

# Trailed sprayer **UX Special**



# **UX Special trailed sprayer**

Our competence is your success





On request, all new AMAZONE sprayers can be provided with an official sprayer proficiency certificate. The proficiency certificate meets current EU regulations according to EN ISO 16122, which is, for European member states, supported also with the CEMA label. The UX Special trailed sprayer with tank capacities of 3,200, 4,200 and 5,200 litres is characterised above all by its dependable and user-friendly design. Boom widths from 15 to 36 m are possible with the Super-S2 or Super-L2 booms. The UX Special meets the highest demands for modern plant protection thanks to the extensive range of high-quality optional equipment.



# **UX Special**

# Maximum precision. Maximum success.

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**INTERACTIVE DRIVER TRAINING** www.amazone.net/smartlearning

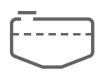
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UX Special

# **UX Special trailed sprayer**



15 m – 36 m



3,200 I – 5,200 I

up to 72 part-width sections



260 or 380 l/min pump capacity



# The advantages at a glance:

- Low transport height and overall compact transport dimensions through an innovative tank and boom design
- Light, compact, easily manoeuvrable compact design and drawbar steering or axle steering with a steering angle up to 20°
- SmartCenter: Tailored operating solutions from the easy-tohandle Standard-Pack to the remotely controlled system with Comfort-Pack
- High-performance induction bowl for minimum fill times and for a homogeneous spray agent mixture
- High-capacity, self-priming, low maintenance piston diaphragm pump for large application rates even at high spray pressures
- DistanceControl fully automatic boom guidance
- DUS or DUS pro pressure recirculation systems for continuous circulation of the spray agent
- 50 cm part-width sections and optimum nozzle choice thanks to the electric AmaSwitch and AmaSelect individual nozzle controls
- Automatic cleaning programmes for perfect results

# **MORE INFORMATION**

www.amazone.net/ux-special



**DOWNLOAD** mySprayer-App



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# Perfect down to the last detail

# The frame – strong and yet elastic!

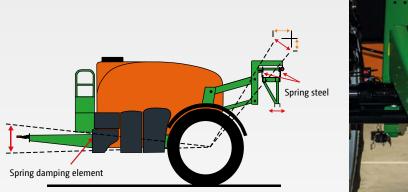
The wide profile steel frame, made from torsion resistant steel, compact tank design and the well-engineered boom technology provide the utmost in robustness.



Spring damping element between the drawbar and the frame



6





# Drawbar damping – For protection of the booms

All drawbars are provided with the drawbar shock absorbance system, an important design element in the UX. Minimising the to and fro movements between frame and drawbar it also protects the booms and prevents any rocking movement of the tractor keeping the operator comfortable.

### **Towing eyes**

The UX trailed sprayer offers the facility for fitting a drawbar to the rear. 12 t max. towing capacity

Optional

### Linking to the tractor – Just as you need it to be

No matter whether using a rigid hitch drawbar with ball coupling or the classic towing eye, AMAZONE always offers the right solution for your tractor. Make a choice between top hitch or lower mounting, between 40 mm or 50 mm diameter towing eyes, or the K 80 ball coupling.

## Hydraulic parking jack

The height adjustable parking jack integrated in the frame makes coupling to the tractor quick and easy with its convenient hydraulic height adjustment.

Optional



Top mounted drawbar with ball coupling and mechanical parking jack



Lower mounted drawbar with hydraulic parking jack

# **Discover the possibilities**





Rigid axle with track widths of 1.50 m to 2.25 m

# Axles and brakes – safety first!

The wide variety of axles offer the right solution for every requirement.

#### The benefits:

- Tyre sizes up to 520/85 R46 (2.05 m diameter) possible
- Ground clearance up to 82 cm
- Permissible speeds of up to 60 km/h with the ALB system (automatic load dependent braking)



Adjustable axle with stepless track width adjustment from 1.50 m to 2.25 m

#### The options:

- Fixed axles with track widths from 1.50 to 2.25 m two track widths are possible by reversing the wheels.
- Adjustable axle with stepless track width adjustment from 1.50 m to 2.25 m for the UX 3200 Special and the UX 4200 Special
- AutoTrail axle steering with control via the multifunction joystick
- "Even on poor dirt tracks and when travelling fast on the road, we really did not have anything to criticise the driving behaviour of the UX 4200 about."

("dlz agrarmagazin" – Test report "Safe in the track". 06/2011)



AutoTrail axle steering

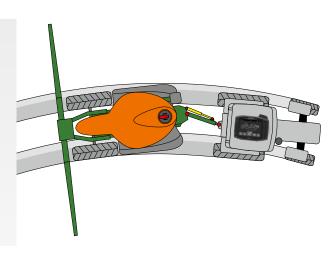
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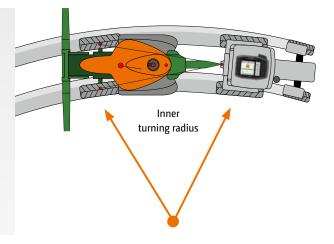
# Steering systems for every application

Always remain on track!



("dlz agrar magazine" – Test report "Safe in the track" · 06/2011)





AutoTrail axle steering with rigid straight drawbar or rigid hitch

UX with AutoTrail drawbar steering in field operation

### AutoTrail drawbar steering

For the UX Special, in working widths up to 28 m, there is the option of AutoTrail drawbar steering when working on level ground.

Alternatively, the steering drawbar can also be controlled via the hydraulic drawbar control, e.g. for steering in row crops.

Optional for UX Special up to 30 m boom widths

### AutoTrail axle steering

drawbar in the field.

The AutoTrail axle steering provides the driver with the utmost comfort and ensures an especially smooth boom ride and high stability. The track-following capability, particularly when in the reversing position, is outstanding. This steering of the axle is also possible in the folded-in position.



### **Clever AutoTrail steering**

AutoTrail steering ensures an intelligent, track-true steering behaviour and can be easily calibrated for any tractor type. The AutoTrail steering systems can be activated at any time and can be oversteered using manual readjustment on slopes. Especially helpful in narrow field entrances is, with the Auto-Trail steering, the ability to activate the steering even with the booms folded.

### Slope compensation for AutoTrail steering

As an option, AutoTrail steering can be equipped with a tilt sensor for fully automatic slope compensation. As the steering angle, depending on severity of the terrain, has to be possibly adjusted, the intensity of the setting can be altered at any time via the joystick.

Optional



With steering angles of 20°, the steering axles of the UX trailed sprayers also negotiate tight bends with ease.



Slippage downhill with the slope compensation deactivated



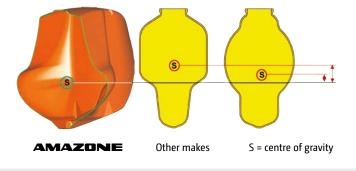
Activated slope compensation of the AutoTrail steering

# Light – compact – easily manoeuvrable



# Low centre of gravity

The design of the UX tanks along with the compact AMAZONE booms ensure a low centre of gravity and very compact transport dimensions. In addition, the boom is optimally protected via the sprung parallelogram boom frame, even when folded.



### The tank

The compact spray agent tank, which is made from polyethylene, is especially secure, light and long lasting. The absolutely smooth inner and outer walls with rounded corners and no crannies allow quick and easy cleaning. Residual spray volumes are kept at a minimum due to the specific shape of the tank sump.

#### Benefits of the tank design

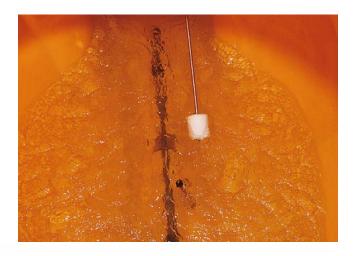
- Seasy cleaning of the spray agent tank
- Very low residual spray volumes
- Low transport height
- Low centre of gravity

### **Cleaning devices**

Three high-performance, rotating nozzles clean the spray agent tank internally. Short pipe runs and hose crosssectional areas as small as possible make for low residual volumes.

### Infinitely adjustable, hydraulic main agitator

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





# High-performance pump technology

Reliable to the last detail



# High performance and reliable single pump system

The UX Special features a single pump system with a capacity of 260 l/min or 380 l/min. The pump is driven as standard via the wide-angle PTO shaft. During filling at its nominal speed, full pump capacity is available for filling the spray agent tank. At the same time, either the contents of the induction bowl can be drawn out via the venturi or the total fill capacity can be increased up to 400 or 500 l/min. The UX Special can be equipped with a pump capacity of 260 l/min or 380 l/min.

#### Benefits of a piston diaphragm pump:

- Simple handling due to its self-priming capability at the start of the filling procedure
- Very high, consistent application rates with system pressures of up to 10 bar
- Can run dry and is liquid-fertiliser proof
- Long service life

# Centralised operator station

### SmartCenter – Centralised operator station

The UX Special crop protection sprayer is equipped with the SmartCenter, a centralised and ergonomically designed operator station. All the operating elements with the induction bowl and the complete operator station together with



SmartCenter on the left hand side of the machine with the induction bowl folded out

fill ports for the suction and pressure filling are directly provided on the front left of the driver's side and are logically and unmistakably arranged.

### Induction bowl and venturi

The high-performance induction bowl features a volume of 55 l and ensures the safe induction of crop protection agents. Active ingredients in powder or granulated form are reliably dissolved in the induction bowl with its integrated rinse ring, which includes an additional nozzle, and can be quickly and simultaneously inducted with the venturi. The induction bowl is splash-proof and can be, when closed, internally cleaned.

# Comfortable and thorough clean out with the induction bowl

For the comfortable cleaning of spray agent canisters and measuring jugs, the induction bowl provides a rotating nozzle. These make it possible to make full use of sticky spray agents and to rinse the spray agent canisters very thoroughly.



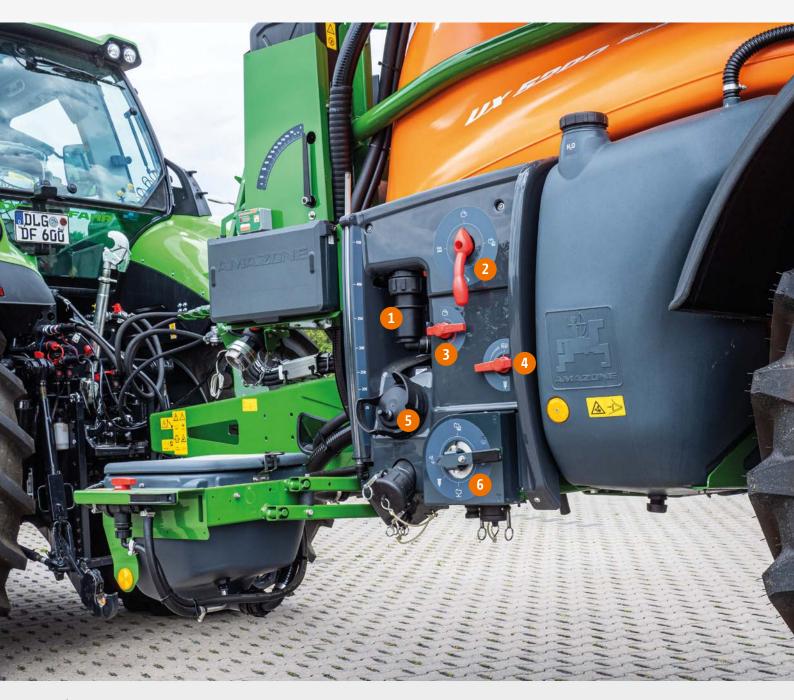
The venturi fast fill on the UX Special allows filling speeds of up to 500 l/min.



The high-performance induction bowl ensures minimum filling times and a homogeneous spray agent mixture

# SmartCenter

2" suction valve – suction capacity up to 500 l/min



1) Self-cleaning pressure filter

- 2) Control tap on the pressure side
- 3) Venturi fast fill
- 4) Agitation tap
- 5) Suction filter
- 6) Control tap on the suction side



UX Special Comfort-Pack

# Comfort-Pack – for the in-cab control of the spray liquid system

Comfort-Pack on the UX Special controls the most important functions of the spray liquid system.

Automatic fill stop
Agitator control
Automatic, in-cab remote cleaning

The hydraulic agitator is switched off at low fill levels to prevent any foaming of the crop protection agent and also to minimise the residual spray volumes when spraying. The remaining spray agent is always returned to the suction filter via the return flow. In this way, any unintended dilution of the spray liquid is prevented. The in-cab controlled internal cleaning nozzles ensure a superb cleaning efficiency. The Comfort-Pack automatically ensures that the agitation will be rinsed.

### Operationally safe suction and pressure filters

Both the suction and pressure filters are especially practical and operationally safe. The 32 mesh/cm<sup>2</sup> suction filter can be opened and cleaned without any loss of spray agent, even when the machine is full. The pressure filter on all UX sprayers is fitted as standard with either a 50 mesh/cm<sup>2</sup> or, as an option, 80 or 100 mesh/cm<sup>2</sup> inserts and is self-cleaning.

## Fill level indicator

The manual fill level indicator for the spray agent and fresh water tanks is equipped as standard and is clearly visible on the machine. A digital fill level indicator is available as an option.



The suction filter can be opened and cleaned even with the sprayer full and without any loss of spray agent.



UX 5200 Special with Comfort-Pack and digital fill level indicator

# Booms in an aircraft wing design

### Both superbly robust and superbly light

Thanks to the special profile design AMAZONE booms are at the same time superbly light and superbly strong. The boom working widths from 15 to 36 metres allow the optimised matching of the sprayer to the farm structure. The exceptionally high-quality ensures a long operational life even across very high acreages.

The compact transport dimensions with transport widths of 2.40 m to 2.85 m also contribute to the its transport on the road.

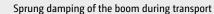


### **AMAZONE** booms

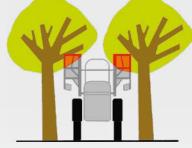




No spray agent from the booms drips on to the tractor. The booms also do not hit the tractor cab.







Everything shipshape: The boom is located safely without movement in its transport position. The parallelogram suspension dampens shock loads in the field as well as in the transport position. This is pure comfort and, above all, ensures the long service life of the boom.



Focusing on the essentials: the road in front of you You can concentrate entirely on driving. The visibility in road transport is exemplary. Where the tractor can get through then the trailed sprayer can also pass. No protruding parts, no boom damage.





The hydraulic fittings made from stainless steel ensure a long service life and a high resale value.

# Maintenance-free and with a long service life

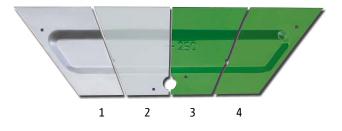
The standard use of stainless steel, the automotive-industry standard, cathodic dip painting process and the targeted use of plastics and aluminium are the perfect guarantee of a long service life.

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 end user, an optimised boom function even after many years.

# High-quality, multi-layer paint

A high-quality multi-layer paint finish guarantees top quality that lasts

- 1) Sheet steel
- 2) Zinc phosphate (galvanising layer)
- 3) CDP priming
- 4) Top coat







• The stable, spacious platform ensures convenient, safe access



# Super-S2 boom

### Superbly compact on the road

Superbly narrow transport width of just 2.40 m on all Super-S2 booms: 15 – 18 – 20 – 21 – 24 – 25 – 27 – 28 m.

The Super-S2 boom folds in or out fully automatically via over-dimensioned hydraulic rams. In the transport position, the boom sits compactly behind the tank with a transport width of only 2.40 m.

The multiple-folded steel profiles with a width of up to 140 mm make the Super-S2 boom extremely robust.

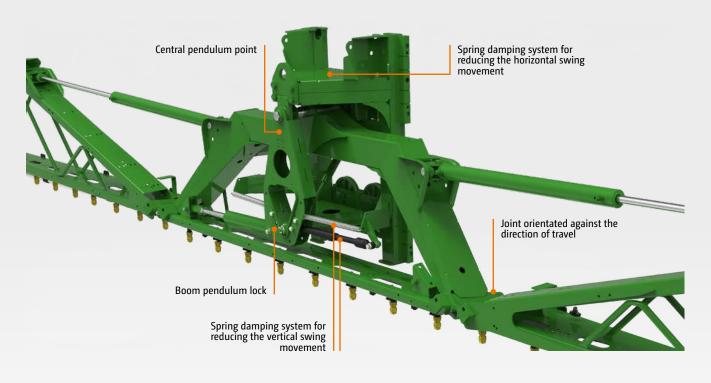
# Three important elements for excellent boom guidance

Super-S2 booms come as standard with:

- central pendulum suspension for the optimum boom guidance on slopes and on level ground,
- combined spring and damping elements for shock-dampening the suspension against vertical forces,
- integrated damping system consisting of braking plates and buffer blocks to damp down the horizontal yaw movement.

The shock-absorbing suspension with a hydraulic accumulator in the parallelogram guides the Super-S2 boom at the right height above the target with ease.

### Super-S2 boom suspension





UX 4200 Special with a 27 m Super-S2 boom



In transport position

# AMAZONE booms – an idea becomes reality

#### 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.

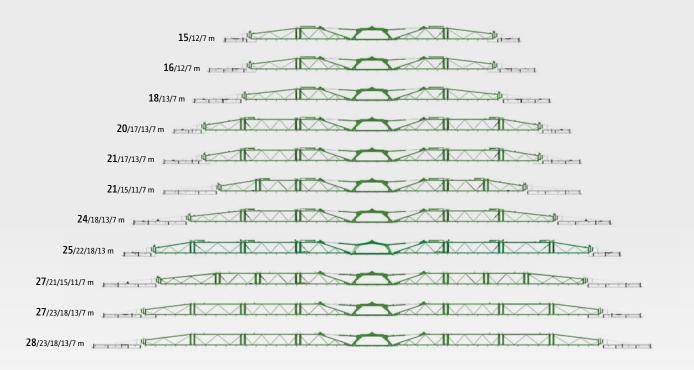
#### **Everything in its place!**

The boom locates safely in the transport hooks. No rattling, no wear susceptible boom thar can clash on the tractor. High road speeds are not a problem.

#### 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.

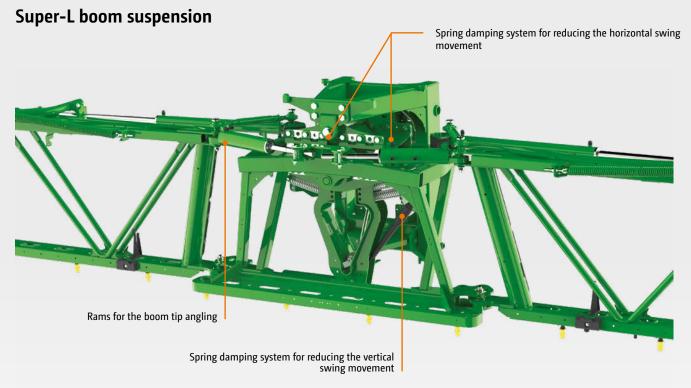
### Potential folding widths of the Super-S2 boom



# Super-L2 boom

Super-stable, super-light and super-compact







UX 5200 Special with a Super-L2 boom

3-section 2,400 mm 4-section 2,650 mm



In transport position

# The first-class Super-L boom – smooth-travelling and precise application comes as standard

Thanks to the central pendulum suspension, the Super-L booms are guided with ease, even in their standard execution.

#### The benefits:

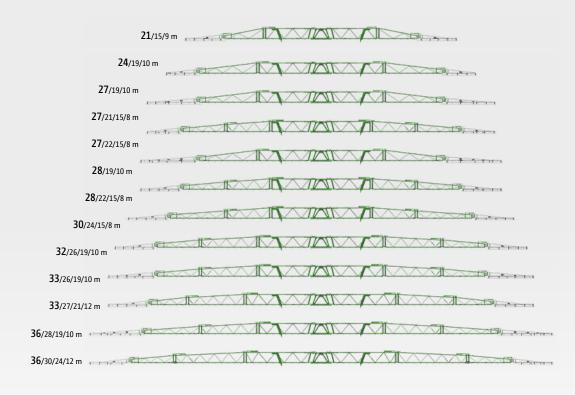
- a particularly long central pendulum system means easy parallel guidance of very wide booms
- combined spring and damping elements for shock-dampening the suspension against vertical forces
- integrated damping system consisting of braking plates and buffer blocks to damp down the horizontal yaw movement

# Super-L2 boom in working widths from 21 to 36 metres

A distinctive feature of the Super-L2 booms is the supernarrow transport width even with working widths of up to 36 m.

Working width	Transport width	
all 3-section booms with 21 m – 24 m - 27 m - 28 m	2.40 m	
all 4-section booms with 27 m - 28 m – 30 m - 32 m - 33 m - 36 m	2.65 m	

### Potential folding widths of the Super-L2 boom



# The outstanding made easy!

### **Pre-select folding**

One-sided, independent folding via tractor spool valves is possible with the AmaSpray<sup>+</sup> or an ISOBUS terminal.

The high level of flexibility offered by the pre-select folding function enables all boom sections to be folded individually. No matter whether left or right hand, both sides can be individually folded in independently of each other to adapt to any conditions in the fields.



### Profi-fold 1

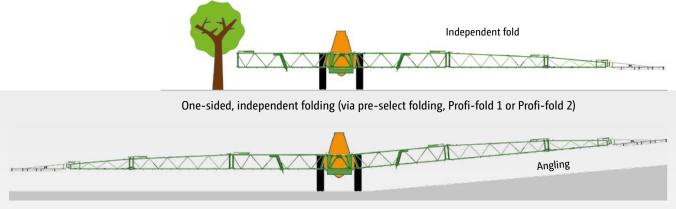
All the hydraulic functions can be carried out safely and simply via the ISOBUS terminal in the tractor cab. The multi-function joystick makes handling particularly comfortable.

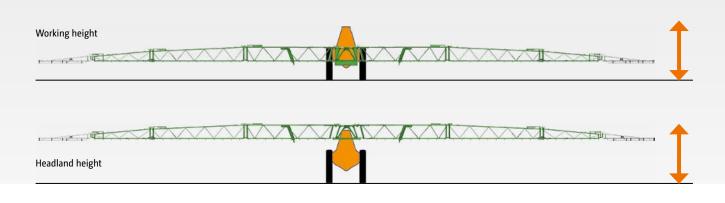
#### The following functions are possible:

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

### Profi-fold 2

In addition to the functions of Profi-fold 1, Profi-fold 2 enables both independent folding and individual angling of the boom tips.





# AutoLift – the comfortable automatic headland system

The AutoLift automatic boom lift (standard equipment) lifts the boom to the pre-selected height every time the machine is switched off. It lowers back down again to the target height when the sprayer sections are switched on. This reduces the risk of damage to the boom while turning on the headland.

### 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. If the crop height varies greatly or there are areas with partially lodged corn, the boom could dip into the crop when equipped with 2 sensors. In this case, equipping the boom with 4 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 the plant protection agent, whilst the computer optimises the boom guidance!

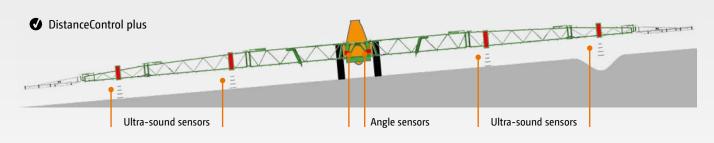
#### Automatic boom lowering via GPS-Switch

The GPS-Switch function in the operator terminal can be used to start lowering the boom before it reaches the untreated area. This means that the boom is already at the correct working height when the nozzles come on. The only requirement for this function is a field boundary saved in the GPS-Switch display in the AMAZONE ISOBUS terminal.

#### Benefits of the DistanceControl boom guidance

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





# **Overview: boom guidance**

For any demand the right solution







Product type	UX Special				
Folding	Standard	Pre-select folding	Profi-fold 1	Profi-fold 2	
Automatic boom guidance (option) Number of relevant sensors	DistanceCor 2 (				
Number of spool valves	2 double-acting / 3 double-acting		1 single-acting + free flow return / Load-Sensing system ( optional equipment)		
Sprayer boom folding in and out	controlled remotely (spool valve)		controlled remotely (terminal)		
One-sided boom folding		controlled remotely (spool valve)	controlled remotely (terminal)		
Folding in to a reduced working width	controlled remotely (spool valve)		controlled remotely (terminal)		
Break back protection at reduced working width	Optional equipment				
Height adjustment	controlled remotely (spool valve)		controlled remotely (terminal) / automatically via DistanceControl		
Boom lift on the headland				notely (terminal) / via DistanceControl	
Adjustment of tilt	controlled remotely (spool valve) controlled remotely (terminal) / automatically via DistanceContro				
Independent / both-sided positive boom angling				automatic	

# **TG part-width section valves**



### **Electrically-controlled TG valve chest**

The TG part-width valve chest with up to 13 part-width sections is available with ISOBUS control and AmaSpray<sup>+</sup>. The part-width 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. A unit with equal pressure compensation is not required with this system.



# DUS pressure recirculation system

Efficient and reliable



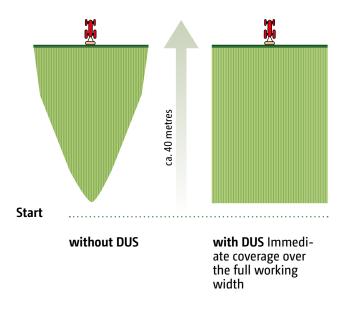
DUS pressure recirculation system

# 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.

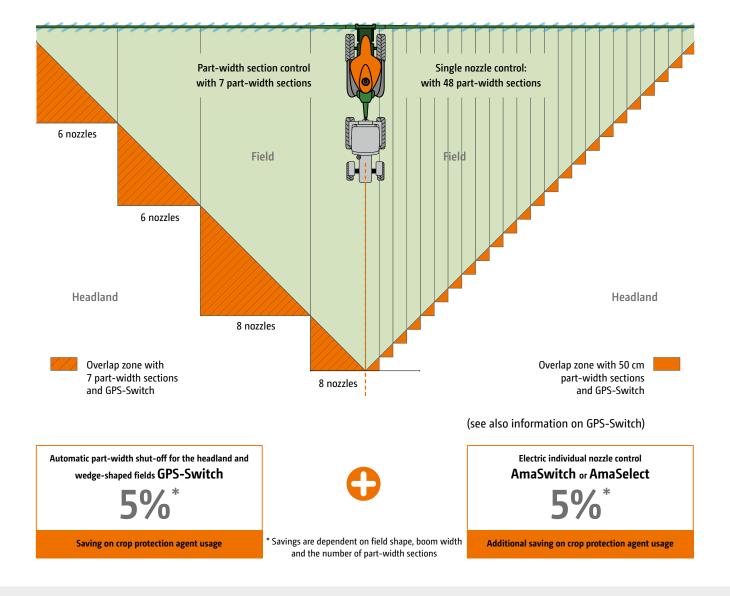


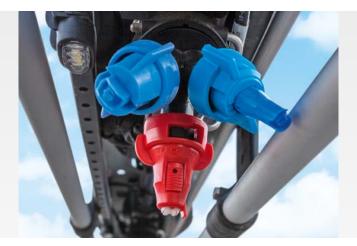
#### from the pump Pressure relief valve Part-width section shut-off valve to the tank. Pressure regulator delivers a stream of spray liquid to the pressure reduction valve which flows under low pressure to the throttle valve. The spray agent is now allowed to travel in the reverse direction back to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

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

# Electric single nozzle control AmaSwitch and AmaSelect

### Example: 24 m boom width





AmaSwitch electric single nozzle control



AmaSelect electric individual nozzle control

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### **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 demand on crop protection (e.g. potatoes, beet), the 50 cm part-width section control is particularly cost-effective

#### 9 8 7 Annual overlap [%] 6 5 4 3 2 1 0 Farm 1 Farm 2 Farm 3 2,300 ha 185 ha 400 ha Level of equipment on crop protection sprayers: 9 part-width sections 11 part-width sections 13 part-width sections 50 cm part-width section individual nozzle control

### **Comparison of systems:**

Standard valve chest	AmaSwitch 3-fold	AmaSwitch 4-fold	AmaSelect
up to 13	up to 72	up to 72	up to 72
-			
1, 3, 4	3	4	4
			-
-	-	-	
-	-	-	
-	-	-	
-			
-	-		
-			
	valve chest up to 13 –	valve chest         3-fold           up to 13         up to 72           -         -           1, 3, 4         3           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	valve chest         3-fold         4-fold           up to 13         up to 72         up to 72           -         -         -           1, 3, 4         3         4           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -

# AmaSwitch

Electric individual nozzle switching with 50 cm part-width sections

# The simple solution for automatic 50 cm part-width section control

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 part-width 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.

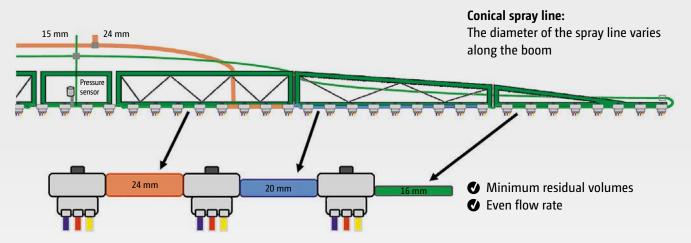
# Equipped with the DUS pro pressure recirculation system as standard

As in the case of DUS, the spray pressure in DUS pro is constant up to the individual nozzle and remains at the pre-set spray pressure. In addition, minimal residual spray volumes are achieved thanks to the conical spray lines.



AmaSwitch 3-fold nozzle body

## DUS pro – constant spray pressure with minimal residual volumes



DUS pro high-pressure circulation system with conical spray line, such as on AmaSwitch, as an example



AmaSwitch 3-fold nozzle carrier 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, the 50 cm partwidth sections can therefore be switched very precisely in wedge shaped fields 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.

### 4-fold nozzle body with electric on/off switching

In addition to the 3-fold nozzle body, AmaSwitch electric single nozzle control can also be equipped with a 4-fold nozzle body.

### With true 25 cm nozzle spacing

The 4-fold nozzle body enables a perfect 25 cm nozzle spacing to be achieved with the aid of the 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 4-fold nozzle body



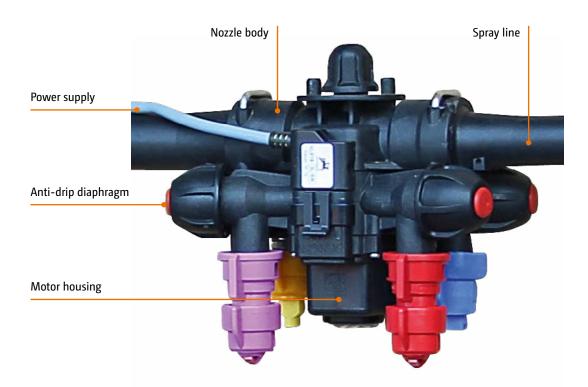
AmaSwitch with 4-fold nozzle body and extension kit for a perfect 25 cm nozzle spacing

# AmaSelect

Electric individual nozzle switching with 50 cm part-width sections

# 4-fold nozzle body with automatic electric nozzle switching

The electric AmaSelect individual nozzle control consists of a 4-fold nozzle body with electric on/off control plus the additional switching over of either a nozzle or a combination of nozzles. In addition to the 50 cm part-width sections, which can be switched automatically via GPS-Switch, the system offers electrical switching between the four mounted nozzles via the operator terminal or even completely automatically if the forward speed or application rate is changed. This offers the possibility, for instance when leaving the optimum pressure range of a nozzle, to switch on a second nozzle or to changeover to a larger nozzle.



AmaSelect - components of the system





# Automatic 50 cm part-width section control via GPS-Switch with Section Control

The automatic control of individual nozzles in 50 cm partwidth sections is made possible by combining the Ama-Select single nozzle control with GPS-Switch (with Section Control). This enables the amount of overlap to be considerably reduced, meaning that there is a significant saving of spray agent.

# High-End as standard – LED individual nozzle lighting and DUS pro

AmaSelect is equipped with the DUS pro high-pressure circulation system and LED individual nozzle lighting as standard.

### With true 25 cm nozzle spacing

As an option, the AmaSelect nozzle body can also be equipped with an off-set kit giving 25 cm nozzle spacing. This offers the benefit, in combination with specific 80° nozzles, to reduce the boom to target surface height down to less than 50 cm.

# Flexible configuration of working widths and part-width sections

AmaSelect enables any number of part-width sections with any number of nozzles to be freely configured. Just for farmers or agricultural contractors with different tramline systems, a simple matching of the nozzle switching with the relevant working width is possible.



AmaSelect electric single nozzle control with a 4-fold nozzle body and 50 cm or 25 cm nozzle spacing

# The right nozzle choice

The basis for success in crop protection



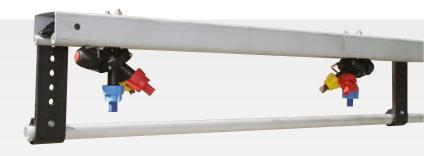
# Less drift also at higher wind speeds

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 their tendency to drift above 3 bar.

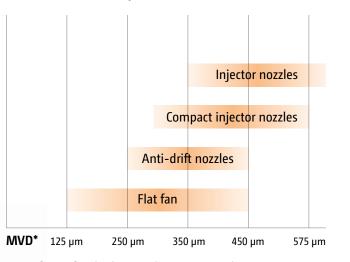
A good compromise is provided by the modern ID-K or Airmix compact injector nozzles. These have relatively little drift, but do not have too coarse a droplet spectrum and are operated at 2 to 4 bar.

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 droplet medium extremely coarse very coarse droplet droplet droplet droplet droplet

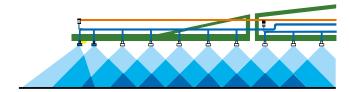
\* mean volumetric diameter

# More precision. More success.

Professional crop protection technology from AMAZONE

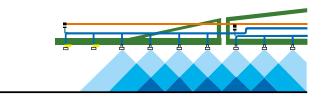


Electric boundary nozzle switching – For environmentally-friendly spray application at the field edge



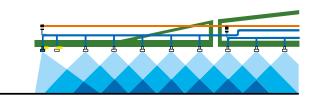
#### Additional nozzle switching

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.



Drag hoses on the Super-S2 boom Stainless steel weight on the drag hose

### Drag hose equipment

The drag hose equipment for Super-S2 booms consists of an additional spray line unit and a drag hose set.

The drag hose equipment for the Super-L boom consists of a drag hose set and can be combined with an AmaSwitch 4-fold nozzle body or AmaSelect as well as an extension kit for 25 cm nozzle spacing.

Stainless steel weights help keep the position of the drag hoses in the crop.



Drag hose equipment with an AmaSwitch 4-fold nozzle body and an extension kit on the Super-L2 boom.

### Liquid fertilisation

UX trailed sprayers are particularly suited to liquid fertilising: the use of high grade plastic material, a good paintwork and the virtually exclusive use of stainless steel ensures a long life even with liquid fertiliser operation.

### **Under-leaf spraying**

Elegant solutions for successful under-leaf spraying are also possible in combination with AMAZONE crop protection sprayers. For example, the Dropleg system from Lechler is a light and robust under-leaf spraying system for the Super-S2 boom which hangs freely between the rows.

#### **Multi-hole nozzles**

3- or 7-hole nozzles or FD sluice nozzles are also available for the coarse droplet application of liquid fertiliser on request.









# **Options for all applications**



#### **UED** individual nozzle lighting

Today, a professional work light system is the basis for flexible, high-performance operation in low-light conditions and at night. The LED individual nozzle lighting picks out each individual spray fan. An instant assessment of their operation down to the very last nozzle on the boom can be made.





#### **Optional camera system**

The optional camera system (only in conjunction with the ISOBUS terminals AmaTron 4 and AmaPad 2 or an external monitor) provides more safety at the rear in unclear driving situations. The system is also a super aid for monitoring the function of the nozzles directly behind the machine. This is ensured even in rain, twilight or in darkness via infrared LEDs and a heated lens. The high resolution, antiglare monitor is backlit and can also display two cameras at once.

### LED work lights

Boom lighting is provided by two LED work lights mounted in the centre of the boom and, from here, due to their wide-reaching illumination; prove to be a particularly effective execution.

Two further LED work lights to give additional background lighting can be mounted up on the platform.

### External wash kit

The crop protection sprayer can be thoroughly cleaned directly after use with the spray lance of the external wash kit.



# AmaSpray<sup>+</sup>

The machine-specific operating computer

### Simple and versatile

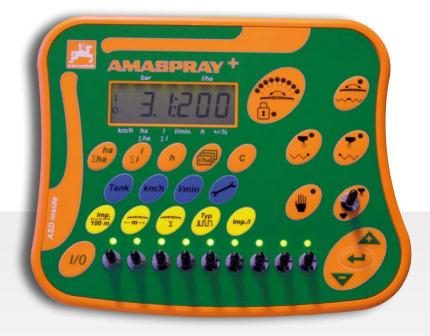
As an alternative to the ISOBUS terminals, AmaSpray<sup>+</sup> allows the simple yet fully automatic regulation of the UX Special trailed sprayers. The buttons, integrated in the operator terminal, enable the switching of 5, 7 or 9 part-width sections. AmaSpray<sup>+</sup> has a digital pressure display and digital tank level indicator. It records the quantity applied and area worked. The hydraulic functions are operated using the spool valves on the tractor. Boom tilt and pendulum lock are also displayed in the AmaSpray<sup>+</sup>. As an option, AmaSpray<sup>+</sup> enables one-sided folding of the boom or, alternatively, access to the boundary and end nozzle spraying systems.

#### 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 lock status
- Hectare meter (total and daily counter)
- 🔮 +/- 10 % key
- Field record management system

#### Additional functions (with optional equipment):

- Pre-select fold for independent boom folding
- End or boundary nozzle on/off control (as an alternative to pre-select fold)
- Fold or tilt via 1 double-acting spool valve (electro-hydraulic changeover valve)
- ASD inside: serial interface for documentation and GPS terminal versatility



With the ISOBUS terminals (see the section on ISOBUS), you also have further operator terminals available for operation

# ProfiClick

The small switchbox with a huge comfort factor



ProfiClick mounts conveniently on the AmaSpray<sup>+</sup>

### The perfect supplement

The ProfiClick control box provides simple and precise control over the hydraulic booms and steering functions on the AMAZONE UX Special. The ProfiClick control box is available in combination with the electro-hydraulic Profi-fold 1. 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 or for the automatic steering of a trailed sprayer can be controlled on the move without looking thanks to the detent position in the centre. So the driver can concentrate perfectly on driving. The ProfiClick control box, used for the actuation of the hydraulic functions of an AMAZONE sprayer, can be combined with the AmaSpray<sup>+</sup> in-cab terminal, the AmaTron 3 operator terminal or with any other ISOBUS terminal. Thus it offers a cost-effective and comfortable control of the hydraulic functions via an oil circuit. On the tractor, only one single acting spool valve with a pressure-free return flow is required.





# ISOBUS as the basis for intelligent communication

### One language, many benefits!

Each ISOBUS-enabled machine from AMAZONE comes with the latest technology and almost unlimited possibilities. It makes no difference whether you use an operator terminal from AMAZONE or an ISOBUS terminal fitted directly in the tractor. ISOBUS is an internationally recognised standard for communication between the operator terminal, tractors and connected implements on the one hand and Farm Management Information Systems on the other.

## Operation with a wide variety of ISOBUS terminals

Which means that ISOBUS enables you to take control of all your ISOBUS compatible equipment. You only have to connect the machine to the respective ISOBUS terminal and the usual operator interface appears on the monitor in your tractor cab.

#### Benefits of ISOBUS at a glance:

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







# Perfectly developed machine operation from AMAZONE

# AMAZONE machinery and operator terminals offer a range of functions which are very easy and safe to operate:

- Highest compatibility and function flexibility of your ISOBUS equipment
- No additional modules on the machine side. All ISOBUS machines from AMAZONE come ready-equipped with the necessary ISOBUS functions as standard
- Practice-oriented machine software and logical menu structure
- MiniView display with all AMAZONE terminals and additional ISOBUS terminals. See, for instance, the machine data in the map view.
- Possibility of operating the machine via the tractor terminal or a twin terminal solution
- Flexible assignment of the map and machine view between the tractor terminal and the operator terminal
- Unique operating concept. Freely configurable displays and individual user interfaces for each driver
- Useful additional functions such as automatic boom lowering on AMAZONE crop protection sprayers
- Integrated TaskController data logger function



Clearly-structured AMAZONE machine operation

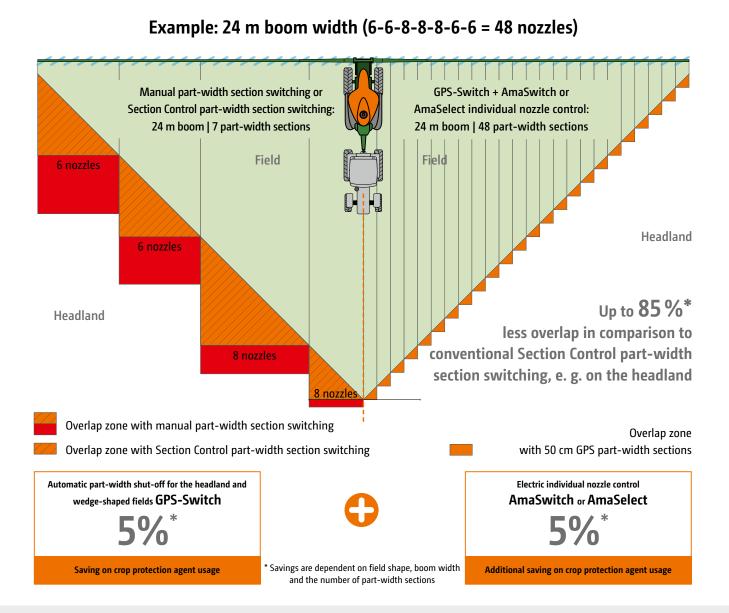
#### Advantages of the AMAZONE machine software:

- User-oriented and intuitive
- Tailored to the machine
- Function scope above and beyond the ISOBUS standard



Clear display of the work menu in the AMAZONE machine operation

# Automatic part-width section control GPS-Switch



### 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 in, depending on field shape and size, the working width and number of part-width sections, significant savings of spray agent compared with a normal spraying system used thus far.



Overlaps on the headland or in wedge shaped fields are prevented via precise switching with GPS-Switch.

If the operating terminal facilitates Section Control, such as GPS-Switch part-width section control from AMAZONE, the part-width sections are activated completely automatically and in relation to the GPS position. Once a field has been created, and once in automatic mode, the driver can concentrate fully on the operation of the towing vehicle, since the part-width sections are switched automatically in wedge shaped fields and on headlands.

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

- Stress relief for the driver
- Increase in precision, especially at night or at higher speeds
- Less overlaps and gaps
- Saving inputs
- Less crop damage and environmental impact
- With Section Control, the ISOBUS terminal takes on so much of the work from the driver."

("dlz agrar magazine" – test report ZA-TS fertiliser spreader  $\cdot$  02/2017)

### **GPS-Switch**

With GPS-Switch, AMAZONE offers 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 with up to 16 part-width sections
- Creation of a virtual headland
- Automated boom lowering with an AMAZONE crop protection sprayer
- Optional with AmaTron 4

GPS-Switch pro (as an add-on to GPS-Switch basic)

- Automatic part-width section control with up to 128 part-width sections, particularly for crop protection sprayers with individual nozzle control
- Marking of obstacles (e.g. water holes, pylons)
- Auto-zoom when approaching the headland
- Optional with AmaTron 4

#### AmaClick

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 AmaPilot<sup>+</sup> multi-function joystick or also as a standalone system alongside an ISOBUS terminal.



# Workday made easy –

Make the most of the possibilities!

### GPS-Maps&Doc

All standard ISOBUS terminals from AMAZONE can collect and save machine and site-specific data using Task Controller. Part-area, site-specific operation via application maps in either Shape file or ISO-XML formats is also possible.

- Seasy creation, loading and processing of jobs
- Start a new task straight away and decide later whether the data is to be saved or not
- Import and export jobs in ISO-XML format
- Job summary via PDF export
- Intuitive system for processing application maps in either Shape file format and ISO-XML format
- Automatic part-area, site specific regulation of the application rate
- Indication of inactive field boundaries and automatic field detection when approaching the vicinity
- Optimum crop management via needs-based application
- Available as standard with AmaTron 4

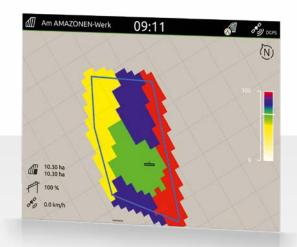
### GPS-Track

The GPS-Track parallel guidance greatly helps with orientation in the field, especially on grassland or in areas without tramlines.

- With a virtual light bar in the status bar
- Automatic tramline control via GPS for seed drills
   Various track modes such as A-B lines or contour following
- Optional with AmaTron 4

### AmaCam

- Software licence for displaying a camera image on AmaTron 4.
- Automatic display of the camera image on AmaTron 4 when reversing



Display of the application map in AmaTron 4



Display of the camera image in AmaTron 4

AmaTron 4

Manager 4 all



# Simple and convenient operation as intuitive as your tablet

Why not handle a terminal as intuitively as a tablet or a smartphone? With this in mind, AMAZONE has developed the operator-friendly AmaTron 4 which offers a noticeably smoother operational procedure, 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 use of the App carousel allows quick changes between applications and the simple and clearly structured operating menu. A useful MiniView, a freely configurable status bar as well as a virtual light bar make the use of the AmaTron 4 particularly clear and convenient.

#### Benefits of AmaTron 4:

- Automatic full screen mode when not being touched
- Automatic display of the touch buttons via a proximity sensor
- Practical MiniView concept
- Actuation via the multi-touch colour display or soft keys
- Particularly intuitive and user-friendly
- Field-related documentation
- Practice-oriented and intelligent menu navigation
- Practical quick-start menu with import and export of job data, help windows, day/night mode and the AUX-N assignment
- One camera input and automatic reversing detection
- Free trial period for all chargeable licences
- AmaTron Connect for the optional entry into the digital age

Equipped as standard with:





### AmaPilot<sup>+</sup> – everything in the one hand!

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

#### Advantages of AmaPilot+:

- Nearly every function is controlled directly via the 3 levels
- Adjustable palm rest
- Freely-programmable, individual key layout

UX Special

# AmaTron Connect

New ways of comfortable networked operation

With AmaTron Connect, AMAZONE provides a digital interface to a smartphone or tablet. The mobile device and AmaTron 4 are simply connected as a hotspot. AmaTron Connect enables use of the AmaTron Twin App as well as data exchange via agrirouter and the myAmaRouter App.

### AmaTron Twin App

**Clear display enhancement** 

The AmaTron Twin App offers the driver even more comfort during work, as any GPS functions in the map view can also be operated via a mobile device, e.g. a tablet, in parallel with machine operation on the AmaTron 4.

# Now download the free App and try the DEMO in the App.



Everything in view at all times with the AmaTron Twin App and the holder kit for a tablet for rigid mounting on the AmaTron 4

#### Advantages of the AmaTron Twin display enhancement:

- Use of an existing mobile device
- Greater clarity all applications in sight
- Comfortable control of the GPS functions in the map view, in parallel, via the mobile device
- Clear, authentic representation of the working machine and its part-width sections



Alternative map views with AmaTron Twin – clear display of the machine and its part-width sections, as well as buttons on the right hand side of the mobile device.

# agrirouter –

the independent data exchange platform for agriculture

### Secure data exchange

agrirouter is an independent data exchange platform for farmers and contractors. It enables simple and crossmanufacturer data exchange between machines and agricultural software applications, thereby reducing administration. The user retains full control over the data at all times.

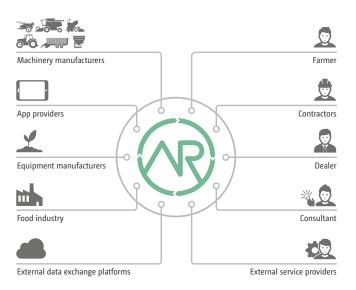
### myAmaRouter App

For the on-line transfer of data between AmaTron 4 and agrirouter

The myAmaRouter App enables data to be exchanged between the AmaTron 4 ISOBUS operator terminal and the agrirouter manufacturer-independent data exchange platform. If an AMAZONE machine is to be used to carry out a task with job data (e.g. application maps), the data can be easily transmitted from a Farm Management Information System (FMIS) to AmaTron 4 via agrirouter and the myAmaRouter App. After the work has been completed, the job can be sent back and is available for documentation in an agricultural software application. Ready for agrirouter

Watch the video for more details





The manufacturer-independent agrirouter enables secure and uncomplicated data exchange.

#### Benefits of agrirouter:

- Simple data exchange between the AmaTron 4 ISOBUS operator terminal and the manufacturer-independent agrirouter data exchange platform
- Easy and rapid transfer of job and task data without the need for a USB stick
- More flexibility in data exchange and documentation

### Uncomplicated data transfer. Transparent and secure!



# AMAZONE – always in your vicinity

Your satisfaction is our challenge



# The satisfaction of our customers is the most important objective

We rely on our expert sales partners for this. Also for service queries they are the reliable contact partner for end users and contractors. Due to continuous training, our sales partners and service technicians are always up to date when it comes to looking after our state-of-the-art technology.

# We provide you with a first class spare parts service

The spare parts centre in Tecklenburg-Leeden is the base for our worldwide spare parts logistics system. This ensures optimum availability of spare parts, even for older machines.

Orders for parts in stock at the Tecklenburg-Leeden spare parts centre which, if placed by 5 p.m., leave our premises the same day. 42,000 different spare parts and wearing metal parts are handled and stored via our modern warehousing system. Up to 1,000 orders are sent out to customers every day.





# Better to choose the original right from the start

Your machines are subjected to extreme use! The quality of AMAZONE spare parts and wearing metal offers you the reliability and security you need for efficient soil tillage, precise sowing, professional fertilisation and successful crop protection.

Only original spare parts and wearing metal parts provide the durability and functionality expected from AMAZONE machinery. This guarantees an optimum quality of work. Original parts at fair prices pay for themselves in the end.

So opt for the original!

### The advantages of original spare parts and wearing metal parts

- Quality and reliability
- Innovation and efficiency
- Immediate availability
- Higher resale value of the used machine



# SmartLearning – Interactive driver training on the App or on a computer

With the "SmartLearning" tool as an App on your smartphone, on-line or as a download version for your computer, AMAZONE offers a useful function to make it easier for you to work efficiently with our machinery and terminals.

"SmartLearning" is an interactive training programme which gives drivers the opportunity to familiarise themselves with the operation of the machine before using it for the first time. However, experienced drivers can also refresh their knowledge here, in order to make even better use of the potential performance of their machine.

Via our homepage as an on-line version or for download: www.amazone.net/smartlearning

#### Or as an App on your smartphone:





# Crop protection technology from AMAZONE

Benefitting from more than 50 years of experience



# Technical data: UX Special trailed sprayers

Model	UX 3200 Special	UX 4200 Special	UX 5200 Special	
Nominal volume (I)	3,200	4,200	5,200	
Tank capacity (I)	3,600	4,600	5,600	
Fresh water tank (l)	320	550	550	
Working width (m)	15-36			
Transport height (m)	Super-S2 boom: 3.25 – 3.40 Super-L2 boom: 3.35 – 3.50			
Transport length (m) with Super-S2 boom	6.25 – 6.50	6.85 – 7.30		
Transport length (m) with Super-L2 boom	6.40 – 6.65	5.40 – 6.65 7.25 – 7.50		
Transport width (m) Super-S2 boom		2.40		
Transport width (m) Super-L2 boom		3-section 2.40 4-section 2.65		
Empty weight (kg)	2,908 - 3,344	2,998 - 3,434	3,096 – 3,652	
Pump capacity (I/min)	260,	260/380		
Max. suction capacity (l/min)	400,	400/500		
Ground clearance		up to 0.82 m		
Spraying height		0.5–2.5 m		
Operating pressure, max. (bar)		10		

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.

The small alternative: UG trailed sprayer For smaller farms, AMAZONE offers the UG trailed sprayer with tank capacities of 2,200 or 3,000 litres.

More information can be found in the separate brochure for the UG.

The big alternative: UX Super trailed sprayer For larger farms, AMAZONE offers the UX Super trailed sprayer with tank capacities from 4,200 to 11,200 litres.

More information can be found in the separate brochure for the UX Super.











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