

Product Series: BTZN-GZ5112



Currently, the global demand for conveying bulk materials such as mineral ores, coal, sand, and aggregates continues to grow. Belt conveyor systems are an economical and efficient method for material handling. However, during the conveying process, material spillage not only severely pollutes the production environment but can also cause abnormal wear on the belt, damage expensive conveying equipment, and potentially lead to significant safety hazards if not cleaned up promptly.

The Conveyor Material Cleaning Robot employs a bucket-based cleaning method to promptly remove accumulated material under return belt. Compared to traditional manual cleaning, this robot offers significant advantages in both efficiency and safety. Equipped with a crawler-type chassis for enhanced mobility over complex terrain and obstacle-crossing capability, the cleaning robot performs its tasks via remote control using wireless communication technology.

Conveyor Material Cleaning Robot

Functional Features:

- **Adaptability to Low Clearance Spaces:** Designed with a low-profile body to accommodate confined spaces beneath ore conveyors, enabling unobstructed passage under return belts for comprehensive cleaning coverage.
- **Ensuring Production Continuity:** Replaces traditional manual cleaning that requires production stoppage, enabling automatic operation without interrupting production. This significantly improves conveying efficiency while eliminating safety risks associated with human-machine interaction.
- **Capability to Traverse Complex Terrain:** To address uneven ground, water accumulation, or slippery conditions caused by wet and sticky materials, the robot utilizes a crawler-type drive system, providing strong obstacle-crossing ability and stable operation in complex working environments.
- **Flexible Bucket Control:** Equipped with a two-dimensional controllable bucket, the robot can adjust the bucket's posture flexibly, allowing for precise gathering of material along the conveyor line and enhancing cleaning effectiveness and operational accuracy.

Low-Profile Structure

Low-Profile design enables easy access to the working space under belt conveyors.

Intelligent Labor Replacement

No shutdown for cleaning required, ensuring continuous and safe production.

Powerful Obstacle-Surmounting Capability

Crawler-driven design adapts to uneven ground and slippery environments.

High-Efficiency Cleaning Structure

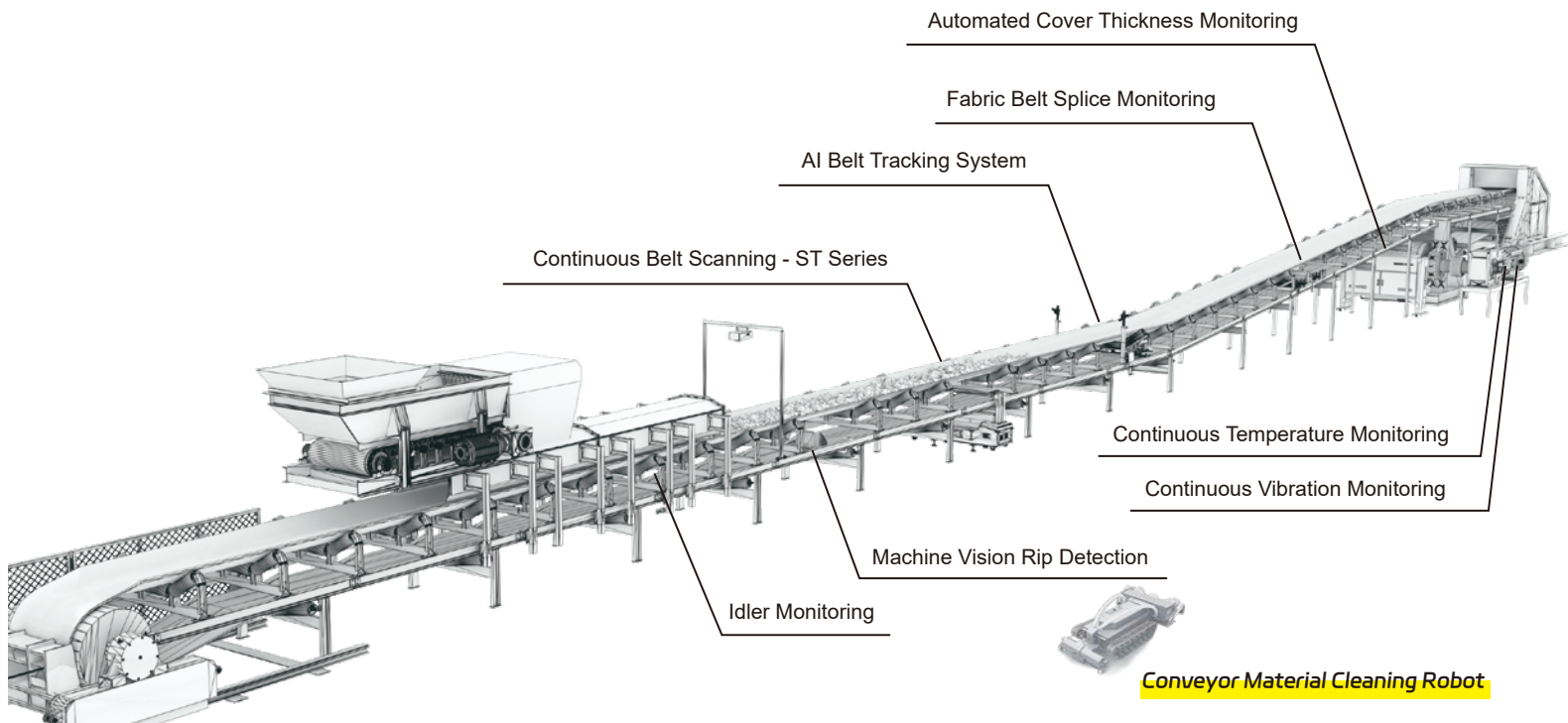
2D-controlled bucket design delivers flexible and high-efficiency cleaning performance.

BO'ON

Main Technical Parameters

Category		Parameters	
Minimum height		35 cm, customizable according to site conditions	Cleaning method Roller brush or scraper bucket (selected according to operating conditions)
Bucket capacity		Customizable	Crawler Chassis Driving Mode Supports in-place steering
Trench-crossing Capability		≥ 20 cm	Communication Mode Wireless remote control
Battery Capacity		50 Ah	Continuous Operating Time 4-5 hours
Operating Environment	Suitable for humid, accumulated water on roads and sticky material scenarios		

Field Application Photos



www.boton-tech.com

Email: btzn@boton-tech.com | Address: No.19, Zhanggong Rd., Xinwu District, Wuxi City, Jiangsu Province, China, 214142

Boton focuses on providing intelligent service solutions for industrial bulk material handling. Our main business includes intelligent turnkey service, overall solutions for intelligent conveying, aim for energy saving, environmental protection and green transformation etc. Boton takes the lead in launching a new model of "integrated general contracting services for conveying systems" in China which changed the situation of different value orientations in the traditional product sales model. This new model speeds up marketization of new technology & new products and has been recognized by many clients domestically and globally.