



Dust Control & Clean-Up Issues Solved with WASHDOWN SYSTEM

PROBLEM SUMMARY

In the southern United States, a coal-fired power plant faced challenges due to excessive fugitive dust frequently accumulating at material transfer points. This issue was magnified by the presence of an outdated and ineffective washdown system within the rotary car dump building. The obsolete infrastructure not only required extensive manual cleanup efforts but also resulted in heightened operational inefficiencies and increased maintenance requirements.

Consequently, the plant faced significant downtime and safety hazards due to inadequate dust control measures. The deficiencies in the washdown system posed risks to compliance with both plant and government regulations concerning dust control and workplace safety standards.

BENETECH SOLUTION

Recognizing the urgent need for modernization, Benetech initiated a comprehensive approach to upgrade the washdown system. Leveraging its expertise, the Benetech team meticulously procured high-quality materials tailored to the project's specific requirements. After deploying its expert service technicians, Benetech systematically dismantled the nonfunctional components of the existing system and seamlessly installed new, state-of-the-art parts.

Benetech's Washdown Systems are engineered to optimize water usage while incorporating advanced features like engineered drainage, curbing, and water shielding. Strategically positioned spray heads and nozzle arrangements ensure thorough cleaning of beam pockets, roof trusses, walls, and floors. The system is meticulously designed for hydraulic balance and zoning, offering the flexibility of manual activation or full automation via PLC control for each zone.



IT PAYS TO IMPLEMENT BENETECH SOLUTIONS

- Reduced coal dust accumulation
- Clean-up manhours were decreased
- Minimized maintenance time
- Satisfied OSHA and federal regulations
- Reduction in plant risk profile by reducing fire concerns

SUCCESSFUL RESULTS

The outcomes of the washdown system rebuild surpassed expectations, delivering tangible benefits to both the coal plant and its stakeholders. The updated washdown system led to a reduction in dust accumulation at material transfer points, enhancing operational efficiency and minimizing downtime associated with maintenance tasks. Furthermore, the mitigation of spillage contributed to a safer working environment, aligning with regulatory standards and fostering a culture of compliance within the plant.

Throughout this process, Benetech has remained committed to addressing operational challenges and regulatory requirements in the power generation industry. By refurbishing the washdown system, plant performance was optimized while demonstrating a dedication to sustainability, safety, and operational excellence.



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