LC Products

clear thinking
better solutions

TITAN 3330 LOAD HAUL OPTIMISATION TECHNOLOGY

To optimize hydraulic excavator or shovel performance, the operator needs to know each bucket payload BEFORE they dump it in the truck.

The LC **TITAN 3330** Load Haul Optimisation Technology uses highly sophisticated instruments and algorithms to calculate and display the payload of each bucket accurately, in real time and during motion, before it is dumped in the truck. This real time measurement is completely stable, carefully filtered, fully compensated for the high vibration digging environment and doesn't intrude on the normal operation of the excavator in any way.

While dumping, a glance at the screen informs the operator of summaries of the total truck load to date and how much remains to be filled. They can then use this information to fill the truck to optimal capacity.

Careful trials have demonstrated that most operations generate a statistical spread of truck loads with a standard deviation of 10% of the average load. Use of the Titan monitor tightens this distribution to achieve a standard deviation of only 5% of the average truck load, resulting in:

- Increase truck fleet production by ~6%*

- Decreased overloads over 110%

- Elimination of 120+% overloads

* actual benefits dependent on current productivity, operator training and other factors
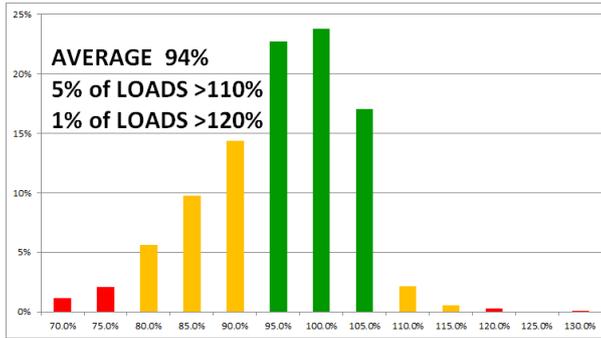
For more information
Please contact:

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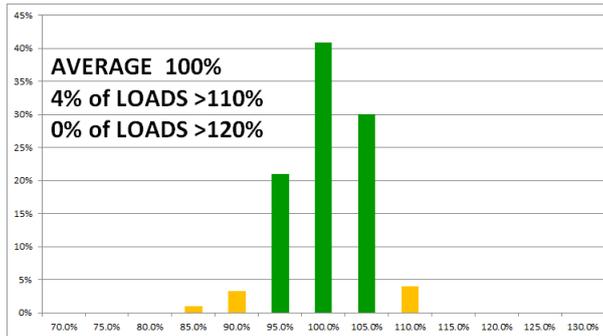Tel: +61 7 3436 2500
enquiries@lc.com.au

Truck Loads Increased ~6% in Trials

Distribution of Truck loads - No Monitor Feedback

AVERAGE 94%
5% of LOADS >110%
1% of LOADS >120%

Distribution of Truck loads - With Monitor Feedback

AVERAGE 100%
4% of LOADS >110%
0% of LOADS >120%

The TITAN 3330 Load Haul Optimisation

- Utilises simple intuitive touch screen
- Provides live feedback and statistics
- Monitors fill time and dig energy
- Assists optimising filling of trucks
- Provides performance logging
- Has proven accuracy through scale tests

In fully matched operations, where the diggers can reliably fill the trucks to capacity with a specific number of passes, the Titan system provides the feedback for tightening the spread, and delivering the increased average payload.

In unmatched operations, Titan provides the feedback needed to train operators to increase their average loads, and the information needed to select new and better optimised buckets.

As a crucial part of the system, LC provides a data support service. Tailored to client needs, it includes options for remote analysis, on site presentations, regular training of operators, and other services vital to ensuring that the data is used to improve productivity. Reports are routinely generated from LC's replicated database in Brisbane.

As further options, LC can provide

- Strain gauges to monitor the fatigue stresses in the structures
- A camera monitoring the lip to check for tooth loss
- A synchronized database on site, with SQL based Intranet reports

LC openly integrates its products with other providers where possible. Integration with truck systems such as iVolve gives
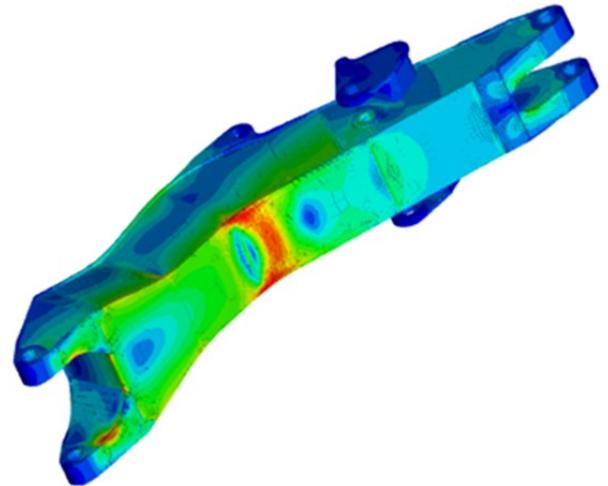
- Automated recognition of trucks
- Cross checking between the truck weighing systems and Titan

LC has systems available for excavators and shovels. Engineered using a combination of standard industrial components and custom developed enclosures and electronics, the Titan system is rated to 70 deg, and can be installed without welding to the machine.

LC Titan Load Haul Optimisation — another example of
LC's clear thinking and better solutions.

www.lc.com.au