

Sulphur Dioxide controls can be broadly classified as follows:

- Physical Coal Cleaning
- Flue Gas Desulphurization
- Low-Sulphur Fuel
- Fuel Desulphurization - Oil
 - Coal

Nitrogen Oxides controls can be classified as:

- Burner Modification
- Boiler Design and Operation
- Flue Gas Treatment

Particulate control is achieved as follows:

- Cyclonic cleaning
- Electrostatic Precipitator
- Baghouse

Definitions

"In use" technologies are those that have been demonstrated on a commercial scale and for which orders have subsequently been placed. "Available" technologies are those that have been demonstrated but not yet installed or ordered to any significant extent. "Emerging" technologies are those in the research and development stages that have been developed to the pilot-scale level.

A) Sulphur Dioxide Control

In the past, the main approach to sulphur oxide control in countries such as Japan and the U.S. has been the use of naturally occurring low-sulphur fuel. This is still the practice in Japan, but in the U.S. the recently enacted federal regulations now require a reduction in uncontrolled emissions for all new boilers burning oil or coal — and pressure is growing to require such reduction for existing units. Several approaches can be used to attain the reduction, including fuel blending, fuel desulphurization, coal cleaning, coal conversion, desulphurization during combustion, and flue gas desulphurization (FGD).

a) Physical Coal Cleaning

For coal, part of the sulphur can be removed at relatively low cost by physical methods, that is, the coal is subjected to a treatment based on gravity differences to