



Incinerator System Overview:

The [Solid Waste Disposal Incinerator Model EPAT-0.5](#) is a modular, multiple chambered, controlled air, solid waste thermal oxidizer system (incinerator), engineered for 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.



Utilizing weight saving refractory materials and modular construction enhances ease of erection and installation while also providing for improved ongoing maintenance of the system, critical for remote installations.

System Capacity: .5 MMBtu/hr waste combustion, providing 55-85 lb/hr processing capacity for animal waste streams with an average gross HHV of up to 5500-8500 Btu/lb.

Batch Operation: Approx. 19-20 cu.ft. per 4-6 hour batch cycle.

Intermittent Feed (w/optional loader): 8 ft³/hr. up to 8 hours per day.





Solid Waste Disposal Incinerator Model A 0.5 - Technical Specifications:

Electrical required: Single point - 230V, 3 ϕ , 60 Hz, 50 amp w/optional loader

Primary chamber:

Type: fixed hearth, with controlled over and under fire air injection
Chamber volume: 25.2 cu. ft.
Hearth Area: 8 sq. ft.
Burner capacity: .4 MMBtu/hr. (Hi-Lo-Off control)
Construction: skid - 6", 10.5#/ft., A36 channel
shell - .250" thick, A36 plate
lining - 3.25", 2800°F 750 psi, (Plicast 3000KK)
insulation - 1"1900°F Fiber (ASTM C612093, type V)

Secondary chamber:

Type: cyclonic thermal oxidizer with 1+ sec. r/t
Chamber volume: 17.1 cu. ft. (std.)
Burner capacity: .4 MMBtu/hr. (full modulating, excess air control)
Construction: shell - .250" thick, A36 plate
lining - 3.25", 2800°F 750 psi, (Plicast 3100KK or equal)
insulation - 1"1900°F Fiber (ASTM C612093, type V)

Combustion air: Supply to under-fire and secondary air injection.
3 hp, 230/460 V, 3 ϕ , 60 Hz
550 cfm @ 16° W.C. pressure

Optional Hydraulic Ram Loader





Solid Waste Disposal Incinerator Model A 0.5 - Technical Specifications:

System Control:

To include: Siemens S-7 series PLC with touch-screen operator interface
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. or Cad flame supervision provided for each burner

Exhaust Breaching:

Construction 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 2" bore, 28" stroke,
charging ram-2" bore, 38" stroke, hopper lid-one 2.5" bore, 16" stroke

Charging frequency: 15 minutes, up to 4 times per hour
Approx. weight: 4,500lbs.

Optional Guardian-OCS:

Oxygen monitoring combustion air control
*(Increases fuel efficiency of the system by 25% & provides
dynamic combustion control to prohibit upset conditions)*

