

Evolution[®] 6040 Crawler Shoes

Location	Pilbara Region, Western Australia
Platform	6040/RH170 Hydraulic Excavator
Conditions	Hard Rock – Iron Ore
Solution	Evolution [®] Crawler Shoes

Situation

A customer in the Pilbara Region of Western Australia was operating a 6040/RH170 backhoe for both bench work and mine face clean up after the shovels have completed their work.

The inherent nature of a backhoe is to pull dirt back onto its tracks. This, combined with the naturally abrasive iron ore body and the high travel ratio of the backhoe, led to higher than anticipated crawler shoe wear.

The original OEM shoes achieved less than 14,000 hours and were unable to be refurbished, due to extensive levels of wear and structural fatigue cracking.

Solution

The machine was fitted with a set of Bradken Evolution[®] shoes to enhance wear life and minimise down time.

The Evolution[®] design incorporates the use of Bradken's patented 'continuous roller path'. This design enhancement improves the contact pressure distribution between the roller and the shoe. As a result, the roller is supported at all times as illustrated in the diagram to the right.

This reduces metal flow in the shoe and increases the service life of mating components.

Results

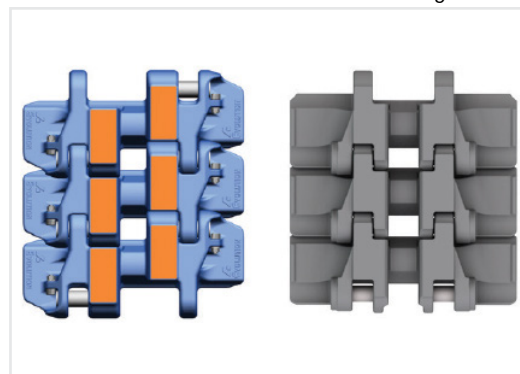
The Bradken Evolution[®] shoes excelled in the challenging conditions. At 14,000 hours the undercarriage underwent a mid-life refurbishment to achieve the maximum possible hours and subsequently lowest total cost of ownership (TCO). After returning to service, the Bradken undercarriage achieved an impressive total of 31,200 hours.



6040/RH170 in iron ore



6040/RH170 Excavator Undercarriage



EVOLUTION[®]

DRP/OEM



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