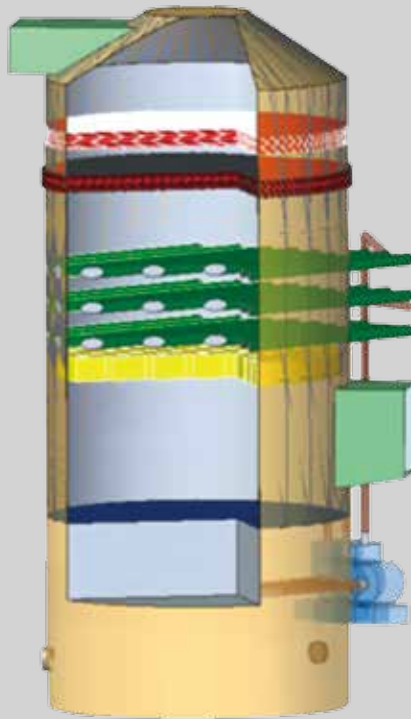




Sinoma

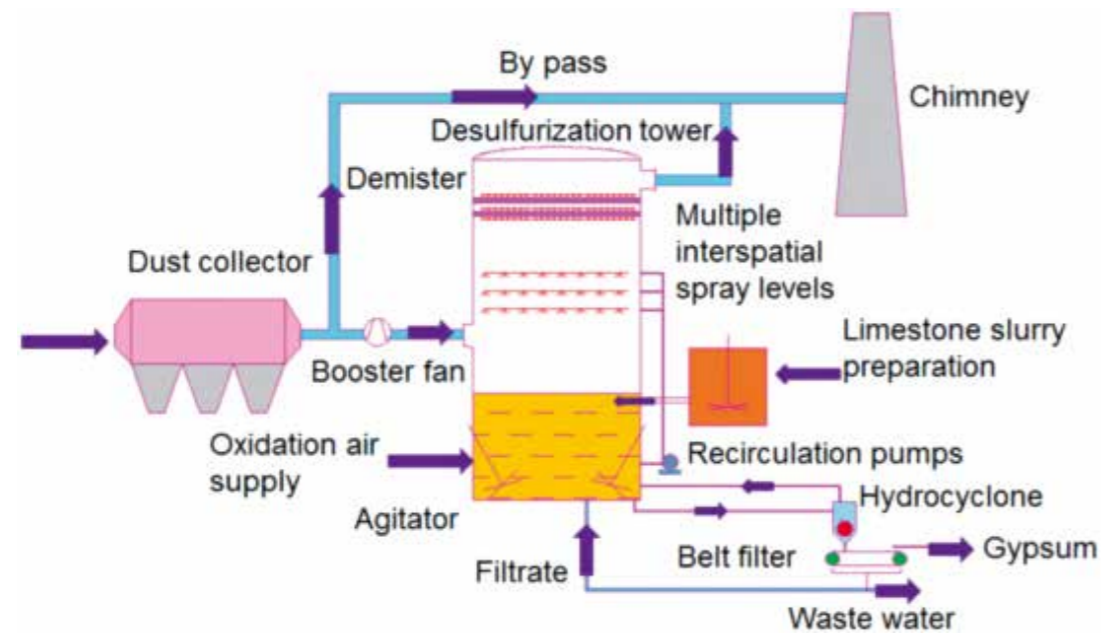
Sinoma International
Engineering Co., Ltd.

DESULFURIZATION & DENITRATION



SINOMA TECHNOLOGY & EQUIPMENT GROUP CO., LTD.

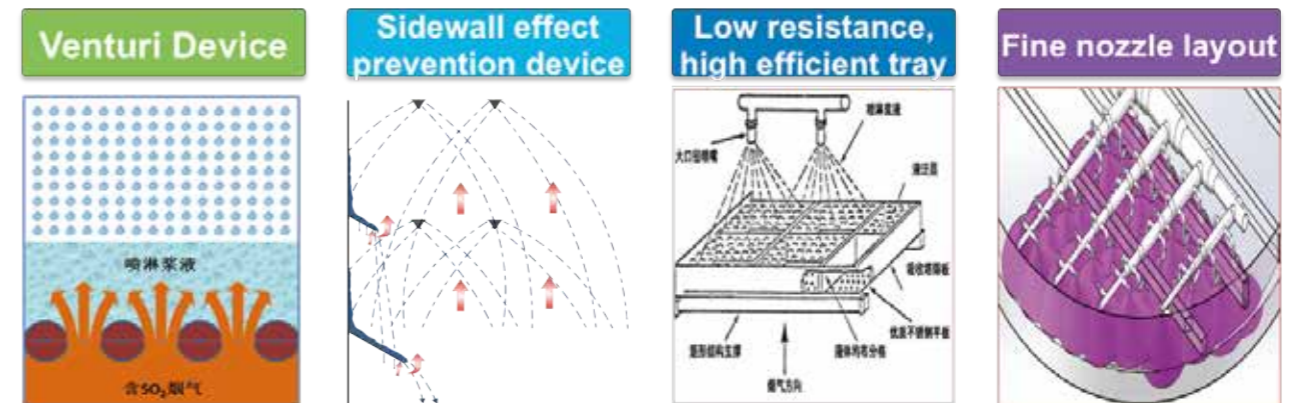
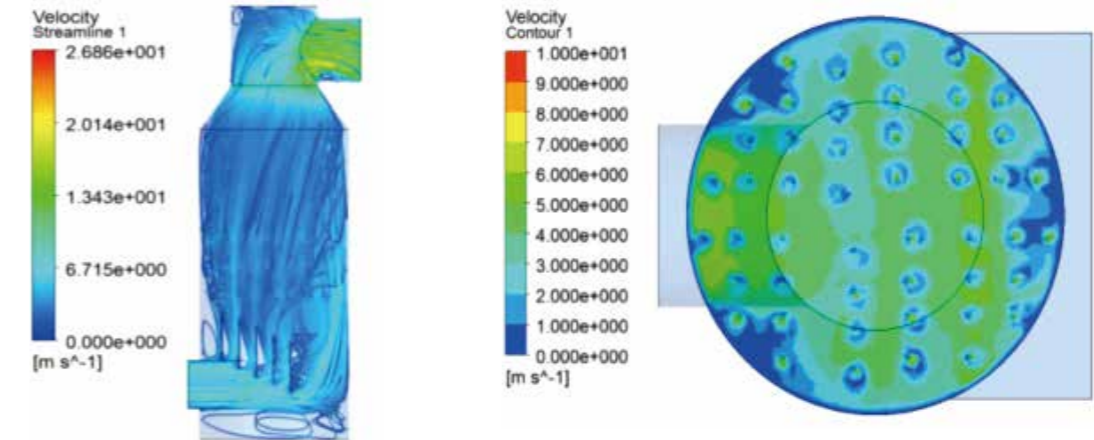
1 Wet Desulfurization for Cement Plant



Parameter table:

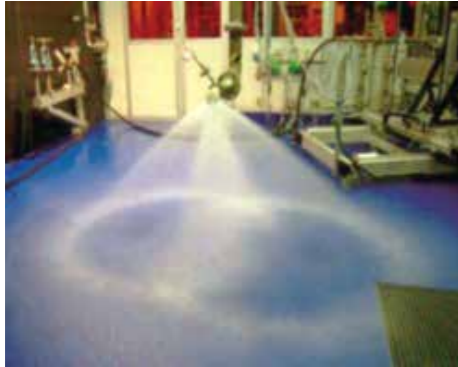
Cement plant capacity (t/d)	5000	2500
FGD flue gas inlet flow(wet basis) (m ³ /h)	900000 (120 Deg C)	500000 (120 Deg C)
FGD inlet SO ₂ concentration (mg/Nm ³)	2500	2500
FGD inlet dust concentration (mg/Nm ³)	20	20
Desulfurization tower size (m)	φ8.8	φ6.6
FGD outlet SO ₂ concentration (mg/Nm ³)	35	35
FGD outlet dust concentration (mg/Nm ³)	20	20
Total pressure loss (Pa)	1000	1000

This table is for normal project for cement plants. All the parameters can be adjusted according to the requirement.



Advantages:

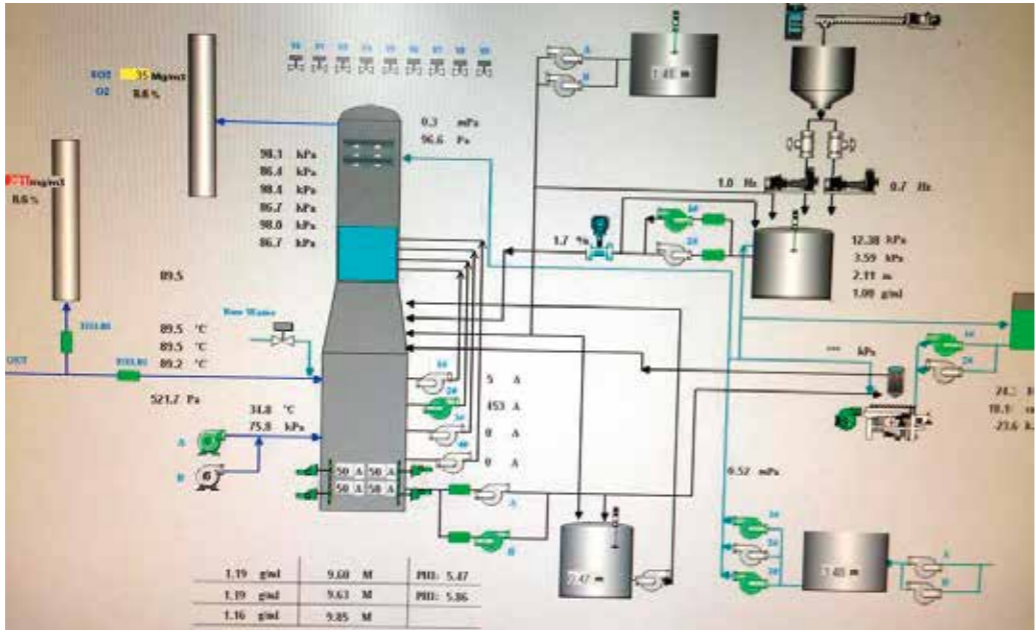
- For cement plant, the kiln dust can be adopted directly as desulfurizer reducing the operation cost.
- High desulfuring efficiency up to 99.99%;
- Adopt uniform-fluid device based on CFD analysis, increasing the desulfurization efficiency.



- Reasonable layout of spraying layer and nozzle, high-performance double nozzles, strengthening mass transfer effect.
- Adopt multi-layer high-performance roof-type demister combined with flow equalization board technology to achieve low pressure and small critical separated droplet diameter, ensuring carrying quantity of droplet no more than 20mg/Nm³. It can minimize dust quantity carried by mist and achieve super-clean emission.
- DCS intelligent control system: adds inlet pressure control loop of fan; regulate the SO₂ outlet concentration by slurry offering; concentration control by vacuum dehydrating agent filter cake; automatic washing control of demister based on differential pressure. All the controls reduce energy consumption and ensure that emission standard is achieved.
- Create a simplified limestone wet desulfurization process, aiming at the instability of sulfur content. This process takes energy conservation as a top priority under the condition of achieving emission standard, which can save energy more than 50% compared to common limestone wet desulfurization. The cost of large cement product line can be controlled at below 2 RMB yuan per ton of clinker.



Desulfurization for Hubei DAYEJIANFENG Cement 5,000 t/d

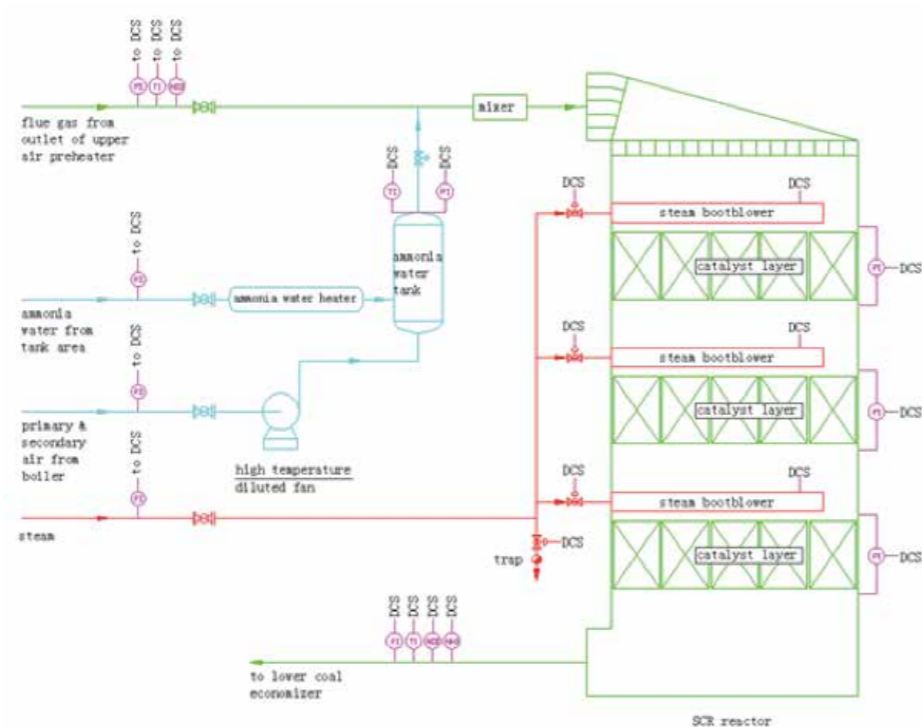


Performance:

SO ₂ emission	35 mg/Nm ³
Dust emission	10 mg/Nm ³
Pressure loss	800 Pa
DeSO ₂ efficiency	99%
Operation cost	0.3 USD per clinker ton

2

SCR Denitration

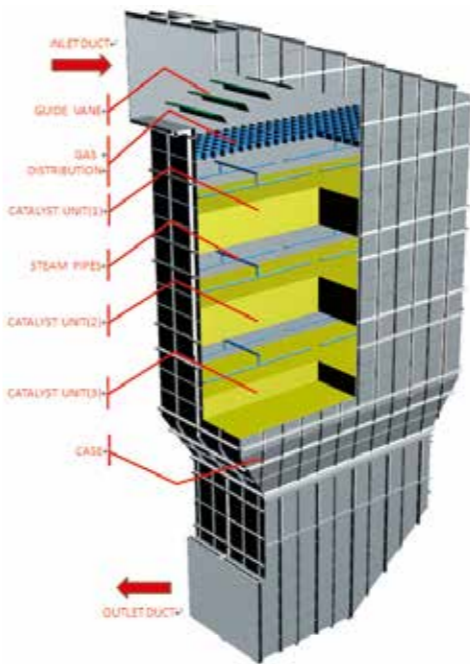


Advantages:

- Sinoma has a long history of service in cement, thermal power, glass and relevant industries, and has formed a complete service system from design, research, manufacture, execution and installation. Sinoma can provide a integrated solution for flue gas cleaning and a full service to the client.
- Combining the domestic and international advanced technology, Sinoma innovates constantly and develops SCR denitration system with independent intellectual property rights suitable for different types, fuel and combustion conditions.
- The newly developed denitration system adopts non-toxic rare earth oxides as catalyst, which has good stability and superior performance. The catalyst reacts stably and has good ability to cope with fluctuation of furnace load.
- Denitration system is equipped with advanced inlet and outlet flue gas analyser and high-sensitive control system, which ensures the denitration system run steadily and reliably and the operating parameters be automatically regulated in time.
- For each newly-built or modified denitration system, CFD is made at the beginning of the proposal to improve the uniformity and stability, which reduces the operating resistance of the denitration system in the maximum extent.

Denitration for Bashan Thermal Power Plant

(gas flow 300,000 Nm/h³)



Performance:

NO _x emission	50 mg/Nm ³
Pressure loss	600 Pa
DeNO _x efficiency	93.3%



Contact Us

Sinoma Technology & Equipment Group Co., Ltd.
Add: No.1 Yinheli Rd.(N), Beichen District, Tianjin,
300400, China
Tel: +86 22 26912535
Fax: +86 22 26915452
Mob: +86 138 2025 5242 (Mr. Zhao.)
E-mail: marketing@sinoma-tianjin.cn