



# PROJECT PROFILE

## Solution to Reduce Plant Emissions



The Monarch Cement Company  
Humboldt, Kansas Plant

## The Monarch Cement Company

Plant/Location: Humboldt, Kansas, USA

Year: 2011

Industry: Cement

Materials: Limestone

Equipment: MPS 3450 AC Raw Mill

Mtph: 300 mtph

Kw: 1171 kW

## Scope of Services

Upgrade of the MPS 3450 raw material mill includes the following:

- New Grinding Table for the MPS 3450 Raw Mill
- SLS 3750 High Efficiency Classifier
- AZZ 5600 Cyclone
- Fan
- Related Duct Work
- Gebr. Pfeiffer “Lift and Swing” Device for MPS Mill
- Related Engineering Services

## Challenge

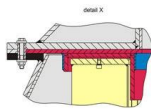
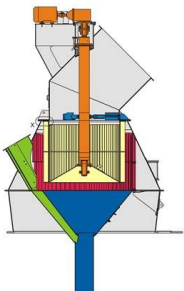
New NESHAP (National Emission Standards for Hazardous Air Pollutants) requirements placed the company in a position to consider upgrading the mill even though the capacity from the project cannot be utilized initially.

## Solution

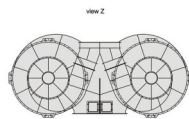
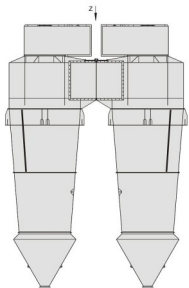
The combination of replacing the mill table and classifier will improve the limestone grinding efficiency, while re-routing the hot gases generated through both kilns and directing them through the limestone grinding mill will greatly reduce the overall emissions generated by the process.

## Results

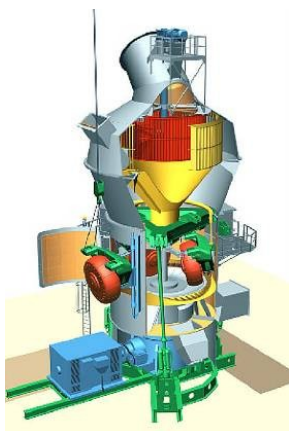
The plant will run more efficiently and still have the ability to increase their capacity, while meeting the new NESHAP requirements.



SLS High Efficiency Classifier



AZZ Double Cyclone



“Lift and Swing” Device  
Installed on an MPS  
Vertical Roller Mill