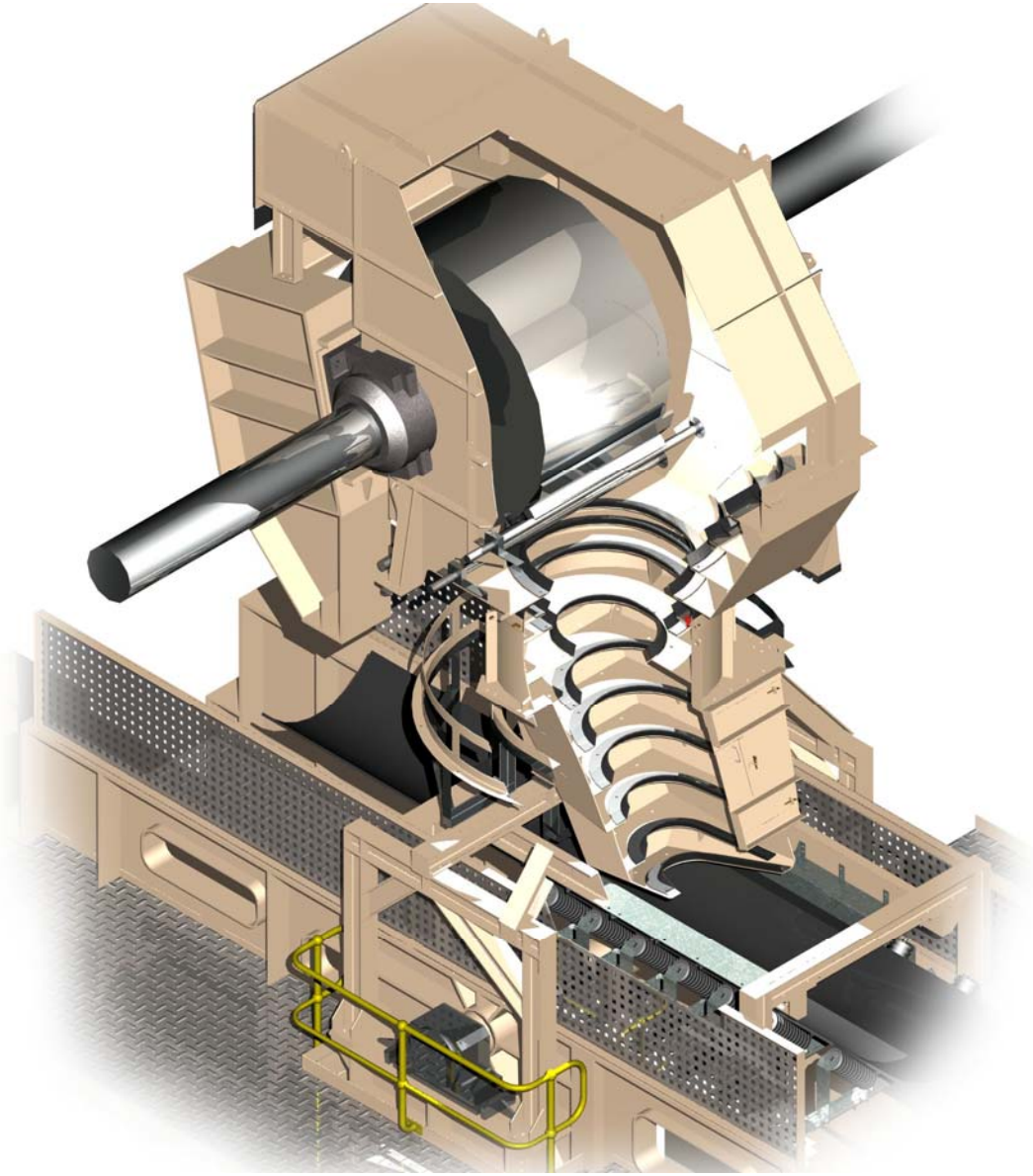
Transfer Design Objectives

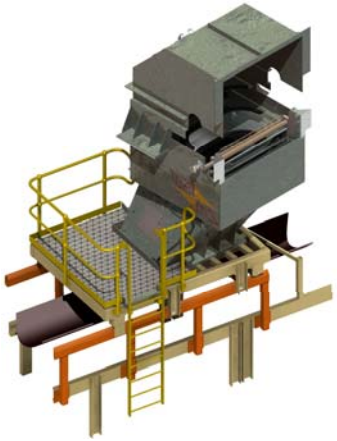


Wear Applications & Management Services

AIM Availability Innovation Maintainability

WEar BAck Transfer Systems

- The design objectives of the WEarBAck transfer include:
  - Controlling the direction and speed of product flow
    - Central discharge loading on receiving conveyor
    - Loading in direction of conveyor travel
    - Retardation or control of flow
      - matching material speed to receiving conveyor speed
  - Control of stream shape
  - Control of spillage
  - Control of dust
  - Reduction of product degradation
    - Minimising material on material wear and material on chute wear
  - Provision of surge control
  - Long intervals between maintenance periods
  - Easy access for inspections and maintenance



Wear Applications & Management Services

AIM Availability Innovation Maintainability

WEar BAck Transfer Systems

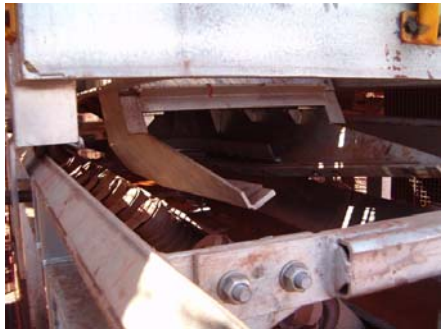
- The WEarBAck design controls flow direction, speed, stream shape and spillage by:
  - Obtaining control of the material flow from the initial impact
  - Maintaining contact with the chute surface where possible to maintain a constant velocity (boundary layer effect)
  - Using incremental and subtle directional changes
  - Using a horseshoe/V cross sectional shape to concentrate the ore stream into a single continuous flow
  - Using a horseshoe/V cross sectional shape and ledge system to create a virtual tube for manipulating ore flow (just like the water in a water slide)
  - Using the appropriate chute elevation angle to match the velocity of the ore to the speed of the receiving conveyor to eliminate boiling at impact
  - Using a wedge shape discharge to:
    - Allow smaller material to load on to the receiving conveyor first
    - Centralise ore flow
    - Provide an upward taper to prevent ore entrapment between chute and belt

Wear Applications & Management Services

Availability Innovation Maintainability

WEar BAck Transfer Systems

- The WEarBAck design controls dust, capacity surges and reduces product degradation by:
  - Keeping the ore in contact with the chute surface as much as possible
  - Concentrating the ore stream
  - Keeping impact angles as small as practical
  - Keeping the velocity of the ore as constant as possible
  - Matching the direction and velocity of the ore to the speed of the receiving conveyor
  - Using the ore to create a face to absorb the initial impact
  - Providing enough volumetric capacity in the transfer to cope with conveyor over runs and ore surges together with:
    - A wedge shape discharge for ease of chute clearance during plant restarts



WEar BAck Transfer Systems

- The WEarBAck design provides long intervals between maintenance periods and easy access for inspections and maintenance by:
  - Using a ledge system to trap ore thus creating a material on material face that protects the chute wall
  - Using removable panels on chute sections where practical to provide uninterupted access for maintenance
  - Providing “soft” loading to the receiving conveyor thus reducing belt and idler maintenance
  - Installing inspection doors in as many areas as practical for visual periodic maintenance.
  - Using light weight and relatively inexpensive ledges in lieu of large difficult to handle iron or steel lining systems

WEar BAck Transfer Systems

- Current Installations
  - BHP Billiton Mount Newman Operation x 2
  - Newcrest Mining Ridgeway Operation
  - Newcrest Mining Telfer Operation
- Scheduled Installations
  - Newcrest Mining Ridgeway Operation, November 07,February 08
  - Newcrest Mining Cadia Operation, November 07, February 07
  - Newcrest Mining Telfer Operation, Late 07

WEar BAck Transfer Systems

- Newcastle
  - Phone: 02 4962 3433
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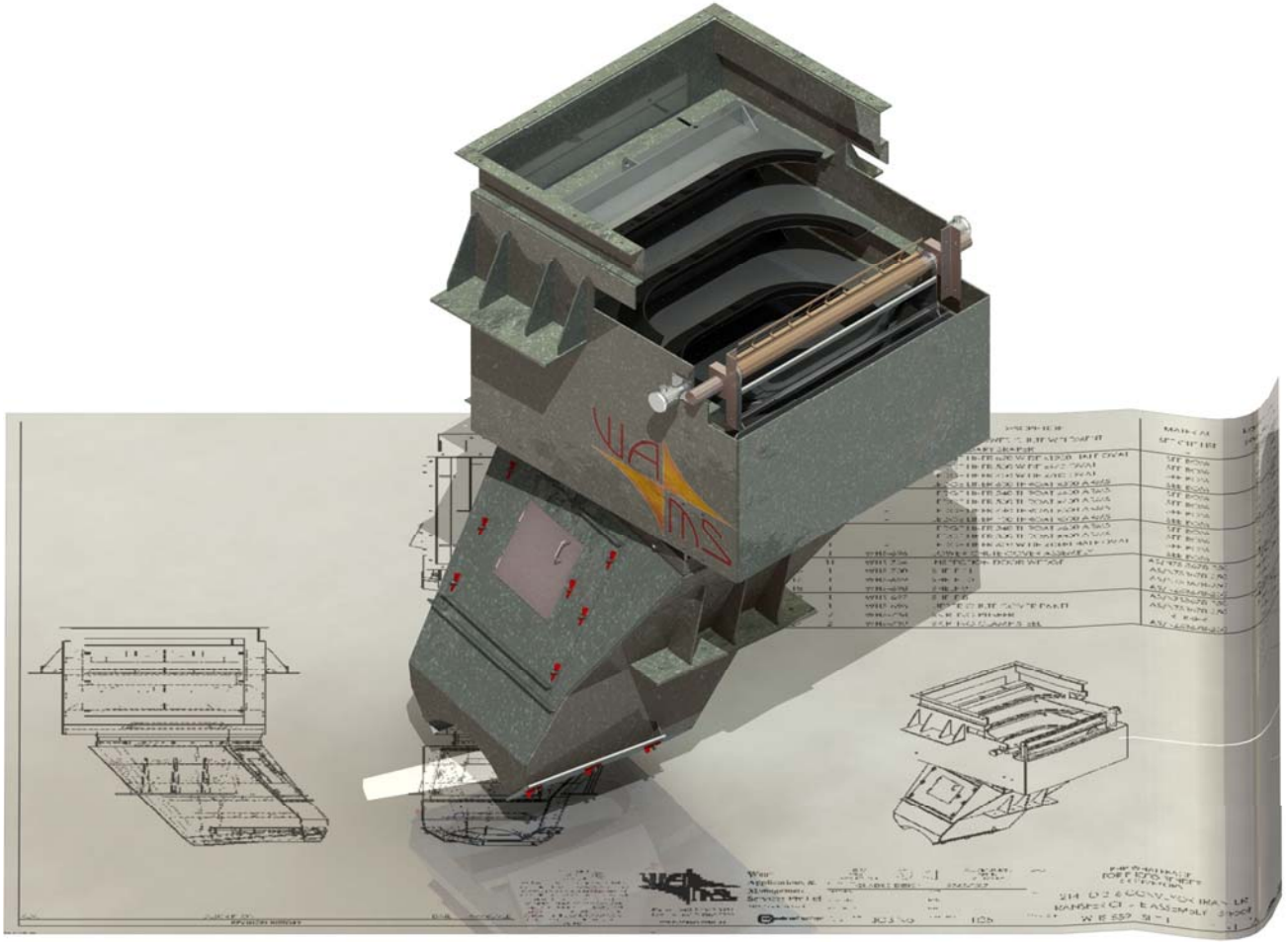
  - Email: support@wams.com.au
  - Web: www.wams.com.au



Wear Applications & Management Services

Availability Innovation Maintainability