

NEW TECHNOLOGY ON IHI FLUE GAS DESULFURIZATION SYSTEM

ABSTRACT

Environmental protection today is very important factor for preserving clean earth for the world.

Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) has been contributing onto the environmental protection throughout the world.

IHI Flue Gas Desulphurisation (FGD) System, which has been installed at many power plants in the world, exhibits marked increase in its plan and construction especially in Asia as a positive solution for environmental protection. Since 1960's, IHI has manufactured and delivered more than 700 units of flue gas treatment systems. In 1976, IHI has completed successfully the first FGD system for the Utility Boiler in Japan. Now IHI is available to design and to manufacture 1000MW FGD System, through which IHI has been recognised as a leading company in the field of the air pollution control industries in the world.

In this paper, we would like to present up-to-dated design of IHI FGD System and remarkable operating results of our new FGD plants completed recently. The FGD System are two-550MW coal fired units. The system is now operating smoothly, achieving a removal efficiency of more than 93% for SO₂. This project was extension & turnkey project constituting Limestone and Gypsum Handling System, Limestone Preparation System, Gypsum Dewatering System and Wastewater Treatment System. Further, enabling to install the FGD Equipment in a restricted area is one of the design features in this project, which may be of some help in planning the various FGD Plant.

And, we also would like to present another our new FGD System that is now under construction.

The FGD System is for a 1000MW coal fired unit, which is of our latest design one containing new technologies to cope with the local stringent environmental regulations. The system is scheduled to operate in December 2003 and then is currently under fabrication & installation. In this project, The latest non-leakage type Gas-Gas Heater (GGH), Box type absorber, Low-Low temperature Electrostatic Precipitator (ESP) technologies are applied.

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