Kiwi made – so you know it's good!

Jaiden Drought tests Pearson's new and improved 20-37 loader, and is impressed by its ease of use and impeccable finish

Images by Jaiden Drought

In a small service town that supports some of the country's most productive dairy land, you'll find tourist buses buzzing around a place they have dubbed 'Hobbiton'. These buses show anyone who is interested the landscape where New Zealand's most famous series of movies was partly shot. It's not really my cup of tea and it wasn't the reason why I came to the mighty Waikato. Instead I was there to check out one of the country's best selling farm machines, the Pearson loader. If the Hobbiton clue wasn't enough (and I don't blame you), I was in a town that, in my opinion, has one of the best T-shirt slogans ever: 'What's the Matamata?' Classic!

Company background

Robbie Pearson set up Pearson Engineering in October 1970, and until the last decade with the introduction of European loaders, was making and installing well over 1000 loaders per year (among other things) for just about every tractor that hit New Zealand's shores.

As the technology of the tractors has evolved so has the Pearson loader, until it has become much more integrated into the tractor.

In 1971, Robbie Pearson built three loaders based on a design he had developed during the 1960s on the family farm. In 1974 the Pearson Quick Tach loader was born; it won a Merit award at the National Fieldays the same year. The Quick Tach loader was equipped with a slide rail design that started as a trip loader before it evolved into the first lot of single-crowd action loaders.

As the Quick Tach developed, the whole design became more streamlined and less bulky. A range of options became available, such as a heavy duty twin crowd, while later on came a self-levelling option.

From the Quick Tach came the Regular series, which had the same slide rail design, but featuring an updated boom with a single cross beam to allow for better visibility of attachments. greaseable pins became standard and the development of the first 35mm Quickhitch appeared and allowed much faster and easier changing of implements.

From the regular series came the Quad models, which kept the same loader design but the slide rail attachment system was done away with. Instead, there was a mounting block on either side of the tractor that not only allowed easier attachment and detachment of the loader but also better access to the engine side panels. This was an important development, as tractors were becoming larger with completely covered engines, which meant loader mounts had to become more compact.

During the early 1990s the first Wedgelock system and the 318 series of loaders was born, with the 3518 and the 3818 becoming the most popular (the 3218 and 3518 are still in production). This range featured a slight modification to the boom – the cross beam was now a cylindrical shape and allowed the third service valve to be mounted to in a tidy fashion.

Later in the decade the design changed again slightly to incorporate new loader stands that folded down off the boom, rather than separate legs, which made removing them easier again.

This brings us to today's design, which is labelled the 20 series. Initially developed in 1998, the 20 series came standard as twin crowd and had a more user-friendly Quickhitch and a toggle system that allowed for superior crowding and dumping angles to be achieved.

September 2010 saw the company take a different turn when Robbie Pearson sold the business to Jason Tidmarsh after owning it for 39 years and 11 months. Jason is a sparkie by trade but has also spent many years in an engineering workshop, allowing him to make some subtle changes to the Pearson loader designs that will ensure they stay as popular as ever with Kiwi farmers.

The test

Our test was carried out on a farm on the outskirts of Matamata Township. The test machine was a brand-new Massey Ferguson 5455 kindly supplied by Taupo Tractors and Machinery, which had the second 20-37 loader ever produced attached to it. The key changes include an improved Quickhitch release system that is located on the side, rather than having to reach over the top. The old-style shallow Pearson bucket is no longer; a rounded-back model is now fitted as standard, which I will expand on later.

The number system has also had some modification and the 20-37 Wedgelock loader replaces the old 20-36; the 20-39 is now the 20-40; the 20-42 is now the 20-4; the 20-46 name carries over unchanged.

We tested the new-shape standard bucket, the wrapped bale clamp, the silage grab, the big


20-37
PEARSON
PEARSON
MASSEY FERGU
5455

bale fork and the back-acting bucket, which was my favourite.

Standard features

- Single large cross-section tube is fully welded both sides of arm for maximum strength
- All pivot points bushed with easy-to-replace grease-retaining bushes
- Self-locking Quickhitch as standard. Pearson or Euro options available
- Plated 35mm pins, greaseable and hardened
- Wedgelock attachment system where wedge pin supports loader legs during removal
- Wide loader arms give excellent visibility between boom and tractor bonnet when hitching implements
- Twin crowd
- All cylinders double acting
- Port relief incorporated in control valve for protection against overloading.

Options

- Third service kit with control in joystick handle
- Hydraulic multi-coupler four-port with electrical circuit for third service
- Electronic proportional control
- Shock absorption system
- Hydraulic locking on Quickhitch
- Third service two-port multi-coupler or quick release couplings (QRCS) on Quickhitch
- Hydraulic self-levelling
- Easy to fit back plates available in all models to convert existing implements.

Construction

The boom is made from two 5mm plates that are pressed into a square C-shape and welded together, giving a 10mm rib down the inside of the loader both top and bottom for maximum strength. The mounting brackets are made from 20mm plates that are pressed and robotically drilled to ensure the best possible strength is achieved no matter what model tractor you have. All pin holes are fitted with grease-retaining replaceable bushes and all 35mm pins are machine cut and robotically welded to ensure a precise fit so there is no room for movement. All of Pearson Engineering's products are built with strength in mind, although this is not achieved by simply adding more steel – instead, precision accuracy and high-quality workmanship allow a quality product to leave the factory floor every time.

Performance

My favourite part of the Pearson is the clear view of the Quickhitch from the driver's seat. This is due partly to the wide setting of the boom, but also the fact that the hitching points

- Build quality and paint finish
- Quickhitch design
- Excellent visibility
- Well located joystick
- New bucket design
- Locally manufactured so can cater to specific customer requirements

- Wedgelock pin is hard to remove
- Third service location

SPECIFICATIONS Pearson	20-37	20-37 SL
Max lift height	3706mm	3706mm
Clearance when bucket dumped	2868mm	2868mm
Max dumping angle	55°	55°
Roll-back angle	45°	45°
Digging depth	160mm	160mm
Pivot point height	1743mm	1743mm
Lift ram	3"	3"
Crowd ram	2.5"	2.5"
Slave ram	2.5"	2.5"
Horsepower	60-100hp	60-100hp

are located inside the loader beams, which give much clearer vision than most other loaders on the market.

As I mentioned earlier, the bucket has been redesigned using a rounded back, which gives bigger capacity. It also means there are no edges where water can sit, which can rust the bucket considerably faster. Although the back of the bucket is round, a square backing plate is welded on the back of the bucket, with the top of the plate the exact same angle as the cutting edge to give a visual indicator of the pitch of the bucket, making digging and grading much easier. Speaking of the cutting edge, this has also been increased from 100mm to 150mm, which, in addition to the rounded back, gives a water level capacity that is the same as a heaped load of the older style bucket.

There are two points on the loader that could be improved. The first is the Wedgelock system, which is effective and reliable, but I found it difficult to remove the pin when removing the loader without a sledgehammer. This is an issue that Pearson Engineering is aware of. The company has started designing an improved system that will allow the pin to be removed on a lever, retaining its strength and yet improving the user-friendliness of the setup.

The other niggle for me is the position of the third service valve on the cross beam. I think this would be better located on the Quickhitch, which allows the hydraulic hoses on the attachment to be shorter and therefore harder to damage – particularly when dealing with difficult materials such as trees.

The cable joystick, on the other hand, was easy to use and well positioned. It is mounted to the seat, which allows it to move up and down with the operator over bumps. It is also set at a perfect height for utilising the armrest. The third service button is mounted on the top of the joystick, which means it can easily be knocked if you're not used to that location; but it worked well all the same.

WWW

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Attachments

All of the attachments Pearson Engineering makes have the same impeccable finish and precision-build quality that goes into its loaders. For me, the standout of the four attachments tested was the back-acting bucket. This is a little unnatural to use as it works in the opposite direction to normal joystick operation but it is very effective and will be ideal for digging shallow trenches to remove excess water, cleaning under wires on the race side and grading your track (among other things).

Also impressive was the wrapped bale clamp. This has a stabiliser arm that makes both arms open and close together; however, this can

FARM TRADER says

The beauty of loaders built in New Zealand is that no matter what style of tractor you have – whether it's 30 years old or brand-new, from 20hp to 180hp – odds are you can find a Pearson loader to suit. Trust me, do so and you will not be disappointed.

be easily removed to allow the arms to swing. I find this particularly useful when loading trucks, as you can get the bales much closer together. In addition, when you are backing out the arms can swing, limiting the pressure on the bales and reducing damage to the wrap.

The silage grab was the 1.5m twin ram version and specified with forged tines that are handy for handling bales. The silage grab allowed two silage bales to be lifted easily. Single ram 1.2m and twin ram 1.8m versions are also available.

The big bale fork comes standard with large 1.25m heavy duty tines and a small angle cut safety tine. This is an excellent safety feature, as even if the forks are underneath the bale rather than spiked through, they will still secure the bale to minimise the risk of roll-back.

The verdict

Overall the loader was very easy to use and the Quickhitch is by far the easiest I have used for attaching implements. The wide loader boom set means visibility between the beam and tractor bonnet is excellent. The build quality and paint finish is unquestionable and although the paint on Pearson loaders may fade over time, rarely do you see it peeling like on some of the European loaders. The attachments work very well – especially the back acting bucket – and the flexibility of the bale grab was impressive. ■

video

To watch the test and see the Pearson 20-37 loader in action, visit www.farmtrader.co.nz

Others in this class

SPECIFICATIONS John Deere 633	
Maximum lift height to pivot points	3.80m
Digging depth	159mm
Roll-back angle at ground level	70°
Dump angle at maximum height	72°
Reach at ground level	1.58m
Break-force force	23,000N
Lift capacity at max height pivot points	1825kg

SPECIFICATIONS Stoll FS 30 +	
Lift capacity at lower arm pivot point	2258daN
Lift capacity at upper arm pivot point	1734daN
Max break-open force bucket edge	2512daN
Max lift height arm pivot point	4071mm
Loading height bucket (H minus 210mm)	3851mm
Scooping depth	210mm
Tip out angle at lowered lift arm	103°
Loading height edge blade tilted	3145mm
Reach, bucket tilted	785mm