



The AUSA proved itself more than competent loading pallets onto the truck directly from the field



Raising the bar

Words and images by Brent Lilley



The AUSA C 250H rough terrain forklift offers more than your average forklift. In fact, as Brent Lilly, discovers it comes into its own in rough and testing conditions.

I must admit, I was a little sceptical about the relevance of this rough terrain forklift to our *Farm Trader* readers, but my doubts were quickly assuaged when I saw the AUSA C 250H rough terrain forklift in action in Te Kauwhata, Northern Waikato.

Rolawn, a company operating a large turf farm at Te Kauwhata, recently took ownership of a new AUSA forklift, making it the ideal company and situation in which to test it out. Rolawn grows several different varieties of grass, such as fescue, rye and, amazingly for me as a farmer in the upper North Island, kikuyu.

The turf is cut and sold directly to landscapers and Rolawn prides itself on providing a consistently high quality ready-to-lay lawn. This is not an easy task, given once cut the turf has a fairly limited lifespan. This is why Rolawn needs an efficient and reliable system to get the turf from its property to the end user, in the best possible condition.

The basic process is this: the turf is cut to order from the field with a specialised machine that cuts and rolls the lengths of lawn turf before they are stacked on pallets to fill each order. The filled pallet is then dropped so the turf cutter can carry on with the next order. This is where the AUSA fits into the system. An easy-to-operate machine was required to pick the pallets up off the soft loamy soil that the turf is grown on, and load them into the truck waiting at the edge of the field. Both I and Rolawn's owner agree the

AUSA is the perfect machine for the job. Once loaded, the turf is delivered within hours to its final location. So what makes this the perfect machine?

Design

The machine largely takes its layout from the proven design of a regular forklift, with a few key differences. The mast at the front mounts directly to the chassis above the front axle for maximum load capacity and stability. The driver's platform is directly behind the front axle for maximum visibility. At the back, a large counter weight covers the engine and balances the machine when carrying a load.

I'm sure anyone who has ever used a regular forklift will agree that the moment you leave hard flat ground they basically lose traction, becoming useless and dangerously unstable. Well, this is where the AUSA shines. Thanks to its on-demand four-wheel-drive system, which uses a hydrostatic transmission for drive and a friction disc transfer box, the four-wheel-drive can be engaged on the move with a push button on the joystick. In my opinion, this is an excellent system that allows the machine to be used in two-wheel drive to reduce wear until four-wheel drive is required. There is a downfall to this, though, in that the universal joints in the rear axle limit the steering angle and increase the turning circle much more than a two-wheel drive machine. Another reason the AUSA works well on rough

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AUSA C 250H rough terrain forklift

Engine	Kubota V2403 M, four-cylinder turbo diesel
Power	50hp
Drive	Hydrostatic
Brakes	Oil-immersed multi disc
Turning circle	4040mm
Wheelbase	1850mm
Length	4245mm
Width	1810mm
Height	2120mm
Weight	4300kg
Ground clearance	280mm
Max lifting height	4300mm
Lifting capacity	2500kg

terrain is its extra-wide front axle, which is then fitted out with wide 500 45 – 20 flotation tyres, giving it excellent stability when carrying a heavy load over rough terrain and reduces compaction.

Mast

Up the front there is a range of options for the type of lifting mast that can be fitted to the machine. With a three-stage mast on the machine I tested, it had a reach of 4.3 metres and will provide more than enough lift height in most situations. Up to 15 degrees of mast tilt back and 10 degrees forward will also prove very handy in certain situations.

On the mast a 1600mm extra-wide carriage makes the most of the width of the machine.



WWW
 Like the sound of an AUSA? There are currently two for sale right now at farmtrader.co.nz

A well-laid-out cab features an easy-to-use joystick for full control



“ I was particularly impressed to find a Kubota V2403 engine...” ”

This also has a side-shift ram cleverly incorporated into it, rather than two separate plates to keep the overall weight down. Side shift comes in very handy when loading pallets onto a truck. A higher mounting point for the mast and long drop-adjustable forks on the carriage give the machine a decent ground clearance of around 280mm, which is great when you're on rough terrain.

Engine

Access to the engine can be a problem on some forklifts that require a large counterweight on the back. Cleverly though, the AUSA has



The cab tilts forward to give access to the transmission and the Kubota engine



A clear easy-to-see instruction panel makes learning the controls simple



Rolawn's turf harvester in action, cutting turf and stacking it on pallets for delivery

been designed so the cab can be unlocked and tilted towards the front on gas struts to give access to the engine, making maintenance reasonably easy (the dipstick, radiator filler, air filter, fuel filter are all easy to get to). The only potential problem is access to the oil filler cap and radiator for cleaning, which were both limited by the large counterweight.

I was particularly impressed to find a Kubota V2403 engine — a 50hp, 2.4-litre, four-cylinder, turbocharged diesel engine. These engines are very commonly used in a wide variety of

machinery and I'm a huge fan. Kubota has an excellent track record building reliable and compact engines in the sub-100hp market and this high-powered engine meets Tier 4 standards while maintaining excellent fuel efficiency, low noise, and cleaner emissions.

Cab and controls

This machine was fitted with a semi-cab, which has a roof and a windscreen at the front and back, although there is an option for an open or a fully-enclosed cab. The semi-cab is a



- On-demand 4WD
- Wide front axle and tyres for stability and low compaction
- All the controls are on the joystick
- Easy access to the cab with just one step
- High ground clearance



- 4WD universal joints reduce steering angle and increase turning circle
- Limited access to some of the engine



A large rounded counterweight on the back protects the engine and balances the forklift

great option in situations where the driver is getting in and out of the forklift often. By far though, the stand-out feature of the cab is the joystick situated on the right-hand side, where all the controls for the forklift are grouped together for full control. A button to engage the four-wheel drive is conveniently located on the side of the joystick, but I do think the indicator light next to it would be more useful placed on the dash.

The forward-reverse button is located under the joystick, which makes sense as you can keep your left hand firmly on the steering wheel and your right on the joystick. Although this will take some getting used to for those of you more familiar with the left-hand forward-reverse shuttle commonly found on tractors. The direction indicator lights on the top of the joystick are a great idea, although, once again, they would probably be more visible to the operator if they were on the dash.



A hydraulic side shift ram is cleverly incorporated into the carriage

Manufacturer and importer

AUSA is based in Manresa, Spain, and the company has been manufacturing compact industrial machines since 1961. It's a family-owned business that designs, manufactures and markets a range of compact vehicles for construction, industry, agriculture and other sectors.

Pukekohe-based Glenbrook Machinery has been importing a range of AUSA machines into New Zealand for the last two years and is very pleased with the equipment and its popularity so far. It offers a range of AUSA machines, along with excellent aftersales service and parts. For those of you that only require a forklift for a short period of time, or would like to try one out, Glenbrook also has a very popular fleet of six AUSA forklifts for hire.



The 1600mm, extra-wide carriage on the front makes the most of the width of the forklift

Verdict

The AUSA forklift proved to be an excellent choice of machine for the situation it was working in. I found it easy to use and incredibly stable on uneven ground, even with a pallet of turf on the forks. And although it wasn't particularly muddy on the day, I can see the

benefit of having an on-demand 4WD system. This is quite a specialist machine, but I believe, after seeing it in action on the turf farm, it will definitely be handy in many other applications, including horticulture, viticulture and cropping. AUSA has certainly developed an impressive rough terrain forklift. ■