



Product News

## **Webba Chute Systems: Managing Quality and Maintenance for Chute Reliability**

Edited by on 29. Jan. 2024

*Gauteng, South Africa -*

Custom engineered chutes are scientifically designed and simulated prior to manufacturing by Webba Chute Systems to give customers optimal uptime – but the company has also innovated ways to keep these transfer points well maintained.



Second from left, Faizal Mahomed, Client Services Manager at Webba Chute Systems, and third from left, Izak Potgieter, ISO Systems Manager at Webba Chute Systems, are in the process of validating the quality control procedure at the Germiston factory. (Pictures: ©Webba Chute Systems)

Channeling the flow of mined material is among the most onerous tasks on any mine, and Weba Chute Systems designs and manufactures its solutions to withstand these demanding applications. The considerable wear on the components in a transfer point, however, requires constant monitoring and attention. The company has therefore developed a range of responses to help customers to manage this important responsibility.

According to Izak Potgieter, ISO Systems Manager at Weba Chute Systems, a vital role is played by the company's technical advisors, who visit customers on a regular basis to check the operation and condition of the chutes.

"To make their work efficient, and to quickly provide the customer with relevant information, we developed our own chute inspection app for our technicians," says Potgieter. "This allows them to capture the necessary data and photographs from their inspection, to generate an automated report to guide the customer in their decisions."

The company also has a reliability model which tracks the duty and condition of each chute over time, and which can inform a predictive maintenance programme. Through its decades of experience, the company has developed a detailed understanding of chutes' wear trends under varying material conditions.



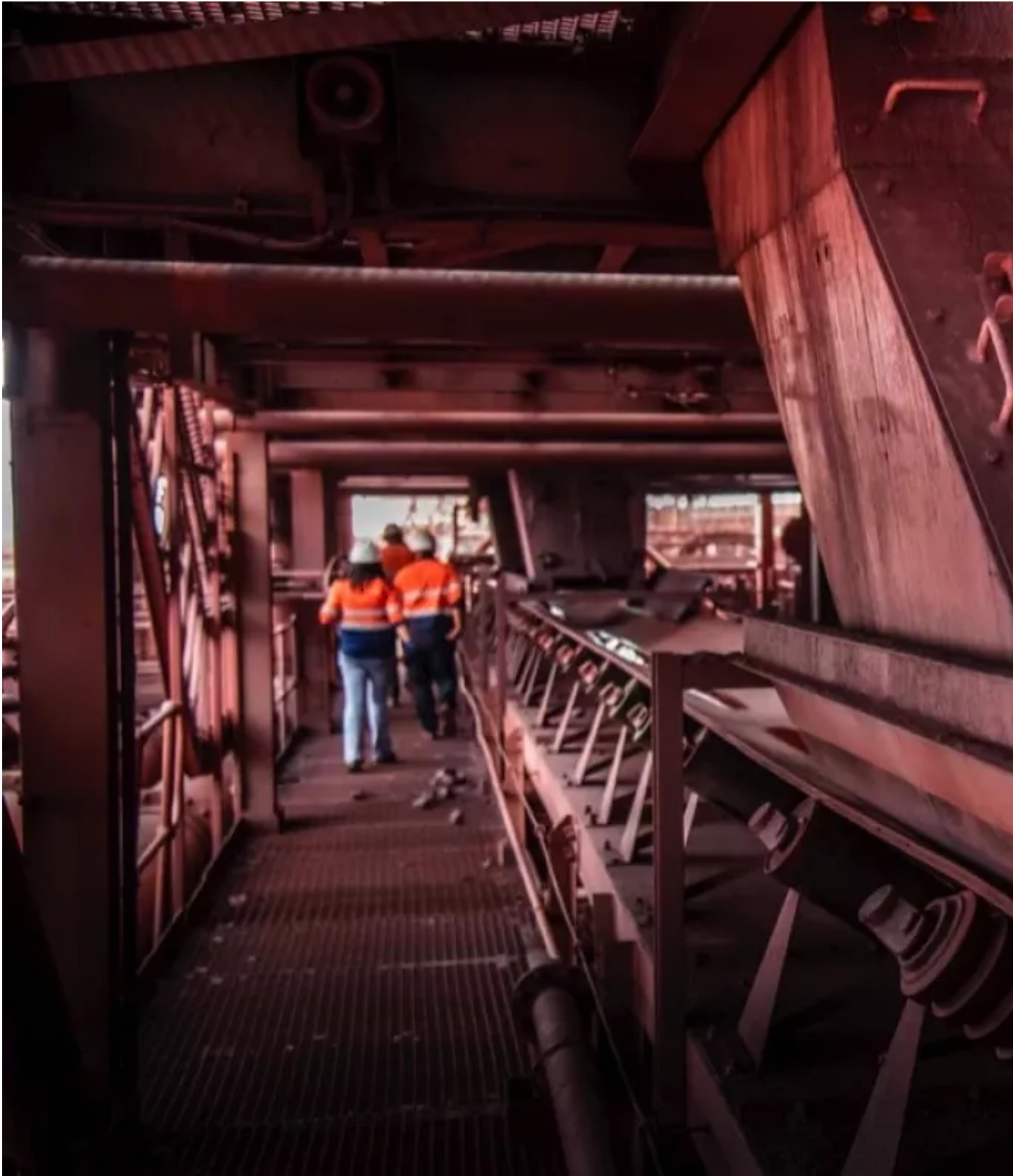
Inspection of a transfer chute at a coal mine.

"Using these models, we can help customers to predict - weeks, months and even years in advance - which aspects of the chute will need maintenance," he says. "This allows the necessary planning to be done, so that unexpected failures do not occur."

He notes that Weba Chute Systems' ISO 9001 accredited quality processes ensure that the spare parts manufactured at its advanced Wadeville facility are consistently what customers require. Collaborating with customers on their maintenance needs therefore also ensures that the right parts are available when required.

Faizel Mahomed, Client Services Manager at Weba Chute Systems, explains that mining conditions at customers' operations can be expected to change over time. More abrasive ore, for example, or larger lump sizes, may result in faster wear on certain components.

"This makes our close contact with customers even more vital, as we can work with them to adapt to changing conditions," says Mahomed. "Sometimes increased wear is unavoidable, and we develop innovations that meet these demands - such as our collaboration with a foundry partner to develop liners with 600 Brunel hardness for longer life."



A primary screen oversize transfer chute at an iron ore mine.

Among the faster wearing items on a chute is the lip, and to save time Weba Chute Systems has developed a quick-release lip for ease of replacement. He also points to the company's innovation of a liner that can be replaced from the outside of the chute. This makes it safer and more efficient for the technician,

who does not need to enter the chute.

Chutes are often mission-critical for a mine, emphasises Potgieter, and in these cases the customer can take advantage of Weba Chute Systems' maintenance contracts. These arrangements put a dedicated team on site to monitor and report on equipment condition, and to coordinate the necessary maintenance with the mine's responsible officials.