



PROJECT PROFILE

Maximizing dust capture

The Challenge

It took teamwork to address the needs of a mineral processing facility. Schust Manufacturer's Representative, Robbins & Bohr brought the facility's dust collector project to Schust who happened to have a project engineer in the area. The project engineer met with the engineering manager at the mineral processing facility to discuss their air quality concerns.

Providing a clean and safe place for employees to work in was a priority for the company that had recently acquired this particular plant location. Without any dust collection, the facility was dusty from the crushing processing line. The engineering manager walked Schust's project engineer through the current process and discussed their needs for dust collection inside and out from bulkhead fittings down to the dust collector construction.

PROJECT IN BRIEF:

EQUIPMENT & SERVICE

- Dust Collectors
- Engineering
- Fabrication
- Installation
- Ductwork

INDUSTRY

- Cement - Minerals- Rock

APPLICATION

- Crushing

AIR VOLUME

- 30,000 CFM

The Solution

In order to safely dedust the crushing line, the team at Schust provided equipment, engineering, fabrication, and installation of the ductwork for the project. And the rep, Robbins and Bohr provided the fan.

A dust collector with three modules and offline cleaning capability was installed to the crushing system along with dampers. Expert engineers at Schust watched the system run and it was determined that the system needed to be designed for 30K CFM air volume for optimal processing.

To maximize the dust capture, Schust designed, fabricated and installed hoods and curtains to pull the dust up from the pit as opposed to the open air environment that wasn't capturing the dust as it rose from the crushing pit. Structural steel was also designed for the installation and support of the heavy hoods.

PLC control panels were installed to control the pulse cleaning as well as the offline cleaning cycles. The panels will fire the jets and open and close dampers to isolate bags during an unexpected event or routine bag change-out.

The projects were installed and operating as intended on-time over the course of four weeks.



It was refreshing to deal with Schust. Items showed up on site and they were finished as promised."

- Engineering Manager, Mineral Processing Facility

Follow-up

Since this installation, Schust has secured contracts for two additional dust collector installations.

Contact Schust to learn more about this project.

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