Ernest Henry Mine



Laser Receiver Mounted on Dozer Blade

Ernest Henry Mine

An open cut hard rock mine approx 150km from Mt Isa and 40 kms north of Cloncurry.
Load out approx. 170,000 tonnes per day using 3 primary diggers.
Pit currently 1300m * 1400m * 420m deep and currently developing 16m benches
Final pit design depth is 530m with same pit perimeter as today.



Until recently, laser levels were taken by a person on foot, standing within two metres of the toe of the dig face. This placed the person at risk of harm from both machinery operating in the vicinity and rocks falling from the face of the highwall or blasted rill material.

The following innovation was developed as a result of one of our people being injured during the course of their daily activities as described above.

An elevating tripod mounted laser and a receiver mounted on the dozer blade have completely eliminated any necessity of persons taking laser levels on foot in front of dig faces at all.

Steep walls create GPS shadows







This paint mark shows how close a co-ordinator worked in proximity to the active dig face.

In the past, the co-coordinators would walk the face with the staff receiver and paint marks on the ground or rocks to show the digger and dozer operators the desired floor level.

Two mining co-ordinators would take levels at dig faces and dumps three times daily on average. This was the equivalent of up to six hours of manual labour per day.

Conception!! Discussion between EHM operators and Hastings Deering









Receiver (protected by steel Guard) is mounted behind dozer blade. There is a corresponding light panel inside dozer cab There is no need for paint markers as the lights indicate when the dozer blade is operating at the correct level.



Risks eliminated:

- •Pedestrian being injured by rockfall
- Vehicle/Pedestrian interaction

Laser & peg up to 300m away from dozer

Dig face



Our People are the Difference



Our People are the