# Technical Information Sheet

<table>
<thead>
<tr>
<th>1. Name of technology</th>
<th>Stoker type refuse incinerator (Kawasaki Advanced Stoker System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Type of technology</td>
<td>In recent years, looking from the viewpoint of prevention of global warming and energy efficiency, the potential of refuse incinerators as heat recovery facilities has come to be recognized. This requires not only that incinerators burn refuse safely, but also that they use the energy from waste materials efficiently. In order to answer these requirements, we have developed the Kawasaki Advanced Stoker System, based on our own parallel flow type refuse incinerator.</td>
</tr>
</tbody>
</table>
| 3. Description of technology | **[Objective and application of the technology]** To incinerate municipal waste safely, and efficiently recover and use the energy from that waste.  

**[Characteristics of the technology]** Our stoker type incinerators have been widely used for around 50 years. We have developed the Kawasaki Advanced Stoker System on the basis of that experience. Its basic concepts are:  
(1) Complete combustion with a low air ratio at high temperature;  
(2) Improved heat recovery ratio; (3) Clean incinerated ash and exhaust gas; and  
(4) Stable operation  
These features help reduce the environmental load by minimizing discharge of hazardous substances, and allow energy to be used efficiently.  

**[Delivery record]** Stoker type incinerators: a total of 321 units in 163 facilities, including:  
- Kyoto City Northeast Clean Center: 700 t/day (350 t/day × 2 units); 15 MW; completed in March 2001  
- East Plant, Fukuoka Clean Energy Corp.: 900 t/day (300 t/day × 3 units); 29.2 MW; completed in July 2005  
- Kishiwada Kaizuka Clean Center: 531 t/day (177 t/day × 3 units); 12 MW; completed in March 2007  

**[Price and other inquiries]** Environmental Plant Sales Department, Plant & Infrastructure Company  
TEL: +81-3-3435-6655  
FAX: +81-3-3435-6601 |
| 4. Classification of technology | **(1) Applicable fields** Municipal solid waste treatment  
**(2) Target waste** Paper/cardboard, Waste plastic, Food waste/raw garbage, Construction waste, Other (Biomass)  
**(3) Services provided** Plant construction, Sales of machinery and equipment, Technical cooperation/licensing, Other |
| 5. Countries to which this technology can be provided | China, Southeast Asian countries, Middle Eastern countries, Europe, North and South America |
| 6. Keywords | Municipal waste, refuse, stoker, intermediate treatment, power generation, detoxification, biomass |
| 7. Contact information | Person in charge: Kenji Tagashira, Environment Plant Sales Department, Plant & Infrastructure Company, Kawasaki Heavy Industries, Ltd.  
TEL: +81-3-3435-6655  
E-mail: tagashira_k@khi.co.jp |