Meridian installs two TLI systems in NSW

Train weighing specialist Meridian Engineers has installed two Train Loading Improvement (TLI) systems in NSW in the last six months, one at Whitehaven Coal’s Gunnedah operation and another at Vale’s Integra Coal.

Vale, the world’s second largest mining company, owns Integra Coal at Singleton in NSW, which produces metallurgical and steam coals from open cut mines and a state-of-the-art longwall.

Constantly looking at ways to improve its operational performance, Vale was the first miner in the Hunter to spot the potential of Meridian’s TLI system.

Faced with the challenge of loading moving rail wagons from a chute with coal flowing at up to two tonnes per second, Vale, in common with nearly all coal and iron ore miners, was underloading its wagons.

However, in the month after commissioning the TLI system, the Singleton site recorded a record low of 0.7 tonnes per wagon underloaded, compared to an average of 2 to 3 tonnes in previous periods.

“We are very happy with the immediate benefits seen in our train loading performance and the improved reporting and loading analysis features delivered by this system,” said the coal handling prep plant manager, Vale Integra Coal Operations, Singleton, NSW.

At Whitehaven, installation of the TLI system allowed the operator to move to coal wagons of 120 tonnes capacity.

“The major benefit of our system was that it allowed Whitehaven to bring in larger wagons as authorities had confidence in weight going in to limits,” explained Anthony Pruiti, managing director, Meridian Engineers.
Meridian’s TLI system comprises: train weighbridges to monitor loading performance; train speed and position systems to monitor train movement through the loading area; wagon identification systems to automatically determine loading targets of wagons prior to reaching the loading point; bin weight indication systems to accurately weigh the material flowing into the wagons; and control systems to automatically load trains.

Significantly, Dr Pruiti believes that Meridian’s is the only system that can be easily retrofitted to existing train loading facilities.

“We can go to a site and convert an existing loading facility into a mass controlled loading system,” he said. “Ours is the only system to do that.”

In Western Australia, Meridian has three TLI systems installed, one each at BHP Billiton, Rio Tinto, and Fortescue Metals Group. The company also has two systems installed in Queensland.

Looking to the future, Dr Pruiti believes that clearer commercial arrangements between miners and transporters regarding over and underweight wagons in NSW and Queensland might better incentivise industry to invest in train loading improvement systems.

More broadly, Meridian Engineers has over 50 installations in Australia, the UK and New Zealand, with agents in the UK and east coast of Australia. These installations encompass train loading and weighing, bin weight, train speed and positioning, load control and load cells and in-motion truck weighing.

Meridian recently appointed Haley and Mellowes as its east coast agent. “Their appointment will strengthen our after sales support and service,” commented Dr Pruiti.

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