

Highly efficient thermal recycling technology

Waste-fired power generation system

Feature

- Hitachi Zosen has engaged in the construction of 72 waste-fired power generation facilities (attached to waste incineration plants).
- Total power generated reached 380MW
- The plant achieved 8,000 hours of continuous operations.

Overview

(Technical principles, actions, etc.)

The system employs a sustainable and a recyclable technology in which a boiler efficiently absorbs the heat generated during waste incineration, and a steam turbine and power generator convert the heat into electric power. For example, processing of the 1,000 ton of waste of 8,800 kJ/kg a day will generate 26 MW of power.

Maishima Plant (Osaka city)

Processing rate: 900 t/d, power generation capacity: 32,000 kW
Some of the generated power is used in the plant while the rest is supplied to electric companies. Plant visits are welcomed.



Maishima Plant (Osaka city)

Chuo incineration Plant (Chuo-ku, Tokyo)

Processing rate: 600 t/d, Power generation capacity: 15,000 kW
Recycled concrete and crushed stone were used as materials for plant construction.



Chuo incineration Plant (Chuo-ku, Tokyo)

Beitou Plant (Taiwan)

Processing rate: 1,800 t/d, power generation capacity: 48,000 kW
Three plants in Taiwan including the Beitou plant achieved 8,000 hours of continuous operations.



Beitou Plant (Taiwan)

Shanghai Laogangzhen Plant (China)

Processing rate: 3,000 t/d, power generation 60,000 kW
Waste gathered in the city of Shanghai is transported via ship to this plant located in a coastal area.



Shanghai Laogangzhen Plant (China)

Applicable field
Waste incineration facility

Water

Energy saving/Energy/recovery

Energy storage/Energy creation

New energy

Waste disposal/
Recycling/
Resource saving

Air

Soil

Other

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