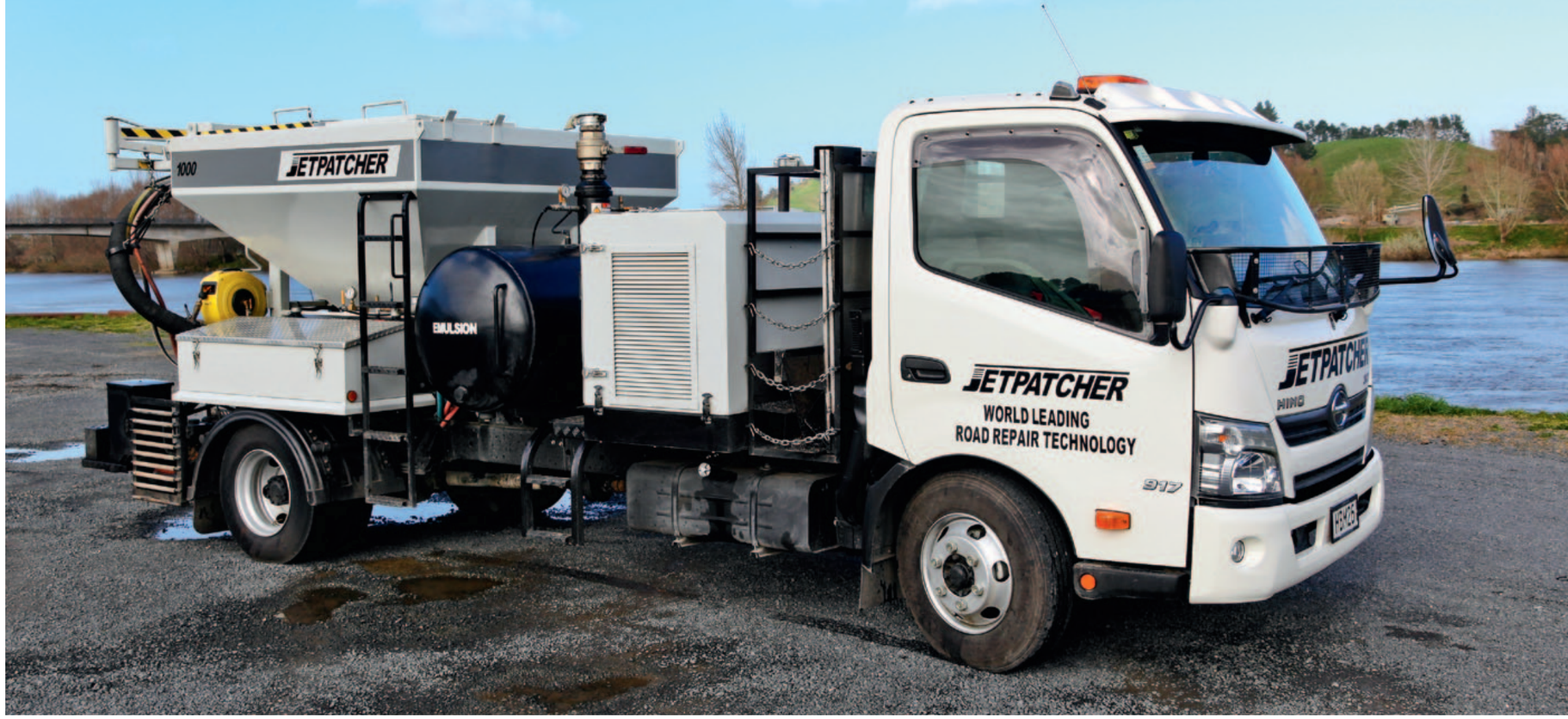
HINO paves the way

BY PETER LYNCH • PHOTOS BY OLIVER LI

Hino's latest Euro V version of their popular 300 series proves itself as a versatile workhorse.



There is no chrome on most Hino trucks. They are usually bought by fleet managers, accountants, contractors and end users who see transport as a secondary but necessary evil to being in business. Such folk focus on what a truck will cost to buy, run, service and how long it will keep doing its job before the cheque book has to be dragged out again. Don't even mention downtime to these people.

Yet they keep coming back to Hino, who have just clocked up 50 years of sales in New Zealand and must be keeping this group of buyers happy.

At the lighter end of the market Hino have most applications covered with their 300 series which includes models from two to four tonnes payload capacity and a choice of single or dual cabs. The entire range meets Euro V using EGR and Hino engineers have snuck in several useful improvements right under the noses of their own corporate bean counters.

I joined Scott Turnbull from Jetpatcher Corporation for a day out with their road patching gang in a new Hino 917 series LWB.

Well forget your traditional gang of four burly lads in a tipper. I take the wheel of the little Hino whilst Scott demonstrates the fine art of road repairing using the Jetpatcher equipment mounted on the back.

It is probably a wise division of duties. Scott has been building, commissioning and using the Jetpatcher equipment for years and should have a PHD in potholes by now. On the other hand, I have driven plenty of Hino trucks and have the uncanny ability to find the only pothole in an otherwise perfect section of road.

Cab access to the Hino is straightforward and the driver gets ample legroom and a suspension seat as standard these days. There is a two-person foam bench seat for the crew but that centre spot has limited legroom. There are a couple of new features, a gauge indicating the status of the diesel particulate filter (DPF) in the exhaust system and Hino's Easy Start system, which makes hill starts simple. The DPF cleaning cycle normally happens automatically and is not obvious when driving but the process can be manually initiated if needed. Other wise it is a truck anyone with a class two licence would be able to jump into and drive readily.

With the 917 cab chassis weighing in at 2500kg, another 2200kg for the Jetpatcher equipment and roughly 3600kg of materials on board we are right on the makers GVM 8500Kgs when heading out. The four litre Hino engine and six speed synchro box are easy to use with Scott recommending first gear starts when loaded or second if empty. Sixth gear is an overdrive, providing a relaxed 90kph at 2200rpm.

The turbo intercooled four cylinder diesel puts out 121kW at 2500rpm, well below its 3000rpm red line, and 464Nm of torque at 1400rpm. It was unfazed by our regular test route over the Bombays, holding 90kph at 2800rpm southbound in fifth gear and 70kph northbound at the same engine speed in fourth slot.

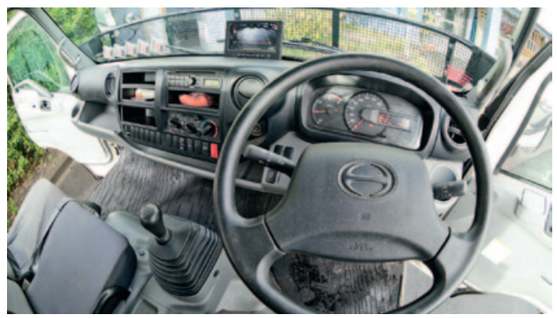
A conventional butterfly exhaust brake keeps speed under control on the downhill sections and is backed up by four wheel discs with ABS, VSC (vehicle stability control) and traction control as standard. Vehicle stability control is a valuable safety aid and Hino are ahead of their Japanese counterparts by fitting it to their light truck range. The cab is more comfortable than I remember Japanese trucks to be and it is easy to converse along the way with interior noise levels of between 68 and 72dB dependent on the road surface.

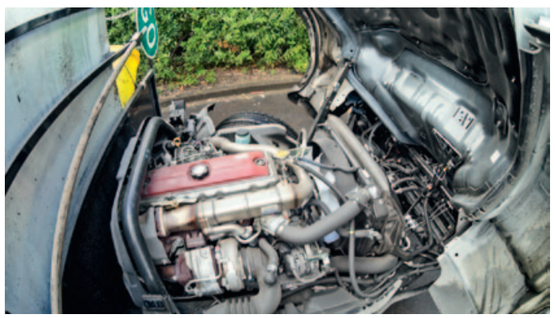
Some things haven't changed, such as my ability to find some of the worst potholes on our back roads around Pukekohe but the little Hino soaks these up diplomatically. Potholes are really Scott's speciality anyhow and after a quick stop to check fuel consumption (around 15.5L/100km), he puts these skills into action.

The Jetpatcher equipment isnt as complex as it first appears. The main components are a big hopper to hold aggregate, a tank containing emulsion (liquid tar) a four cylinder diesel auxiliary engine to provide compressed air and heat as well as a discharge hose on a moveable arm at the rear. There are also smaller compartments for sand, water and a vibrating plate compactor.

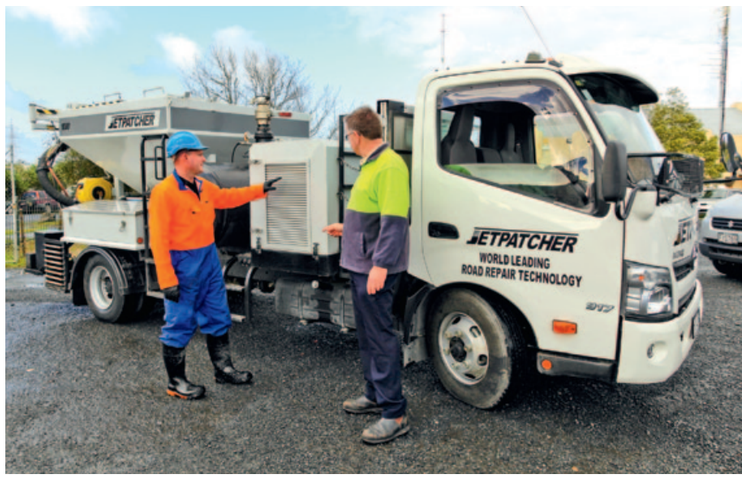
After finding a suitable pothole near Jetpatcher's Henderson yard, Scott and his offsider Darwin go to work. A big burst of low-pressure air from the nozzle is used to blow water and loose material from the pothole before a coat of emulsion is sprayed to bond with the underlying and surrounding road surface. Then a mixture of aggregate and liquid

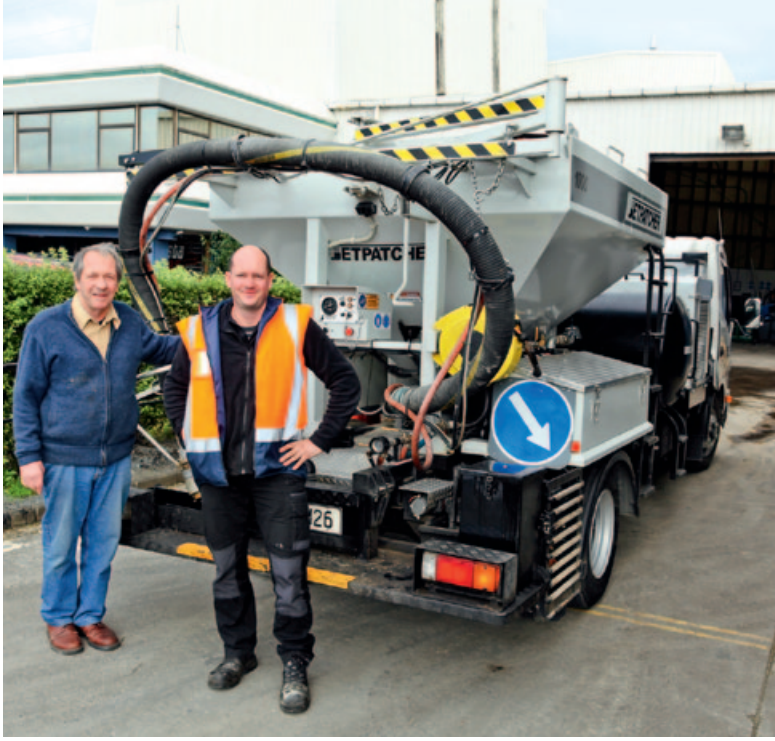
SRS airbags are standard and Jetpatcher have also added a rear view camera. Four litre 121Kw turbo diesel engine powers larger versions of the Hino 300 series.



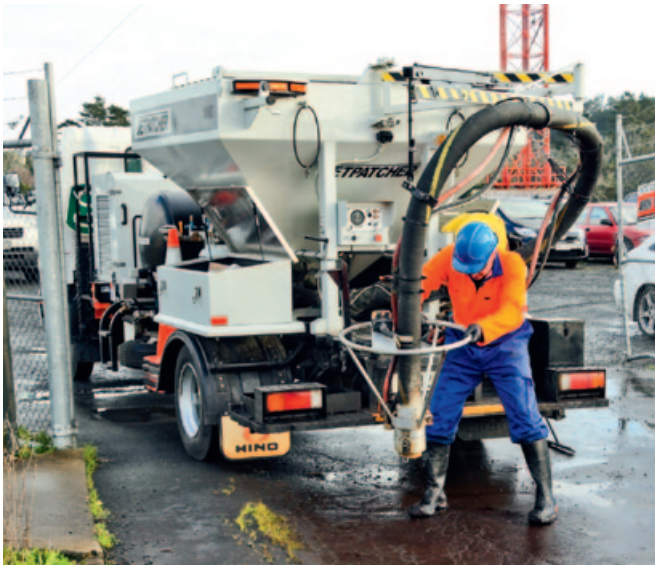


Compressed air and heating is provided by a four cylinder auxiliary diesel engine.





Jim (at left) and Scott Turnbull. Jim developed the Jetpatcher process during the 1990s and has now exported over 500 machines. Below: Filling a pothole is a quick one-man operation.



emulsion is sprayed into the hole with sufficient pressure to compact it down. A final run over with the plate compactor and a sprinkling of sand means the patch is ready for light traffic within ten minutes.

It is all very quick and, as Scott explains, usually takes less time than the associated setting up of traffic control measures. Another major advantage over traditional asphalt patching methods is that there is minimal wastage of materials and the truck can operate in country areas without visiting a hot mix plant.

Jetpatcher produce larger units to suit trucks up to 12 tonne capacity and these also have the ability to lay a chip seal surface by means of a spreader box at the rear. It is a system developed by Jim Turnbull (Scott's father) in the 1990s and gradually refined in light of their own experience. Over 500 units have been exported all around the world but the full potential of the system has been slow to be accepted in New Zealand.

With more pressure on our roading budget and a growing need to respond quickly to surface damage in high traffic areas the Jetpatcher system might soon become part of every contractor's front line tools. □