

CASE STUDY

BIRRANA ENHANCEMENTS PROLONG LIFE OF KOMATSU 930E FRONT WHEEL GROUPS AT A COAL MINE

H-E PARTS INTERNATIONAL (H-E PARTS) PROVIDES SOLUTIONS FOR THE ENTIRE DRIVETRAIN, SPECIALIZES IN THE RE-MANUFACTURE OF MAJOR MOBILE EQUIPMENT COMPONENTS, AND OFFERS INDUSTRY LEADING BIRRANA™ PRODUCTS. THE ENHANCED DESIGN FEATURES OF THE BIRRANA™ PRODUCTS DELIVER EXTENDED LIFE, EASE OF MAINTENANCE, AND SUPERIOR PERFORMANCE.

The reliability team of a coal mine customer in Powder River Basin approached H-E Parts in need of longer service life on Komatsu 930E front wheel groups. They were experiencing early life failures and looking for a solution.

SUPERIOR TECHNOLOGY

At the time, the 930E wheel groups were averaging less than 10,000 service hours. After examining the cores, our engineering team agreed upon a plan to rebuild them and increase their service life using our Birrana™ proprietary technology. The following enhancements lead to increased life for the 930E front wheel groups:

- Isolated Wheel Bearing Compartment: Our engineers separated the wheel bearing compartment from the lightweight brake cooling oil, thus allowing the wheel bearings to be lubricated by approved wheel bearing oil.
- The Birrana™ control fit wheel bearing system: includes flexible spacer, hardened spacer, custom bearing design and specifications, and preload adjustments.
- Birrana™ contamination control: includes isolation seals, contamination guards, and contamination kits.

With these upgrades, the Birrana™ enhanced wheel groups lasted an average of over 33,000 service hours. Today, the customer operates over 30 H-E Parts rebuilt wheel groups.

CUSTOMER	Coal Mine Customer
LOCATION	Powder River Basin, WY, USA
APPLICATION	Komatsu 930E
PRODUCT	Birrana™ Enhanced Front Wheel Groups



930E Front Wheel Group

OEM	Less than 10,000 service hours
H-E PARTS	Over 33,000 service hours
INCREASED LIFE	230%

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