

# WHY PURCHASE GENUINE KOMATSU UNDERCARRIAGE?

BIA Group provides comprehensive support across the entire equipment lifespan, advising clients on the maintenance of their equipment to enhance Total Cost of Ownership (TCO) and maximize machine uptime. This case study explores BIA Group's study of Komatsu dozer undercarriage parts, illustrating the clear advantages of opting for authentic, original components.

<p><i>Opting for genuine Komatsu undercarriage is not merely a transaction; it represents a strategic investment in reliability, productivity and operational efficiency.</i></p>	<table border="1"><thead><tr><th data-bbox="1069 790 1503 862">KEY FACTS</th></tr></thead><tbody><tr><td data-bbox="1069 862 1503 1120"><ul style="list-style-type: none"><li>• Reduced TCO</li><li>• Optimised Uptime</li><li>• Increased Safety</li><li>• Extended Lifespan</li></ul></td></tr></tbody></table>	KEY FACTS	<ul style="list-style-type: none"><li>• Reduced TCO</li><li>• Optimised Uptime</li><li>• Increased Safety</li><li>• Extended Lifespan</li></ul>
KEY FACTS			
<ul style="list-style-type: none"><li>• Reduced TCO</li><li>• Optimised Uptime</li><li>• Increased Safety</li><li>• Extended Lifespan</li></ul>			



### 3 COMPELLING REASONS TO INVEST IN GENUINE KOMATSU UNDERCARRIAGE

- **Mitigate machine downtime** : Genuine Komatsu undercarriage are engineered to the highest standards which ensure reliable and consistent operational lifespan serving as a proactive measure to mitigate breakdown.
- **Enhance machine productivity** : Komatsu's genuine undercarriage surpasses industry standards with its superior hardness depth and extended wear life. This exceptional hardness equips the undercarriage to endure demanding operational conditions, ultimately optimizing durability and contributing to improved machine productivity.
- **Lower cost per hour** : While not positioned as the cheapest purchase option in the undercarriage (UC) product range, selecting an OEM-quality product with superior hardness depth delivers extended wear life. The result is a significant reduction of the cost per hour, presenting a strategic investment that balances initial expenditure with prolonged operational benefits.

### COMPARATIVE FIELD TEST CONDUCTED

To underscore these distinguishing characteristics, BIA conducted a comparative analysis in an authentic operational setting. In this examination, both KOMATSU and generic undercarriages were concurrently implemented in a Komatsu dozer type D375A-6R within a mine environment.



*Test carried out under real conditions on a mining site in West Africa*

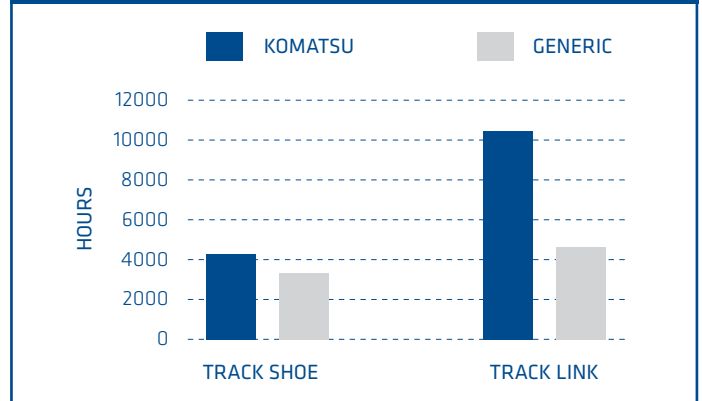
The susceptibility of the generic component to high-impact scenarios became apparent, raising concerns about its durability in rigorous operational conditions. It was discerned that the track link's longevity relies on the minimum duration among link pitch, bushing, and link height.

## DOUBLED LIFESPAN

In this context, genuine Komatsu undercarriage components exhibited heightened resilience, showcasing a durability surpassing their generic counterparts by a factor of two.

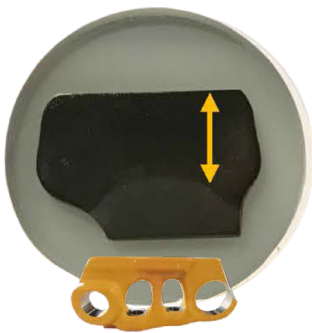
The generic track link was replaced after 4559 hours, whereas the genuine Komatsu track link lasted an impressive 10,393 hours - more than twice as long. This durability also applies to other track shoe components, highlighting the superior performance of genuine Komatsu parts.

### FORECASTED PART'S LIFE AT 100% WEAR



Test carried out under real conditions on a mining site in West Africa

### KOMATSU



### NON-GENUINE



Link portion heat treatment has a larger depth on Komatsu link part. (Higher hardened depth, yellow arrow).

Quality of steel is one of the differentiating factor. Komatsu uses Japanese boron steel for a majority of its undercarriage products (track links, bushings, wear points on the rollers, sprockets, etc). Boron steel becomes even more hardened and more wear resistant as it goes through the Komatsu special heat treatment process (i.e. link tread, bushing, sprocket). In addition, Komatsu uses F5 seals to prevent oil leakage between pin and bushing and prevent foreign material to enter.

Let's also point that, during the field test, another divergence emerged as the generic undercarriage experienced a fractured master link bolt after only 1097 hours of operation. This failure precipitated a substantial 2-day downtime for repair.

## OPTIMISED TCO

While the upfront investment in authentic Komatsu parts may generate a slight increase, the overarching Total Cost of Ownership (TCO) reveals a real competitive advantage. The prolonged and consistent lifespan of Komatsu undercarriage components results in significantly reduced instances of downtime, thereby enhancing operational continuity and cost-effectiveness.

Contact BIA Group's expert aftersales team for tailored insights and solutions. Visit [www.biagroup.com](http://www.biagroup.com) for more information.