TECHNOLOGY FOR CLEAN AIR

PROJECT PROFILE

EMC technology improves plant operations and reduces operating costs

THE SITUATION

A Scheuch customer was experiencing high-pressure drop across the clinker cooler baghouse and ineffective cooling in the clinker cooler heat exchanger. The customer was also using a high volume of injection water to cool the exhaust stream because the cooler was not as effective as needed for the process.

THE SOLUTION

Scheuch's engineering team worked with the client to develop a two-year project implementation plan that fit within the plant's operating schedule and capital budgeting process. In the first year, a new Scheuch EMC baghouse would be installed, replacing the existing baghouse, tackling the immediate need to reduce the elevated pressure drop.

Scheuch long-bag filter technology would be used to provide the maximum filtration area in a smaller footprint;

PROJECT IN BRIEF:

EQUIPMENT & SERVICE

- Engineering
- Dust Collector
- Heat Exchanger
- Duct Work
- Commissioning

INDUSTRY

- Cement

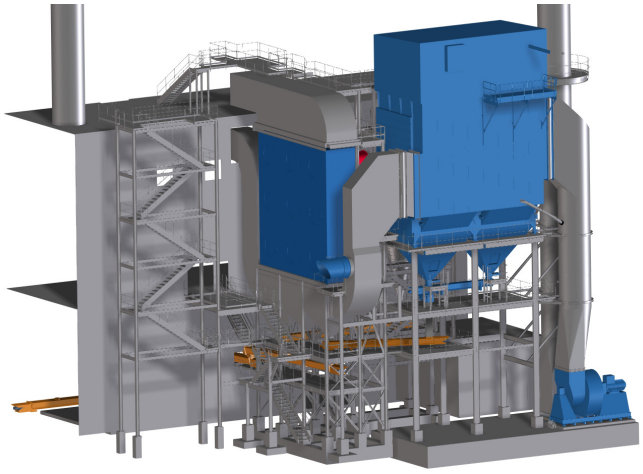
APPLICATION

- Emission Control
- Heat Exchanger
- Process Exhaust
- Material Handling

making installation in the existing plant easier.

In year two of the plan, the heat exchanger would be retro-fitted with new Scheuch heat exchanger components, including bundled, staggered row heat exchanger tubes and Variable Speed Drive (VSD) controlled axial-flow fans for more effective cooling.

The customer was familiar with Scheuch EMC technology, as they had utilized Scheuch technology at other plants globally, but previous to this project, none in North America. Customer representatives visited Scheuch workshops and installations in Europe and were impressed with the quality of the product and the technology used to fabricate the baghouses, fans, screw conveyors and rotary airlocks.

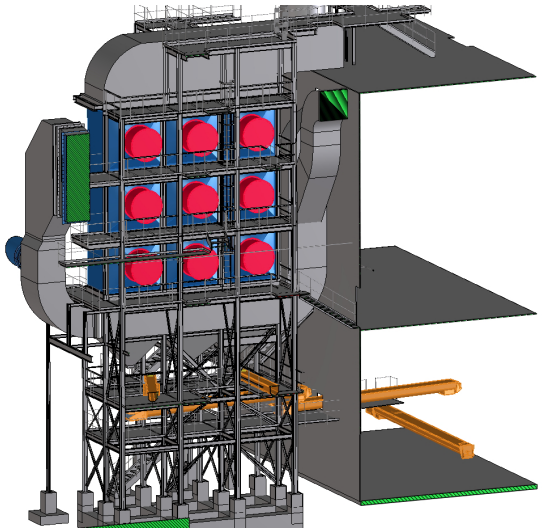


Scheuch EMC Baghouse with off-line cleaning and inlet drop-out box

Users of Scheuch technology whom were visited during the customer's European tour provided powerful references regarding the effectiveness of the EMC technology and the support provided by Scheuch before, during and after the project.

The customer selected Scheuch for the project, even though there were no EMC collectors installed in North America at the time.

Ultimately, the customer purchased an EMC baghouse for the clinker cooler exhaust, heat exchanger and auxiliary material handling equipment, including Scheuch screw conveyors. In fact, the customer was so impressed with the Scheuch screw conveyors, they were purchased for applications outside of the baghouse scope of work.



Scheuch Clinker Cooler Heat Exchanger with VSD controlled asizal flow fans and modular heat exchange bundles

Immediately following the installation of the baghouse, the customer realized an improvement in pressure drop of nearly 12 mb. In the following year, after the heat exchanger was installed, water injection volume in the downstream process was significantly reduced, thus resolving processing issues.

Over the next few years, the customer continued to be satisified with the clinker cooler performance, that another EMC collector and heat exchanger were purchased for the main baghouse at the same facility a few years later.

This customer now has a total of seven (7) Scheuch EMC baghouses in two (2) facilities in the Southeastern United States.

Contact Scheuch to learn more about this project.

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