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DRIVING
IMPRESSION

A range expanded and improved

In launching the UF 1302 and UF 1002, Amazone has added new entry-level models to its mounted sprayer range. We were intrigued by the large number of small and useful features at which we took a close look in spring of this year.

Two years ago, Amazone unveiled their first mounted sprayer in the UF 02 series – the UF 2002 with a 2,000-litre tank as the flagship of the range. This was followed by the UF 1602 last year. With the continuing popularity of small mounted sprayers among small and medium-sized farmers, Amazone also added entry-level models to this new range – the UF 1002 and UF 1302 with 1,000-litre and 1,300-litre spray tanks. These complement the predecessor models UF 901 and UF 1201 which are still being manufactured. Launching the new models, Amazone took the opportunity to spruce up the entire 02 range with new and indeed useful details, as we found out in our field test last spring.

EASIER COUPLING

In replacement of the familiar quick-coupling system the top link can now uncouple and move fore, thereby

clearing enough space between the tractor and the sprayer to couple all pipes and lines and the driveshaft without hassle. The larger gap between tractor and sprayer is bridged by a pto shaft that is split into three sections, which is really good. After all lines are coupled, the operator reverses the tractor toward the sprayer, secures the top link in its coupling position and raises the lower links, thereby lifting the sprayer. The lower links can hook up to one of two cat-2 pin holes, so you can move the sprayer closer to the tractor. Leverage forces are further reduced by the high profile of the tank.

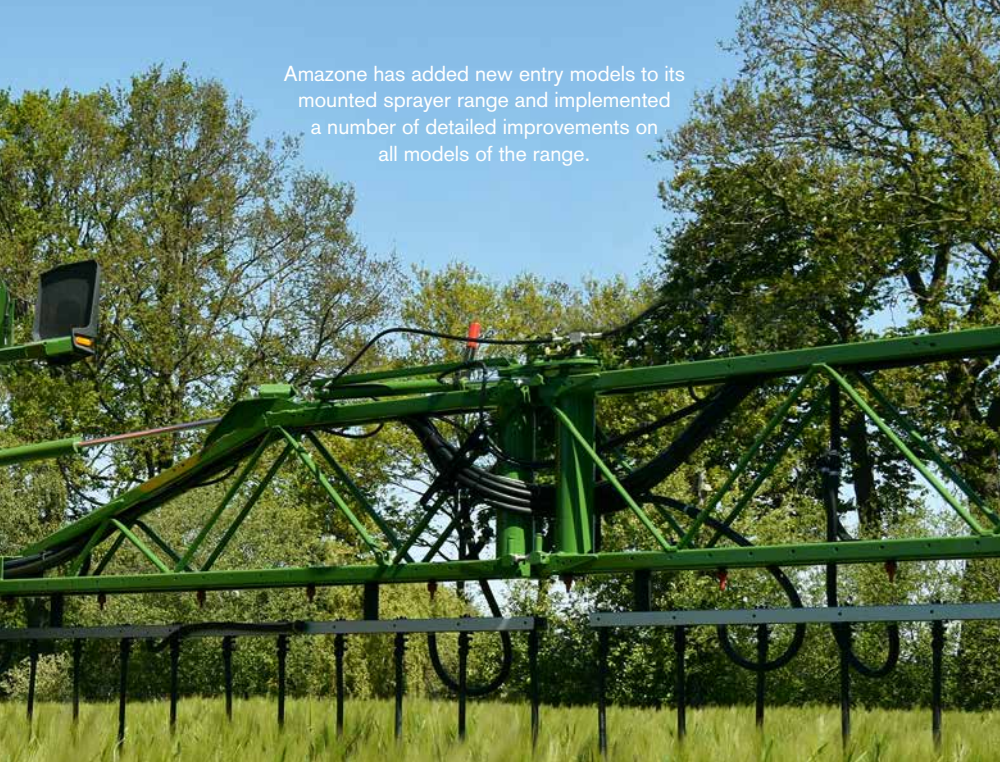
We were also favourably impressed by the new stands. They snap in and out of position when the operator pulls on a small ring with a special tool. The optional transport wheels have brakes and fold up together with the stands. These changes mean that the operator no longer has to crawl beneath the ma-

chine in order to fold the stands and remove the transport wheels manually, as was still necessary on the predecessor UF 1 model. The tool is stored in a handy holster on the left side of the machine.

BOOSTED FILLING RATE

Buyers of the entry-level UF 1002 and 1302 models can choose between three Comet piston diaphragm pumps and flow rates of 150l/min, 200l/min and even 250l/min. The new injector on the inductor hopper is now able to handle flow rates of up to 150l/min. If the operator needs to fill the spray tank with substances like ammonium nitrate urea solution, the injector can be switched over and combined with the power of the pump. This feature increases the filling rate to around 400l/min and reduces the filling time to less than four minutes. Excellent! Our UF 1302 had the 200-litre pump which is absolutely

Amazone has added new entry models to its mounted sprayer range and implemented a number of detailed improvements on all models of the range.



SUMMARY

The UF 02 range was introduced two years ago to join the earlier UF 01 range. The UF 02 models recently received two new siblings –

the UF 1002 and the UF 1302 with 1,000- and 1,300-litre tanks.

The UF 1302 was our test machine. In expanding the range, Amazone has implemented detailed improvements

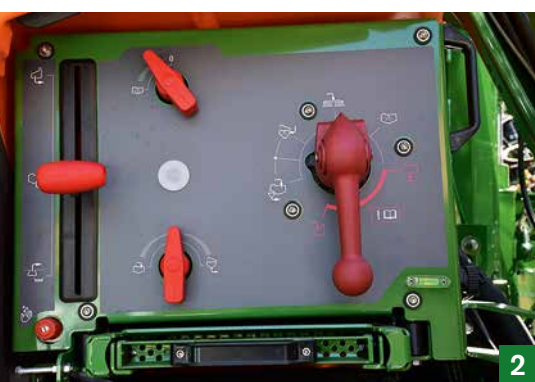
that focus on enhanced filling convenience.

on top of all jobs, especially when various chemicals have to be added one after the other.

The inductor hopper and the operator control panel on the left machine side are protected by covers and a large hinged door. On opening that door, we discovered various useful details including pockets for the gloves on the inside of the door and a holder for the measuring cup. At the top and hidden under another door is an extra cubby hole where you can store your protective gear and where a 20-litre hand-wash tank is housed.

Unlike the earlier models, this UF 1302 has an inductor hopper that swings down rather than to the side. The lid has a gas strut that keeps it open during filling. A cup for measuring the chemicals is stored just inside the lid, so the chemicals can be measured right over the hopper, which is another useful detail alongside the drip collector for the cup. Another new feature on the hopper is the so-called ‘sourcing tap’ which selects the source of the clean water, either the pump during suction filling or the pressure side.

The hopper holds 60 litres and has a mid-mounted suction valve complete with sieve and mixing jet. We were impressed with its suction capacity which allows operators to empty a 25kg bag of epsomite into the hopper and have the jet take care of it without any problem. Yet to avoid heavy foaming when adding fungicides, for example, it is possible to disable the mixing jet. Cleaning the hopper is performed by pressing on the lid which in turn activates the container rinsing mechanism. Now you can easily find the right spot to be pressed, which was not the case



on the predecessors. In addition, the plastic is softer now and offers less resistance.

MORE OPERATOR COMFORT

The operator control panel was updated, too, making filling a less complex job. This so-called SmartCenter is available in Standard or Comfort specification. The Comfort package offers various options including cut-off filling level detection (even when pressure filling), the TwinTerminal 3.0, agitator control relative to the current filling level and the application rate plus automatic system clean. Our standard spec UF 1302 had none of these.

An important novelty across the range is the 7-way diverter pressure valve which uses poppet valves. Operation of this tap shuts all valves tight. Only afterwards can you move the tap into a different position. Once the tap is in position, the respective valve opens. Another new feature enables operators to fill the clean water tank either through the suction side or the pressure side. The operator has to make sure the valves are in a correct position to avoid directing spray liquid into the clean water tank. For this reason, the setting range of the 7-way diverter pressure valve is marked red and has a decal that instructs the user to read the manual.

While automatic rinsing is only a Comfort feature, constant system clean is a selectable standard feature now, allowing the operator to give the sprayer a good initial clean before leaving the field. By pressing a button on the terminal, you activate an electro-magnetic clutch that tensions a drive belt between the main pump and a small auxiliary pump. This auxiliary pump feeds clean water from the clean water tank to the spray tank. According to the manufacturer, by feeding the remaining liquid faster to the spray nozzles than clean water is entering the tank, the main pump creates a suction effect inside the spray lines which in turn

speeds up cleaning. We simulated this using beet juice and clean water and found that indeed it took only about one minute until the water was running almost clear again. However, best practice still requires that the machine is rinsed with a detergent when swapping chemicals, such as when changing from a maize herbicide to a cereal fungicide. Nonetheless, the continuous system clean is definitely a good and practical option (for an extra €1,835).

NO CHANGES TO THE SPRAY BOOM

Almost no changes have been made to the spray boom. Customers can still choose between the Q-Plus boom which folds horizontally and is available at work widths from 12m to 15m and the vertically folding Super-S1 and Super-S2 booms for work widths of up to 30m. Our sprayer had the 21m Super-S2 boom. This had the automatic Distance-Control system and the automatic GSP-Switch section control that switches nine sections on this particular boom model. The sprayers allow owners to upgrade their machines step by step - from entry-level to high-end specification. Choices include the individual nozzle control, the DUS pressure circulation, four-nozzle bodies and even 25cm nozzle spacings.

Our UF 1302 was operated from the new Isobus-compatible Amatron 4 terminal. In addition to that, our sprayer also came with the AUX-N-compatible AmaPilot+ joystick that made it very easy to control all the functions in the field. The Amatron screen can be extended to the tablet-based AmaTron TwinApp (IOS and Android) via Bluetooth, which allows the operator to use the field view and all its functions from a tablet. This is a great help, especially if the cab-based terminal has a somewhat small screen for viewing both the machine and all functions or if the terminal isn't up to the job. As an option, you can also choose the large AmaPad 2 terminal or the more straightforward and traditional AmaSpray+ unit which has toggle switches for section control.

The delivery hoses for applying liquid fertiliser are also new. These flexible and kinked hoses are vertically suspended now, especially on the folded Q-boom. Moreover, the hoses can be attached higher up and fixed in place with clamps, which is very useful in avoiding the hoses in the middle section dragging on the road.

◁ 1) Coupling and uncoupling the sprayer is easy.
2) The uncluttered operator control panel. 3) The 60-litre inductor hopper comes with a measuring cup and further useful details.



△The map view can be transferred via Bluetooth to a tablet, for example – courtesy of the new AmaTron Twin app.



△We tested the efficiency of the system clean feature with beet root juice. The water in the left jar was sampled before the experiment, the right jar afterwards.

On the whole, Amazone offers a host of options for its mounted sprayers, and this is reflected in the price. For example, the price for our UF 1302 in test specification with the options mentioned and 21m boom is €49,970. By comparison, the top model, the UF 2002 with 30m boom in high-end specification, costs €70,000. But there is also a much less sophisticated and low-

er-priced option: the UF 1002 with 15m Q-Plus boom and AmaSpray+ control computer with manual section control. Prices for this start at approx. €20,000.

@andreas.huesmann@topagrar.com.
Translated into English by trans-agrar.



VIDEO

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