



Enhancing Safety & Efficiency with Dust Control Solutions

PROBLEM SUMMARY

A limestone barge on the Ohio River was experiencing issues with excessive fugitive dust from an old, underperforming dust collector due to its poor design. This resulted in significant downtime, costly maintenance, and dangerous amounts of dust.

Ensuring safety while optimizing efficiency was a priority for the barge which was why they brought in Benetech to address the dust issues. Benetech implemented a comprehensive solution that not only mitigated safety concerns but also enhanced operational efficiency.

BENETECH SOLUTION

Recognizing the critical need for containment improvements, Benetech meticulously designed a new dust collection system tailored to the barge's specific requirements that replaced the ineffective dust collector. Dust collector pipework and pickup hoods were strategically replaced to ensure optimal dust containment during the unloading of limestone onto the barge.

Benetech products included, but were not limited to:

- 1. Dry Dust Collector** — A system that captures and removes dust from the air by utilizing filters to collect the dust and blowers to clean the bags without the use of water.
- 2. MaxZone® Load Zone System** — A belt enclosure system with easy-to-access, externally adjusted skirtboards; internal wear liners; dust curtains designed to disrupt air flow streams and prevent dust escaping the enclosure; and rubber skirting to prevent dust leakage along the sides of the conveyor.
- 3. Inspection Doors** — Dust-tight doors that minimize airborne dust and spillage while also allowing access for service and maintenance.



IT PAYS TO IMPLEMENT BENETECH SOLUTIONS

- Improved air quality
- Minimized dust and spillage
- Decreased conveying system downtime
- Reduced plant risk profile by mitigating fire concerns
- Significantly reduced maintenance time and cost



SUCCESSFUL RESULTS

By methodically replacing the existing dry dust collector and reconfiguring key components, Benetech not only addressed hazardous dusting issues but also initiated a new phase of operational excellence at the barge. The incorporation of the MaxZone facilitated superior dust capture efficiency, while the installation of inspection doors provided convenient access for maintenance and inspection purposes.

Benetech's innovative solution is evident in the improvements in dust containment, reduced maintenance, and workplace safety. As industries continue to prioritize safety and efficiency with evolving government mandates, Benetech continues to serve as a leader in material handling solutions.



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