

Maschio Unico reversible plough:

# Breaking new ground

Farmers and contractors looking for a new plough are currently spoilt for choice. The latest Maschio Unico models from importer OPICO only add to the decision dilemma for those eyeballing a new fully mounted reversible to flip their dirt

**B**ack at Cereals 2017, Italian maker Maschio – through UK importer OPICO – took the wraps off the first of a new range of ploughs. This prototype machine formed the basis of the Unico mounted plough range, and it now comprises M- and L-series, with an XL version expected to follow later in 2019.

At the LAMMA show earlier this year the firm also revealed the first Mirco semi-mounted model for tractors up to 500hp, hinting at what is still to come. Much of this has been steered by Maschio sales manager, Rob Immink. The former UK managing director of Gregoire Besson joined OPICO to coincide with the 2017 launch, and has had the ear of the Italian factory to help formulate the Unico plough range for UK growers.

"At the end of 2018, we had secured a 6% share of the UK's tractor-mounted plough market," he comments. "Adding a plough was viewed as a logical addition to our Maschio tillage portfolio, and it sits neatly alongside our existing power harrows, rotary cultivators and drills."

**Models include the Unico M, with up to five furrows as a 4+1 and suited to tractors up to 200hp. Unico L is available as 4+1 and 5+1 builds and suits tractors up to 300hp. The forthcoming Unico XL version is for tractors up to 380hp, is offered in 5+1 and 6+1 formats and will be configured to suit on-land or in-furrow operation. All models are fully mounted and can be chosen with mechanically adjustable variable furrow widths from**

12-18in, or with a hydraulically adjustable Vario system for widths from 12-22in. As is the norm with many ploughs, protection comes from shearbolt or an auto-reset system – in the case of the Unico, the latter is a hydraulically pressurised system, set from the tractor and using accumulators. This offers horizontal and vertical movement, to protect each leg assembly.

Cat II and III headstock and coupling systems are available, while a press arm mounting flange is fitted as standard.

There are six mouldboard options from the factory, but only two will be offered in the UK. And of the three skimmers the factory produces, only a universal skimmer design and a maize skimmer will be made available to UK buyers.



Minimal surface trash and a 95cm point-to-point clearance meant total burial was achievable.

## DATA SHEET

### Unico L Vario

Build	Six-furrow (5+1)
Protection	Shearbolt
Furrow widths	12-22in hydraulic adjustment
Point to point	95cm
Weight	2,500kg
Power	Up to 300hp
Spool requirement	Three double-acting
Price as tested	£33,463

"We've chosen to offer 'popular builds' to simplify the selection process," Mr Immink says. "Buyers can choose from a slatted mouldboard that uses two stays, or a long-throw MP4WD board, equipped with a single, heavy duty stay."

"The MP4WD is capable of working at depths from 5-18in, and can easily accommodate a 710 tyre," he adds.

**When it comes to durability, Maschio has given its M series plough a 120mm diameter turnover shaft and 120x120mm main beam. The L series features a 130mm shaft and a 140x140mm main beam. Both models use a single turnover ram, and, when it comes to wearing metal, a bolt-on reversible point is the standard fit. Tungsten-tipped points can be specified.**

Storage space within the headstock means the plough's spanners and operator's handbook can be kept on board at all times. Standard point-to-point clearance is 95cm, with 85cm and 105cm also available, while



Long-throw MP4WD body is one of two options for the UK. The other option is a slatted board.

standard underbeam clearance is 80cm, with a taller 87cm version available. A single combination wheel takes care of working depth control and transport, with the latter achieved in the butterfly position with the top link removed and the machine's overall transport height then managed by the tractor arms. Maschio has created a parallelogram linkage assembly for the Unico to assist with plough alignment. It includes the integration of a small hydraulic ram within a larger ram and enables the line of pull to be maintained as front furrow width is adjusted. Called True Line, Mr Immink says it offers an element of hillside compensation on slopes.

"True Line lets you side-shift the plough to prevent it from trying to run downhill when working across a steep bank," he says. "It's also a memory ram and is used during the turnover process to reduce the plough's offset and then return it to its original position once turnover is complete." He adds such a process avoids having to close up the furrow widths on the Vario model during turnover.



Combination depth and transport wheel can be equipped with optional hydraulic depth control.

Unico L is available in 4+1 and 5+1 formats.





Front furrow width is set using a turnbuckle, though an optional hydraulic front furrow adjustment can be specified.

**Our test plough was a Unico L, 5+1 Vario with shearbolt protection and a single rear disc option.** Front furrow width is mechanically adjusted on this model, and power was supplied by recently appointed dealer Chandlers, in the guise of a MF 7726S Dyna 6.

Getting from transport to work is relatively straightforward and involves leaving the cab – a spring-loaded catch through the headstock holds the plough in position, and this has to be released. The transport wheel then needs its locking catch releasing so it follows the furrows, and the top link is then installed in its slotted hole to give float.

With the distance between the tyres measured and the appropriate front furrow settings applied through the turnbuckle, the plough could be introduced to work and then fine-tuned. The furrow width was set at 30cm (12in) – a useful opening gambit.

With the plough in the ground and a couple of passes made, the mechanical rear depth adjuster on the wheel was tweaked to get the



Skimmers are height-adjustable using a pin and clip system – quicker and less fiddly than bolts.

rear furrow down to a 12in working depth. This depth was requested by the grower who had recently harvested sugar beet from the field. A tweak of link arms and top link length to match, the plough had no hesitation in turning over six even furrows and matching up on subsequent passes. All that was required was a couple of twists of the turnover stops to maintain the plough's vertical alignment against the furrow wall. We'd recommend connecting the True Line ram's hydraulic pipes to a spool control that's hard to reach – just to prevent accidental adjustment once set.



Front furrow adjustment is by turnbuckle; a hydraulic front furrow option is available.

**Skimmers are secured using a pin and clip system**, so the incremental height adjustment is stepped. Skimmer angle is non-adjustable. A glance out of the tractor's rear window at the top link showed that the plough was pulling straight, and the Fergie could be opened up. A forward speed of 9km/hr proved effortless at just 1,500rpm, and the light land crumbled under the Unico's MP4WD mouldboard. Raising the plough at the headland and pushing spool number one sees the plough 'breathe in' and roll over without hesitation.

**The combination depth wheel hangs beneath the frame as the plough turns over, offering a smooth transition.** Spool flow and timings have been managed to deliver a gentle rotation. As the plough comes to rest on its stops, the frame auto resets. At this point, I reached for the spool controlling the Vario adjustment and opened the plough to 45cm (18in). It's easy to adjust with the help of the pointer on the frame.

It proved effortless, and the next bout saw the full furrow width of 55cm taken. In this easy land, why not make use of the full potential, given there's 260hp up front?

**With the plough delivering a 3.3m working width, soil flow continued over the shiny boards without issue.** Limited surface trash was dealt with, achieving full burial and a clean finish. It would have been great to try the plough in more challenging conditions, but the time of year and demo plough availability dictated our Lincolnshire fens test location. The next headland turn proved a challenge, as the full working width and relatively shallow lift height achieved by the Massey caused the 13.00/55 x 16 depth wheel to be dragged across the field surface. Given that the unit had worked faultlessly on a different tractor brand the previous week, we're inclined to think this issue lay somewhere with the Fergie – it's an area to check closely with your choice of tractor.



As a result, I reluctantly pulled the furrow width back to 45cm to avoid the same scenario happening again.

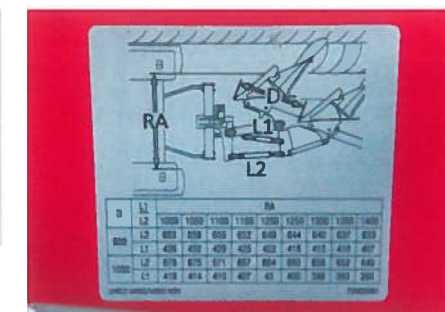
During this test, we found the large depth wheel runs pretty cleanly, though its scraper collected a lot of sugar beet trash and needed to be periodically cleaned – a chore. Sadly, we were unable to move the scraper to see what difference could be achieved, though it is adjustable.

### Further details:

- Vario pivot pins are outside the main beam
- Turnover ram stops feature an indent to simplify adjustment
- Components are bolted to the main beam
- Hydraulic depth wheel control is available.

**Summary:** The Unico does what it says on the tin – it turns soil over. Settings are easy to

Unico adopts the butterfly position for road transport. Last furrows need monitoring when carrying out tight turns into narrow gateways.



Beam-mounted instructions replicate those in the operator's handbook. It makes plough set-up a relatively straightforward affair.

make, instructions are clear and it handled our test field with ease after sugar beet. Running with the harvester's wheelings – rather than at an angle – affected the overall finish and was beyond our control, though what we ploughed was difficult to fault. It would have been great to see how this plough copes with heavier trash. But that's for another day.

**Geoff Ashcroft**



Unico's single turnover ram pushes positively onto adjustable stops.



Storage compartment in the headstock frame provides convenient space for plough tools and handbook – no need to carry them in the cab.



Hydraulic furrow width adjustment is easy to monitor with a beam-mounted gauge and pointer.