

CONVEYING BOTTOM ASH



Design Requirements

Product Type: Bottom Ash

Capacity: 100,000 pounds per hour

Duty: 24/7

Original Conveyor Pan Size: 36" W x 10" D x 77'-6" L

Customer Challenge

In 1986, a waste-fired cogeneration power plant that provides heating, cooling, electric power and other utility services to local buildings, purchased a Slipstick Industrial Horizontal Motion Conveyor to transport bottom ash from their municipal solid waste mass burn incinerator to their belt conveyor. With dimensions of 36" W x 10" D x 77'-6" L, the Slipstick pan was fabricated with AR400 to withstand temperature ranges from 0° F to 200° F and included splash guards to minimize spillage at the incinerator's feed points. Twenty two years later, our customer reached out to Triple/S Dynamics to modify the existing conveyor to increase capacity by extending the length of the pan and upgrading the drive.

Triple/S Solution

Triple/S Dynamics collaborated with the customer to design the pan extension, adding an additional 50'-0" feet. With the additional length, the modified pan size now extends to 36" W x 10" D x 127'-6" L and the capacity increased to 100,000 pounds per hour. Simultaneously, the Slipstick differential drive was upgraded from a #20 to #24H to accommodate the increased capacity and pan length. After removal of the original #20 drive and support steel, the new pan assembly and #24H drive were attached to the existing conveyor assembly hung from suspension rods. Years later, after the original pan modification, our customer purchased an additional drive for their Slipstick Industrial Horizontal Motion Conveyor; the existing drive was eventually rebuilt and has become a spare.

Triple/S and the Customer

Our customer, referring to the original #24H drive they sent in to Triple/S Dynamics for inspection and rebuild, stated " We got every ounce of use out of it." With the reliability of the Slipstick Industrial Horizontal Motion Conveyor in harsh environments and the flexibility to design future modifications for existing equipment, Triple/S Dynamics was able to extend the life of our customers equipment where it has been in operation for 35 years.