumption	17' Ceiling and 12' x 12' Access Doors
Natural Gas Requirements (propane systems available)	Only required connections: Natural Gas and Electrical
<u>Peak</u> 500,000 BTU/h 500 CFH – 15 m ³ /h 150 kW	30 Amp Circuit, Type THHN 10 Gauge Wire
<u>Steady State</u> 50,000 BTU/h 50 CFH – 2 m ³ /h 15 kW	200 ft ² Floor Space (System & Work Space)
	20,000 lbs. Floor Load Capacity
Designated Waste Stream: Pathogenic, trace chemotherapy, pharmaceutical wastes, sharps, and related blood borne pathogens.	
Facility Requirements	
<ul style="list-style-type: none"> ▪ Roll-up door and loading dock that is >14' wide. ▪ 30 Amps three phase electrical service available per system. ▪ Fenced and locked gate facility for security and DOH requirements. City may require hedges or slats in wire fence to obscure view. ▪ Natural gas pressure of 5 psi and flow rate of 6,000,000 BTU/h – 6,000 SCFH. ▪ No drain in building – easier to collect and clean spills. Otherwise, water treatment system required. ▪ Ventilation fans inside building to dissipate heat from system. ▪ Preferably roof with no tar sealant - simple steel roof best. Otherwise we need to insulate around the stack. ▪ Water lines for eye wash fountain and safety shower with appropriate drain. ▪ Building must be completely up to all current code and minimum 18' ceilings. ▪ Preferably a low traffic area. ▪ 5,000 ft² facility and 1-2 offices. ▪ Natural gas supply in building. 	

MODEL M 1.1.1.	PYROLYTIC CHAMBER	PLASMA CHAMBER & VENT	TOTAL																								
DETAILED SYSTEM SPECIFICATIONS																											
Footprint	90 ft ²	48 ft ²	153 ft ²																								
Skid Length	10 ft	8 ft	17 ft																								
Skid Width	9 ft	6 ft	9 ft																								
Skid Height	10 ft	17 ft	17 ft																								
Weight	10,000 lbs.	10,000 lbs.	20,000 lbs.																								
REQUIREMENTS & CONSUMPTION																											
Electrical Requirements <ul style="list-style-type: none"> • Frequency • kVA • Amperage • Certification • Control Panel Classification* * Higher panel ratings available upon request ** Electrical stabilization equipment available upon request	60 Hz 4 kVA 10 A UL NEMA 4	60 Hz 5 kVA 20 A UL NEMA 4	60 Hz 9 kVA 30 A UL NEMA 4																								
Electrical Consumption <ul style="list-style-type: none"> • Required power supply • US average cost per kWh • Cost per hour 	2 kW 0.10 \$/kWh \$0.20/h	4 kW 0.10 \$/kWh \$0.40/h	6 kW 0.10 \$/kWh \$0.60/h																								
External Fuel Requirements Natural Gas (propane systems available) <ul style="list-style-type: none"> • <u>Start-Up</u> • <u>Steady-State</u> 	5 psi Supply Pressure 500,000 BTU/h 50,000 BTU/h	5 psi Supply Pressure 1.25M BTU/h 125,000 BTU/h	5 psi Supply Pressure 1.75M BTU/h 175,000 BTU/h																								
External Fuel Consumption Natural Gas (propane systems available) <ul style="list-style-type: none"> • <u>Start-Up</u> • <u>Steady-State</u> 	@ \$4.00 /MMBTU \$2.00/h \$0.20/h	@ \$4.00 /MMBTU \$5.00/h \$0.50/h	@ \$4.00 /MMBTU \$7.00/h \$0.70/h																								
Throughput <ul style="list-style-type: none"> • Based on composition of the waste 	<ul style="list-style-type: none"> • Cycle (c) = 12 hours <ul style="list-style-type: none"> ○ Pounds per cycle: 625-950 lbs. • 1 Day (d) = 2 shifts <ul style="list-style-type: none"> ○ Pounds per day: 1250-1900 lbs. 																										
Total Cost (full system gas & electric) <u>Start-up & Peak</u> <ul style="list-style-type: none"> • Total cost per hour • Total cost per pound <u>Steady State</u> <ul style="list-style-type: none"> • Total cost per hour • Total cost per pound 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>Electric</u></td> <td style="text-align: center;"><u>Gas</u></td> <td style="text-align: center;"><u>Total</u></td> </tr> <tr> <td style="text-align: center;">\$0.60/h</td> <td style="text-align: center;">+</td> <td style="text-align: center;">\$7.00/h</td> </tr> <tr> <td colspan="3" style="text-align: center;">= \$7.60/h</td> </tr> <tr> <td colspan="3" style="text-align: center;">15 cents / lb.</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td style="text-align: center;">\$0.60/h</td> <td style="text-align: center;">+</td> <td style="text-align: center;">\$0.70/h</td> </tr> <tr> <td colspan="3" style="text-align: center;">= \$1.10/h</td> </tr> <tr> <td colspan="3" style="text-align: center;">2 cents / lb.</td> </tr> </table>			<u>Electric</u>	<u>Gas</u>	<u>Total</u>	\$0.60/h	+	\$7.00/h	= \$7.60/h			15 cents / lb.						\$0.60/h	+	\$0.70/h	= \$1.10/h			2 cents / lb.		
<u>Electric</u>	<u>Gas</u>	<u>Total</u>																									
\$0.60/h	+	\$7.00/h																									
= \$7.60/h																											
15 cents / lb.																											
\$0.60/h	+	\$0.70/h																									
= \$1.10/h																											
2 cents / lb.																											



Paragon Waste Solutions
 751 Pine Ridge Road
 Golden, CO 80405
 Tel: +1 (303) 974-2987
paragonws.com