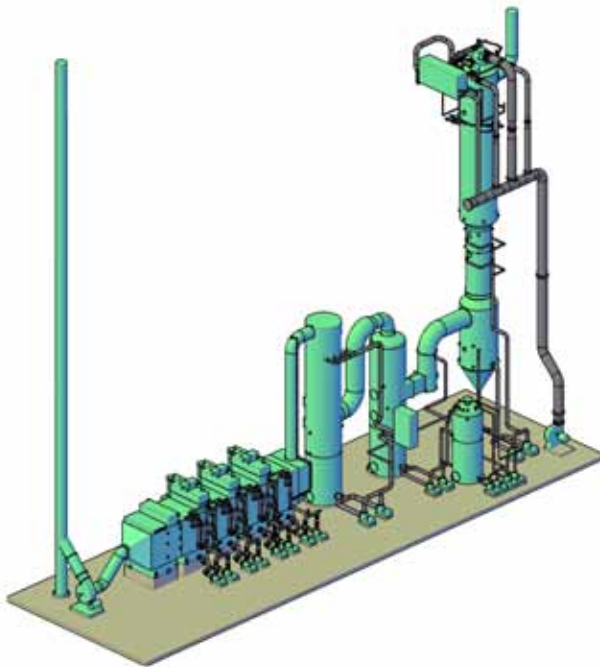


SILOXANE PLANT WASTE



GAS AND LIQUID EMISSIONS

A new siloxane plant located in Eastern China required a complete system for destruction of liquid and gaseous waste streams containing high levels of silicon and chlorides. Verantis designed and supplied a complete system including emission control to meet local environmental codes.

The system consisted of a down-fired incinerator specifically designed to handle the high loading of silicon dioxide produced during thermal destruction of the waste. Following the incinerator, the emission abatement system consisted of multiple stages of specialized control equipment designed for high-efficiency removal of the corrosive halogen acid gases and submicron silicon dioxide particulate. This included a high-temperature quench, venturi prescrubber, packed condenser tower, and multi-stage Ionizing Wet Scrubber (IWS®). The primary component for emission

abatement is Verantis' proprietary Ionizing Wet Scrubber (IWS®) which is especially suited for this application due to its ability to simultaneously remove acid gases and submicron particulate. The unique crossflow arrangement of the IWS minimizes fouling and maintenance shutdowns and is especially suited for applications with very fine, sticky particulate such as silicon dioxide (SiO₂). The entire system was designed to meet or exceed Chinese emission standards per GB-18484-2001.

Verantis was awarded this order due to our extensive experience in engineering custom solutions for the treatment of hazardous waste streams in the silicone chemicals industry and also for our ability to meet and adhere to strict specifications which were critical for this installation.

OVERVIEW

Verantis designed and supplied a complete process system for destruction of liquid and gaseous silicone chemical waste streams. The turn key project also include on site installation.



EQUIPMENT

For this project ,Verantis designed and supplied all equipment for a complete incineration system and a four stage IWS® .



AUXILIARY EQUIPMENT

In addition to the major components, the scope of supply also included all pumps, piping, instrumentation control panels , on-site installation and start-up supervision.



SILOXANE PLANT WASTE



FEATURES

- Solutions provided for a new siloxane plant in Eastern China.
- Designed a solution for the destruction of liquid and gaseous wastes streams containing high levels of silicon and chlorides to meet strict environmental regulations.
- Verantis design/build services included a complete incineration system, a four stage IWS®, and on-site installation and start up.
- Verantis was able to provide a custom engineered solution due to their previous experience in the treatment of hazardous waster streams in the silicone chemicals industry. In addition, Verantis was able to meet or exceed strict specification that were critical for the installation.

For more information and resources,
please visit www.verantis.com.

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TECHNICAL CAPABILITIES

All parts of Incineration and air pollution control systems were designed in-house. System components were sourced through a world-wide network of fabricators and suppliers.



DESIGN CAPABILITIES

Systems can be designed to accommodate a variety of requirements including NFPA, API, ASME, and regulatory codes such as Chinese GB, European EN and US EPA standards.



TURNKEY SOLUTIONS

Verantis is able to provide Turnkey Solutions globally for most of your incineration and pollution control needs. For more information on any of our production or solutions, please visit us at www.verantis.com

