

Product Splitter

Industry

Coal-Fired Electric Power

Application

A new feed belt from the coal yard was added and material from this belt had to be accurately split between two smaller plant feed belts

Material

Powder River Basin Coal

Objective

- Accurate splitting of the feed belt discharge between the two receiving belts
- Improve housekeeping and safety by reducing material spillage
- Reduce dust generation

Transfer Detail

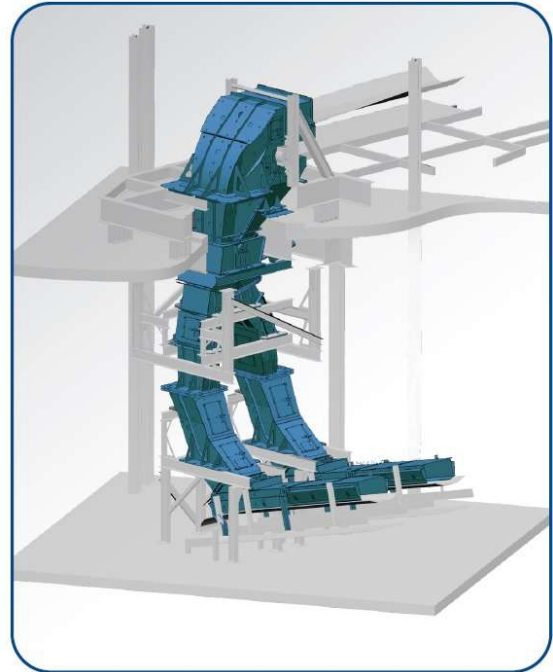
Feed belt is a 1.5m wide 2,200 tph system dropping about 7.5m to parallel 1.1m wide belts rated at 1,100 tph each.

Challenge

The new chute work at a coal-fired power station had to fit within the existing building and other chute work while providing an accurate split between two receiving conveyors. The diverter needed to provide operational flexibility to feed either plant feed belt individually or to dynamically split the feed to both plant feed belts to maximize material feed rate from the new 1.5m belt. Housekeeping and dust mitigation were also major concerns.

Tasman Warajay Solution

The engineers designed and fabricated a 1-on-2 Transfer Chute with Tasman Warajay Technology® which included removable chrome carbide overlay wear liners to handle the abrasive wear of the coal. The new Tasman Warajay Transfer Chute provides the operational flexibility the plant was looking for to allow them to run coal to either plant feed belt individually or to feed both simultaneously.



Result

This system has been in operation for several years with no maintenance required on the liners. The bucket diverter has provided accurate splitting and flexibility to the system. There are no moving parts in the coal stream. They are spending minimal time maintaining the new system and cleaning up spilled material around it. The new system provides for efficient and cost effective operations.