

Tripper to Stacker / Bypass

Industry

Coal handling plant

Application

1-on-2 switching transfer designed to deliver material to a stacking conveyor or “trip” back onto itself

Material

Product Coal

Objective

To divert material from an existing through conveyor to deliver flexible product stacking options and maintain production

Transfer Detail

Consists of a 1-on-2 transfer with an actuated diverter chute and fines chute using 1200mm conveyors

Challenge

The plant required a transfer system that could divert material to an alternative stockpile to maintain production. The existing feed conveyor passed through this transfer station and delivered material to a transfer downstream. In the event the downstream transfer was required to be shut down, the wash plant also had to be shut down.

Tasman Warajay Solution

The Tasman Warajay Technology Engineers designed a complete solution where the conveyor was reconfigured to have a fixed “trip” within the existing structure. A switching transfer was designed using Tasman Warajay Technology and fabricated in-house, which now allows material from the main conveyor to be transferred to the stacking conveyor (Stacking Mode), or back onto the main conveyor (Bypass Mode). When transferring material to the stacking conveyor (Stacking Mode) the material is launched from the feed conveyor collected and controlled, and then soft loaded onto the receiving conveyor.



When transferring back to the main conveyor (Bypass Mode), the actuated chute inside the enclosure is moved into a position that directs the material and soft loads it to the main conveyor.

Result

The customer now has a flexible stacking option which allows the plant to continue production during downstream outages. This transfer has delivered the customer-increased plant production.