



'New Generation' Tieman Pocket Road Train

The next generation of Tieman's 'New Generation' bitumen tanker

INNOVATION IS ALWAYS HIGH ON TIEMAN'S PRIORITY AND WHEN BORAL REQUESTED SAFER ACCESS TO THE DIRECTIONAL VALVE ON THE PUMP, TIEMAN WAS QUICK TO ENGINEER A SOLUTION. THEIR LATEST BITUMEN TANKER DESIGN FOR BORAL CONSTRUCTION MATERIALS (WA) OFFERS INCREASED OPERATIONAL SAFETY, WITH ACCESS TO THE PUMP DIRECTIONAL VALVE FROM GROUND LEVEL FOR THE FIRST TIME.

Boral Construction Materials (WA) has recently taken delivery of a new Tieman 27.5 metre pocket road train stainless steel bitumen tanker combination capable of carrying up to 57,000 litres of bitumen. This is the first bitumen tanker order from Tieman Boral Construction Materials (WA) and brings the fleet of bitumen tankers up to eight. Boral Construction Materials (WA) is part of Boral Limited, an international building and construction materials company that is headquartered in Sydney and has leading market positions in Australia, the United States and Asia. With an annual turnover of around \$5 billion and around 14,300 employees, the group operates from some 850 locations in 13 countries. Safety and efficiency is key to all of Boral's operations, including the selection of new trucks and trailers for all divisions of the business. And when the need arose to add new bitumen tankers to the Boral Construction Materials fleet in WA, the company conducted its own investigation on the



Hinged rear ladder interlocked with the top handrails.

Tieman product through speaking with other bitumen tanker operators. During its research, the company paid particular attention to the cost savings in gas and labour that was provided by the exceptional heat retention properties of the Tieman stainless steel 'New Generation' design. Boral Construction Materials (WA) calculated a minimum saving of approximately \$10k per annum – a massive saving over the life of the tanker.

Safety

Boral's first priority is the safety of its employees and subcontractors, and the



reduced heating time required on site assists Boral Construction Materials (WA) in managing driver fatigue hours. The most impressive safety feature of this design however, is Tieman's innovative new rear valve and pump design, enabling operators to actuate the pump control handle from ground level. The new tankers built for Boral Construction Materials (WA) are the first bitumen tankers in Australia that make this possible, without the need for operators to climb part way up the ladder in order to reach the handle, thus dramatically reducing falling from height risks.

"On earlier tanker designs, operators had to actually climb part way up the tanker in order to operate the valves. Tieman has now incorporated this across the bottom of the barrel so there is no need to leave the ground to operate any of the internal valves and pumps. This is something that Boral really wanted with these tankers and Tieman was happy to accommodate this need, and it is working well," says Rob Jarrett, Boral Operations Manager Logistics. Also aiding operator safety is the newly designed rear stainless steel ladder. The lower section of the ladder is hinged and interlocked with the top handrails. This hinged section of the ladder actuates the handrails, thus ensuring the operator cannot climb up onto the tanker without the handrails being up. The top walkway has also been widened so the operator has clear access along the top of the tanker without having to step over manway lids. Rob comments, "You can't physically get up onto the tanker without pulling down the ladder and in doing that the fall protection is activated. This is something that we are now going to retrofit to all of our pressure vessels – we wouldn't buy another bitumen tanker without this feature. It really is a great design." Due to the nature of the product being carried, Boral Construction Materials (WA) also chose to have an emergency eye wash station fitted to the tankers. This too is now implemented across all new bitumen tanker purchases.

Tieman has also introduced a new operational matrix that is engraved on a stainless steel sign positioned at the rear of the tanker. By making the signs from stainless steel, the chance of signs deteriorating from burners and weather conditions is eliminated.

Heat retention

The barrels used in this combination have been constructed from Tieman's special heat resistant grade stainless steel. As this steel is tougher and more ductile than standard stainless steel, maximum structural integrity is ensured – meaning no need for major refurbishments caused by corrosion and metal thinning later in the track of the tanker's life. This steel also eliminates structural issues associated with expansion and contraction. "The heat retention provided by the stainless steel used to construct these tankers was a major factor in Boral Construction Materials'



New Tieman Safety Feature – rear pump control handle operated from ground level



Extra wide top mesh walkway

(WA) decision to purchase these units through Tieman," says Rob. "In my past experience, having used Tieman tankers in other divisions of the Boral fleet, I knew that these tankers would be manufactured to the highest standard."

The unique ringed design of these tankers, where the rear barrel is point mounted to the suspension in lieu of being attached to the chassis reduces tare weight and also helps to reduce heat loss. Heating for these tankers is provided by a Kleenheat liquid withdrawal vaporising propane gas burner.

Flexibility

This pocket road train combination has been designed with the flexibility to be used in a 36.5 metre combination by adding a lead B-double tanker with a tri axle dolly.

Boral Construction Materials (WA) has already ordered its third Tieman bitumen tanker which will include all of the same safety and operational features.

After Sales Service

Tieman has also invested in its WA business with the new appointment of Calvin Ridley as WA State Manager with his continuing dual role of servicing local tanker customers through his 20 years of tanker experience.

Contact

Tieman Industries Pty Ltd
4-10 Keon Parade
Keon Park VIC 3073
Ph: 03 9469 6700
Fax: 03 9462 1814
Web: www.tieman.com.au