Access all areas

Dan Gilkes visits an example of the latest entrant into the rough terrain access platform market: Cautrac with a Niftylift basket and boom mounted on a Morooka tracked carrier.

Visitors to the recent Hillhead and Vertikal Days shows may have caught a glimpse of the first dedicated rough terrain access platform to be offered by Morooka importer Cautrac. Based on the chassis from the Morooka MST-300 tracked dumper, the machine uses the boom structure and controls from Niftylift's well-proven 150T trailer-mount platform.

Equipment supplier Cautrac decided to get into the mobile access market after a number of its tracked dumper customers had converted similar machines in the past themselves, indicating that there is a demand for this configuration. However, whereas each of those customer platforms has a one-off design and build, with all the problems that come in terms of back-up and repair, the MST-300 Access is a fully CE-marked machine that has been engineered and built in co-operation with Niftylift.

At around £57,500 it is not cheap, but Cautrac's Northern region manager Craig Taylor says that the MST-300 Access offers three main benefits that conventional self-propelled platforms of this size simply cannot compete with.

The first big advantage is travel speed. Where most crawler access platforms have a travel speed of little more than 1kph, the MST-300 can travel at speeds of up to 11kph. For contractors working in remote locations, the ability to rapidly travel from the roadside to a job site across fields or up a hill and back again is a major selling point. Cutting travel time will boost the period that operatives can actually work from the machine, increasing productivity.

Secondly the Morooka, despite weighing in at around 3.9 tonnes when equipped with the access boom, puts down a ground pressure of just 0.27kg/sq.cm through its wide rubber tracks. This means that the machine can travel across sensitive ground, such as playing fields and golf courses, causing minimal damage to the grass. However at the same time the machine retains its superior off-road credentials, and will happily pull through deep mud and wet ground in the winter months.

The £57,500 MST-300 Access from Cautrac is a 14.7-metre rough terrain access platform based on a Morooka tracked carrier.

Main Picture and Above: The Morooka can tackle mud and slopes, with a light footprint through rubber tracks that also make it ideal for travelling across higher-value turf.

The third feature that Mr Taylor says could make the Morooka a popular option is its ability to climb a 30-degree slope, providing customers with the ability to get to the most remote locations with ease. ***EARTHMOVERS*** has had an exclusive opportunity to put those claims to the test, trying the machine on farmland near to Cautrac's Northern depot in Bolton.

Cautrac opted to use the MST-300 as a base for the machine, as it is one of the most popular compact Morooka machines that it sells, and is well represented in overseas markets if the access machine takes off. Likewise Niftylift is well known and has dealers around the world, making the combination acceptable to a wide range of customers.

The MST-300 is powered by a four-cylinder Kubota engine, providing 48hp. It drives through a hydrostatic transmission using a simple T-bar control in front of the operator's seat. What's more, you can lift the seat and rotate it from one side of the cab platform to the other, instantly changing the way the seat faces and providing the operator with the best possible view to the work area no matter which way the machine is going. You get a ROPS structure with the MST, but there is no full glazed cab option. That said you can specify a soft wet weather cover if required.

Another reason for using the MST-300 as a base is that the machine is just 1.7 metres wide, with the outrigger legs folded away. This allows the platform to easily pass through standard farm gates and position itself in fairly restricted surroundings. Folded height is just 2316mm with an overall transport length of 4686mm.

The four hydraulically-folding outrigger legs are actually from a larger 21-metre machine, but have been chosen to provide maximum stability when at full reach. The stabiliser legs are independently operated and can provide a level operating base on slopes of up to 14 degrees. A simple pair of spirit level indicators are used to provide a safe working position before the boom can be used, and the outriggers are all equipped with hose burst valves to prevent the machine dropping in the event of a hose failure. There are a variety of ground protecting leg pads available for the machine if required, depending on the material on which it will be used. With the legs fully down the overall width of the machine is 4800mm at the front and slightly less at the rear.

Above: The operator can swing the seat around to face either direction, making it easier to position the prime mover in confined spaces

Having settled the carrier, the operator can work the boom from either side of the machine to lower the basket and make it easy to climb aboard. Once clipped on you then switch to the basket-mounted controls for all boom functions, cutting off the ground-level controls to prevent movement while the basket is in operation. However, in the event that something happens to the operator while in the air, the boom can be returned to ground level from the lower controls in an emergency. Should all power fail as well, there are hand-operated hydraulic pumps by the control blocks, allowing someone on the ground to provide enough pressure to safely lower the basket if required.

This Picture and Above: Insulated boom sections are available for work on power lines if required, with a wide working envelope from this go-anywhere platform.

400 DEGREES

Maximum lift height is 14.7 metres and the MST-300 offers a 225kg capacity, enough for two operatives and some hand tools. The boom also provides up to 7.55m of outreach, allowing the operator to work out over an obstacle below. The operator can slew through up to 400 degrees, so should never be caught up against an obstacle, and there is zero tailswing or overhang at the back of the boom at ground level to worry about. Full proportional hydraulic controls make for very smooth operation, with no sudden jerks or bouncing, even at full reach. The boom is very sturdy too, feeling secure even over the side of the machine.

Cautrac feels that there are many potential customers for the machine in a number of markets. These include the utility companies, but also bridge access for inspection and repair work.

At Hillhead a number of quarry firms were also measuring the machine up for tunnel maintenance, the rapid travel speed being of particular interest to them. The low-pressure undercarriage also makes the machine ideal for sports ground lighting maintenance. To add to the platform's versatility, Mr Taylor says that it would be possible to equip the chassis with a towbar, to pull a power pack, compressor or tools to the working area.

For customers new to the access market, Cautrac's tie-up with Niftylift means that full IPAF training is available at Niftylift's training school. Of course there has already been interest in a taller model too, though it would mean a larger carrier that would not be as versatile as the MST-300. "We are looking at the possibility of a 21-metre machine, but it is not ready yet," says Mr Taylor.

While it is easy to hire-in rough terrain and crawler access platforms for the occasional small job, companies that regularly need to get to inaccessible high value job sites are not usually afraid to spend a bit more for the right machine. The fact that utility companies spend so much on Unimogs is testament to that. Rail work is another area where the right specification is often more important than the initial purchase price, and rail-roading the MST-300 chassis would not be impossible.

At the moment Cautrac is still testing the waters, showing the machine to a wide variety of potential customers to assess the demand. However, as soon as the orders come in the firm will be able to deliver. "We will always keep one of these access machines in stock," concludes Mr Taylor.

Right and Below: The well-proven Niftylift controls in the basket and on the boom are simple and can be operated with gloves on in the winter.