



Partners in Productivity

Application Profile

Rockline® EZZ-LS “Limited Space” Primary Cleaner Solves Carryback Problems

Industry

Quarry

Application

Aggregates, crushing service, gravels, rocks

Product

EZZ-LS “Limited Space” Primary Cleaner

Objective

Reduce carryback, decrease downtime,
increase productivity

Conveyor Detail

Woolgoolga Quarry, located in Northern New South Wales approximately 6 hours north of Sydney, has been in operation for over 30 years. The quarry operates mobile screens and crushers, with standard 1200mm belts.



Problem:

Woolgoolga Quarry had problems with material carryback on their mobile screening plant. The originally installed OEM cleaner was simply a flat piece of polyurethane bolted to a flat bar with tensioning achieved manually. The cleaner edge was wearing away very quickly, causing excessive carryback. Workers at the site could not shut down the unit and readjust the cleaner as regularly as required to fix the carryback problems, therefore material accumulation was extreme. They excavated a trench under the screener for the carryback to pile. The trench gradually filled and overflowed, causing the belt to jam. Workers had to shut down the system, dig the material out by hand, and reposition the plant cleaner. This time-consuming task took two workers four hours to complete, and was performed once a week, sometimes more frequently depending on the material. This was costing the Quarry up to \$2,500 in lost time and wasted production every time they needed to shut down.



Rockline EZZ-LS fitted to conveyor at Woolgoolga Quarry

Solution:

Site management discussed their problems with Flexco. After evaluation and measurement, it was suggested that the site upgrade their current cleaner to the EZP-LS "Limited Space" Primary Cleaner. Designed to be small and compact enough to fit in tight space configurations, the cleaner delivers a constant and effective cleaning force. With a 113mm high blade and needing just 75mm of horizontal and 165mm of vertical clearance, this primary cleaner fits on conveyors with pulleys as small as 150mm. The EZP-LS is compact, but still includes a user-friendly interface and impressive performance features of the Industry-preferred EZP1 Primary Cleaner. The EZP-LS was easy to install, with specific installation coordinates and step-by-step instructions included with the cleaner.

Result:

The EZP-LS Primary Cleaner immediately solved the quarry's carryback issues. Upon inspection one month after installation, it was found that there was no longer a need for the workers to dig a trench to catch material waste or shut down the system for time-consuming and costly manual cleanup.

The patented, faceted design of the ConShear™ - LS Blade allows the blade to renew its cleaning edge as it wears, which eliminates the need for manual readjustment. The smaller-sized LST Tensioner is self-contained and easy to adjust, making maintenance simple and minimal. The cleaner is also easy to service, with a one-pin blade replacement feature, saving time and money on costly shutdowns.

More than five months since the primary cleaner was installed, the unit is still running effectively and there has been no need to shut the system down and spend up to four hours manually cleaning up. It was estimated that by fitting the EZP-LS Primary Cleaner, the Quarry have saved approximately \$10,000, plus, there is reduced wear on the conveyor belt and rollers. The Quarry has saved time and maintenance costs, and there has been an overall increase in productivity and output.

