BOTON

Mining

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Gold Ore

Mining

Norton Gold Fields Binduli Conveyor System Project

Anti-adhesion conveyor solution for sticky gold ore transfer between HPGR and fine screening

BOTON delivered a self-developed conveyor system for Norton Gold Fields' Binduli expansion project in Kalgoorlie, Western Australia, supporting stable material transfer between the HPGR crushing process and the fine screening section.

The project combined BOTON' s conveyor system engineering, conveyor belt technology and anti-adhesion cover compound, helping reduce material carryback, spillage and build-up under highly sticky gold ore operating conditions.

BOTON PROJECT CASE STUDY

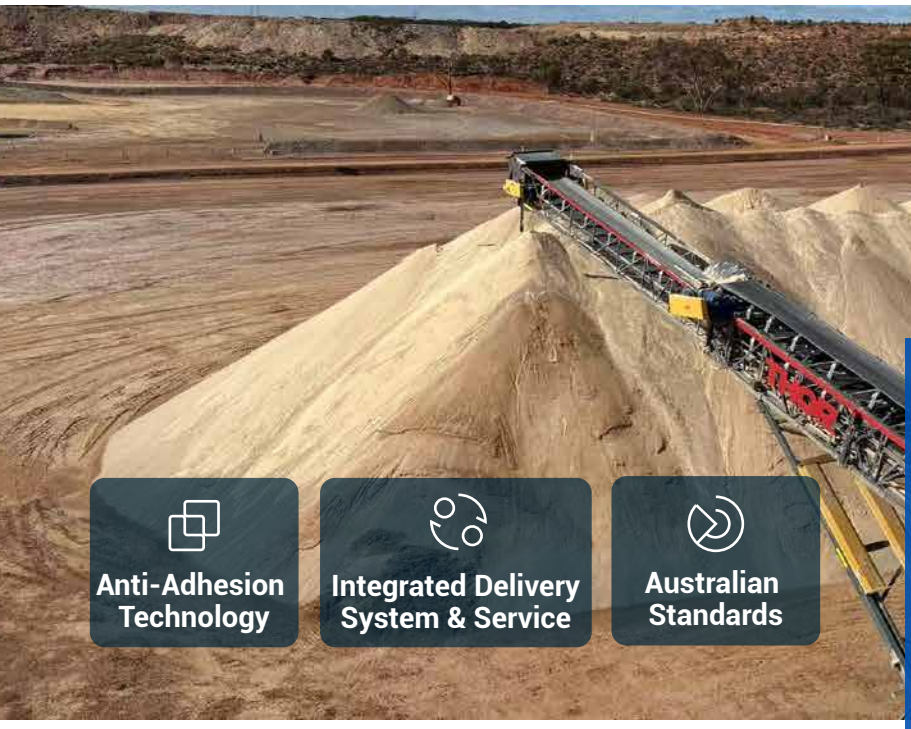
KEY FACTS

- Application: **Gold Ore Conveying**
- Site: **Binduli Gold Mine, Kalgoorlie, Western Australia**
- Product: **BOTON Self-Developed Conveyor System and Anti-Adhesion Conveyor Belt**

Conveyor Length	Belt Length	Design Belt Speed	Design Capacity
105 m	**210 m**	**2.5 m/s**	**1,000 t/h**

Special Technology: **Anti-Adhesion Cover Compound**

Delivery Scope: **Conveyor system design, product supply, manufacturing coordination, site installation guidance and acceptance support**



PROJECT CHALLENGES

Critical transfer point between crushing and screening

The conveyor is located between the HPGR and the fine screening process, where material flow stability directly affects the performance of the downstream screening section. Any build-up, blockage or belt tracking issue could create additional maintenance work and affect overall process continuity.

Highly sticky gold ore

The material handled in this project has strong adhesion characteristics. On conventional conveyor belts, sticky ore can easily remain on the belt surface, creating carryback on the return side and causing material accumulation around idlers, frames and transfer areas.

Strict standards and delivery constraints

The project needed to meet Australian mining, fabrication and electrical requirements, with high expectations for equipment safety, interlocking protection and site acceptance. Frequent design coordination and limited site work windows also placed higher demands on manufacturing response and project execution.

CORE ACHIEVEMENTS

Integrated conveyor system delivery

BOTON successfully delivered a complete conveyor solution for the Binduli expansion project, including the self-developed conveyor structure and conveyor belt. The project demonstrated BOTON' s ability to support customers with integrated system engineering, product supply and site service, rather than single-component delivery.

Improved control of sticky material build-up

The project addressed a key operating challenge caused by highly sticky gold ore. Through a targeted anti-adhesion belt solution and optimized system configuration, BOTON helped reduce material carryback, spillage and build-up on the return side, idlers and conveyor structure.

Support for project delivery in Western Australia

The conveyor system was delivered under demanding Australian mining project requirements, involving design coordination, fabrication quality control, site installation guidance and acceptance support. BOTON' s cross-functional delivery capability helped support project progress under strict review and site control conditions.

BOTON SOLUTION

Self-developed conveyor system delivery

BOTON provided an integrated conveyor system solution, including the self-developed conveyor, matching conveyor belt and project execution support. The scope covered design coordination, manufacturing management, site installation guidance and acceptance support, helping ensure that the conveyor structure and belt system were engineered as a matched solution.

The conveyor structure was optimized for the crushing and screening transfer application, with attention to material flow, belt tracking stability and maintainability under high-load mining conditions.

Anti-adhesion conveyor belt technology

BOTON developed a targeted anti-adhesion cover compound for the Binduli project. The belt surface was designed to reduce bonding between sticky gold ore and the conveyor belt, helping minimize material carryback and accumulation on the return side.

This anti-adhesion design helped address the operating challenges caused by sticky material build-up, including frequent cleaning demand, material accumulation around conveyor components and increased maintenance pressure.

Coordinated engineering and site support

To support project delivery, BOTON coordinated conveyor design, product manufacturing and site installation guidance around the project' s technical and schedule requirements. The team responded to design coordination needs and helped reduce the risk of rework during execution.

BOTON also matched the belt solution with supporting system components, including an efficient belt cleaning arrangement and idler configuration suitable for sticky material handling. This system-level approach helped improve operating reliability under challenging mine site conditions.