

NEW ZEALAND

TRUCK BODY & TRAILER

September 2016

INNOVATIVE B-TRAIN HITS THE ROAD



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B-TRAIN TRAILERS LOAD IN ONE MOVEMENT

By Mike Stock

CANTERBURY TRANSPORT OPERATOR KERRY INNS' new B-train has trailers that can be driven together and loaded as one, using a Phantom loader that drives through the unit.

Work began on the trailers in May and they were handed over in late August to owners Kerry and his wife Traci who operate K & T Trucking at Rolleston, just south of Christchurch.

The load-through B-train is used by the Goodman Fielder contractor to deliver fresh milk to Nelson, and went into service on September 1.

The hard-sided trailers have alloy floors rated for forklifts and the custom-built Phantom loader, and are fitted with American-made insulated Whiting roller doors marketed in New Zealand by Structurflex.

One roller door is fitted to the front of the rear trailer and the other is at the front of the first trailer.

To push the trailers together for loading, the sliding fifth wheel on the first trailer air release is activated, the manual brakes are applied on the rear trailer and the truck backs the first trailer till the rubber bump stops on the trailers touch.

When the trailers are pushed together, a fold-down floor section bridges the gap between the front and rear trailers so the cargo can be loaded in one single movement from the barn-style rear freight doors.

"It means you can back up to the dock just once without needing to split the unit and back each trailer individually," says Michael Carpenter, the managing director of Fairfax industries which built the

two trailers.

The B-train can carry 36 pallets of milk loaded in a side-by-side configuration.

"It's the first of its type that Fairfax has built for a long time," says Michael. "The previous Fairfax built a similar one in about 2000 (Michael took over the company in 2012)."

That unit was much smaller because it was built to the old regulations but the new B-train is built to the 50-max rules.

It runs on a maximum general access over-length permit, and the complete unit, including tractor, is within the 23-metre length proforma.

Carpenter says there were some engineering issues to overcome in achieving the load-through layout.

With roller doors at the front and barn doors at the rear of the second trailer, it was important to build it in such a way that rigidity wasn't compromised.

Goodman Fielder arranged the decals on the sides of the trailers, and the Kenworth was signwritten in Auckland after Kerry and Traci took delivery in Christchurch and drove the truck north to pick up the trailers from Fairfax's Takanini factory. Admark did the signage on the truck and both trailers.

The trailers run on SAF Intradisc wide-track single wheel axles, and the Alcoa wheels are shod with Michelin tyres. Suspension is a Wabco air set-up.

Thermo King supplied the refrigeration units, one mounted on the



Facing page: Kerry and Traci Inns own Fairfax built B-train and Kenworth K200 rig which features drive-through trailers to allow freight to be loaded into both trailers while they're hooked together.

Above left: Rear trailer's Thermo King refrigeration unit is slung under the chassis.

Above centre: Big Thermo King refrigeration unit dominates front wall of front trailer.

Above right: Fluorescent yellow arrows over wheel nuts on highly-polished Alcoa wheels are a visual check of whether nuts are tight. If the arrow tips aren't aligned, it's an indication a nut has worked loose.

Bottom: The K & T Trucking rig carts fresh milk from Christchurch to Nelson daily.

front of the first trailer and the other slung under the second.

A Kenworth K200 tractor unit fitted with a Euro 5 Cummins engine rated at 620 horsepower tows the trailers.

It replaces a 585hp Kenworth and is one of five Kenworths that make up the Inns' fleet. Predominantly, they're curtainsiders, and Traci says the new B-train is the first hard-sider they've had built.

"We've been very impressed with the service from Michael; not many body-builders deliver on time, but he did."

The Milk is loaded on to the B-train using a Phantom which picks up 90 crates of milk at a time, a weight of about 1.5 tonnes.

"We unload it using a pallet jack, carrying six crates at a time," says Kerry Inns.

The run to Nelson is over twisty and hill roads and includes the Lewis Pass. To cope with the terrain, a high-horsepower engine was needed, and the Cummins fitted the bill.

Kerry chose the Kenworth for its robustness and ability to cope with tough conditions.

The K200 has replaced a second-hand bonneted Kenworth 408 on the run. The older truck had struggled on the hilliest terrain.

"We inherited that truck from the North Island for this run but it wasn't the right truck for the job," says Traci. "It's nice to be getting a

purpose-built truck for that route."

Kerry is very safety-conscious, and the B-train is equipped with technology designed to make it easier to back and to eliminate the possibility of hitting people or objects when the truck is reversing.

The Rear trailer is fitted with a high-mounted reversing camera and the B-train has a Wabco Tailguard.

"It applies the brake so you don't run anyone over," says Kerry.


Wabco's Tailguard is a rear blind spot detection system that stops the trailer automatically if it picks up the presence of a person or obstacle behind the reversing vehicle.

It uses up to six ultrasonic sensors to measure the distance to objects behind the trailer and can detect small, large, stationary and moving objects in the blind spot behind the vehicle.

It's designed to help the driver to reverse safely when visibility is limited.

Tailguard brakes the trailer while reversing within 50cm to 200cm from objects and walls located in the rear blind spot

The system activates automatically when the driver shifts into reverse gear, and warns the driver by pulsing the brakes when the reversing speed is higher than 9km/h.

An in-cab display shows the distance to objects behind the trailer and sounds an alert when the trailer comes within the pre-programmed distance of an object. 





Above left: Rear of front trailer and front of rear trailer have roller doors to allow access between both for loading.

Above centre: A view looking forward from the back of the rear trailer. Trailers have forklift-rated alloy floors.

Above right: Trailer is fitted with reversing camera (black box at top centre) and Wabco Tailguard for added safety.

Bottom: B-train runs SAF Intradisco axles.

Facing page top left: Kenworth tractor unit has 620-horsepower Cummins motor to give it grunt to tackle hilly terrain on the run to Nelson..

Facing page top right: Both trailers are fitted with insulated Whiting roller doors.

