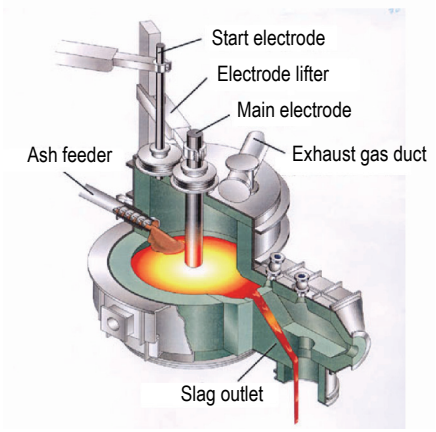
Technical Information Sheet

1. Name of technology	Waste incineration ash plasma melting furnace
2. Type of technology	This technology uses plasma to convert ash to molten slag for recycling.
3. Description of technology	
Objective, application, characteristics, delivery record, and price of technology	**[Objective and application of the technology]** This technology is used to convert ash to slag for volume reduction and recycling. **[Characteristics of the technology]** Direct voltage is applied to the graphite electrode and the electrode at the bottom of the melting furnace to cause the main electrode to generate plasma gas (N2) and create a plasma arc. The ash is melted by the radiation heat from the arc and the Joule heat generated by the current flowing in the slag bed. The electrodes are made of graphite, which does not require water cooling. This enables easy operation with continuous feed and continuous slag discharge.  **[Delivery record]** City A (146 tons per day) and 5 other facilities **[Price and other inquiries]** Engineering Planning Department (Tokyo), Planning and Development Center, TAKUMA Co., Ltd. Person in charge: Susumu Uno TEL: 03-5822-7894 (Direct) FAX: 03-5822-7895
4. Classification of technology	
(1) Applicable fields	Municipal solid waste treatment, Industrial waste treatment, Hazardous industrial waste
(2) Target waste	Other (Municipal solid waste, industrial waste, and hazardous waste)
(3) Services provided	Plant construction, Sales of machinery and equipment, Waste treatment service, Technical cooperation/licensing, Environmental impact assessment, Survey/data processing, Other
5. Countries to which this technology can be provided	No limitations have been placed on country or region.
6. Keywords	Ash, plasma melting, molten slag
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