Wide Path[™] undercarriage system for P&H[®] and Caterpillar[®] electric rope shovels





Put an end to your battle with toenailing and excessive maintenance

Enjoy better performance and more production time between maintenance needs with our Wide Path[™] undercarriage system. The system better distributes weight on the track pads and eliminates toenailing to increase your productivity and profit.



Key benefits

- Increased safety
- Decreased maintenance frequency
- Lower operating costs
- Improved performance

Discover how Wide Path[™] can improve your process

We have designed an undercarriage system with a wider roll path and more wear clearance that will fit without any frame modifications.

Increased safety

As conventional track pads wear under the weight of the shovel, they develop toenails of material that extend off the roll path. These toenails interfere with the articulation of the track pads around the idler and drive tumbler. Extreme pressure at these interference points can cause metal to break off in a violent manner. Our innovative design eliminates both toenailing and the possibility of metal breaking off and potentially causing an injury to someone.





Conventional track pad with toenailing and poor articulation



Wider roll path

Decreased maintenance frequency

With our innovative design, the Wide Path[™] undercarriage system lasts up to 100% longer than the original equipment manufacturer (OEM) parts.

- Improves weight distribution, reducing stress on the track pads
- Increases wear limits
- Reduces wear on the track pads, lower rollers, rear idler, drive tumbler and side frame guide rails

Lower operating costs

With the help of Wide Path^{™™}, you can reduce the operating costs for your shovel undercarriage system by up to 50%. These savings come in the form of less downtime and longer-lasting components.

Improved performance

In addition to lasting longer than conventional designs, the Wide Path[™] undercarriage system has a thicker internal structure so the track pads do not bend. When track pads bend or toenail, they interfere with smooth track articulation and decrease the quality of performance for the entire system.

Decreasing the required maintenance and increasing the performance of the undercarriage system allows operators to have more confidence in the entire shovel. They will be able to focus on the job at hand instead of frustration over equipment issues.

As conventional track pads wear, they begin to bend away from the ground across the width of the pad. Bending in this way causes stress on the pins and interference between the pad and the car body. Our design minimises bending to increase the life of the track pads and the pins.



Track pad bending demonstrated along-side a new track pad



- 1. Drive tumbler
- 2. Front idler
- 3. Lower roller
- 4. Rear idler
- 5. Track pad
- 6. Sliders

Wide Path[™] undercarriage components

The low maintenance and minimal reactive downtime customers have experienced with this undercarriage (opposed to the OEM) has made their life easy. Not only are they impressed with the product, but also with Excel's routine first-class support. The fact that multiple undercarriage sets have been purchased since this first article was launched proves that actions speak louder than words.

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DAVE EAGAN

Global Service Line Manager, Extraction Products

Features of our optimised design compared to conventional systems

Wider roll path

Our track pads and the roll path are wider than is found in conventional track systems, though it does not require any frame modifications for installation. This design creates a larger surface area for the track pads to reduce the direct stress, improve the weight distribution, and reduce wear on the system components.





Thicker internal structures

We have used our engineering expertise to design a system that gives the track pads robust internal support in the roll path. The extra support that our system gives prevents the track pads from being crushed under the weight of the shovel.

Optimized geometry of track pads

Our wider, better supported track pads will last longer than conventional designs. When material flow does occur as they wear, the optimised geometry of the track pads prevents the metal between track pads from touching, toenailing or interfering with articulation.





Wide Path[™] track pad

Enhanced ribs in roll path™

In the conventional roll path[™] design, the ribs flow off the end of the roll path[™]. Our team found the solution in enhanced ribs. By increasing the number and predominance of the ribs, we created a new design that does not flow off the end while the manganese steel is hardening through work.





Wide Path[™] track pad



Conventional track pad

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