

CASE STUDY

ENGINE REBUILD INCREASES ENGINE LIFE BY 6,000 HOURS

H-E PARTS IS COMMITTED TO EXTENDING AND ENHANCING EQUIPMENT LIFE THROUGH OUR INNOVATIVE POWERTRAIN AND ENGINEERING SOLUTIONS.

Engine Solutions is consistently sought out by customers for machining and engineering solutions. What sets our team apart is the ability to rebuild and recondition an engine and all major components at one single location to run like new.

H-E PARTS PROVIDES INNOVATIONS THAT IMPROVE UPON:

- Overall Engine Balancing
- Connecting Rods
- Crankshafts
- Cylinder Head Reconditioning
- Honing
- Magnaflux/Crack Testing
- High Performance Engine Testing

These capabilities are what originally attracted a thermal coal customer in Columbia, South America to H-E Parts. The customer was having repeated engine issues on CAT 793 haul trucks. They were hoping to increase fleet operating hours while lowering overall cost per hour.

	FLEET HOURS
PREVIOUS SUPPLIER	14,000 - 16,000
NEW OEM ENGINE	20,000
H-E PARTS REBUILD	18,500+

The customer indicated that, when brand new, engines ran for 20,000 hours. After first rebuild, engine life decreased by 20 to 30% to 14,000 - 16,000. A third rebuild routinely only provided a third of the hours experienced with a brand new engine.



CAT 3516 ENGINE REBUILD READY TO BE SHIPPED FROM H-E PARTS ENGINE SOLUTIONS

Our customer is an innovator and leader in equipment maintenance. By collaborating with H-E Parts, they have achieved consistent longer life from their engines.

Our team provided key solutions to the customer, such as, advanced machining processes and balancing services to drastically reduce the torsional vibration. By decreasing the vibration, the operator's comfort increased and downtime decreased. The customer also noted major components are no longer seeing fretting wear that results in costly replacement parts.

These improvements allow our customer to keep the engine running longer, with a significant reduction in cost per hour of operation. The customer also appreciates the ability to stage and review engine components during disassembly, and discuss in depth wear and tolerances. H-E Parts is committed to extending component life and lowering costs. We are proud to work with leading miners and to lead in providing innovative solutions that improve mine and industrial maintenance.

SINCE 2013, H-E PARTS HAS PROUDLY REBUILT 50 ENGINES FOR THIS GLOBAL CUSTOMER WITH THE 51ST ENGINE CURRENTLY IN THE WORKS.

LOCATION / DIVISION	Columbia, South America
MINE TYPE	Thermal Coal Mine
APPLICATION	CAT 793 Haul Truck
PRODUCT	CAT 3516 Engine Rebuild