





LLARS



# UF mounted crop protection sprayer

The reliable classic



The compact UF mounted crop protection sprayer, with a tank capacity of 900 l or 1,200 l, is characterised by its sturdy construction and lightweight design. With a choice of Q-Plus, Super-S1 or Super-S2 booms, and in boom widths from 12 to 30 m, the UF is a machine that caters for a wide ranging size of farm.



### UF slick – sleek – sly

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Also in work, the level of specification available is the major bonus. From mechanical operation right through to ISOBUS communication with Section Control – anything is possible."

(dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)  The Amazone UF 1201 delivered an impressive performance during the test and not only because of its easy operation. It also had the best boom guidance and top quality workmanship".
 (profi magazine – Practical test: "5 mounted sprayers in comparison" - 01/2013)

2



# UF 01

The compact and reliable mounted crop protection sprayer

Boom widths from



With FT front tank up to **2,200 litres** 

### The advantages at a glance:

spraying

- Robust construction yet lightweight design
- Light and smooth polyethylene spray agent tank with favourable centre of gravity
- Sprayer boom in super light, super strong and super compact profile design
- Outstanding boom suspension for an exceptional boom ride
- Maintenance-friendly self-priming piston diaphragm pump which can run dry
- Induction bowl with Power-Injector for quick, reliable and precise chemical fill
- AmaSwitch individual nozzle switching 50 cm part-width section control available as a special option
- Extendable to 2,200 litres with the FT front tank for even higher outputs

## Spray agent tank either 900 or 1,200 litres



UF

# The choice is yours

The UF 901 or the UF 1201 mounted crop protection sprayers



AMAZONE field sprayers fulfil the demands of the crop protection regulations, the guide lines of the Julius Kühn Institute and the highest European test standards (ENTAM certification).

On request AMAZONE field sprayers are provided with an official certificate of inspection for crop protection sprayers.





Those people who like to look into the tank from above can do this without any danger thanks to the standard ladder with platform and handles."

(dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)

UF 901 1.050 litres







- Those using the machines rated the build quality and the paint finish of the machines as very good. The highest rating was also given for service life, the ease of mounting and dismounting from the tractor as well as the manoeuvrability and compactness. Furthermore, the boom width and the unproblematic suspension were also praised."
- The UF 1201 with the Super-S1 boom is an uncomplicated sprayer designed in particular for medium-sized farms and which is easy to operate thanks to ProfiClick and the AmaSpray<sup>+</sup> in-cab terminal."

(dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)



UF

# So easy: mount up, fill and off we go!

# Functional spray agent tank

- Slim tank with a favourable centre of gravity
  Smooth tank walls for easier cleaning inside and outside
- Minimised residual volumes even on slopes due to the optimised design
- Effective agitation capacity and JKI-certified



"The Amazone UF features the lowest centre of gravity distance and at 1.3 t, a low unladen weight."
 (profi – Practical test "5 mounted sprayers in comparison" · 12/2012)

Quick coupler system

### Just a few connections. Quickly and safely.

With a few connections you can quickly and safely attach the UF on to the tractor. Sufficient space between the tractor and the sprayer makes attaching easy.

The rolling device makes it easy to move the sprayer. The optional quick coupling system and the TeleSpace PTO shaft provide an even faster and easier attachment to the tractor. All the cables and hoses are clearly and unmistakably arranged. The 120 litre fresh water tank is located on the right-hand side under the spray agent tank. The convenient positioning on the right allows easy filling at ground level. If required, the fresh water tank can also be filled via the fill port on the left.



UF 1201 with 24 m Super-S2 boom

# Everything is functional when in orange and green

Fast and safe filling



Filling via the suction hose

The sprayer can be filled using the suction hose via the 2" suction port. The liquid flow is routed in such a way that during the filling procedure there is always clean water available at the induction bowl. In terms of filling capacity, the sprayer from Amazone is right out in front."

(profi – Practical test "5 mounted sprayers in comparison" · 12/2012)



### **Option: bowser fill port**

For filling from a pressurised hose, a fill port with either a Geka or Camlock coupling is available as an option. This connection can be used to fill the fresh water tank simultaneously from the left-hand side.

### Piston diaphragm pumps

The piston diaphragm pumps run perfectly happily when dry and are liquid fertiliser safe. The design of the pumps simultaneously ensures an even, high delivery capacity with a high filling performance and quiet operation even under high pressure.

Pumps with an output capacity of 160, 210 and 250 l/min are available. The oil reservoir for the pump is positioned within the field of vision of the driver for easy monitoring of the pump from the tractor cab.

### **Fill level indicator**

The fill level indicator can be read via the pointer and electronically via the operator terminal.





A 2" discharge port for quick emptying under pressure, such as, for example, transferring to a front tank, can also be supplied (option).

UF

# **Operator station UF**

Clear and simple via the SmartCenter

# All functions are controlled with only three levers:

- 1) **Pressure Vario-Control valve** for filling, inducting, spraying, internal or external cleaning
- Quick emptying (option) for emptying the spray liquid tank with the aid of the pump
- Agitation valve for the infinitely variable setting of the agitation intensity via the self-cleaning pressure filter.
   Integrated additional function: Specific draining of the pressure filter
- Suction Vario-Control valve for drawing from the spray agent tank, from the fresh water tank or via the suction hose.
   Integrated additional function: Pressure-free residue draining and venting of the suction filter.



- SmartCenter Clearly arranged and user-friendly.
  All control elements are logically and unmistakably arranged directly to the front left-hand side of the operator.
  The valves are all marked with self-explanatory symbols to avoid operational errors. Compare!
- "All the valves and taps are located on the left hand side which means less walking."

(dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)

# **UF liquid circuit**

AmaTron 4 – execution with DUS, quick emptying and external wash down kit

Suction side
Pressure side
External cleaning
Internal cleaning
Return flow
Filling venturi



Liquid circuit UF – logical and convenient

The liquid circuit of the UF series has been optimised for operator friendliness and lowest residual sprayer volumes. Cleaning can be carried out with a partially filled tank, and the suction and pressure filters can be emptied before opening the filter housing.

# Exact mixing of the spray agents

Safe and quick with the induction bowl

The 55 litre induction bowl offers fast and clean working and is very easily accessible from the front left of the central operator control panel.



### Induction

Powdery agents and high rates of granular fertiliser are quickly and safely dissolved via the rinse ring and simultaneously inducted at high capacity. Three additional jets provide the spill-free and effective induction. Stepless adjustment of the delivery and induction rates.

The three additional mixing nozzles provide a high agitation effect and allow the induction of agents difficult to dissolve. Practical thinking: when closed, the canister flushing also cleans the lid and the induction bowl."

> (dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)

### Pressure filter

The self-cleaning pressure filter is standard equipment. The agitator tap also enables the specific draining of the pressure filter. This allows the filter to be checked without any leakage of spray agent – especially when the tank is full.

A high fill rate is obtained with the venturi. The same professional induction bowl is used on the UX Special trailed sprayer.



### **Canister cleaning**

For unproblematic cleaning of the spray agent canisters and for full utilisation of the contents, the canisters are flushed using the rotary nozzle. With this nozzle, the induction bowl can be cleaned even when the lid is closed. A dead man's control keeps the user safe.





### Infinitely variable, hydraulic main agitator

The intensity of the hydraulic agitation can, steplessly, be reduced down to nothing in order to avoid any foaming of the crop protection agent or to facilitate spraying out the remaining tank contents.

On AMAZONE crop protection sprayers, the unsprayed plant protection agent is delivered back via the return flow into the suction system. In this way any unintended agitation of the spray liquid via the return flow is prevented.

# Comfort-Pack for in-cab control of the filling and cleaning

One option with three functions for all UFs with ISOBUS.

- The automated fill stop actuates the suction valve when the desired fill level has been reached.
- Automatic agitator shut off at a fill level of less than 5% (the nominal volume) results in small residual volumes.
- The spray line, tank and agitator can be cleaned via the ISOBUS terminal. Der Anwender muss die Kabine nicht mehr verlassen.

### Internal and external cleaning

The standard internal tank cleaning system with rotary nozzle ensures quick and effective washing out. Smooth tank walls without apertures and indentations ensures reliable function and simple checking. The optionally available spray lance allows the thorough external cleaning of the sprayer immediately after operation whilst still in the field. The 20 m hose reel supplies a working pressure of 10 bar to enable effective cleaning with little water consumption.



# AmaSet<sup>+</sup> control box

AMAZONE

# AmaSet<sup>+</sup> – simple and reliable

The AmaSet<sup>+</sup> control box is a convenient component in ensuring user-friendly and environmentally sensitive crop protection application. All important spraying functions being controlled remotely from the tractor cab. Within the same tractor gear the spray rate (I/ha) remains constant.

### The benefits:

- Digital pressure indication
- Overall and part-width section on/off
- Up to 7 part-width sections
- Selectric in-cab pressure adjustment
- Display of boom position and locking status

### Additional functions (with optional equipment):

Pre-select fold for the independent boom folding

- End or boundary nozzle for the Super-S boom (alternatively to pre-select fold)
- Fold or tilt via 1 double acting control valve (electric changeover unit)

# **High-tech valve chests**



Manually-actuated HB valve chest The manually operated valve chest allows spraying without any electrical power supply. The main switch, the manual pressure adjustment and the switching on and off of either three or five boom part-width sections are arranged in a clever, ergonomic manner. Due to the equal pressure system the spray rate per hectare remains constant when switching on and off the part-width sections.



 Electrically remote controlled NG partwidth section valves

The NG equal pressure control unit for the AmaSet<sup>+</sup> control box is centrally positioned in the middle of the boom. Ultramodern motor valves allow the fast, drip-less on/ off control. Matching the equal pressure valve chest to the nozzle size is quickly and easily carried out via the colour coordinated dials.



 Electrical remote controlled
 TG part-width section valves
 Cutting-edge valve technology available for ISOBUS control and AmaSpray<sup>+</sup>. The partwidth boom sections are switched, on and off, quickly and drip-free via electric motor valves with pressure relief. The amount applied is accurately and directly controlled by the computer in any situation and so negating the need for any mechanical equal pressure control. AmaSpray+ -

simple and versatile

# AmaSpray<sup>+</sup> operator terminal

AmaSpray<sup>+</sup> enables the simple yet fully automatic control of

the UF. Switches integrated in the operator terminal enable

the control of 5, 7 or 9 part-width sections. AmaSpray<sup>+</sup> has

a digital pressure display and a digital tank level indicator. It

records the quantity applied and area worked. The hydrau-

tractor. Boom tilt and pendulum lock are also displayed in

ed folding of the boom or alternatively the access to the

boundary and end nozzle spraying systems.

the AmaSpray<sup>+</sup>. As an option, AmaSpray<sup>+</sup> enables one-sid-

The AmaSpray<sup>+</sup> operator terminal with serial Interface can

also be used for the automatic documentation (ASD) and

part area site-specific application via a GPS terminal.

lic functions are operated using the spool valves on the



"The sprayer can be comfortably operated with the AmaSpray<sup>+</sup> in-cab terminal in combination with ProfiClick."

> dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)

### The benefits:

- Single, high-contrast, backlit screen
- Overall and part-width section on/off
- Up to 9 part-width sections
- Digital pressure indication
- Digital fill-level indicator
- Display of boom position and locking status
- Hectare counter (total and daily counter)
- 🕑 +/- 10 % key
- ✔ Field record management system

### Additional functions (with optional equipment):

- Pre-select fold for the independent boom folding
- End or boundary nozzle for the Super-S boom (alternatively to pre-select fold)
- Fold or tilt via 1 double acting control valve (electric changeover unit)
- ASD inside: serial interface for documentation and GPS terminal versatility

# ProfiClick

### The small switchbox with a huge comfort factor

The new ProfiClick control box provides simple and precise operation of the hydraulic functions of the boom on AMAZONE crop protection sprayers.

It is available in combination with the electro-hydraulic pack "Profi-fold 1" for the entire crop protection sprayer product range from AMAZONE. All the operational functions of the ProfiClick switchbox are ergonomically arranged and directly linked with a function. The potentiometer for the re-adjustment of boom tilt can be controlled on the move without looking thanks to the centre position via a detent function. So the driver can concentrate perfectly on driving.



ProfiClick switchbox without steering

- for UF mounted and UG or UX trailed sprayers
- Operation of the boom functions via a constant oil flow
- 1 Ergonomic hand support
- 2 On/off
- 3 Boom pendulum lock
- (4) Boom fold(5) Boom up/down

6 Boom tilt

16 17



# ISOBUS –

Machine actuation in the digital age



### One language, many benefits!

Each ISOBUS-enabled machine from AMAZONE comes with the latest technology and almost unlimited possibilities. It does not matter whether you use an operator terminal by AMAZONE or an ISOBUS terminal directly installed in your tractor. ISOBUS is a worldwide recognised communication standard between, on the one hand, operator terminal, tractor and connected implements and, on the other hand, agricultural office software.

### **Operation with any ISOBUS terminal**

Which means that ISOBUS enables you to take control of all your ISOBUS compatible equipment. You just connect the machine with the relevant ISOBUS terminal and immediately the normal operator interface is displayed on the monitor screen in your tractor cab.

### **Benefits of ISOBUS:**

- This worldwide standard provides a uniform interface and data exchange formats that ensure the compatibility even with third party manufacturers
- Plug and Play between machine, tractor and additional ISOBUS implements



# **AMAZONE – more than just ISOBUS**

Improved control, more yield! Precision Farming 4.0

### **Our competence in electronics**

To increase the operational comfort, AMAZONE implements and operator terminals feature a scope of functionality way beyond ISOBUS standards.

### The benefits of more than just ISOBUS:

- Highest compatibility and safety functionality of your ISOBUS equipment
- No additional modules on the machine side. All ISOBUS machinery from AMAZONE is already equipped as standard with the necessary ISOBUS functions
- MiniView display with all AMAZONE terminals and additional ISOBUS terminals. See, for instance, the machine data in the GPS view
- The possibility using the tractor terminal or in a twin terminal solution to separate the functionalities of tractor and connected implement

- Unique operation concept. Freely-configurable displays and individual user interfaces in the operator terminal
- Up to 3 user profiles are possible. Establish for every driver or operation an individual user profile!
- Freely-configurable machine operation as, for instance, the folding procedure of the booms of your AMAZONE crop protection sprayer
- Tractor ECU function evaluation Automated movement sequences such as automated blocking of the steering axle while reversing
- Integrated TaskController data logger. As a matter of principle, every ISOBUS telemetry solution is possible (for example, TONI telemetry from CLAAS).
- Freely-configurable part-width sections



# Make the most of the possibilities

### Job management and documentation

All standard ISOBUS terminals from AMAZONE can collect and save machine and site-specific data using Task Controller. The collected data can subsequently be used in your Farm Management Information System.

- Easily compile or load jobs
- Processing jobs
- Occument and export the work performed
- Processing of application maps in an ISO-XML format

### GPS-Maps

GPS-Maps enables uncomplicated part-area site specific management because this software module provides easy use of application maps in a shape file format. Either the target amount of the material to be applied or the target amount of effective ingredient can be directly processed.

- Intuitive system for working from application maps
- Automatic part-area site specific regulation of the application rate
- Optimum crop management via need-oriented application
- Standard on AmaTron 4 and AmaPad 2

### GPS-Track

The GPS-Track parallel tracking aid makes orientation in the field much easier, particularly on grassland or in areas without tramline tracks. It has various track modes such as A-B Line and contour lines. Deviation from the ideal track is graphically shown on the display by an integrated light bar. Thanks to the clear steering recommendations with exact tramline distances you always remain on track!

- The virtual light bar in the status bar
- is standard for AmaPad 2
- In and optional for the AmaTron 4

GPS-Track – your parallel driving aid in the field





# agrirouter -

The independent data hub for agriculture



### Simple and safe data exchange

agrirouter can work with products and services from different manufacturers and facilitates universal data exchange for AMAZONE. agrirouter provides a safe and easy way to exchange data between AMAZONE machines, agricultural software, manufacturers and companies.

### Full control choose for yourself!

agrirouter simplifies data exchange by allowing wireless exchange of job data and application maps between AMAZONE machinery. It simplifies operating procedures, reduces administrative effort and improves profitability. You retain control of the data and decide who gets which data and to what extent.

### Advantages of agrirouter:

- Simple and easy handling
- Comfortable and fast transfer
- Full control of your data
- Data are transferred, not stored
- Manufacturer-independent use

### ð o 🚚 🛃 Machinery manufacturers Farme App providers Contractors Equipment manufacturers Food industry External data exchange platforms External service providers



# Automatic GPS-Switch part-width section control with Section Control



### Precise switching in 50 cm part-width sections

The decisive benefit of the individual nozzle control is the possibility to operate with small part-width sections giving an even greater degree of precision in wedge shaped fields, short work and on the headland. If AmaSwitch or AmaSelect is combined with the automatic GPS-Switch Section Control, the automatic switching of individual nozzles in 50 cm part-width sections is made possible. With this system, areas of overlap

are significantly reduced and are, in comparison with a conventional Section Control part-width section shut-off system, up to 85 % less. So, the combination of GPS-Switch and individual nozzle control results, depending on field shape and size, working width and number of part-width sections, in significant savings of spray agent compared with a normal spraying system used thus far.

AMAZONE

### Automatic part-width section control

If the terminal to be operated features Section Control, such as, for example, GPS-Switch part-width section control from AMAZONE, the switching of the part-width sections can be carried out completely automatically and in relation to the GPS position. Once a field has been established by the driver, then, in the automatic mode, they can fully concentrate on handling the vehicle whilst the switching of the part-width sections in wedges and on the headland is carried out automatically.

### Benefits of automatic part-width section control:

- Stress relief on the driver
- Increase in precision especially at night or at higher speeds
- Less overlaps and gaps
- Saving of resources
- Less crop damage and environmental pollution
- With Section Control, the ISOBUS computer relieves the driver from a lot of work."

("dlz agrar magazine" – "Test report ZA-TS fertiliser spreader". 02/2017)

### **GPS-Switch**

With GPS-Switch, AMAZONE offers a GPS-based, fully automatic, part-width section control for all AMAZONE operator terminals and ISOBUS compatible fertiliser spreaders, crop protection sprayers or seed drills.

### **GPS-Switch basic**

- Automatic part-width section control of up to 16 part-width sections
- Optional for AmaTron 4

### GPS-Switch pro

- Automatic part-width section control of up to 128 part-width sections
- Creation of a virtual headland
- Creation of Point of Interests (POI)
- Automated boom lowering for an AMAZONE sprayer
- Standard for AmaPad 2
- Optional for AmaTron 4



Special crops and bed work often require the on/off switching of the individual part-width sections in the middle of the boom. AmaClick is an additional ergonomic control unit that can be used either in conjunction with the multi-function joystick or also though as a standalone system alongside an ISOBUS terminal.



### UF

# **ISOBUS terminals from Amazone**

Intuitive, comfortable, better – workday made easy

# From simple to high-tech – everything is possible

AMAZONE offers two particularly convenient operator terminals for your ISOBUS machinery in the form of the ISOBUS-compliant AmaTron 4 and the AmaPad 2. In addition to pure machine operation, there are additional application options, such as automated GPS-Switch partwidth section control.

 All applications come pre-installed and can be initially tested free of charge

Intuitive and clear actuation

# Everything in view with the 2-terminal solution

As well as operating the AMAZONE ISOBUS machine through the tractor terminal, there is also the handy alternative of separating the functionalities of the tractor and the attached machine and operating them by using two terminals. The tractor terminal can continue to control the tractor or also display the GPS applications whereas the additional operator terminal in its UT display mode is fully utilised to monitor and control the machine.





Terminal	AmaTron 4	AmaPad 2
Display	8 inch, multi-touch colour display	12.1 inch, multi-touch-colour display
Mode of operation	Touch and 12 soft keys	Touch
Interfaces	1 x Ethernet 2 x RS232 (GPS & ASD) 2x USB interfaces	1 x Ethernet 2 x RS232 (GPS & ASD) 2x USB interfaces with WLAN dongle
Job management and processing of application maps (ISO-XML and Shape)	GPS-Maps&Doc * with integrated Task Controller	Task Controller
Parallel driving aid	GPS-Track * with virtual light bar	GPS-Track pro with virtual light bar
Automatic track following	-	GPS-Track Auto for the Pantera self-propelled crop protection sprayer
Automatic part-width section control (SectionControl) Note: dependent on the max. no. of sections of the machine!	GPS-Switch basic * with up to 16 part-width sections or GPS-Switch pro * with up to 128 part width sections	GPS-Switch pro with up to 128 part width sections
Camera connectivity	1x camera connection * with AmaCam automatic reversing detection	2x camera connections *



### **Everything from a single source!**

Thanks to the AUX-N feature, you can operate multiple functions of the machine via AmaPilot<sup>+</sup> or any other ISOBUS multi-function joystick.



- Adjustable palm rest
- ✔ Freely-programmable,
- individual key layout

• "The joystick rests comfortably in the hand." ("dlz agrar magazine" - "Test report Pantera 4502" · 02/2016)



**()** "The ISOBUS control is an in-house development from AMAZONE and has been designed clearly and is easily understandable. If desired, some keys can be freely allocated. Also the multi-function display can be freely selected."

("agrarheute" magazine- "Test report Centaya seed drill". 06/2018)



UF

# AmaTron 4

Manager 4 all



# Easy and comfortable operation as intuitive as your tablet

Why not handle a terminal as intuitively like a tablet or a smartphone? With this in mind AMAZONE has developed the highly intuitive and operator-friendly AmaTron 4 which offers a noticeably smoother operational process, especially when it comes to job management. The AmaTron 4, with its 8" multi-touch colour display meets the highest expectations and offers maximum user-friendliness. A swipe of the finger or using the App carousel allows quick changes between applications and the simple and clearly structured operating menu. A useful MiniView, a freely configurable status line as well as a virtual light bar make the use of the AmaTron 4 particularly clear and convenient.

### Benefits of AmaTron 4:

- Automated full image mode during non-operation
- Practical MiniView concept
- Operation via the touch display or via soft keys
- Separate Sep
- Field-related documentation
- Practice-oriented and intelligent menu guidance
- Oay-night mode

### Standard with:

### GPS-Maps&Doc



Automated AmaCam reverse driving recognition that gives direct access to a reversing camera and prevents dangerous situations

Machine operation (UT, Universal Terminal) in day-night mode

# AmaPad 2

The especially comfortable way to control agricultural machinery

# The new dimension of control and monitoring

AmaPad 2 from AMAZONE is a particularly high-quality operator terminal. The 12.1" multi-touch colour display is particularly comfortable and fulfils the highest demands on Precision Farming. The operation of AmaPad is carried out solely via touch.

With the practical "MiniView concept", applications which aren't being actively operated at that moment but need to be monitored are clearly displayed at the side. When needed these can be enlarged via "a finger swipe". The possibility to individualise a "dashboard panel" with the displays of choice rounds up the user ergonomics.

In addition to the GPS-Switch pro part-width section control, GPS-Track pro, a high-end parallel tracking aid with virtual light bar is included in the standard specification.

### Benefits of AmaPad 2:

- ✔ Large 12.1" multi-touch colour display
- Sextended MiniView concept
- Upgrade to automatic steering is possible thanks to the automatic GPS-Track Auto track guidance
- Oay-night mode

Standard with:

### GPS-Maps pro GPS-Track pro GPS-Switch pro



# AMAZONE aircraft-style boom design



UF 1801 with LED individual nozzle lighting

- U Lift mast with height adjustment of approx. 0.50 to 2.20 m
- On the Amazone, the boom provides the biggest range of adjustment and quickest folding."

(profi – Practical test "5 mounted sprayers in comparison" · 01/2013)

The Amazone UF 1201 with its Super-S boom features the best suspension and damping."

(profi – Practical test "5 mounted sprayers in comparison" · 01/2013)



# Simultaneously superbly strong and superbly light

Due to the special profile design AMAZONE sprayer booms are very light yet at the same time very robust. The nozzle bodies with integrated diaphragm non-return anti-drip valves fit up into the boom profiles reliably preventing any dripping at the nozzle. Self-adjusting bayonet fixings ensure a tool-less quick nozzle change. For any operational use and any application rate the right nozzles are available, for example, for the optimum wetting, anti-drift or for liquid fertiliser use.

# 3-fold shock absorbed suspension for the most arduous operational conditions

As standard all AMAZONE booms are equipped with

- springs and shock absorber pack for damping the vertical roll movements
- rubber buffer damping elements with ball suspension to damp down the horizontal yaw movements
- tension springs for the shock absorbed suspension of the entire boom

As standard also is hydraulic height adjustment and guide skids that results in the perfect boom guidance and thus, the accurate longitudinal and lateral distribution of the spray agent.

### Boom design to perfection

In hilly terrain and with large working widths, hydraulic tilt adjustment makes sense. The quick and precise tilting and return of the boom into the level position is possible via a tractor spool valve or via the electro-hydraulic functions in the ISOBUS terminal. Both Q-plus and the Super-S series AMAZONE booms are JKI recognised and comply to the highest European demands on crop protection implements – compare that with others!



# **Compare for yourself!**

It's the important quality features that make the difference!

### AMAZONE booms – an idea gets its way

MAZONE

### **Compactness matters!**

Due to the low centre of gravity and the light and robust design of the machine it is easy to carry and the tractor front axle weight reduction is much less than with many competitors.

### Drive safely!

The visibility in road transport is exemplary. Anywhere the tractor can go, the sprayer with its narrow booms goes as well. No protruding parts, no boom damage, minimal transport width.

### **Everything shipshape!**

The boom locates safely in the transport hooks. No rattling. No susceptible wear on the boom pivots. Travelling fast is not a problem.

### Maintenance-free and with a long service life

The decades of experience in boom design pay off: The conical hinge pin is the intelligent centre of a well thought-out boom philosophy! The boom pivots self-adjust against any play on the conical hinge pins and that ensures for the user an optimised boom function even after many years.

The standard use of stainless steel, the automotive-industry standard, cathodic dip painting process and the targeted use of plastics and aluminium are the perfect guarantee of a long service life.









### Clean working!

No spray agent from the booms drips on to the tractor or on the operator station and the booms also do not hit the tractor cab.



Exclusively from AMAZONE: All hydraulic connectors are always made from stainless steel!

UF 901 with 15 m Q-Plus boom

# Q-plus boom

12 – 12.5 – 15 metres

### The robust, entry-level boom

With the horizontally folded Q-Plus boom in working widths of 12 m, 12.5 m and 15 m, AMAZONE offers an entry-level boom that is second to none when it comes to quality and reliability. Folding in and out is hydraulic as standard, as are the boom height adjustment and one-sided folding in the left-hand direction of travel.

### Your advantages:

- Super-stable and, at the same time, super-light
- 3-fold shock absorption
- Hydraulic height adjustment as standard
- One-sided folding on the left-hand side as standard
- Available with hydraulic tilt adjustment

### Manually folded Q-Plus boom

The Q-Plus boom is also available with manual folding as an option. The manual folding is actuated via powerful tensioning and pressure springs without locking catches. Manually folded Q-plus boom (option)





The central hose guidance ensures a clean and kinkfree routing of all hoses and cables.

# Working widths

### Boom layout and folding variants for the Q-Plus boom

<sup>15</sup> m



# Super-S boom

The top-class boom from 15 to 30 metres

UF



### Super-S1 and S2 boom suspension



The 3-fold, shock-absorbed suspension, with hydraulic height adjustment and elastic boom height indicators, guides the boom safely over the crop at the right height.

# The comfortable, top-class boom in working widths up to 30 metres

The vertically folded Super-S booms are available in working widths from 15 m to 30 m. Due to the layout of the boom, there are only a few pivot points, which enables a quick folding and, more importantly, a transport width of just 2.40 metres. When equipped with Profi-fold electro-hydraulic boom actuation and DistanceControl height control, operation is made so much easier.

The Super-S boom is available in the Super-S1 boom from 15 m to 21 m and the Super-S2 boom from 15 m up to 30 m.

### More than just the solid core: Profiles made from high tensile steel

That what has been taken away from the boom's weight is returned in efficiency. The clever lightweight design makes use of the material where it makes sense. For instance, aluminium for weight reduction at the outer boom sections of the Super-S2 boom, but not however, in the middle of the boom. There, high tensile steel is necessary so that the boom is kept rigid and in line and so spray errors due to vibration are prevented.



The Super-S2 boom is super-stable and, at the same time, super-light.

### The advantages:

- Super-stable and, at the same time, super-light
- Super narrow transport width of just 2.40 m
- 3-fold shock absorption
- Hydraulic height adjustment as standard
- Expandable with fully automatic DistanceControl height control
- Sexpandable with hydraulic tilt adjustment
- Second able with end nozzle control
- Expandable with Profi-fold electro-hydraulic boom actuation

# Super-S1 boom

15 – 18 – 21 metres

AMAZONE

Due to the layout of the boom sections, there are only a few pivot points, which allows faster folding. The well-known robust profile construction of these variants will also convince. Despite the individual sections of the Super-S1 boom being 50 centimetres longer in comparison with the Super-S2 boom, the machine height comes to 3.30 metres.

The Super-S1 boom, in working widths of 18 and 21 metres, can be easily reduced to 15 metres by folding in the outer boom section.

- "The transport width remains just 2.40 m a big benefit from the vertical folding of the boom pack"
- "[...] has the benefit of having one joint less making the boom, on the one hand quicker folding, and on the other hand more cost-effective."

(dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)



The boom is so robust and, during our application, the boom ride was pleasantly smooth."

> (dlz agrar magazine – Field test UF 1201 "Super also in small widths" · 05/2016)

### Boom layout and folding variants for the Super-S1 boom

Working widths



### **Super-S2 boom** 15 - 16 - 18 - 20 - 21 - 24 - 27 - 28 - 30 metres

Due to the shorter, individual sections, a machine height of just 2.90 m is achieved.



### Boom layout and folding variants of the Super-S2 boom



# With maximum comfort and even more precision

### **Pre-select folding:**

Independent folding is possible via either the AmaSpray<sup>+</sup> in-cab terminal or an ISOBUS terminals via the tractor spool valves.

### Profi-fold – flexible and comfortable

As an option for all Super-S booms, AMAZONE offers the Profi-fold electro-hydraulic actuation system. All hydraulic functions can be performed reliably and easily from the cab using the ISOBUS terminal or a ProfiClick switch box. The multi-function joystick makes handling especially comfortable.

### Profi-fold 1:

Height adjustment, folding in and out, independent, one side folding at reduced speeds (max. 6 km/h), boom width reduction, and tilt adjustment.

Independent fold

### Profi-fold 2:

In addition with variable geometry, individual boom tip angling.



Boom independent, one sided tip angling


Sensors precisely detect the target height distance and take over the operation.

### DistanceControl with 2 sensors or DistanceControl plus with 4 sensors

AMAZONE offers for Super-L booms, either DistanceControl fully automated boom control with 2 sensors or Distance-Control plus with 4 sensors on the Pantera self-propelled sprayer. In heavily differing crop heights, or in areas with partially lodged corn, it could be that the boom, when equipped with 2 sensors, dips into the crop. In this case equipping the boom with four sensors will prevent this. The sensors are electrically connected in parallel and so it is always the sensor that is closest to the target surface that is actuated. The driver is able to concentrate on correctly applying plant protection agents and the computer optimises the boom height control!

#### Benefits of the DistanceControl boom guidance

- Fully automatic boom guidance including height guidance, tilt adjustment and boom lifting on the headland
- Automated bilateral boom angling (in combination with Flex-fold 2)



DistanceControl when equipped with two sensors: measuring to the crop



DistanceControl when equipped with two sensors: The boom can dip into the crop, for example, where there is lodged corn



DistanceControl plus:

offers the remedy in those more difficult conditions with its four sensors





UF

AMAZONE

# Set the pace with DUS



DUS pressure recirculation system

# The DUS pressure recirculation system – proven more than 10,000 times

The AMAZONE DUS pressure recirculation system ensures a reliable circulation throughout the entire system. When starting the spraying operation all the hoses including the spray lines are filled under pressure in the reverse direction with the mixed spray agent. This means the spray lines are always full and immediately ready to use over the entire working width. There is no waiting on the headland.

Every time individual part-width sections are shut off, during the turning operation and during transport, the spray liquid circulates continually thanks to the pressure recirculation system. This reliably prevents deposits, blockages or segregation in the spray lines.

During the cleaning operation, fresh water flushes the spray lines out right up to the nozzles without any spraying being necessary. During this cleaning procedure the concentrated spray liquid is returned back to tank via the pressure recirculation system leaving the spray lines clean.



#### from the pump Pressure relief valve Part-width section shutoff valve to the tank. Pressure regulator delivers a stream of spray liquid to the pressure reduction valve which flows under low pressure to the throttle valve. The spray agent is now allowed to travel in the reverse direction back to the tank. Spray line Spray line

#### DUS pressure recirculation system: supplies each individual part-width section

UF

## AmaSwitch

Electric individual nozzle switching with 50 cm part-width sections



DUS pro high pressure recirculation with conical spray line on here, for example, AmaSwitch

### Automatic 50 cm part-width section switching

With AmaSwitch, AMAZONE offers the precise solution for automatic part-width section control on 50 cm sections. AmaSwitch is the ideal alternative for users who want to maximise the benefits of very precise switching in wedge shaped fields and areas of overlap, thanks to the 50 cm partwidth section control.

Standard equipment with AmaSwitch includes the DUS pro high pressure recirculation system and, in addition, can be equipped with LED individual nozzle lighting.

### 3-fold nozzle body, with electric on/off switching

The technology behind AmaSwitch is based on a conventional, manually-rotated, 3-fold nozzle body with electric individual on/off. The opening and closing is achieved via an electric valve which is fixed directly onto the nozzle body. In conjunction with GPS-Switch, it is thus possible to very precisely control 50 cm part-width sections in short work and on the headland. In addition to the automatic switching using 50 cm part-width sections, it is possible to configure the amount of part-width sections from choice.

#### **DUS pro**

With DUS pro, the spraying pressure is constant right up to each individual nozzle and at the set spraying pressure. Thanks to the conical spray lines, minimal residual spray volumes are achieved.

#### **Conical spray line:**

The dimensions of the spray line vary along the boom Minimum residual volumes

Even flow speed

### 4-fold nozzle body, with the additional 25 cm nozzle spacing

In addition to the 3-fold nozzle body, AmaSwitch electric single nozzle control can also be equipped with a 4-fold nozzle body. In addition, a true 25-centimetre nozzle spacing can be achieved with the aid of an optional extension kit. This offers the benefit, in combination with specific 80° nozzles, to reduce the boom to target surface distance down to less than 50 cm.



AmaSwitch 3-fold nozzle body with individual nozzle lighting



AmaSwitch 4-fold nozzle body



AmaSwitch with 4-fold nozzle body and extension set for an actual 25 cm nozzle spacing



### **Calculated example:**

Annual average overlaps of conventional part-width sections vs 50 cm part-width sections in combination with Section Control

### Important knowledge for field analysis

- Average overlap with 50 cm part-width sections only 1.92%
- Average overlap with 9 part-width sections 7%
- Short payback period for large farms due to annual saving potential
- Due to smaller field sizes, smaller farms save proportionally more
- When growing crops with a high crop protection demand (e.g. potatoes, beet), the 50 cm part-width section is particularly cost-effective



50 cm part-width section individual nozzle switching

		Electric single nozzle control	
Your benefits	Part-width section valves TG	AmaSwitch 3-fold	AmaSwitch 4-fold
Multiple boom sections	up to 13	up to 60	up to 60
50 cm part-width sections	-		
Number of nozzles per nozzle body	1, 3, 4	3	4
Manual nozzle switching			
Low pressure recirculation (DUS)		-	-
High pressure recirculation (DUS pro)	-		
25 cm nozzle spacing		-	
Individual programming of the part-width sections (TB)	-		
No need for compressed air			
LED individual nozzle lighting			

### **Comparison of systems:**

Nozzle switching - Review of systems

= optional

– = not possible

# The right nozzle choice

UF

The basis for success in crop protection



### Less drift also at higher wind speeds

With the air-assisted injector nozzles, crop protection agents can be applied with very little drift. They are universally usable in all crops and all classifications. Because of the coarse droplet application, these nozzles can also be used in higher wind speeds.

AMAZONE offers a wide range of nozzles from agrotop, Lechler and TeeJet.

### Single and multi-nozzle bodies

The nozzle bodies with integrated diaphragm non-return anti-drip valves fit up into the boom profiles reliably preventing any dripping at the nozzle. Self-adjusting bayonet fixings ensure a tool-less quick nozzle change. The 3-fold or 4-fold nozzle bodies are suited to frequent nozzle changes due to different applications and crops. Nozzle protection tubes, as standard on the outer sections, or, if desired, over the entire boom working width, ensures protection for long injector nozzles and multiple nozzle bodies.





Injector nozzles (ID, TTI) have a relatively coarse droplet spectrum and are particularly versatile with regard to their field of application. A pressure range of 2 to 8 bar is possible.

If coverage quality is at the foreground of the application, the use of standard or anti-drift fine droplet nozzles, such as XR or AD, is recommended. Special care is required here due to the tendency to drift above 3 bar.

A good compromise is provided by the modern ID-K or Airmix compact injector nozzles. These have relatively little drift, but do not have too coarse a droplet spectrum and are operated at 2 to 4 bar.

When it comes to special coverage qualities the double flat fan nozzle is an interesting alternative: the AVI Twin from Agrotop also produces droplets that are not too fine. Everyone purchasing an AMAZONE crop protection sprayer receives, free of charge, an AMAZONE nozzle mounting tool that enables a much easier nozzle change.

The split spray pattern ensures a more even deposit on the front and back of the plant and makes sense maybe, for example, in ear treatment.

For speeds greater than 10 km/h, the TD HiSpeed nozzle with its asymmetrical spraying angle is becoming a new industry trend.

#### Distribution of the droplet size



very fine fine medium coarse very coarse extremely droplet droplet droplet droplet coarse droplet

\* mean volumetric diameter

# Electric boundary nozzle switching on the Super-S boom

### For environmentally-friendly spray application at the field edge





#### Additional nozzle switching

In order to extend the normal working width, an asymmetrical nozzle can also be switched on. This is particularly useful if the distances between tramlines are not precise enough.

#### End nozzle switching

If a one metre buffer zone around the edge of the field needs to remain unsprayed due to distance constraints, end nozzle switching can be used.



#### Boundary nozzle switching

For precision border spraying between two sensitive crops, the boundary nozzles can be used to make sure the spray pattern is accurately defined.





Stainless steel weights on the drag hose

#### **Under-leaf spraying**

Elegant solutions for successful under-leaf spraying are also possible in combination with AMAZONE crop protection sprayers. The Dropleg system from Lechler, for instance, is an easy and robust under-leaf spraying system that hangs freely between the rows and which fulfils professional demands.

### **Operator-friendly liquid fertilising**

In conjunction with the AMAZONE boom, a separate drag hose kit for risk-free late fertilising is available. The selfcontained aluminium profiles can be attached with a few hand clamps. Drag hoses offer a risk-free late top dressing with liquid fertiliser and stainless steel weights help keep the position of the drag hoses within the crop. For the coarse droplets distribution of liquid fertiliser AMAZONE offers multi-hole nozzles (3, 5, or 7 hole).

 "The nozzles are easy to access and only Amazone provides any relevant drag hose equipment." (profi – Practical test "5 mounted sprayers in comparison" · 01/2013)

#### LED boom lighting for Super-S booms

For flexible and efficient operation at twilight and in the dark, LED boom lighting is available.

Two far-reaching LED work lights, mounted in the middle of the boom, ensure excellent visibility of all the nozzles at a glance.





#### LED individual nozzle lighting

Professional work lighting is today the basis of a flexible, output-increasing solution to operating in twilight and at night. LED individual nozzle lighting picks out each individual spray fan. An absolutely immediate assessment of their operation down to the very last nozzle on the boom can be made.



# The small self-propelled sprayer

UF with front tank



Due to the intelligent control of the liquid flow circuit, AMAZONE has managed to make the front tank really practical."

(Top Agrar 10/2008)

Via the FT front tank, the tank volume of the UF mounted sprayer can be very simply increased by 1,000 I. Thanks to the optional FlowControl System and the compact design, the UF front tank is the ideal solution for increasing the overall capacity of the UF.



#### The benefits:

- FlowControl intelligent fill level management for optimum weight distribution
- Improved driving stability on slopes due to the intelligent loading of the front axle
- Very compact design thanks to front linkage better manoeuvrability in the field and for a safer road transport

The special advantages offered of more manoeuvrable tractors with a mounted implement compared with trailed sprayers in smaller and more awkward shaped fields as well as the better behaviour on slopes are the major arguments for the front tank solution.

#### Benefits over a self-propelled sprayer

- Use advantage on price
- Up to 50 km/h permitted speed on the road
- 80 km/h permitted speed with Fastrac
- Tractor can also be used for other operations

#### Benefits over a trailed sprayer

- Compact unit
- Less side crabbing on side slopes
- Optimum ballasting of the front axle results in a smooth travelling behaviour in sloping terrain
- Faster to back into corners on the headland
- Easy manoeuvre in smaller and in wedge shaped fields
- Compact transport on narrow country lanes and along roads
- The front tank simultaneously serves as front weight ensuring an optimum balance
- Reduction of soil compaction
- Price advantage





# **Automatic regulation via Flow-Control**

Operates just like using one large tank

UF







The operator terminal controls the liquid circuit. Only when the fill level of the rear mounted sprayer reaches the 30 % mark is the spray agent pumped from the front tank to the rear.

#### Electronic fill level management system

The specific feature of the FT 1001 is the 100 % integration of the front tank into the mounted sprayer via the Flow-Control electronic fill level management system in the ISOBUS terminal. The technological basis of Flow-Control is the two electronic fill level indicators in the tanks and the two high capacity injectors. The transfer capacity in both directions is up to 200 l/min ensuring the liquid is always ideally homogenised. The ISOBUS terminal automatically controls the liquid circuit, ensuring always, an optimised weight distribution. Premature relief of the weight on the front axle is prevented and, depending on the fill level, new liquid is delivered from the front tank early enough so that the mounted sprayer is never emptied prior to the front tank and the liquid always remains homogeneous.

Manual control also allows the transport of just fresh water in the front tank.



 Automated liquid flow via Flow-Control

 AmaTron 4
 High capacity injectors
 Switch valves for injectors
 Electronic fill level indicators
 Flow-Control pump 115 l/min
 Internal cleaning
 UF spraying pump
 Spray line



# Handling and transport





# Sophisticated design for the utmost in safety

No matter whether in the yard or in the barn: there is always a safe parking place for the compact combination on its parking rollers. This simple handling convinces even after just a few operations.

The internal cleaning of the sprayer combination is carried out via the fresh water tank of the UF. The 100I additional clean water tank allows for the appropriate cleaning according to the European guidelines (clean water supply at least 10 % of the tank volume).

The compact sprayer-tractor unit is favourable especially in narrow lanes with hardly any obstruction to the view thanks to the well thought out design.



The AMAZONE FT 1001 fulfils all relevant EC guidelines and standards for traffic safety.

The optional traffic light kit is necessary in cases where the traffic lights of the tractor is hidden. The covered headlights of the tractor must be duplicated on the tractor roof. The fitting on the front tank is not allowed.





Optional camera system

In difficult driving situations, such as when pulling out of road junctions, the optional camera system on the front tank and on the mounted sprayer provides better visibility, and thus more safety, to the front and the rear. The high resolution, anti-glare monitor has a backlit display and can display two cameras at the same time.

### Technical data: UF mounted sprayers

Model	UF 901 12 m Q-plus 115 l/min NG 5-fold AmaSet <sup>+</sup>	UF 901 15 m Q-plus 160 l/min TG 5-fold AmaSpray <sup>+</sup>	UF 1201 15 m Super-S1 160 l/min NG 5-fold AmaSet <sup>+</sup>	UF 1201 21/15 m Super-S1 210 l/min TG 7-fold AmaTron 4
Actual volume (l)	1,050	1,050	1,350	1,350
Empty weight (kg)	680	713	893	1,012
Length (m) *	1.65	1.65	1.70	1.70
Height (m)	2.66	2.66	3.30	3.30
Transport width (m)	2.56	3.00	2.40	2.40
Height adjustment (m)	0.50 – 2.10	0.50 – 2.10	0.50 – 2.10	0.50 – 2.20

\* Dimensions of the lower link mounting



Model	FT 1001, Flow-Control	
Basic weight (kg)	217	
Nominal volume (I)	1,000	
Actual volume (I)	1,125	
Permissible total weight (kg)	1,475	

Illustrations, content and technical data are not binding! Deviations of technical data are possible depending on the equipment. The illustrations may deviate from the requirements for local road traffic regulations.



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