**2** Municipal waste incineration technology

## Safe and sound municipal waste incineration and high-efficiency power generation

## Advanced ability to prevent pollution and high=efficiency power generation

From about 1960, Japan began disposing urban garbage by incineration, and today, Japan possesses the world's leading garbage incineration facilities. In the fiscal year 2009, there were 1243 incineration facilities in Japan, incinerating garbage using several methods - stoker furnaces, fluidized bed furnaces, and gasification fusion resource furnaces with the objective of ash recycling. Stoker furnaces account for 70% of all furnaces, and improvement of this type of furnace is progressing rapidly.

Today, while high level environmental conservation technologies are being introduced, technologies related to high-efficiency power generation and technologies related to safe operation, such as automatic incineration devices and automatic cranes, are also being developed. We are now accumulating know-how on handling diverse types of garbage of today, ranging from the low-calorie garbage, which was generated when incineration facilities were first being built, to the high-calorie garbage. Such technology can be utilized for the type of garbage generated in the Asian region.

The newest stoker furnace technology is low air incineration that aims for high-efficiency power generation, which is already under construction in Japan. The figure below shows one example of the latest technology: a facility exhibiting high pollution prevention and high-efficiency power generation capacity.

