

Environment - ECO Waste

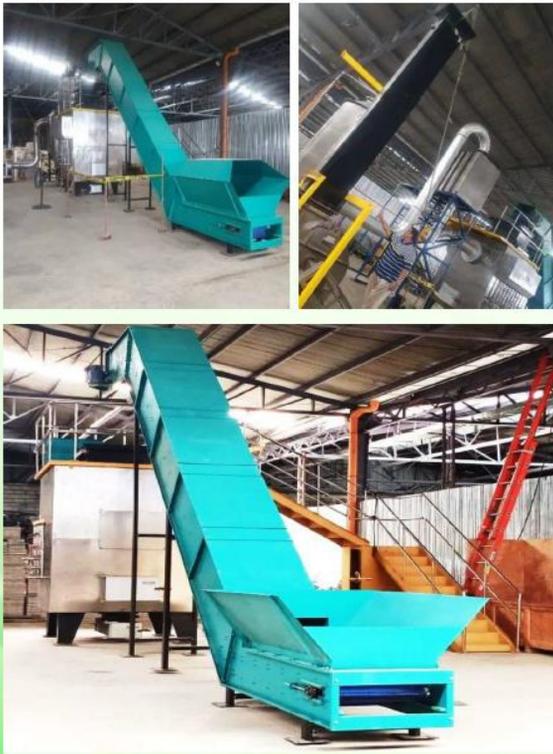
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Where and When: Solid Waste Management Alert

Executive Summary:



Eco Waste Management System offers an efficient and commercially viable, eco-friendly, permanent solution to waste management. This new, state-of-the-art technology does not require any input energy source like fuel or electricity, to manage the waste.

EWMS Technology is flexible in handling different types of waste. In the Philippines, the technology will be used to process residual municipal solid waste in compliance with Republic Act (RA) 9003. It also has the capacity to process bulky wastes such as used tires, PET bottles, plastic bags and Styrofoam.

DISPOSAL PROCESS





HSE ALERT - 012

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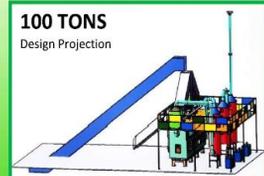
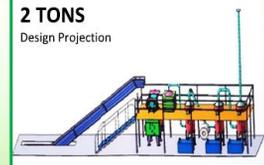
HOW ECO WASTE MANAGEMENT SYSTEM WORKS?

- Waste is fed into the chamber of the equipment at uniform intervals. During the commissioning process an initial start ignition is done using camphor/dry-wood, destruction starts slowly by splitting the molecules into atoms. Further ionization of atoms into electrons, protons and neutrons is called the "ionization state". Acceleration of electrons creates a strong energy which increases and maintains the heat in the chamber.
- On the other side a small amount of atmospheric air is allowed to pass through a strong magnetic field into the oxygen starved chamber. During this operation, oxygen molecules split into elemental oxygen having a negative charge. This atomic oxygen will oxidize the perfectly organic surface and change organic matter into desperate organic oxide. This reaction is induced by exothermic phenomenon, creating a thermal condition of +/- 200°C accelerating a reaction which will create initial decomposition.
- Upon achieving 200°C (by initial firing), then accelerating to 500-1000°C through magnetized ionization, a thermal vibration will be achieved.
- The decomposition of waste takes place stack wise so that the heat energy generated will be continuous. Located at the bottom of the destruction chamber is a tubular type radiator positioned near the lower layer of the equipment where ash gets deposited and separated. The waste heat is recovered through a tubular heat sink arranged near the upper layer of the deposited ash of a hearth center section of said decomposition chamber and said hearth periphery. This entire structure will support heat transfer, recovering the waste heat and applying it back to the wet waste, thus reducing the moisture content dramatically.
- The flue gases emitted from the decomposition chamber is released by induced draft. The emission may contain some toxic components like dioxin and furan, heavy metals, nitrogen oxides, etc., which are treated by the 3 stage wet scrubber and activated carbon filters, containing and reducing emissions to achieve the prescribed norms.

- #### BENEFITS & SAVINGS
- De-Centralizes handling of waste
 - Reduces Transportation Costs
 - Avoids Open Burning of Garbage
 - Reduces burden on Landfills
 - Phases Out Landfills with Zero Waste
 - Saves the Environment from Air, Soil, Ground Water Pollution

- #### TYPES OF WASTE
- Waste Paper
 - Tires & Tubes
 - Municipal Waste
 - Hospital Waste (Special Machine)
 - Food Waste
 - Plastic Waste

- #### FEATURES
- NO ELECTRICITY, NO FUEL, NO BURNING, SELF-SUSTAINING:** Magnetized ionization technology is used. The system doesn't need the combustion process, neither electricity nor fossil fuel is used.
 - US TECHNOLOGY:** System is based on United States design and process.
 - PROCESS AT MAGNETIZED STATE:** After initial start-up fire, destruction starts slowly by splitting the molecules into atoms. These atoms are further ionized as electron, proton and neutron and this state is called "magnetized ionization stage".
 - SMALL FOOTPRINT:** A small amount of floor space is required to support the system, this is based on the Unit Size and should be located in close proximity to the Unit.
 - QUICK & FAST:** Decomposition of waste takes place at a fast rate, within 1-1.5 hours a per load of waste.
 - US TECHNOLOGY:** The Eco Waste Management System works on a Programmed Magnetized Oxygenated State that eliminates any and all kinds of environment pollutants.
 - AVOIDS LANDFILLING AND DUMP YARDS** Reduces the volume of MSW in the ratio of 1/200-1/300 times the input waste
 - LOW COST & LESS MAINTENANCE:** Low capital expenditure with minimal running cost
 - MOBILITY:** Compact & Easy for Mobility
 - ENVIRONMENT FRIENDLY** Helps conserve the Environment by adhering to emission norms, also helps curtail Air, Soil & Ground Water Pollution. Any non-segregated Municipal Solid Waste (MSW) can be handled effectively.

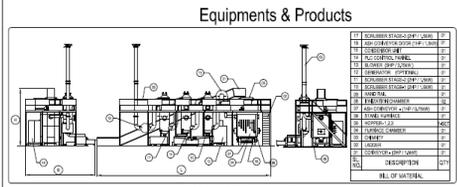


Eco Waste Management System

- Available in the following capacities:
- 2 Ton Capacity per Day
 - 5 Ton Capacity per Day
 - 10 Ton Capacity per Day
 - 20 Ton Capacity per Day
 - 25 Ton Capacity per Day
 - 40 Ton Capacity per Day
 - 50 Ton Capacity per Day
 - 60 Ton Capacity per Day
 - 80 Ton Capacity per Day
 - 100 Ton Capacity per Day
- (Capacity calculated on a 24 Hour basis)

For more inquiries, please visit or call us:
 Lok Tuck Kong
 WhatsApp: +65-91498562 / +65-93675494
 All countries inquiries are welcome.

- #### WARRANTY
- One (1) Year Warranty on Parts and Services.
 - Annual Maintenance Contract required.
 - The acsion provider will provide training for buyer's personnel on how to operate 'Eco Waste Management System'.



ECO WASTE MACHINE							
MODEL	+2 TON	+5 TON	+10 TON	+20 TON	+40 TON	+80 TON	+100 TON
01 LABEL OF CHAMBER	150x150x200	150x200x250	200x250x300	250x300x350	300x350x400	400x450x500	500x550x600
02 BASE CLEARANCE	200mm	200mm	200mm	200mm	200mm	200mm	200mm
03 MINIMUM HEIGHT	5.5m	5.5m	5.5m	5.5m	7.25m	7.25m	7.25m
04 DECOMPOSITION CAPACITY	2T	5T	10T	20T	40T	80T	100T
05 DECOMPOSITION METHOD	30W-30M MAGNETIC DECOMPOSITION						
06 MANUAL / AUTOMATIC	BOTH AVAILABLE						
07 No. of COPIES	18 APPROX	18 APPROX	22 APPROX	22 APPROX	22 APPROX	24 APPROX	24 APPROX
08 POWER REQUIREMENT	15KW	15KW	15KW	15KW	15KW	15KW	15KW
09 % of HUMIDITY (REQ)	11.5% to 13.5%	11.5% to 13.5%	11.5% to 13.5%	11.5% to 13.5%	11.5% to 13.5%	11.5% to 13.5%	11.5% to 13.5%
10 MONITORING SYSTEM	PLC BASED						
11 LABEL OF MACHINE FLOOR	150mmx150mm	150mmx150mm	180mmx180mm	170mmx170mm	170mmx170mm	190mmx190mm	180mmx180mm
12 LARGEST SIZE FEEDING	AVAILABLE						
13 HAND RAIL FOR SAFETY	AVAILABLE						
14 ELECTRICAL SYSTEM	3 PH. 380V / 415V SPECIFIC TO COUNTRY REQUIREMENT						
15 POWER REQUIREMENT	OPTIONAL						
16 DUTY CYCLE-24HR	CONTINUOUS						
17 LOADING CYCLE TIME	20min DEPENDS ON CALORIFIC VALUE OF WASTE						
18 LOADING TYPE	AUTO MANUAL CONTINUOUS						
19 WASTE HANDLING	SERVICING THE OUTLET/CHUTE						
20 P.L.C CONTROL OF INLET FEED	AVAILABLE						
21 WASTE HANDLING OF ASH	SCREW TYPE CONVEYOR AVAILABLE						
22 SURFACE PROTECTION	HEAT RESISTANT PAINT PROTECTED WITH REFRACTION BRICKS AND CHROME WOOD.						
23 MATERIAL	AS PER SISCO COMPANY STD						
24 SAFETY INSTRUCTIONS	PLACARDS DISPLAY						
25 OPERATIONAL INSTRUCTIONS	PLACARDS DISPLAY						
26 MAINTENANCE INSTRUCTIONS	PLACARDS DISPLAY						
27 I/O & CONTROL	PLACARDS DISPLAY						
28 DIMENSION CONTROL MONITOR	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm	NET SCRUBBER 400mm x 500mm
29 SECTIONAL DIMENSION	500 x 1200	500 x 1200	500 x 1200	500 x 1200	500 x 1200	500 x 1200	500 x 1200

For more information refer to GSCE website to get the latest updates
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