INTEGRATED DISTRICT INCINERATORS

Description
The integrated district incinerator (IDI) is designed for heat supply of a particular district and consists of three major workshops:
- Waste incineration plant (WIP) for incineration of various waste products;
- Conventional fuel-fired boiler plant;
- Heating-system workshop providing heating of the agent for the heat-supply system.

Two types of fuel can be used in IDI:
- conventional fuel: such as gas, coal, black oil, etc.;
- unconventional fuel: combustible municipal wastes.

The waste incinerator is designed for burning district solid municipal waste (SMW) or other combustible products, such as industrial, commercial, municipal, medical wastes, and street garbage. Therefore the integrated district incinerators have two objectives:
- heat-power generation, which is traditional for heat power plants;
- ecological (unconventional), which is focused on sanitary cleaning of city districts by means of incineration of municipal wastes.

Technical appraisal and economic benefits
Simultaneous engineering solution of two most actual problems for Siberian cities:
- destruction of solid municipal wastes;
- enhancement of heat-supply reliability;

About 7–10 thousand tons of standard coal per year are saved in a district with a population of 100 thousand people.

Application area
Sanitation and cleaning services of cities.

Development stage
Not available.

Patent situation
No patent was obtained.
Commercial offers

• consulting services;
• development of technical specifications;
• development of the letter of intent;
• feasibility study;
• consulting services and expertise;
• development of a detailed design;
• design of optional equipment;
• supervision during construction.

Estimated cost

The cost of services is to be discussed. The cost of one waste incineration plane is about 200 million rubles (cost of 2002).

Contacts

Pavel A. Kuibin, Cand. Sc., Scientific Secretary
Institute of Thermophysics, Siberian Branch of the Russian Academy of Sciences
1, Prosp. Akademika Lavrentieva, Novosibirsk, 630090, Russia
Phone: (383) 330-60-44
Fax: (383) 330-84-80
E-mail: kuibin@itp.nsc.ru
http://www.itp.nsc.ru