Zambian customers invest in Reman for ADT longevity

Imagine spending a mere 35% of the cost of a new Articulated Dump Truck (ADT) that will guarantee a 66% return on investment in terms of mechanical uptime and productive hours. If that sounds far-fetched, you'd better speak to some of Bell Equipment's customers in the Zambian Copperbelt who are enjoying the benefits of the original equipment manufacturer's Reman Programme.

In Zambia's famous Copperbelt, Bell Equipment enjoys a 100% market share for ADTs used on surface mining operations. This, according to Mike Quin, the company's Managing Director for Zambia, has come about as a result of competitive marketing and reliable after-sales service to back the legendary design and build quality of the machines.

"Lowering the production cost per tonne is one thing but with commodity prices under pressure, our customers are now also looking to extend the life of their mining equipment," Mike says. "We as a company value this view and have put up our hands with the introduction of our remanufacturing (Reman) programme to further enhance the longevity of our products, especially our ADTs."

When Mike first arrived at Bell Equipment's Customer Service Centre in Kitwe in 2017, there was very little activity in the vast workshop with its eight bays. This soon changed as he saw the potential in refurbishing a fleet of six Bell B45D ADTs that had been traded in by a customer for newer ADTs.

"Using five apprentice mechanics, we thoroughly inspected these trucks and replaced only ancillary items such as sandwich blocks, prop-shafts, suspension struts, exhaust manifolds, coolers and tyres," Mike explains. "We spent USD\$30 000,00 on each ADT without changing major components and, once the engines were restarted with new oil and coolants, they were in an infinitely better condition to be sold."

The success of this exercise prompted Mike and his team to actively promote the Reman Programme to their client base throughout Zambia and the Democratic Republic of Congo. "Our clients with larger fleets of our Bell ADTs generally maintain their fleets well as can be seen from high machine availability in the region of 4 500 hours per year," he says. "This translates to achieving 18 000 hours quickly by mining around the clock and diligent servicing is paramount." Two of Bell Equipment Zambia's largest customers in the emerald mining field, namely Kagem Mining and Grizzly Mining, have bought into the Reman Programme in a big way. The former has given Bell an order to refurbish nine Bell B40D ADTs and the latter, seven B35D and B40D machines. The Bell B35D ADTs had been parked for two-years and the company was keen to see them back in action once the work was completed.

Once a Bell ADT enters the workshop, initial work sees the replacement of its engine, transmission, drop-box and differential heads. Wet disc brakes are then stripped out, inspected for wear, and replaced if necessary. All coolers and radiators are inspected and replaced or cleaned. This is all part of the basic cost of the Reman Programme, although potential additional work is noted and quoted on separately, such as for bin liners.

"We spend an average of 176 man-hours per machine and the work is carried out by qualified mechanics who are assisted by apprentices," Mike adds. "Having apprentices involved is essential from a training and skills-transfer point of view as they are the future generation of mechanics."

"The Reman Programme has been received positively by our customers who now budget for the long-term benefit it promises them. Another attractive feature is the offer of a 3 000-hour wet drivetrain warranty after Reman has been completed. During that time, all servicing is done by Bell mechanics."

Mike points out that during 2017 and 2018 three ADTs were refurbished each year but, once the success of the programme became obvious to the market, those numbers have increased dramatically with nine Bell ADTs completed in 2019 with the promise of six more to come.

"The numbers all make sense. Once a Bell ADT has completed 18 000 hours, the customer will spend 35% of the price of a new model to gain another 12 000 hours or 66% and therein lies the real benefit," he says. "The Reman Programme has been received positively by our customers who now budget for the long-term benefit it promises them."