

Product Handling - Bucket Wheel

Industry

Coal Export Terminal

Application

Bucket wheel reclaiming coal from storage for loading onto oceangoing ships and coastal barges.

Material

Coals and petroleum coke, Powder River Basin Coal

Objective

- Reduce dust generation
- Increase throughput and overall system efficiency
- Reduce spillage and plugging
- Improve wear-liner performance
- Replace work chutes

Transfer Detail

213cm wide boom belt feeding
6 350 tonne/h on a 183cm belt

Challenge

Dust generation was a major concern for this coal export terminal since the port is located next to a metropolitan area. There was also significant spillage that resulted in clean-up costs. Finally, the chute work was original to the unit and was showing distinct signs of age requiring high levels of maintenance for patching and repair.

Tasman Warajay Solution

Tasman Warajay designed, fabricated, and installed a 1-on-1 Transfer Chute with Tasman Warajay Technology. The system accommodates the luffing and slewing actions of the reclaim boom and includes ceramic tile wear liners.



Result

Immediately upon start-up of the terminal, the operator saw the benefit of increased throughput. Since installation, the terminal can reclaim coal at rates over 150 percent of previous rates. This result allows the terminal to move forward with additional chute replacement projects so they can ultimately move coal through all of their transfers at higher rates. This allows them to load ships more quickly, efficiently, and at lower cost.