Industrial Waste 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:** 4.2 MMBtu/hr waste combustion, providing 363-605 lb/hr (95165-275 kg/hr) processing capacity for mixed waste streams with an average gross HHV of up to 5500-8500 Btu/lb.

**Batch Operation:** Approx. 5 yd$^3$ (3.82 m$^3$) per batch cycle

Intermittent Feed (w/optional loader): 4 yd$^3$/hr (3 m$^3$/hr) up to 8 hrs/day
**Thermal Oxidizer Incinerator - Technical Specifications:**

### Dimensions:
- **Length overall:** 11'-6" (3505.2mm) batch system w/o loader
- **Width overall:** 10'-3" (3124.2mm)
- **Height (w/o stack):** 14'-0" (3962.4mm)
- **Approx. weight:** 26,000 lbs. (11,818 kg)

### Primary chamber:
- **Type:** fixed hearth, with controlled under-fir air injection
- **Chamber volume:** 185.4 cu. ft.
- **Hearth Area:** 30 sq. ft.
- **Burner capacity:** .8 MMBtu/hr. (Hi-Lo-Off control)
- **Construction:**
  - skid - 6", 10.5#/ft., A36 channel
  - shell - .250" thick, A36 plate
  - lining - 5", 2800°F 750 psi, (Plicast 3100KK or equal)
  - insulation - 1"1900°F Fiber (ASTM C612093, type V)
- **Approx. weight:** 15,500 lbs. (4090 kg)

### Secondary chamber:
- **Type:** cyclonic thermal oxidizer with 1+ sec. r/t @ 1600°F (850°C)
- **Chamber volume:** 113.6 cu. ft.
- **Burner capacity:** 3 MMBtu/hr. (full modulating, excess air control)
- **Construction:**
  - shell - .250" thick, A36 plate
  - lining - 4", 2800°F 750 psi, (Plicast 3100KK or equal)
  - insulation - 1"1900°F Fiber (ASTM C612093, type V)
- **Approx. weight:** 10,500 lbs. (2727 kg)

### Combustion air:
- Supply to under-fire and secondary air injection.
- **35 hp, 230/460 V, 3Ø, 60 Hz**
- **1250 cfm @ 18" W.C. pressure**

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Optional Hydraulic Ram Loader
Solid Waste Disposal
Incinerator Model A 4.2

**Thermal Oxidizer Incinerator** - Technical Specifications:

**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” 2400°F, 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: 1.3 yd³
Power unit: 5hp, 230/460 V, 3Ø, 1800 psi
Hydraulic cylinders: 2500 psi: Charge door - two 2” bore, 36” stroke
- Charging ram- two 2” bore, 36” stroke
- Hopper lid - one 2.5” bore, 16” stroke
- Hopper loader - two 2.5” bore, 18” stroke
Charging frequency: 10-15 minutes, up to 4-5 times per hour
Approx. weight: 6,500 lbs. (2955 kg)