

SO₂/Acid Gas Solutions

Dry-DeSO_x | Semi-dry DeSO_x | Wet-DeSO_x



Dry-DeSOx

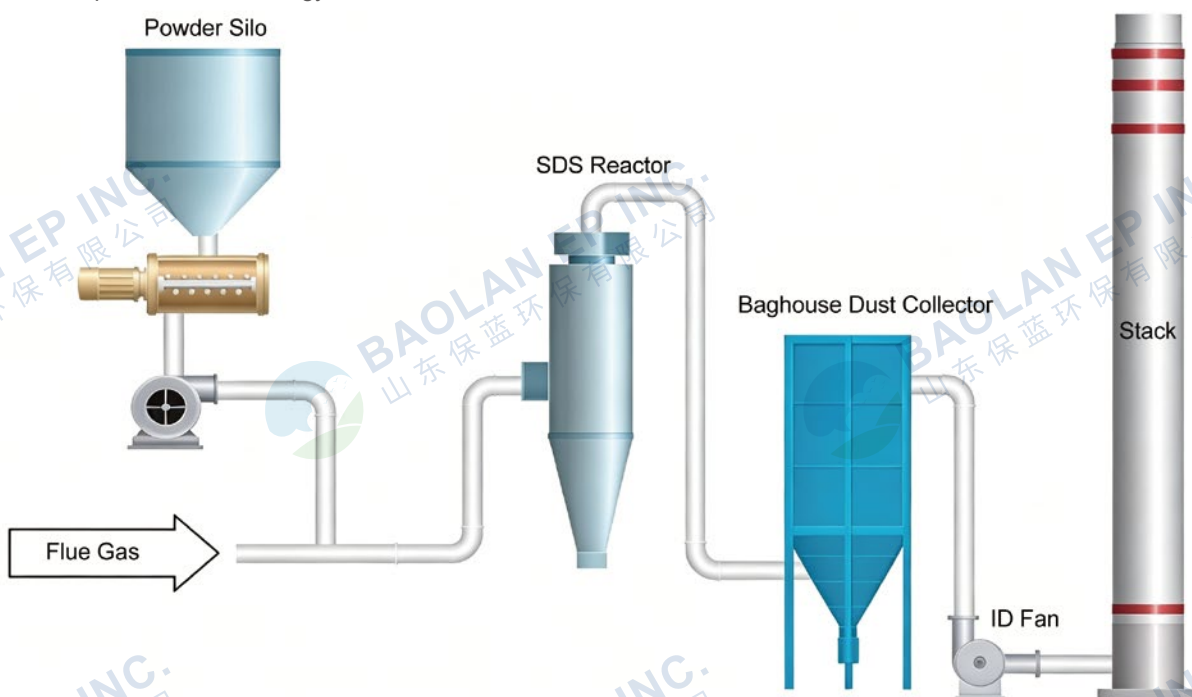
SO₂/Acid Gas

Overview

Dry desulfurization is an efficient and environmentally friendly flue gas desulfurization technology. It adopts dry powder absorbent as the reaction medium and completes the desulfurization reaction under full dry working conditions without water spraying and slurry preparation.

Absorbents such as lime powder and sodium bicarbonate are injected into the desulfurization reactor, fully mixed and contacted with acidic pollutants like sulfur dioxide and sulfur trioxide in flue gas to realize pollutant removal through adsorption and chemical reaction.

The process features a simple flow, small floor area and **no desulfurization wastewater discharge**, with low operation and maintenance costs. The by-products are dry powder and can be comprehensively recycled. It is widely applicable to flue gas treatment in power plants, industrial kilns, chemical and other industries, meeting the demands of industrial emission reduction for low carbon, environmental protection and energy conservation.



Working Principle

Flue gas extracted from the flue duct (with a flue gas temperature of 140–260 °C) enters the SDS desulfurization and dust removal system.

The flue gas first enters the SDS reactor, where ultra-fine sodium bicarbonate powder is injected.

Under the action of high-temperature flue gas, the ultra-fine sodium bicarbonate powder decomposes into highly active sodium carbonate and carbon dioxide.

The highly active Na₂CO₃ fully contacts and chemically reacts with SO₂ and other acidic substances in the flue gas, thus being absorbed and purified.

After desulfurization, the powdery dust particles enter the bag filter along with the air flow for further dust removal, and then proceed to the next process.

Reaction Principle:

Main Desulfurization Reaction:



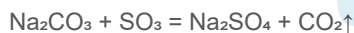
Oxidation Side Reaction (forming stable sulfate):



Side Reaction (removing trace sulfur trioxide):

A small amount of SO₃ in the flue gas (further oxidized from SO₂) also reacts with Na₂CO₃ to form sodium sulfate.

This realizes the removal of sulfuric acid mist while desulfurizing, avoiding equipment corrosion:



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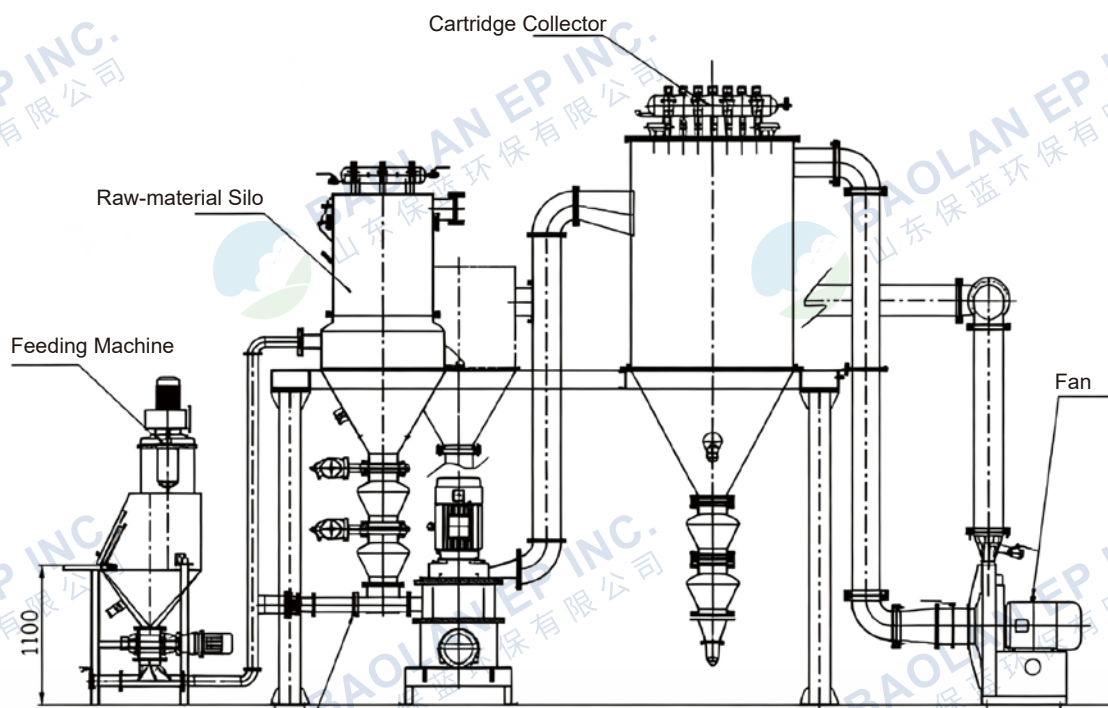
Internal Structure

Raw-material Storage Unit: It receives and stores industrial sodium bicarbonate (baking-soda raw material) to realize stable continuous feeding and prevent bridging and material clogging.

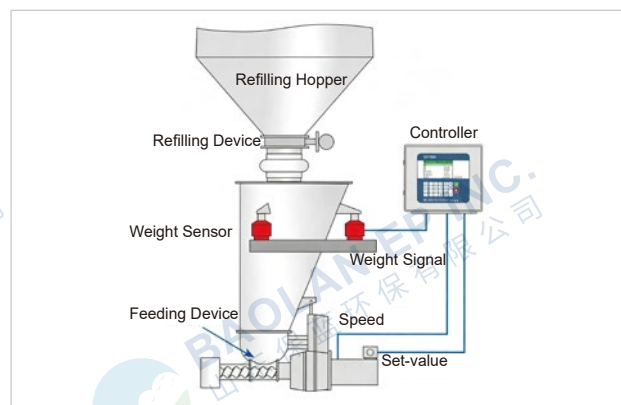
Equipment composition: raw-material unloading device (ton-bag unloading station/tanker unloading), raw-material silo, silo arch-breaking device (air cannon / vibration arch-breaking), high-and-low level gauge, silo-top dust collector, manual gate valve, star-shaped discharge valve.

Ultra-fine Grinding Unit (Core Unit of SDS): Coarse baking-soda is ground into ultra-fine powder to increase specific surface area and ensure the reactivity of thermal activation. Equipment composition: vertical / horizontal classifier mill, classifying wheel, circulating pipeline, mill-matching fan, sealing device.

The ultra-fine pulverizer is mainly used in industries including plastics, ceramics, paints, phosphate fertilizers, papermaking-chemical and building materials. It grinds non-flammable and non-explosive materials with Mohs hardness below grade 7 and moisture content below 6%. This machine features small footprint, complete unit assembly, wide application scope, simple operation, convenient maintenance, stable performance and high cost-performance.



Metering Feeding Unit: It delivers ultra-fine sodium bicarbonate powder with precise quantitative dosing according to flue-gas parameters and inlet SO₂ concentration to realize load-following regulation. Equipment composition: ultra-fine powder buffer silo, variable-frequency loss-in-weight feeder / screw metering feeder, level switch, sealing valve.



Dry-DeSOx

SO₂/Acid Gas

Internal Structure

Pneumatic Conveying and Flue-gas Injection Unit: The metered ultra-fine dry powder is conveyed to the flue duct and injected uniformly into flue gas to achieve sufficient gas-solid mixing.

Equipment composition: Roots blower / dilution fan, pneumatic conveying pipeline, injection lance, flue-duct static mixer.

Process Key Points:

The dilution air provides conveying power and disperses powder to prevent agglomeration;

Injection lances are arranged on the straight section of flue duct to reserve sufficient reaction distance;

The static mixer enhances mixing of flue gas and powder to avoid uneven local powder injection and dead zones.

Reaction Starting Point: Sodium bicarbonate undergoes thermal decomposition and activation in flue gas at 140-260 °C.



Reaction and Dust-removal Unit (Core Reaction Zone): Preliminary reaction takes place inside the flue duct, and deep desulfurization reaction is completed on the filter-bag surface of bag-house dust collector, meanwhile dry powder and fly ash are captured.

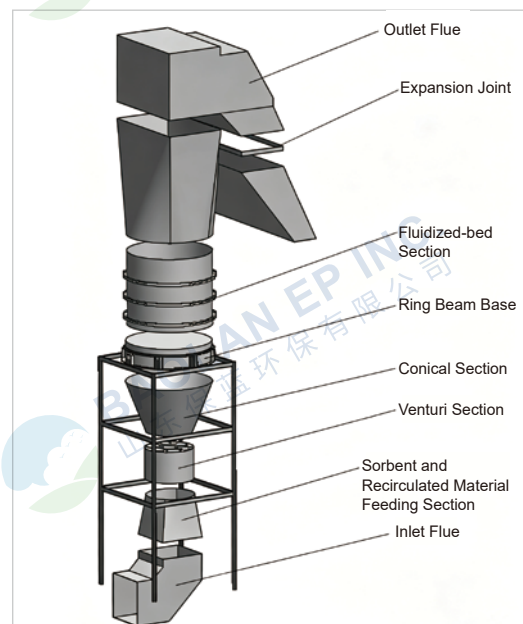
Equipment composition: bag-house dust collector (pulse-jet cleaning type), filter bag, pulse valve, blowing system, differential-pressure monitoring, temperature measuring point.

Description: Inside flue duct: sodium bicarbonate is thermally decomposed to form porous Na₂CO₃ and reacts preliminarily with SO₂, SO₃ and HCl;

On filter-bag surface: powder adheres to the outer layer of filter bags to form filter cake. When flue gas passes through the filter cake, acidic pollutants make full contact with alkaline powder and most desulfurization reactions are accomplished;

Differential-pressure signal of dust collector is fed back to DCS for automatic control of pulse-jet cleaning cycle;

The filter bag serves as an indispensable reaction unit for SDS process rather than a simple dust-removal component.



Ash Conveying and Storage Unit: Function: Collect reaction by-products (mixed dry powder of sodium sulfate, unreacted sodium bicarbonate and fly ash) from dust-collector hoppers, convey them to ash silo for temporary storage and discharge periodically.

Equipment composition: dust-collector hopper, star-type ash discharge valve, pressure vessel pump / screw ash conveyor, desulfurization ash silo, silo-top dust removal device, level gauge, dry-ash bulk loading device.

Description: The by-products are dry powder without slurry, and can be directly transported out for disposal by tanker truck.

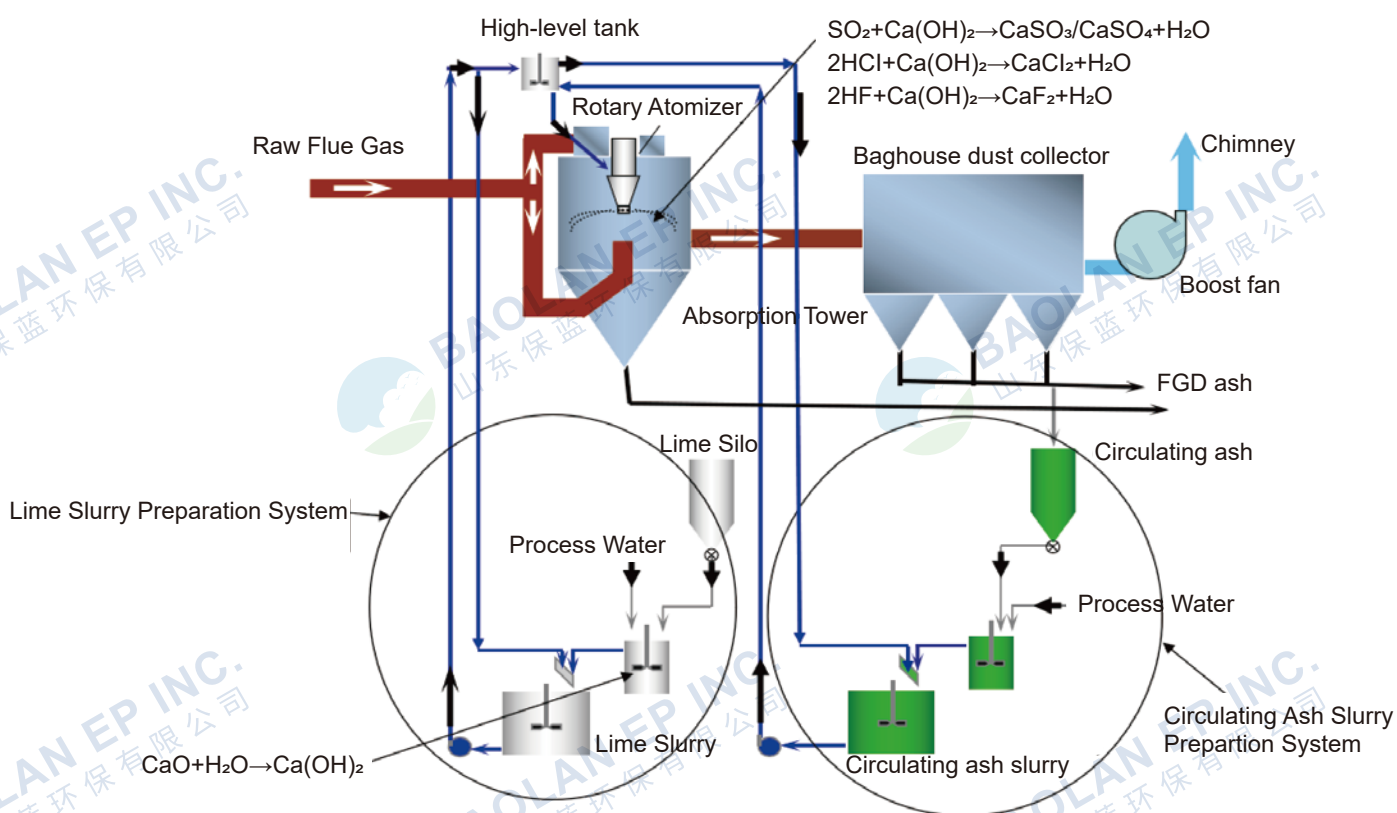
Semi-dry DeSO_x

SO₂/Acid Gas

Overview

Semi-dry DeSO_x, full name as Semi-dry Flue Gas Desulfurization Technology, is an efficient and environmentally friendly flue gas treatment technology between dry and wet desulfurization. It is widely used in flue gas desulfurization projects in power, metallurgy, chemical, building materials and other industries. Its core function is to remove sulfur oxides such as sulfur dioxide (SO₂) from flue gas, meeting the requirements of industrial emission reduction and environmental protection compliance.

This technology uses lime milk, hydrated lime slurry and other absorbents. The absorbents are sprayed into the desulfurization reactor through a special atomization device to fully contact and mix with high-temperature dust-containing flue gas. During the process, the absorbents react chemically with SO₂ in the flue gas to form stable sulfate products. At the same time, the high temperature of the flue gas makes the moisture in the absorbents evaporate quickly, and finally semi-dry desulfurization ash is formed. It does not require a large amount of water resources or produce a large amount of desulfurization wastewater, fundamentally solving the wastewater treatment problem of wet desulfurization.



Working Principle

The core principle relies on the contact between atomized alkaline slurry and high-temperature flue gas to achieve rapid evaporation and drying, as well as gas-liquid-solid three-phase acid-base neutralization. Acidic sulfur oxides in the flue gas are converted into solid salts.

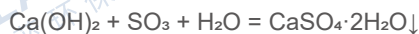
No large amount of wastewater is generated during the whole process, and the desulfurization efficiency can reach over 95%.

This technology is suitable for treating medium and high-temperature flue gas (140~220 °C) from utility boilers, industrial kilns, etc., and is one of the mainstream desulfurization processes besides wet desulfurization.

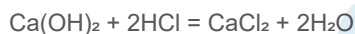
It can simultaneously remove a small amount of SO₃, HCl and HF in the flue gas (common in waste incineration/kiln flue gas), realizing multi-pollutant synergistic control.

All reaction products are solid powders, which are collected by the dust collector together with the main desulfurization products.

Removal of sulfur trioxide (forming calcium sulfate dihydrate):



Removal of hydrogen chloride (forming calcium chloride, soluble in water but solidified upon droplet drying):



Semi-dry DeSO_x

SO₂/Acid Gas

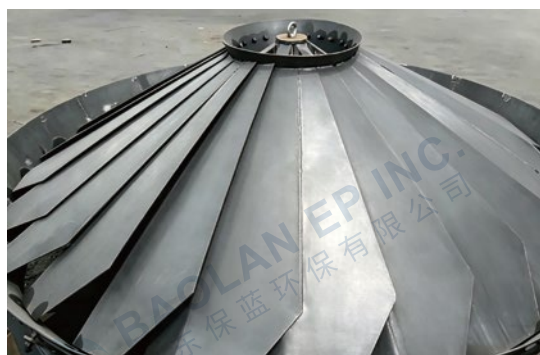
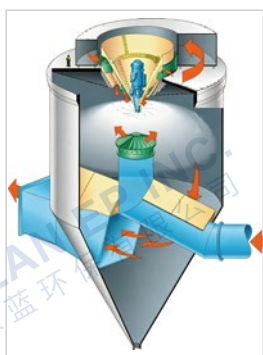
Internal Structure

Absorber System: Flue gas enters the absorption tower through the original flue duct in two upper and lower paths. When these untreated hot flue gases are dispersed into the spray drying absorption chamber, they come into contact with finely atomized lime slurry droplets with an average diameter of 60 μ m.

During the gas-liquid contact process, the acidic components (such as SO₂) in the flue gas are quickly absorbed by the alkaline droplets, and the moisture is rapidly evaporated simultaneously.

By controlling gas distribution, slurry flow rate, droplet diameter, and other parameters, the droplets involved in the absorption reaction are ensured to dry before reaching the wall of the spray drying absorption chamber, ultimately forming powdery desulfurization products (mainly calcium sulfite).

The treated flue gas enters the bag filter for dust removal, where suspended particulate matter is removed. The purified gas is then drawn out of the filter by the booster fan and directly discharged.



Central Gas Distributor: The central gas distributor is located in the middle of the absorber and consists of an inlet duct and outlet guide vanes. The injected flue gas flow rotates slightly counterclockwise. Flue gas enters from both the upper and lower sections, ensuring thorough mixing between the flue gas and the sprayer slurry to achieve a high acid gas removal efficiency.

A baffle is installed in the horizontal inlet duct of the central distributor to prevent dust deposition.

The rotary atomizer is the core equipment of the entire SDA process and a patented product of Niro. It atomizes the slurry into extremely fine droplets by centrifugal force generated through high-speed rotation. The droplets react with high-temperature drying flue gas, and the product is fly ash.

The high-level tank is responsible for supplying slurry to the rotary atomizer and forming a slurry circulation loop.



Semi-dry DeSOx

SO₂/Acid Gas

Internal Structure

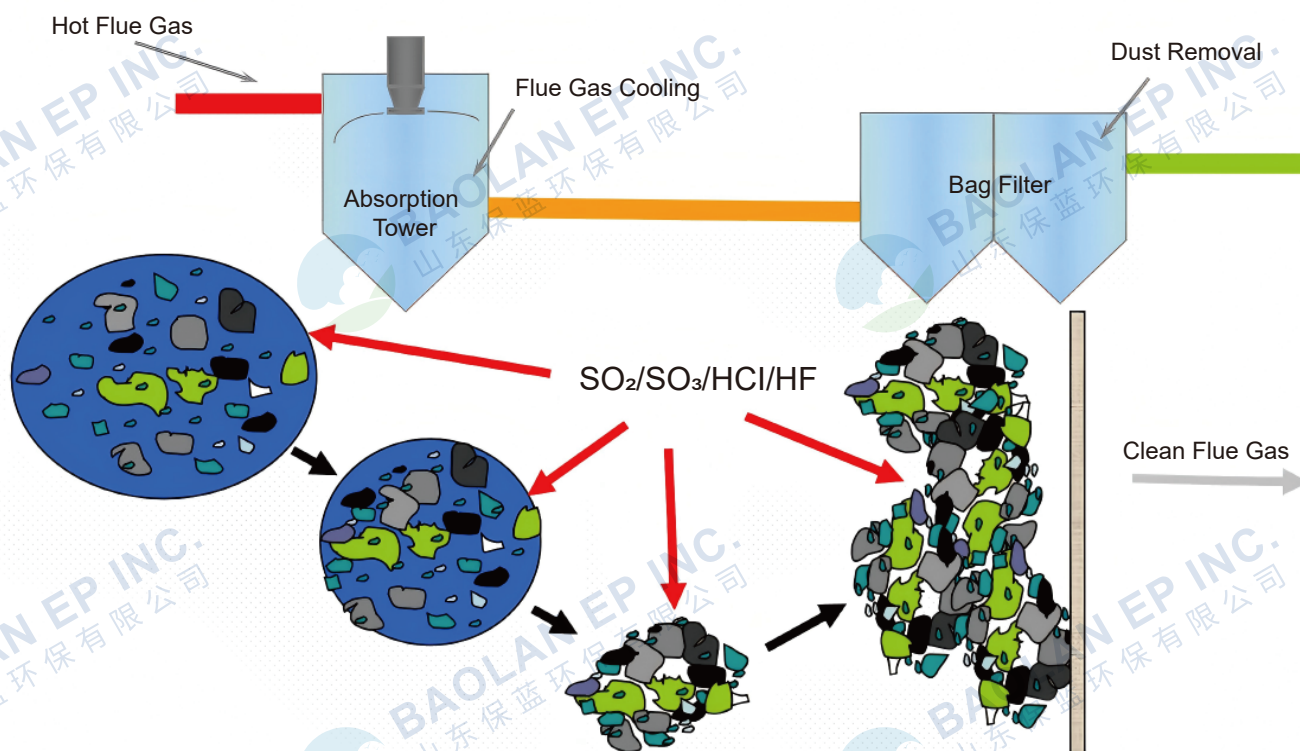
Gas Atomizer Description: When the solid concentration in the lime slurry droplets reaches a specified level, it is beneficial to the operation of the SDA system and ensures effective atomization, absorption, and drying in the flue gas desulfurization (FGD) system. Excess lime in the dried product can be reused as absorbent. Even if the reaction products do not react further, they form nuclei inside each lime slurry droplet. New absorbent continuously deposits on these nuclei, increasing the lime surface area available for reaction with untreated flue gas.

Engineering experience shows that recycling the desulfurization residue can reduce reagent consumption by 30–50%, significantly reducing the operating cost of desulfurization.



Introduction to the Pneumatic Ash Conveying System: The pneumatic ash conveying system consists of the fly ash handling system of the bag filter, the ash bin unloading and venting system, the ash silo aeration air system, and the silo bottom unloading system.

Using compressed air as the power source, the fly ash is conveyed to the circulating ash silo or ash silo through closed pipelines installed on the bin pumps. The circulating ash can be recycled and reused, while the desulfurization ash is discharged externally through the ash silo bottom unloader, bulk loader, and double-shaft mixer, realizing pollution-free ash discharge.



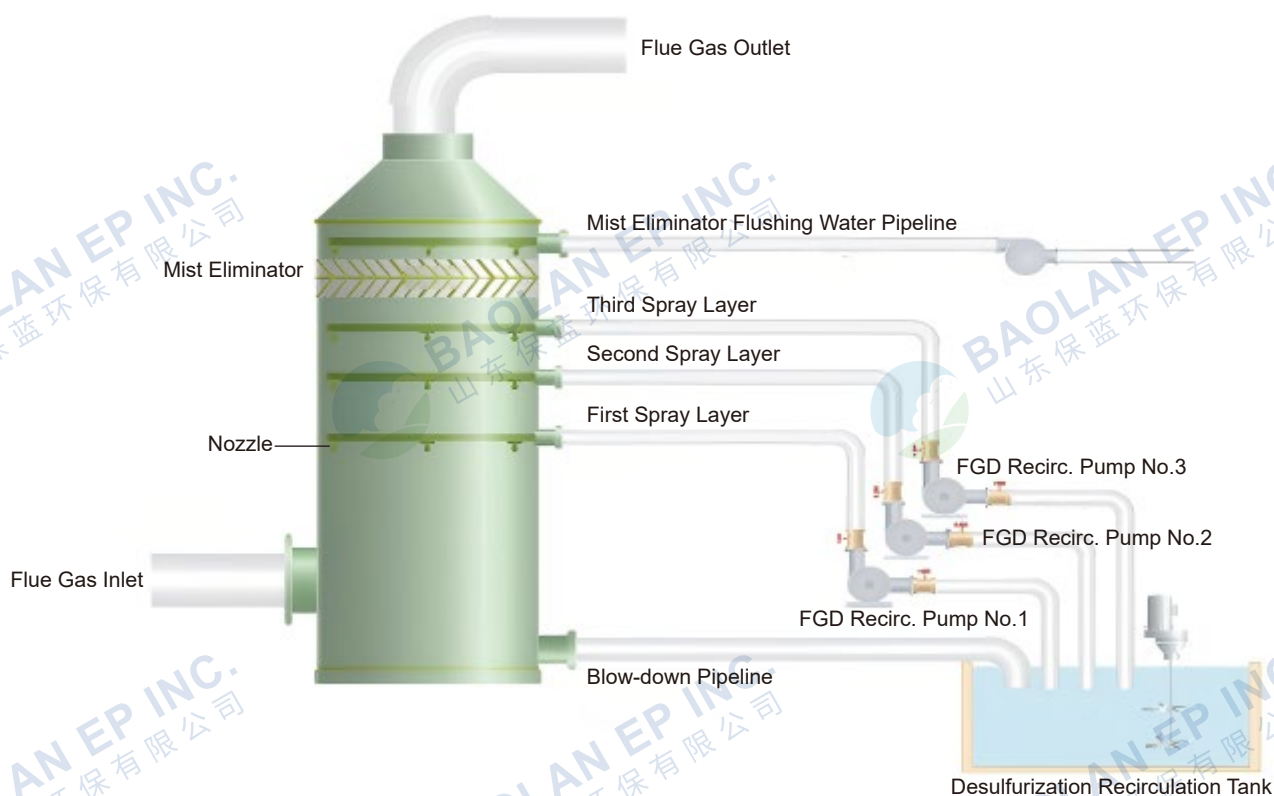
Single Alkali FGD

SO₂/Acid Gas

Overview

Single alkali desulfurization adopts a single alkaline solution of sodium hydroxide (caustic soda) or sodium carbonate (soda ash) as the desulfurization absorbent. The absorbent fully contacts flue gas in countercurrent mode inside the washing tower. Acidic pollutants such as sulfur dioxide and sulfur trioxide in flue gas undergo acid-base neutralization reactions with the alkaline liquid to realize flue gas desulfurization. After simple sedimentation treatment, part of the spent desulfurization liquid is recycled for circulating spraying in the absorption tower, while a small amount of waste liquid is discharged for disposal.

This process is applicable to projects with low flue gas volume and low sulfur working conditions including medium and small oil-fired and gas-fired boilers, ceramic kilns, glass kilns and small non-ferrous metal smelting furnaces, especially sites with limited space where limestone-gypsum wet process and spray drying process are not suitable.



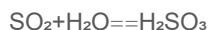
Working Principle

Single alkali desulfurization (usually sodium alkali method using NaOH and Na₂CO₃ as absorbents) removes acidic pollutants by reacting alkaline absorbent with SO₂ in flue gas. It is suitable for the treatment of medium and low-sulfur flue gas.

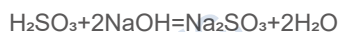
Main Chemical Reactions (Taking NaOH as the initial absorbent)

1.Absorption Reaction in the Tower (Core Reaction Zone)

Step 1: SO₂ reacts with water to form sulfurous acid



Step 2: Sulfurous acid reacts with NaOH to form sodium sulfite (main reaction)



Step 3: If SO₂ is in excess, sodium bisulfite is formed

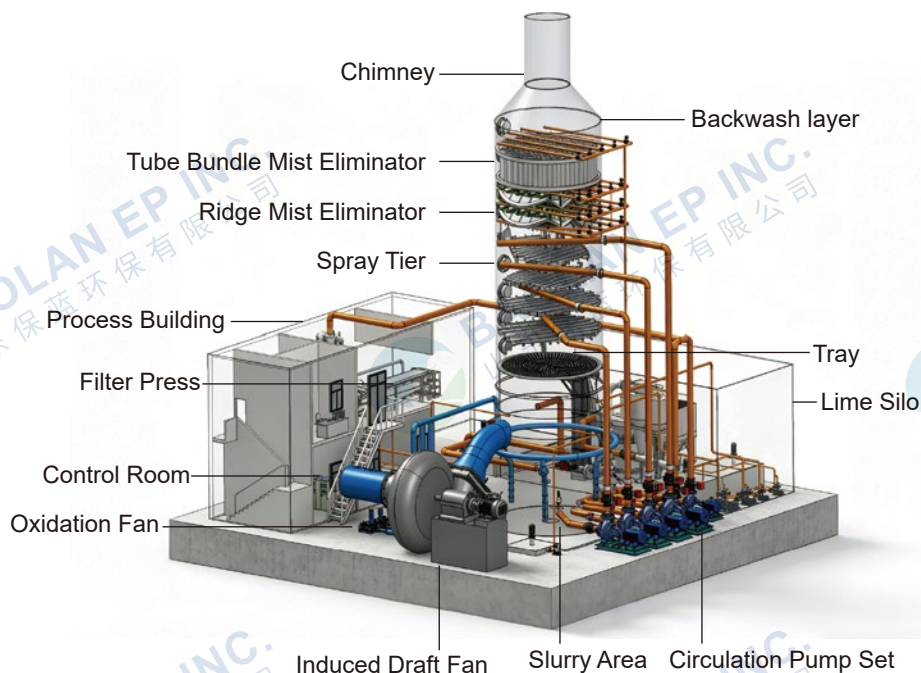


Limestone Gypsum FGD

SO₂/Acid Gas

Overview

Limestone-Gypsum Wet Flue Gas Desulfurization (Limestone-Gypsum FGD/WFGD) is the most widely adopted and technically mature flue gas desulfurization process for coal-fired power plants, iron and steel sintering kilns and industrial boilers at present. It boasts a desulfurization efficiency of 95% to 99% and can steadily meet ultra-low emission limit standards. Low-cost limestone slurry is used as the desulfurization absorbent to neutralize sulfur dioxide contained in flue gas. After forced oxidation, the by-product dihydrate gypsum is generated, realizing pollutant removal and resource utilization of solid waste.



Working Principle

The reaction mechanism of the limestone-gypsum flue gas desulfurization (FGD) process is as follows:

In the FGD absorber, SO₂ in the flue gas is first absorbed by water in the slurry and reacts with CaCO₃ in the slurry to form CaSO₃. CaSO₃ is then oxidized by O₂ from the injected oxidation air to finally form gypsum crystals CaSO₄·2H₂O.

Main chemical reactions:

Reactions of SO₂ and SO₃ in flue gas with water in slurry droplets:

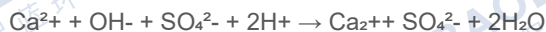
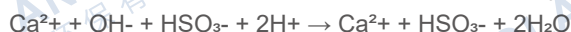


H₂SO₄ formed from SO₃ and water reacts rapidly with the limestone slurry.

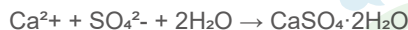
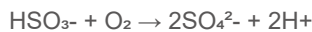
Dissolution of limestone in the slurry water:



Ionic reactions of SO₂ and SO₃ with limestone slurry:



Oxygen injected into the slurry tank oxidizes calcium sulfite to calcium sulfate, forming gypsum:



Flue gas enters the absorber from the bottom and contacts counter-currently with the limestone slurry sprayed downward, absorbing SO₂ in the flue gas.

The cleaned flue gas is demisted and discharged from the top of the absorber.

After absorbing SO₂, the slurry in the absorber forms calcium sulfite, which settles and is oxidized to calcium sulfate crystals by forced oxidation air.

The gypsum is then pumped by a gypsum discharge pump to a hydrocyclone, and undergoes cyclone separation (concentration) and vacuum dewatering to produce recyclable gypsum.

The overflow from the hydrocyclone is sent to a filtrate tank, and most of the filtrate is pumped back to the FGD system for recycling.

Limestone Gypsum FGD

SO₂/Acid Gas

Internal Structure

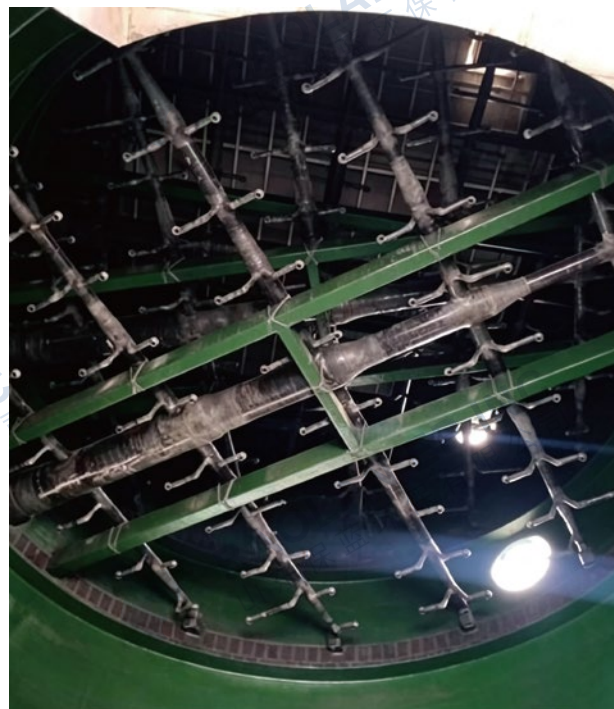
Absorber Body: Carbon steel structure, anti-corrosion with glass flake coating.



Volute Nozzle / Spiral Nozzle: Atomize slurry, strengthen gas-liquid mass transfer and improve SO₂ removal efficiency.



Demister: The demisting system consists of two stages of demisters and a flushing system. The flue gas flows through the demister at a certain velocity, and its flow direction changes rapidly and continuously. Through the curved channels of the demister, droplets entrained in the gas stream are separated under the action of inertia and gravity.



Spray Tier: The spray layer is the core mass-transfer component of the absorption tower. Driven by slurry circulation pumps, the complete spray system delivers lime/limestone-gypsum slurry from the tower bottom to the internal spray pipe network. The slurry is atomized through nozzles into numerous slurry droplets. Flue gas flows upward and comes into counter-current contact with the downward-spraying slurry to realize the absorption reaction of acidic gas SO₂.

Limestone Gypsum FGD

SO₂/Acid Gas

Internal Structure

Agitator: Absorber agitators are generally installed in the slurry tank zone of the absorber.



Circulation Pump: To realize the recycling of desulfurization slurry in the absorber and maximize the efficiency of the desulfurizing agent, special desulfurization circulation pumps with corrosion resistance, wear resistance, large flow rate and stable head are adopted.

The circulation pumps are configured in a unit system with one pump corresponding to each spray layer.

The pump casing adopts a carbon steel structure lined with polymer material, and the impeller is made of corrosion-resistant and wear-resistant material.

A filter screen is installed at the pump inlet to prevent solids from being sucked in and clogging the nozzles.



Oxidation Fan: Oxidation fans are provided to continuously blow air into the slurry tank of the absorber, converting the desulfurization by-product CaSO₃ into stable CaSO₄, ensuring the neutralization and oxidation reactions in the slurry tank proceed completely, and keeping the suspension uniform without sedimentation.

Roots blowers are commonly used as oxidation fans. A filter screen is installed at the inlet to ensure dust-free oxidation air entering the tower, and a sound enclosure is equipped outside the fan.

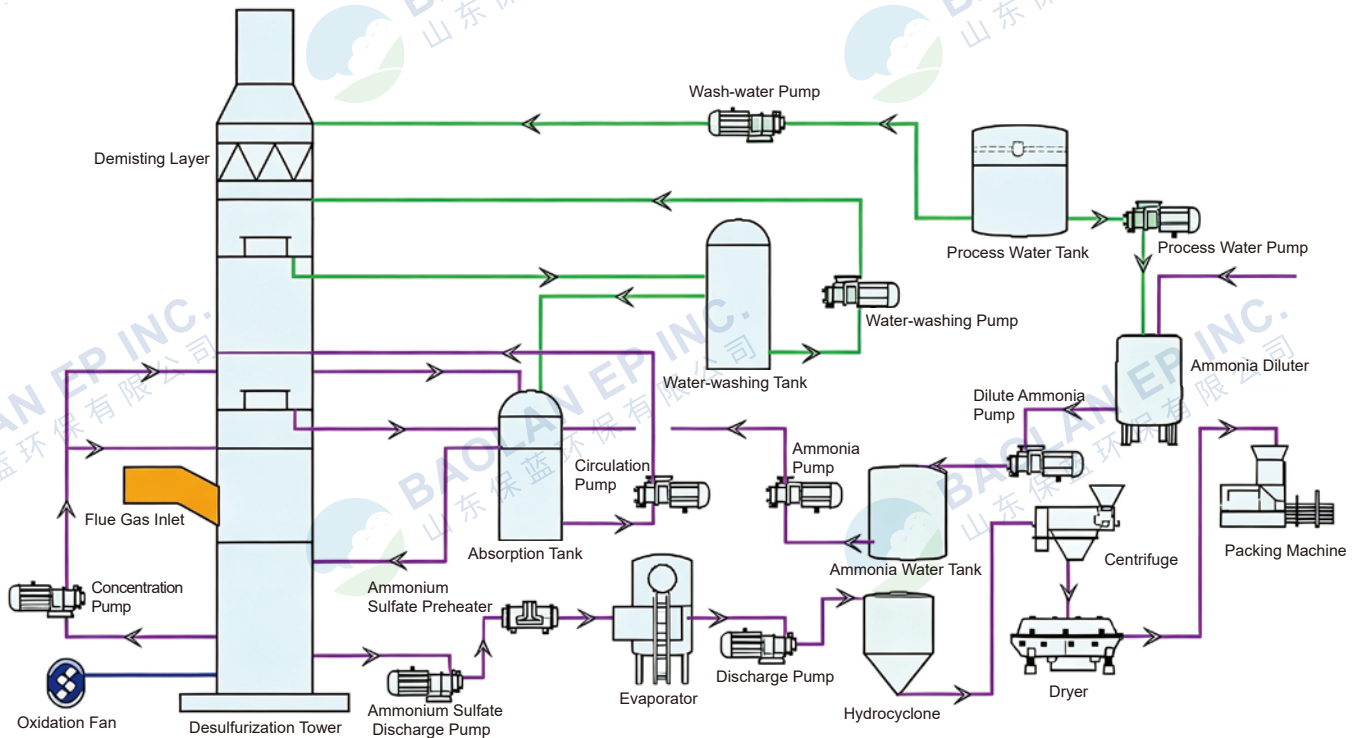
The oxidation air volume is supplied according to the maximum output of the operating fans.

Ammonia-based FGD

SO₂/Acid Gas

Overview

SO_x-containing flue gas passes through the dust collector to meet emission standards and then enters the induced draft fan. The flue gas flows into the saturation-concentration section at the lower-middle part of the desulfurization tower. After washing, it proceeds to the absorption section in the upper-middle part of the tower. In the absorption section, multi-stage spraying enables full contact and reaction between flue gas and absorption liquid to remove SO₂. Afterwards, the flue gas enters the purified water-washing section, where counter-current contact with washing water over packing materials eliminates escaped ammonia and dust. Finally, the flue gas passes through the mist eliminator for demisting to form purified tail gas, which is discharged via the



Working Principle

The absorbent is fed into the desulfurization tower to absorb SO₂ from flue gas and form ammonium sulfite. In the oxidation section at the bottom of the desulfurization tower, ammonium sulfite is fully oxidized into ammonium sulfate solution by oxidation air evenly distributed through multiple layers. Part of the ammonium sulfate solution flows into the crystallizing tank and is circulated to the concentration section by the concentration circulation pump. The heat of flue gas evaporates moisture in the circulating liquid to achieve saturation and produce ammonium-sulfate slurry with 10 % solid content. The ammonium-sulfate slurry of 10 % solid content is delivered by the crystallization pump to the hydrocyclone for further sedimentation and separation. The overflow clear liquid enters the circulation tank, while the crystal liquid (40 %-60 % solid content) goes to the centrifuge. The filtrate from the centrifuge flows into the feed-liquid tank, and the filter residue is wet ammonium-sulfate powder with a moisture content of 3 %-5 %. The clear liquid in the feed-liquid tank is pumped back by the feed-liquid pump to the absorption system for recycling. Finished ammonium-sulfate products are packaged and transported to the product warehouse for subsequent sales, realizing waste-to-value conversion and generating economic benefits.

Part of circulating water from the water purification spray system is injected into the desulfurization circulating liquid to replenish water consumed during concentration and absorption and maintain the system water balance. The remaining portion continues circulating after being supplemented with fresh purified water.

Ammonia-based FGD

SO₂/Acid Gas

Internal Structure

Flue Gas System: Flue gas from the boiler and production line tangentially enters the concentration section of the desulfurization tower at a certain angle, and makes full contact with the secondary circulating spray liquid in the concentration section. Water in the secondary liquid is evaporated to achieve supersaturation and crystallization. This process saves a large amount of steam consumed by external steam-driven evaporative crystallization in the conventional process. Meanwhile, the flue gas is cooled down to approximately 85-90 °C. It mixes and reacts with post-reaction air coming from the oxidation section before entering the upper absorption section of the desulfurization tower, where it fully reacts with ammonia-rich primary circulating liquid. More than 99% of sulfur dioxide reacts with ammonia. The gas passes through the purified water-washing section and becomes clean flue gas. After mist elimination by the mist eliminator, the clean flue gas is discharged. For the clean flue gas, ammonia slip is less than 3 mg/Nm³, sulfur dioxide content is lower than 35 mg/Nm³, and water droplet concentration is below 75 mg/Nm³.

Primary-Secondary Desulfurization Liquid Circulation System:

The primary-stage circulating liquid is ammonia-rich solution of ammonium sulfate and ammonium sulfite, which is pumped into the absorption section of the desulfurization tower. It makes full contact with flue gas and absorbs 99% of sulfur dioxide contained in flue gas, then recirculates after treatment. It provides the desulfurization environment for main reactions and constitutes the main reaction zone of this system.

The secondary-stage circulation mainly adopts ammonium sulfate solution. The solution is pumped into the concentration section of the desulfurization tower and fully contacts hot flue gas to rapidly reach a supersaturated state, forming supersaturated ammonium sulfate solution with 10% solids content. The solution is sent to the ammonium-sulfate system to produce finished ammonium-sulfate products.

Purified Water-Washing System: The function of the purified water system is to prevent ammonia slip and aerosol generation, wash fine dust, and make-up water according to process requirements so as to maintain the water balance of the system.

Main equipment: one process water tank, one circulating water tank, process water pump, mist eliminator flushing pump, one layer of packing, one set of riser hood for liquid collection sump.



Consumption paths of process water: water evaporation with flue gas and water carried away by by-products.

Process water from outside the battery limit is metered and then stored in the process water tank. Process water in the tank is delivered to each water-using point by the process water pump.

Process water required by the desulfurization system is supplied by the existing process-water system. As flushing water for the mist eliminator and washing water for flue gas, process water is fed into the absorption tower in a controlled quantity. The water-flow control valve is interlocked with the liquid level of the circulation tank.

To ensure reliable system operation, the process water pumps are configured as one running and one standby. If the operating pump fails, the standby pump can be quickly put into automatic operation via DCS to maintain stable water supply for the system. Mist-eliminator flushing can be implemented by DCS for automatic periodic flushing, or sequential flushing in automatic / manual mode based on the pressure difference across the mist eliminator.

Ammonia-based FGD

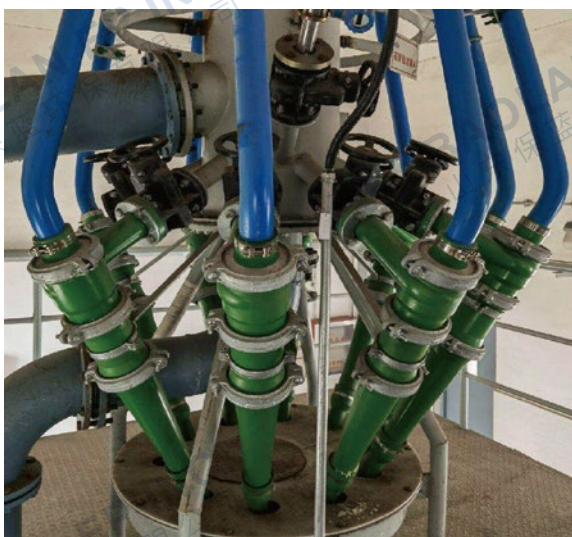
SO₂/Acid Gas

Internal Structure

Ammonia Water (Gaseous Ammonia) Feeding into the System: According to different characteristics of each user plant, this process can adopt either liquid ammonia or gaseous ammonia as absorbent (both may be used jointly when necessary). For this process, 10% ammonia-water solution is used as the absorbent. Ammonia water is directly fed to the first-stage spraying at the bottom of the primary circulation loop to improve desulfurization efficiency and reduce ammonia slip.

Oxidation Air System: After being compressed and cooled by the air compressor, air is fed into the oxidation section at the bottom of the desulfurization tower. It oxidizes ammonium sulfite in the solution into ammonium sulfate for further absorption and concentration to obtain ammonium-sulfate products. Part of the residual air enters the concentration section in the middle of the desulfurization tower to agitate the supersaturated ammonium-sulfate solution and prevent blockage, and is finally vented together with flue gas.

Post-Ammonium Sulfate System: The function of the ammonium sulfate post-processing system is to separate ammonium sulfate slurry generated by the desulfurization system to obtain wet ammonium sulfate material, and return the separated ammonium sulfate mother liquor to the desulfurization system for recycling.



Hydrocyclone



Dryer



Centrifuge

Ammonia-based FGD

SO₂/Acid Gas

Internal Structure

Desulfurization Tower: The tower body is divided from bottom to top into oxidation section, concentration-saturation-crystallization section, absorption section, water-washing purification section and mist eliminator.

Oxidation Section: Oxidation air flows from the tower bottom through the oxidation-air distributor and then three-tier gas-liquid distributors for full-range uniform oxidation. Thanks to the rationally-arranged layout based on calculation-aided design, the oxidation efficiency can exceed 99.8%. Ammonium sulfite solution coming from the absorption section is completely oxidized into ammonium sulfate solution.

Concentration Section: Ammonium sulfate solution is fed into the concentration section by the crystallizing tank and secondary circulation pump, and sprayed downward from the top of the concentration section. The incoming high-temperature flue gas is brought into counter-current contact with the calibrated circulating spray liquid. Water is evaporated to raise the density of ammonium sulfate solution until saturation and crystallization take place. The saturated solution enters the crystallizing tank and is conveyed by the crystallization pump to the hydrocyclone of the downstream ammonium-sulfate system, and then further sent to the centrifuge for separation. The return liquid separated from the hydrocyclone and centrifuge flows back to the crystallizing tank. Connected to the upper part of the crystallizing tank, the clear liquid overflows back into the tank for continuous recirculation.

Absorption Section: The absorption section is provided with four-layer sprays and one-layer packing arranged from bottom to top. The bottom-most first layer is an independent ammonia-feeding absorption circulation system with high-efficiency absorption performance. Two upper layers adopt ammonium-sulfate spray absorption, which absorbs SO₂ as well as part of the escaped ammonia. Meanwhile, the ammonium sulfite solution at the lower section mixed with ammonia water absorbs SO₂ firstly and then blends with ammonium sulfate solution. The mixture flows downward for co-dissolution to establish complete circulation and absorption. This forms an integral structure where desulfurization is realized in the lower part and ammonia capture in the upper part. Specially-dedicated spray water is applied at the uppermost layer. While supplying make-up water to the system, it fully absorbs escaped ammonia, so as to achieve sufficient SO₂ removal and effective suppression of ammonia slip.

Water-washing Purification and Demisting Section: A water-washing purification section is arranged above the absorption section. Purified water is used to thoroughly absorb ammonia slip contained in flue gas. Afterwards, the flue gas passes through the mist eliminator. The demisting performance depends critically on proper temperature, flow velocity and the inherent structure of the mist eliminator. Proven by operational experience, gas-flow velocity and mist-eliminator configuration are of vital importance. A double-layer three-flush mist eliminator is adopted for excellent demisting effect.





Environ. trouble? Baolan trustable!

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