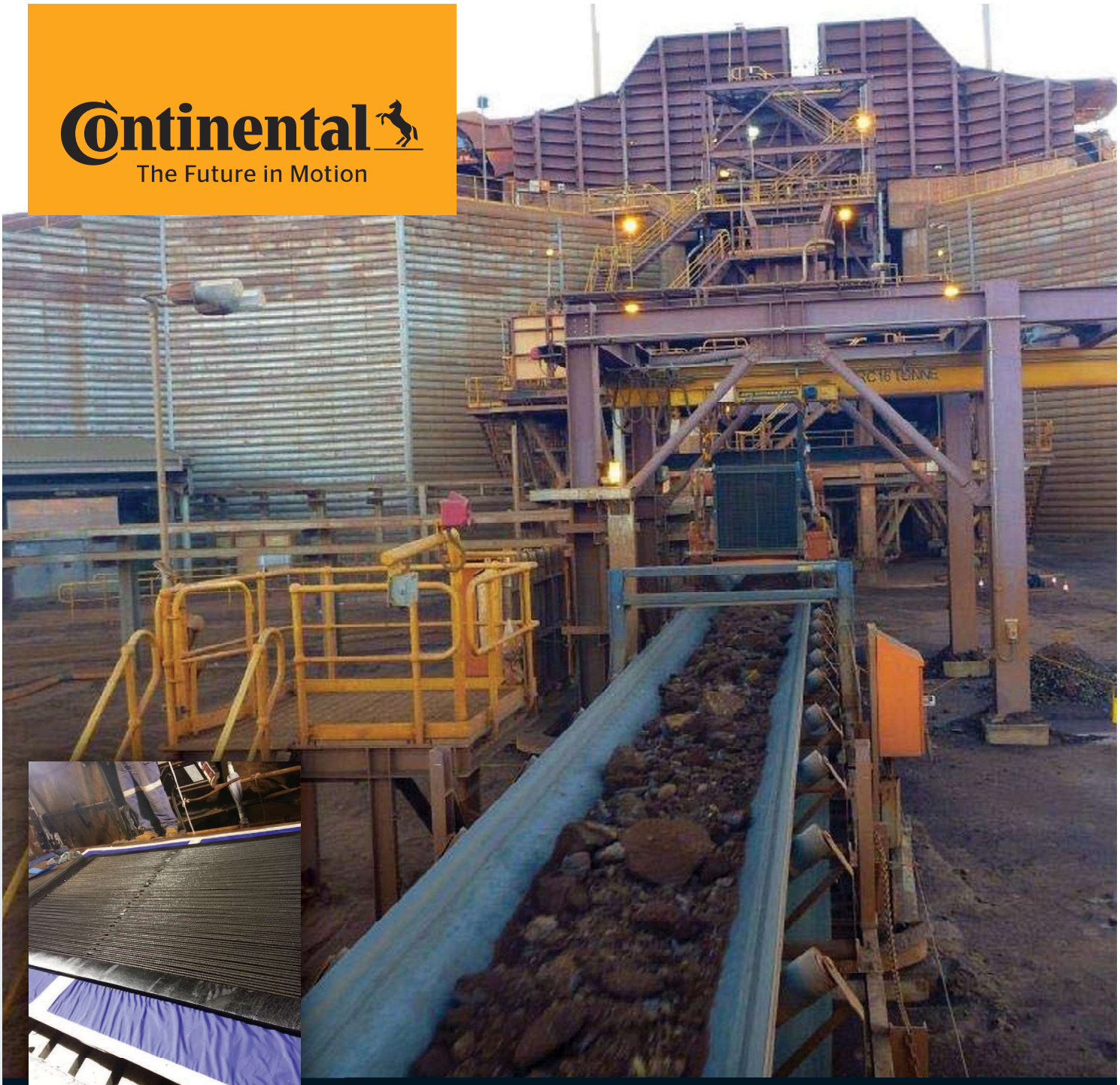
Continental
The Future in Motion



Completed on time, on budget and incident free

Extending belt life on 3 primary feeders

Project Scope The three primary belt feeders at FMG's Solomon Hub were delivering unacceptable downtime and lost production through repeated belt failures. Mechanical changes to the loading chute combined with a new conveyor belting specification greatly improved their availability.

Key Data The feed source is the primary crusher and major conveyor parameters were: • Conveyor – Centre to Centre – 140.63 metres • Pulley Diameters – 800mm • Tonnage – 5,500tph • Belt Speed – 3.98m/sec • Product Size – ≤600mm (95% minus 400mm) • Product Bulk Density – 2,400kg/m3 • Chute Drop Height – 5.7m A combination of large primary product size and drop height generating a high impact force which exceeded the rating of the selected steel cord belt specification was identified as the cause of holes being punched in the belts and premature belt failure. Installing cross bars in the lower section of the chute and a 90° cross beam longitudinal to reduce the speed of the product resulted in improvements to the loading. The new belt installed was a composite of 1800 mm x Conquest XP 1250/2 PIW 18 mm x 7 mm ContiTech Grade Monster Hide x Stacker c/w HD Leno Breaker fabric in the carry cover. This has a belt mass of 72.0kg/m and 34.9mm gauge.

Summary FMG has had great success with 'Monster Hide' compound on CV03 at Cloudbreak Mine (topleftpic) where it has increased belt life from three to eight months. An astonishing 165% improvement. Results of the loading chute changes combined with the new conveyor belting on the three primary feeders have been extremely encouraging.

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