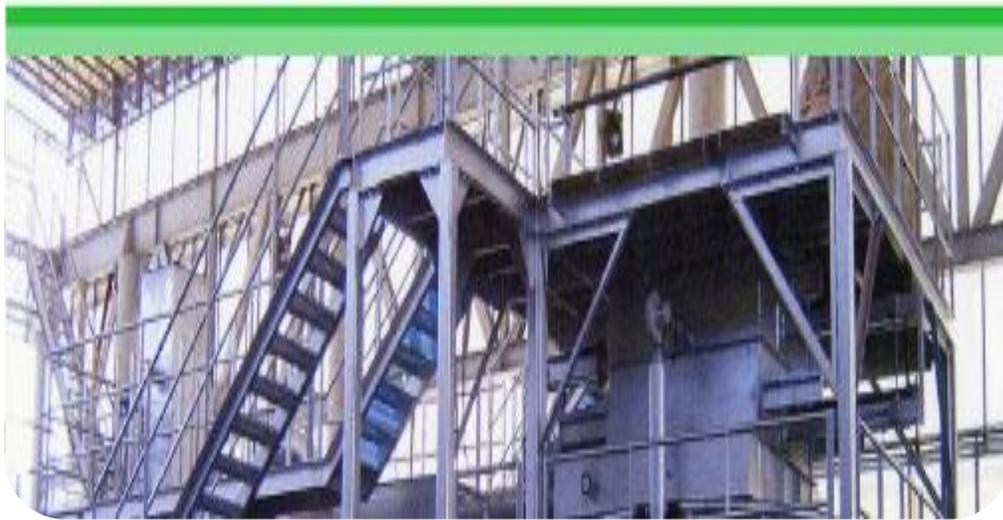


ゴミを資源に…地球に優しく人に優しい新技術

有機物分解セラミック生成装置 (ERCM) - Earth Resource Ceramic Machine -



In the current global environment, air pollution, acid rain, global warming (the Kyoto Protocol - Reduction of CO<sub>2</sub>), etc., has encountered various problems.

To introduce this system, the fluidized bed gasification fusion furnace of conventional and innovative systems have been evolved.

From the conventional combustion technology called "molecular decomposition" of the dream was born as an entirely new technology that is very new technology of the century.

Energy and resource conservation, and preserving the natural environment and surrounding community. "Earth-friendly, people-friendly" recycling system was born.



※ Staggeringly low cost

This system was gradually introduced organic matter and does not require any auxiliary fuel and heat to sustain itself fuel work. Electricity prices in continuous operation five cubic meters per month cheaper cost a staggering 100,000 yen.

※ Low noise

Sound source of sound only to be used for ventilation and cooling chiller unit.

※ High-quality ceramic

Ceramics produced by this unit of the hospital lab coat with superior bactericidal effect higher electro negativity sterile sheets, soil improvement, water quality improvement, paint and adhesives for construction, usage vary widely.

※ Negative ions (reducing atmosphere)

Using negative ion generating unit, transmission input and negative ions into the furnace at all times, to a reducing atmosphere in the furnace.

Reduce the thermal motion of oxygen in the atmosphere by reducing, preventing the flame burning.

Decomposition of hydrocarbon gas reflux occurring during drying.

※ No need to separate

You can put up with organic matter mixed without separation.



※ Ceramic radiant (far infrared region of electromagnetic waves)

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Place the charcoal occurred in the ceramic, ceramic top of the radiant heat generated. Far-infrared electromagnetic waves of radiant heat, the atoms will be resonant organic matter inputs, which generate heat by absorbing the energy of electromagnetic waves. (Atomic polarization) of heat generated by organic matter, hydrocarbons continue to dry from the inside.

※ Self flue region(non-flame burning above 1200 °C)

Grilled smoked, when there is a spark at the bottom of the deposit in general, propagating to the upper part widens conically

In ERCM, so that a reducing atmosphere in the furnace to feed constantly negative ions, it does not propagate the flame will be given to the top of the ceramic itself.

Carbides containing oxygen, if exposed to flame itself automatically linked to form a self-sustaining combustion.

Negative ions to help self-sustaining combustion activities, we have maintained a very high temperature of the combustion portion of the ceramic filled automatically by the radiant heat mat.

※ Molecular decomposition (decomposition at the atomic level).

Carbide is melted by the flame burn itself and joins the energy that is covalently bonded atoms (molecular decomposition) and leaves the mineral-like ceramics.

※ Decomposition of dry distillation gas (reducing atmosphere)

Carbonization gas volatile hydrocarbons evaporate into self-sustaining combustion when dry organic matter input is sent to disassemble detoxification treatment layer and the top while turning in a reducing atmosphere furnace.



※ Cooling of the exhaust treatment (without touching the outside air cooling)

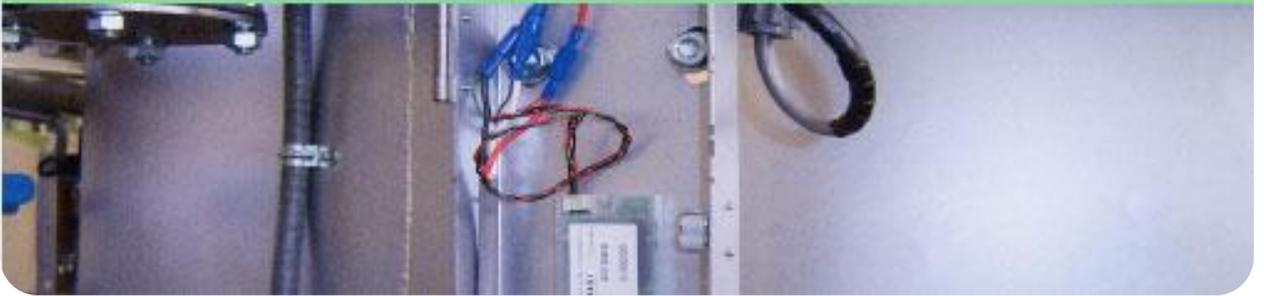
Expose to the air and leave the exhaust gas detoxification and decomposition carbonization can cause a variety of substances that bind atoms and molecules were decomposed again, they made harmful substances. Therefore, cooling must be stabilized without exposing to air in the exhaust has been rendered harmless ERCM, and collected as wood vinegar. (Will be liquefied vapor comb catching atoms decomposed) in the final stage exhaust treatment and exhaust emissions as taking a harmless microscopic particles that could not catch the smell of tar minutes

※ Outline of ERCM

<u>Type expression</u>	<u>ERCM 500Type /1000Type /3000Type /5000Type /10000Type</u>
<u>Dimensions</u>	<u>Width: 3,000 mm / Length: 11,920 mm / Height: 4,816 mm (Type 500)</u>
<u>Weight</u>	<u>About 33t (Type 500)</u>
<u>Treatment</u>	<u>4.8 Cubic meter in day,10 Cubic meter in day 30 Cubic meter in day,50 Cubic meter in day,100 Cubic meter in day</u>
<u>Receiving hopper</u>	<u>The size and volume of raw materials such as consultation</u>
<u>Raw material input port</u>	<u>1,700 mm × 1,700 mm (Type 500)</u>
<u>Inspection opening</u>	<u>500mm × 750mm (Type 500)</u>
<u>Power supply required quantity</u>	<u>Metered electric light B-30A, low pressure power-30kW (Type 500)</u>
<u>Main unit</u>	<u>Tank wood vinegar. reduction zone. control panel (generator house)</u>
<u>Raw material mainly composed</u>	<u>Wastepaper. Construction and demolition waste. Turf.Tree felling. Food residue Waste plastic shell. Incineration ash. Other</u>

※Please note: The specifications of this device dimensions are subject to change without notice.

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ERC M・低コストのひみつ



✘ When you start ERCM, other kinds of fuel used to fire the charcoal itself, not use any auxiliary fuel. Mosul became self-heating organic matter that was introduced in order to form a self-sustaining combustion and does not require an auxiliary fuel.

In addition, no organic matter input to screen, well if you put out in three to four days, no special action can be operated continuously for 24 hours 365 days. Cumbersome to operate for a week holiday will not, if the power is often simple and safe organic matter early next holiday as usual. The organic inputs, because the volume reduction to 1 / 100 to 1 / 500 and becomes a ceramic, export ceramics produced in about once every two months, in order to automatically take-out by simply pressing a switch, stopping the ERCM you do not need. ERCM safe design so, if the input of organic matter is complete, there is no need to close with Zhang. Operation is as simple as this, please work with two pair

### ・ Methods of analysis

#### ➤ J I S K 0 3 1 2 ( 1 9 9 9 )

Facilities surveyed, without burning, are small because they do not discharge wastewater to water bodies, the definition of specific facilities and waste incinerators is not applicable. Dioxin is a low concentration compared to the provisional target value, the concentration in this study was benign.



・Methods of analysis

➤ Manner prescribed by  
the Minister of Environment  
No. 1 pursuant to paragraph 2 of Article 2 of Law  
Concerning Special Measures against  
Dioxins Rule (Notification  
No. 80 of Ministry of Environment, (2004)  
Dioxins etc. are low levels compared  
to the provisional  
target value, a concentration problem in the study.



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✳ ERCM is no flame without burning flame to burn organic matter (referred to as self-sustaining combustion) to produce ceramic and by causing molecular degradation. This apparatus for the process without having to incinerate waste generally being done now, typically suppressed by keeping the combustion flame to the occurrence of harmful substances such as dioxins that occurs when flue gas treatment and during combustion in the final step to allow clean handling below the standard of regulation in Japan is a very innovative device that can be recovered as high-quality ceramic

END