

Technical Information Sheet

1. Name of technology	MSW gasification and ash melting furnace (Mitsubishi Fluidized Bed Gasification and Ash Melting System)
2. Type of technology	Combination of a fluidized bed gasification furnace (partial-combustion) and vertical ash melting furnace for MSW treatment (gasification and ash melting)
3. Description of technology Objective, application, characteristics, delivery record, and price of technology	<p>[Objective and application of the technology] MSW is gasified and the gas is incinerated at over 1,300 degrees C for ash melting to reduce volume and minimal dioxin emission simultaneously.</p> <p>[Characteristics of the technology]</p> <ul style="list-style-type: none"> • Fluidized bed gasification furnace <ul style="list-style-type: none"> i Gasification of MSW (partial-combustion) ii Extraction of valuable materials such as iron, steel, and aluminium from waste without oxidation (easy to recycle) • Ash melting furnace <ul style="list-style-type: none"> i Ash is melted at over 1,300 degrees C for volume reduction & stabilization of residue. ii Melted ash becomes “molten slag,” which is a recyclable material for use in construction. iii Minimal dioxin emission due to decomposition at high temperature iv Minimal energy consumption for ash melting since this system produces flammable gas that is used in the ash melting process. <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="459 904 852 1357" style="text-align: center;"> <p>Gasification furnace</p> </div> <div data-bbox="970 853 1433 1370" style="text-align: center;"> <p>Ash melting furnace</p> </div> </div> <p>[Delivery record] Kushiro Wide-Area Federation (Mar. 2006), Sanjo City (June 2012), Aomori City (Mar. 2015)</p> <p>[Price and other inquiries] Please contact the office and person in charge below.</p>
4. Classification of technology	
(1) Applicable fields	Municipal solid waste treatment, Industrial waste treatment, Recycling
(2) Target waste	Paper/cardboard, Waste plastic, Plastic bottles, Glass bottles, Steel cans, Aluminum cans, Styrene foam, Food waste/raw garbage, Waste oil, Other
(3) Services provided	Plant construction, Sales of machinery and equipment, Waste treatment service
5. Expecting market	Europe, Asia, Australia
6. Keywords	Recycling, gasification and melting, waste, waste gasification, melting
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