

**Halley & Mellows Pty Ltd have been providing material handling products and solutions to some of our country's most vital industries for over 30 years.**

Backed by highly regarded companies such as PICOR, Carman Industries and Mogensen. Halley & Mellows have secured their position as one of Australia's leading material handling solution providers with their ever increasing product range.

One area Halley & Mellows have targeted is to revolutionise the manner in which product is loaded into rail wagons, in an effort to increase the loading efficiency and maximise the utilisation of rolling stock. This has been achieved with the introduction of the new Precision Loading System (PLS) patented here in Australia.



The new 'PLS' precision loading system uses the 'Triple Batch' process, which allows each rail car to be loaded in three precisely weighed batches. With three batches, the weigh bin size can be significantly reduced. It is designed just large enough to flood the front of the railcar with the first batch, make and discharge the second batch, allowing enough time to rapidly make and discharge a third precision batch to complete the rail loading at 5500 tonnes per hour.

The 'PLS' triple batch concept has numerous advantages over traditional single batch systems. The much smaller weigh bin size allows a much smaller surge bin size, which translates into an overall height reduction from approx 30m to 20m.

This smaller size yields decreased steel and foundations cost, allows for a shorter conveyor, and at 5500 t/h, saves about 125kW conveyor drive power. The smaller size and decreased complexity results in decreased installation time. The 'PLS' precision loading system, due to its small size and bolted construction, is also easy to relocate. It is now economical to install a 'PLS' precision loading system at one location, and to relocate it at a later date.

Using the Halley & Mellowes stockpile drawdown reclaim equipment in combination with the ever-improving on-line elemental analysers provides for high precision blending of two or more different quality coals to meet contract specifications. This high precision blending optimises profitability and makes best use of reserves. By adding a 'PLS' precision loading system to the precision blending system, it is possible for a mine to minimise its capital investment and operational costs while simultaneously maximising the value of its reserves

