New

Biosirus

Magnocarb

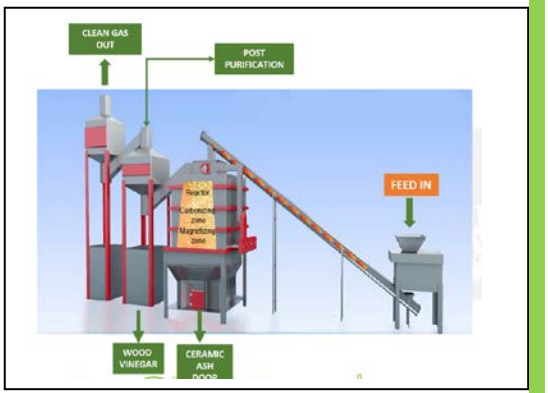
Low-Temp. Municipal Waste Reduction

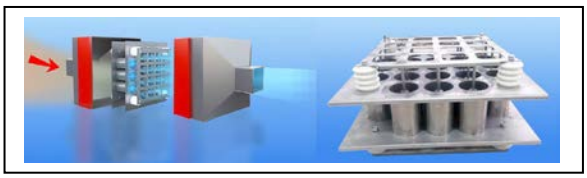
Low Temperature (50–350 deg. C)
Significant Reduction (1/300 to 1/500)
No Dioxins
Clean Flue Gas

- **Application:**
  - Offices, General Commercial, Hotels, Apartments
  - Municipal Garbage Services
  - Supermarkets, Food Service, Food Terminals
  - Food Production, Meat Processing, Agriculture
- **Features:**
  - Energy savings – No fuel, small electricity input
  - Small footprint, simple modular construction
  - Wide range – organics, biomass, animal waste, light plastics
  - Environment-friendly
  - Clean flue gas
- **How Does It Work:**
  - Oxygen rich low temperature waste decomposition
  - Magnetization eliminates dioxin production; Decomposes dioxin at a low temperature (300 deg. C)
  - Carbonizer does not require external heat source and power, except for the first ignition
  - Low temperature plasma exhaust gas purification (strong electric field reaction, molecular polymerization)
- **Technical Data:**
  - **Models:** 500 / 1,000 / 3,000 / 5,000 / 12,000 Kgs/day
  - **Power Supply:** 120/220/240V; 50/60Hz.; 1ph/3ph
  - **Power Consumption:** 5 – 125 kwh/day
  - **Exhaust Gas**: MSW incineration standard (GB18485-2014)
  - **Waste Reduction**: 1/300 to 1/500
  - **Output:** Small quantities of ceramic ash, wood vinegar solution, little steam
  - **Environmental:** No dust, no odor, no noise, no pollution, clean flue-gas
  - **Construction:** Simple modular design

- **Operation:**
  The system consists of 3 chambers (Reactor, Magnetization chamber and Flue gas purification unit). Through the depths of the Reactor, the waste passes through the low temperature carbonizer and the magnetic zones. The organic waste (in its hypoxic acceleration state) is decomposed into gas, water and inorganic ash. The flue gas passes through a low-temperature plasma purification unit.

  The inorganic ash can be used in building materials or as fertilizer



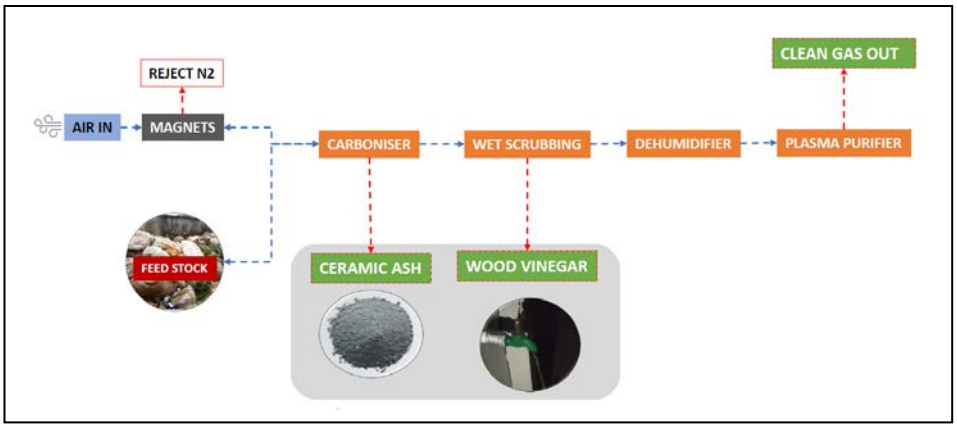


Tech Talk: *Low Temperature Carbonization*

Incinerator is typically a furnace, where waste is burnt.
At present, the main treatment of municipal waste is either incineration or landfill. Both have serious pollution issues such as leachates (landfill) and emissions (incineration). Incineration is banned in many countries. Since garbage sources are dispersed (even within a locality), its collection and transportation (to a central waste facility), is very expensive. Hence, a sustainable solution for municipal garbage reduction would be best when it is (1) in-situ with waste production, and (2) uses non-polluting methods. This would be the most economical and environment-friendly solution.

Dispersed and discretized oxygen-rich low temperature (50-350 deg. C) carbonizers, using non-polluting methods is the best answer for neighborhood garbage reduction. The low temperature decomposition is friendly to the environment. Magnetization/atomized air eliminates dioxin production by decomposing them at low temperatures. The larger units can be fitted with low-temperature plasma exhaust purification systems, to clean up the flue-gas. The result is a pollution-free waste reduction system. Garbage reductions of up to 1/300 to 1/500 (i.e. between 97% and 99%) can be achieved. The output is soil-friendly fertilizer ash and wood vinegar solution.

The best part is, that this solution is achieved (1) right where the garbage is produced; (2) at much lower cost (relative to traditional garbage collection/transportation/central processing); (3) has low O&M cost; and (4) is almost input-energy free. All this, with added benefits being odor-free, pollution free, and noise-free.



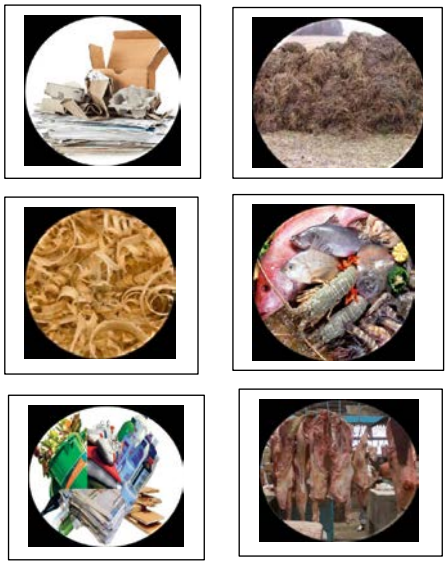
And Savings Too:

This ensures lower costs, greater ROI and a scalable speedier long-term solution. A two-for-one benefit.

Best Value Applications:

Parameters	Platinum Savings	Gold Savings	Silver Savings	Bronze Savings
Factory, Hotels, Apartments	*****	****	***	**
Food Industry (All)	*****	****	***	**
Municipal	*****	****	***	**
Supermarkets, Plazas	*****	****	***	**
Electricity Tariff (US $/Kwh)	>0.15	0.12	0.10	0.08
Transport cost (US $/km)	>10	10-7	7-3.5	<3.5
Labour cost (US $/hour)	>10	10-8	8-5	<5
Typical Pay back (simple ROI)	1 Year	2 Years	3 Years	4 Years

Typical Applications



Not Suitable

Call us for any details or a trial project

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