Dry Bottom Ash Handling Increases Marketability

Sean L. Kochert\textsuperscript{1}, Maria Giudetti\textsuperscript{2}

\textsuperscript{1}Manager Mechanical Conveying Systems, Allen-Sherman-Hoff, Malvern PA; \textsuperscript{2}Field Evaluation Engineer, Allen-Sherman-Hoff, Malvern, PA

KEYWORDS: Bottom Ash, Cement, Carbon Reduction, Ash Handling

ABSTRACT

An innovative dry bottom ash handling technology allows the potential for mixing bottom ash with fly ash for use in the cement industry. The MAC\textregistered (Magaldi Ash Cooler) is the latest technology for the dry removal, cooling and conveying of bottom ash from balanced or negative draft, pulverized coal fired boilers. The system does not require any water and utilizes the negative pressure inside the boiler to induce air flow through the MAC conveyor to cool the bottom ash. Due to zero water usage, the combustion process continues on the conveyor allowing for more complete burn of the bottom ash resulting in a product more similar to fly ash.

The paper will discuss the technology and its benefits as both a more reliable material handling system and the inherent benefits of obtaining a lower carbon, dry bottom ash product. The paper will also cite examples describing the advantages over traditional wet systems.