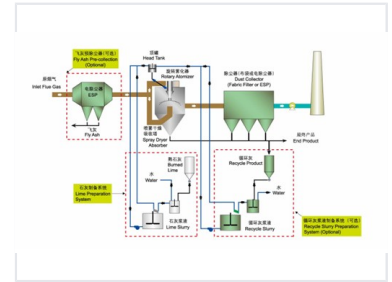


# Flue Gas Desulfurization System with Dry Sorbent Injection

This system utilizes dry spray absorption technology to remove sulfur dioxide from flue gases. A lime slurry is dispersed into the flue gas stream, promoting SO<sub>2</sub> absorption and producing a dry product that is then collected.



## Overview

### Efficient Dry Spray Absorption Technology

This Flue Gas Desulfurization (FGD) system utilizes Dry Sorbent Injection and spray dryer absorber modules to effectively remove pollutants like SO<sub>2</sub>, SO<sub>3</sub>, HCl, and HF. The technology is designed for low capital investment and minimal O&M costs, making it a cost-effective solution for power stations. Its compact structure and high availability ensure reliable performance in demanding industrial environments.

## Performance Metrics

### Operational Advantages

Low Capital Investment • Low O&M Cost • Low Power Consumption • High Availability • Space-Saving Design

## Process Capabilities

Pollutants Removed	SO <sub>2</sub> , SO <sub>3</sub> , HCl, HF
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## System Components

### Core System Components

- Spray Dryer Absorber Module
- Rotary Atomizer
- Lime Preparation System
- Downstream Particle Collector (Fabric Filter or ESP)
- Recycle Slurry Preparation System (Optional)
- Fly Ash Pre-collection ESP (Optional)

## Technical Process

### Reaction Reagents

- Lime Slurry
- Burned Lime
- Water
- Recycle Product

### Absorption and Collection

Untreated flue gas enters the absorber where it contacts a fine spray of lime slurry dispersed by a rotary atomizer. The pollutants are rapidly absorbed and converted into dry reaction products. These products, along with fly ash, are then efficiently removed by a downstream fabric filter or electrostatic precipitator.