

Heavy duty **HINO**

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VIDEO

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A 480 horsepower Hino is not typically used to haul logs at 57 tonne gross weight – but that’s what Mangonui Haulage are doing. *New Zealand Trucking* headed north to find out why.





The sharing of forest access roads by loggers and tourist bus operators runs faultlessly due to the professional approach taken by both parties.



The make up of the far north soil means the logs grown are heavier per cubic metre than expected. What looks like a normal load of logs could be a scale breaker.

It's a bit of a trial really," says Mangonui Haulage owner Dennis Sparksman about the first Euro 5 Hino 700 to go into service.

It's one of an order of 12 Hino 700s the company is putting under logs, but it has a number of features that make this FY3248 model different to most of the Hino 700s on the road.

For a start, it meets Euro 5 and is equipped with SCR (selective catalytic reduction) using DEF (Diesel Emission Fluid - Adblue) to meet the low emission standard through exhaust intervention; secondly, it has a gross combination mass of 72,000kg, a figure usually related to trucks with North American heritage.

Few in the north would argue against the road transport business decisions of Dennis and his son, Mangonui Haulage general manager Sean Sparksman. Their business model of building a modern fleet quickly by buying mainly Japanese trucks has worked well in the region.

They do have three Kenworths, a couple of Western Stars and a couple of Scania's, but the bulk of their almost 50-strong fleet comes from the Mitsubishi/Fuso and Hino stables, with a healthy number of Isuzus and Nissan/UDs added to the mix.

The business originated in the coastal town of Mangonui in the 1940s as George Small Transport, under the guidance of Small, a World War II veteran. He sold out to John Peat in the mid 1970s and it was bought by Peter Sole in 1979. Dennis Sparksman went to work for Sole as an owner driver in 1980, at the wheel of a Ford D2418.

Sole introduced the Mangonui Haulage name and the now iconic, brown and gold livery. In 1982, Dennis Sparksman and another owner-driver Geoff Desmond joined forces to buy the business. At that time it was mainly owner drivers, but they started buying second-hand trucks, mostly International T-lines, and built up a fleet primarily comprising company stock trucks and a few owner-drivers on tipper work.



Northland born and bred, and a veteran of 44 years at the wheel, Roy Notton enjoys the comfort and visibility offered by the Hino. His smoothness at the wheel disguises the truck's modest output for the weight carried.

In 1987, they bought Kaitaia Transport's livestock division, which consisted of two Volvo G88s and three Internationals.

Dennis bought out Geoff Desmond in 1992 and became the sole owner. The fleet was still mainly International T-lines on stock work, but Dennis slowly replaced the owner-driver trucks with company gear, which he says has proved a good move.

Mangonui Haulage was contracted to forestry owners and sawmillers Junken Nissho (JNL) carting roading metal in the 1990s and when the company started clear felling the plantation they asked Dennis if he was interested in putting on a logging truck. It was 1999 and Dennis says, "In those days, I was pretty gung-ho and took advantage of any opportunity."

The first logger went into service and Sean explains what happened, "Once they started to clear fell, one truck turned into two and two trucks turned into four and it started to snowball."

There are now 28 loggers in the company, the rest of the fleet being a mix of livestock, bulk trucks and a few ready mix concrete units operating out of the plant in Mangonui. The company employs 65 staff and also has a presence 40km further north in Kaitaia, where it has outgrown its current yard and is developing a new one.

Two years ago Summit Plantations purchased the JNL Northern Forests and the working relationship has continued with the new owners under the existing management.

Mangonui Haulage does about 80 per cent of Summit's log cartage in the north and there is a lot of timber to move. The two big crews in the 18,000 hectare Aupouri Forest, north of Kaitaia, each load out 500 to 600 tonne a day. Most of it goes to the JNL mill in Kaitaia, although Mangonui takes a lot of export logs through to Marsden Point.

The company has a recent tradition of using Japanese trucks. Since 2000, it was mostly Mitsubishis and the Sparksmans rate them highly. They are concerned that the new model is mechanically unproven under logs and saw some merit in buying Hino 700s for the current truck order, but they are carrying out some serious brand comparisons and the makeup of the fleet may well evolve in a different direction over the next few years.

The new Hino is on a fixed run, permitted to operate at 57 tonne. It runs on private forestry roads, State Highway 1 and a short section of road controlled by the Far North District Council.

Sean says approval from the forestry and the national highway controller, NZTA, was quickly assessed and granted, but the 400m under the control of the local road controlling authority took 18 months before approval was given. For the last month the Hino has been working at about 56 tonne, alongside a Western Star on the same route with the same weight permit.



Mangonui Haulage General Manager Sean Sparksman (left) with his father and company owner Dennis in front of one of the Hino loggers.





*Clockwise from left
It's a good climb up into the
cab of the Hino, but access
facilities are well thought
out.*

*Function and form with
minimal frill. A typically
efficient Japanese
dashboard set up.*

*Roy loves the ride comfort
of the big beast from the
east.*

The H plated Hino's weight rating and other factors mean the tare is a solid 12,080kg in full road trim, 600–700kg heavier than the Euro 4 units. This includes a heavy duty chassis with inserts, steel wheels and bolsters.

Sean reckons steel wheels are a practical option in the northern forests where the roads are topped with sharp rock, and points out the surface damage already evident on the alloys fitted to the Hino's five-axle trailer. The truck carries six loads a day and the durability of the steel bolsters is expected to outweigh the weight advantage of lighter bolsters.

The long five-axle Evans trailer is a solid unit too. Mangonui usually gets its logging gear from Evans, and has its own engineers do the fitting and finishing work. The trailers are supplied as a glider kit, being an efficient system that helps get new trailers on the road quickly when necessary. When the Hino is running empty with the trailer up, the rear overhang is the maximum allowed.

Roy Notton is the driver of the Hino, having been with Mangonui Haulage for 18 months, but the 61-year-old has been driving since 1971 when he started with the dairy company in the Northland town of Hikurangi. Born and raised in Kaitaia, he moved back there after 17 years on milk tankers and had a couple of driving roles, including 10 years on loggers with Henderson Logging.

After a stint in Australia where the dry air helped his wife's medical problem, he's returned to enjoy the Northland lifestyle. Roy has bought

a property north of Kaitaia where he can get into the forest pig hunting and riding his horses regularly.

We met Roy and the big Hino at Mangonui Haulage's Kaitaia yard where the truck was being cleaned a day after Cyclone Pam had visited the area. Roy drives the Hino from the Aupouri Forest into the JNL mill in Kaitaia six times a day. It's about a 40km lead and the terrain can only be described as flat, an ideal route for the heavy duty Japper and its impressive payload.

The Hino's chrome grille and bumper creates a visually striking front end. Arguably, Hino 700s are the best-looking Japanese truck on the market and Mangonui's colours ensure this unit is a looker.

The cab is a fair climb, but steps ahead of the front steerers make it easy. Inside it's roomy and wide. Although the engine cover takes up more space than most modern cabovers, Hino has managed to install a third fold-down seat, albeit with no leg-room.

We head north to the forest with Roy explaining how comfortable the truck is. Even though the passenger's seat is not air suspended, the comfort is noticeable, especially on the corrugations typical of metal surfaces. The long trailer looks a little ungainly overhanging the rear of the truck, but it doesn't have any effect on the truck's driveability when empty.

It's about 15km heading north on the seal before we turn left onto the forestry road and head west towards Ninety Mile Beach. There are plenty of signs of the cyclone's recent visit, but

the sand has dried out and traction isn't an issue. However, cross-locks and CTI ensure the truck has excellent traction when required.

The off-road drive into the skid site is about 20km, but it does include a section of public road that tourist buses use to access the beach. The interesting mix of roads and traffic is helped by the fact that the roads are, in the main, straight and flat and the forest has largely been felled around the entrance ensuring good visibility. That said, Roy is impressed with the vision from the driver's seat, the A pillars being well forward and having minimal impact on sight lines. The mirrors are also excellent and are heated, a handy safety feature even in the winterless north.

The herds of wild horses that live in the area generate an element of danger. They are seen on almost every run into the skid site and have caused a few accidents over the years. Roy is a horseman and remembers when the horses were released in the 1960s, including some well-blooded stallions to improve the stock.

It's a big, open skid site, with plenty of flat space and an efficient crew running it. Roy gets the truck into position and although the long trailer swings wildly as the loader operator unloads it, driver and operator quickly have it in the coupling and loading gets underway.

Both truck and trailer are equipped with weighing equipment and the job is completed in a short turnaround time. The logs up here are a higher density than throughout the rest of the country, due the sandy soil, meaning logs weigh more per cubic metre than elsewhere.

Roy attaches the chains and the loaded truck is away. The first thing noticeable is that the Hino lifts off with a full load and climbs the rise out of the skid site with no indication that it is anywhere near 56 tonne all up. Roy's Roadranger skills help to make it appear effortless as he changes up without revving the engine significantly.

The Hino's engine is modest for this type of work, at only 13 litres, 480hp and 2157Nm (1590lb/ft), but Hino's complete package in its heavy duty model, which includes a twin plate clutch, Eaton (18 series) manual transmission, 4.555:1 diff ratios and heavy duty V-rod rear suspension, combines to make a practical and formidable package utilising the engine's outputs to best advantage. Maximum torque is achieved at only 1100rpm, another reason the truck lifts off so comfortably.

Roy uses the retarder and it slows the truck easily. It's a full engine compression brake, with three stages. It's operates so quietly, Roy says, "I don't even hear the jolly thing. It's nice and quiet, but it does pull you up."

The service brake is a full air S cam system with ABS. A prominent trailer brake lever protrudes from the dash, ready to help straighten the combination if necessary.

As you would expect with 1100 tonne leaving the forest each day, the road is busy and Roy



calls his position regularly to inform the other trucks in the forest of his whereabouts. A couple of tourist buses catch the logger and Roy lets them pass without any fuss. A herd of about 20 horses disappears quickly as we approach, but Roy says they usually stay close to the road. It's the unseen ones that gallop unexpectedly out of the bush that are the problem.

The road is in reasonable condition, but the Hino acts as if it would handle it at its worst. With a load on, the truck is smooth.

Although DEF adds another cost to the transport operation, it has proven effective without the unpleasant side effects some of the other emission reducing systems. All European manufacturers now use it on their heavy trucks. Cummins has adopted it widely and all the Japanese manufacturers will shortly have it in their New Zealand heavy trucks. In short, it's already established as the immediate future of truck emission control.

Mangonui Haulage already had it in its Scania

The logging fleet is predominantly Japanese with the Hinos getting the chance to prove their mettle against the company's traditional Mitsubishis.

The adoption of Selective Catalytic Reduction (SCR) to meet Euro 5 emission standards is fast becoming an industry standard.



and a couple of other trucks, so it wasn't a big step to get it into the Hino. Roy is comfortable with looking after the extra tank and tops it up every three or four days. There is a DEF level indicator on the dash and he doesn't let it get below half full. The small 28-litre tank might be a little too small for some operations, but the Hino appears to use the magic fluid frugally.

A short stop to check the chains is undertaken and Roy swings the long unit onto State Highway 1 heading south. The JNL mill is only 400m off the highway and we're there in no time. Roy puts the truck over the weighbridge on the way in and the onboard weighing system

proves accurate; the payload is 37.5 tonne when it's loaded to the permits.

Two loaders get the logs off in short time and Roy can go back for another load after his half-hour break in the Mangonui Haulage lunchroom next door.

Assembling a package of practical components to produce a truck like the FY3248 is one of Hino's strongest points. This is a truck that has many benefits such as load capacity, fuel economy, Euro 5 emission standards, gradeability, cruise control, FUP, Bluetooth and driver's SRS airbag... at a price that is expected of a truck with far fewer features. □

SPECIFICATIONS

HINO 700 FY3248 8X4

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|----------------------------------|--|-----------------------------|--|
| Tare: | 12,080kg (as reviewed), 10,095kg (cab & chassis) | Front suspension: | Semi-elliptic taper leaf springs |
| GVM: | 32,000kg | Front axles: | Hino MF781 |
| GCM: | 72,000kg | Front axle capacity: | 15,000kg |
| Wheelbase: | 5955mm | Rear suspension: | Semi-elliptic leaf springs with V Rod, stabiliser |
| Engine: | HINO E13CVG SCR engine, 6 cyl. in-line | Brakes: | S-cam ABS |
| Engine emission standard: | Euro 5 | Park brake: | Spring operated |
| Engine Capacity: | 13 litre | Auxiliary brake: | Engine compression retarder, 3-stage |
| Maximum power: | 480hp | Chassis dimensions: | 300 x 90 x 8mm with insert |
| Maximum torque: | 2197Nm | Wheels: | 22.5 x 8.25 ten stud |
| Clutch: | Twin plate | Tyres: | 275/70R 22.5 152/148 |
| Diameter: | 387mm | Electrical system: | 24V |
| Transmission: | RTLO 18918B, 18-speed manual | Cab: | All steel welded construction sleeper cab, air suspended, electrical tilting mechanism, driver SRS airbag, 3 seats with driver's seat air suspended, electrically controlled heated mirrors, air conditioning, DAB+ AM/FM radio/ CD & DVD player with Blue Tooth, remote door locks, cruise control. |
| Rear axles: | Hino THD18 | | |
| Ratio: | 4.555:1 | | |
| Rear axle set capacity: | 21,800kg | | |

