



### Incinerator System Overview:

Our [Solid Waste Disposal Incinerator](#) is a modular, multiple chambered, controlled air, solid waste thermal oxidizer system (incinerator), engineered for the unique demands of mixed composition and solid waste disposal.

An advanced cyclonic secondary combustion chamber provides superior, turbulent thermal oxidation of combustion gases with over 1 second retention std., for environmentally safe stack exhaust to atmosphere.

Utilization of weight saving refractory materials and modular construction enhances ease of erection and installation as well as improved maintenance of the system.



**System Capacity:** 1.0 MMBtu/hr waste combustion, providing 140-200 lb/hr (64-90 kg/hr) processing capacity for mixed waste streams with an average gross HHV of up to 5500-8500 Btu/lb.

**Batch Operation:** Approx. 1.95 yd<sup>3</sup> (1.5 m<sup>3</sup>) per 4-6 hour operation cycle

Intermittent Feed (w/optional loader): .73 yd<sup>3</sup>/hr (.56 m<sup>3</sup>/hr) up to 8 hrs/day



**Solid Waste Disposal Incinerator Model A1.0 - Technical Specifications:**

**Dimensions:**

Length overall: 7'-6" (2286mm)  
Width overall: 7'-6" (2286mm)  
Height (w/o stack): 10'-0" (3048 mm)  
Approx. weight: 13,500 lbs. (6136 kg)

**Primary chamber:**

Type: fixed hearth, with controlled under-fir air injection  
Chamber volume: 66.8 cu. ft.  
Hearth Area: 10 sq. ft.  
Burner capacity: .28-.45 MMBtu/hr. (Hi-Lo-Off control)  
Construction: skid - 6", 10.5#/ft., A36 channel  
shell - .250" thick, A36 plate  
lining - 4", 3000°F 750 psi, (Plicast 3100KK or equal)  
insulation - 1"1900°F Fiber (ASTM C612093, type V)  
Approx. weight: 7700 lbs. (4090 kg)

**Secondary chamber:**

Type: cyclonic thermal oxidizer with 1+ sec. r/t @ 1600°F (850°C)  
Chamber volume: 39.15 cu. ft.  
Burner capacity: 1 MMBtu/hr. (full modulating, excess air control)  
Construction: shell - .250" thick, A36 plate  
lining - 3", 3000°F 750 psi, (Plicast 3100KK or equal)  
insulation - 1"1900°F Fiber (ASTM C612093, type V)  
Approx. weight: 4250 lbs. (1932 kg)

**Combustion air:**

Supply to under-fire and secondary air injection.  
3 hp, 230/460 V, 3Ø, 60 Hz  
650 cfm @ 18° W.C. pressure

**Optional Hydraulic Ram Loader**





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**System Control:**

Siemens S-7 series PLC with touch-screen operator interface

To include:

Primary & secondary chamber temperature control  
Temperature actuated fuel and air control  
Burner interface, status and reset access\*\*  
System status and alarm display  
Hydraulic systems control (applicable with optional loader)  
\*\*Discrete, UL, CSA, FM & IRI burner monitoring/control  
w/U.V. flame supervision provided for each burner

**Exhaust Stack:**

Std. refractory lined

Construction:

(2-4' sections with s.s. no-loss cap & spark screen)  
shell - 10 gage, A36 carbon steel  
lining - 3" 2400oF, 175 psi, (Plicast AL-Tuff LWI-24 or equal)  
Wt. - 155 lb/ft (70.45 kg/ft.)

**Optional loader:**

Type: Hydraulic ram feed (optional cart tip hopper load available)  
Hopper volume: 14 cu. ft. (.4 m3)  
Power unit: 5hp, 230/460 V, 3Ø, 1800 psi  
Hydraulic cylinders: 1800 psi: Charge door - two 3" bore, 1.5" rod, 36" stroke  
Optional Waste Carts: 50 Gal. (189lt) / (6.6 ft3) poly, roll-out type  
Charging frequency: 20 minutes, up to 3 times per hour  
Approx. weight: 5,000 lbs. (2273 kg)

