# **Pantera**



## **Highly intelligent**

With the Pantera you are in the ideal position to meet the challenges thrown at you in crop protection. Stateof-the-art technology and management systems are brought together in this self-propelled sprayer. They constitute the basis for the Pantera concept for large farms and contractors and are an important part of intelligent plant production.

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### Pantera – the concept:

#### Intelligent in-cab management

The spacious cab, with its air-suspended driver's seat and optimum all-round visibility makes for safe travelling and leaves you relaxed even after a long working day.

#### Intelligent operational management

Via the multi-function joystick and the AMADRIVE operator terminal, the Pantera offers comfortable and simple operation. At the same time, the AMATRON 3 on-board computer with its integrated GPS-Switch and GPS-Track systems make life enormously easier.

#### Intelligent chassis management

The unique tandem chassis provides a smooth, horizontal boom travel. Simultaneously, it ensures stability on slopes and offers a very simple to operate track width adjustment.

#### Intelligent drive-line management

The powerful 200 HP engine and the engine management system with either ECO or POWER mode results in the best fuel efficiency. The drive is extremely smooth, with infinitely variable hydrostatic drive from 0 to 40 km/h with no switchover between speed steps (the permissible maximum speed may vary, depending on the national road traffic regulations).

#### Intelligent plant protection management

Thanks to the Super L-boom with working widths of up to 40 m and Distance-Control automatic boom guidance you can fully concentrate on the applying the correct amount of chemical.

#### **Optimum service**

AMAZONE machinery stands for the highest efficiency and the best quality. With expertise and quick solutions, our sales partners and the back-up of AMAZONE service, we are always by your side.

### "Speed-Spraying"

# For more output in plant protection spraying

AMAZONE offers various levels of specification for increasing the speed, efficiency and cost-effectiveness of filling, transportation and cleaning. AMAZONE combines these technical benefits for enhanced crop protection application under the generic term "Speed-Spraying".







## Get in and drive off! But above all, stay relaxed

In the spacious driver's cab of the AMAZONE Pantera, you enjoy the highest possible level in creature comforts, the best all-round visibility and top operator convenience. In this way you are always in control of the self-propelled sprayer.



#### You will enjoy every working day...

#### ...when you sit in this cab:

- √ Superb sound insulation
- √ Convenient, wide access with hydraulically folding ladder
- ✓ Electrically adjustable and heated exterior mirrors
- ✓ Additional mirror for best view of the front wheel
- ✓ Air filter in the roof cover
- ✓ Automatic air-conditioning
- ✓ Air-cushioned driver's seat with numerous adjustment possibilities
- √ Spacious, folding passenger seat

- Height and longitudinally adjustable arm rest with integrated controls
- ✓ Adjustable steering column for rake and height
- $\checkmark$  Large cool box under the passenger seat
- ✓ Document compartment
- ✓ CD radio with Bluetooth hands-free telephone facility
- ✓ Sun visors for front and rear windows
- ✓ Option: active carbon filters



# Feel at home – by day and night

The lighting concept of the Pantera offers you, the driver, the best view of the road, the field and the machine even at dusk or at night.

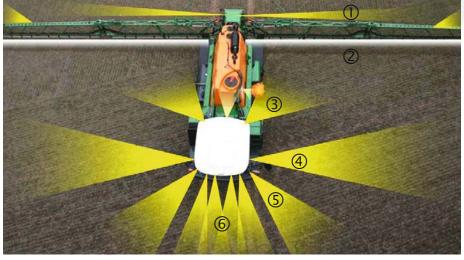
#### The standard equipment includes:

- √ 6 work lights in the roof cover (4 + 2)

  Optional equipment: Xenon work lights
- ✓ Side view work lights for lateral illumination
- ✓ Work lights on the operator terminal and the fuel tank

As an option available for the Pantera boom: 4-way work lights or as the optimum LED lighting for each individual nozzle.

# Lighting equipment for long yet safe working periods



- ① Work lighting (option)
- ② LED individual nozzle lighting (option)
- 3 Boom work lights
- Side view work lights
- Side work lights
- 6 Front work lights



LED individual nozzle lighting

# Multi-function joystick controls both the vehicle and the sprayer – all functions to the one hand

Whether using the drive lever or operator controls for the spraying functions – with the multi-function joystick in the Pantera – many functions come safely to one hand.

"Get in and drive off" is the motto! Drive to the machine is infinitely variable and has an intuitive feel via the multi-function joystick. In cruise control, and with the maximum forward position of the multi-function joystick, the Pantera achieves speeds of up to 40 km/h on the road, and in the field, the pre-selected desired operating speed (the permissible maximum speed may vary, depending on the national road traffic regulations). Pulling the control lever to the rear actuates the newly developed hydrostatic dual circuit braking. This automatically actuated hydraulic auxiliary braking assists the driver in all situations. The highest sensitivity on start-up and when manoeuvring is guaranteed. This is normally sufficient for a sensible reduction of the speed on the road or in the field. Only in exceptional cases does one need to operate the foot brake as well.

You can also control the entire steering management via the multi-function joystick: On/off control of the all-wheel steer and manual dog leg steer or re-alignment in sloping terrain are all possible.

Of course, many of the sprayer functions can be operated via the multi-function joystick: Part-width section and boom control, plus additional functions such as boundary nozzle on/off and the +/- % spray rate increase button.



Multi-function joystick AMADRIVE for vehicle functions AMATRON 3 for spraying functions

#### **AMACLICK with AMATRON 3**

Special crops often require the on/off control of the individual part-width sections. AMACLICK is another ergonomic operating unit which can be used in conjunction with the joystick, or if required, also solely with AMATRON 3.



# Everything under control, everything to view – with AMADRIVE for all vehicle functions

Simply brilliant – the AMADRIVE touch-screen monitor for vehicle operation and the monitoring of the Pantera.



# With just a light pressure on the touch-screen of the AMADRIVE you can control the following functions:

- √ Cruise control
- ✓ Engine management with Eco or Power Mode
- √ Headland-management
- ✓ Track width adjustment
- √ Adjustment of the spray pump speed
- Control of the work lighting on the vehicle and booms

## Via the AMADRIVE display a variety of data can be recalled as well:

- Forward speed and engine revs
- √ Fuel tank level and engine temperature
- ✓ Diagnostic data of engine and hydraulic system



The pictures from the optionally available rear-view reversing camera and the camera for the right front wheel are also displayed on the high-quality colour screen.

#### High-quality camera technology:

- ✓ Large 135° viewing angle
- ✓ Camera with heating and lotus coating
- Clear picture even after dark thanks to infrared night vision technology
- ✓ Automatic back light function

# AMATRON 3 – the terminal for all plant protection functions

Thanks to the handy and clear AMATRON 3 on-board computer, you only need one terminal for the operation of the different boom and spray liquid circuit functions. On AMATRON 3 all relevant data is clearly displayed and the few necessary settings are quickly and easily done.

AMATRON 3 features illuminated buttons and a high resolution, high contrast screen. All the information about the control of the sprayer is shown on the one display. Depending on the driving conditions and according to personal taste, you may choose either spraying function or the GPS function as a detailed view.



## AMATRON 3 operator terminal – modern and future orientated

The AMATRON 3 on-board computer allows the fully automatic regulation of the pre-set application rate (I/ha). Defined rate changes are carried out quickly and precisely in pre-selected %-steps.

Thanks to its clear, simple and logical menu navigation, this modern on-board computer is especially versatile. The multi-function joystick enables the very comfortable control of the valve chest and boom functions. For monitoring the system, a large, low-reflection display has been incorporated. The very compact shape of the terminal requires little space in the cab of the Pantera.

AMATRON 3 also enables the use of both Distance-Control for the booms, and the Comfort-Pack for the remote control of the spray liquid circuit.

The digital fill-level display ensures a constant and safe fill level monitoring. Via the digital pressure indi-



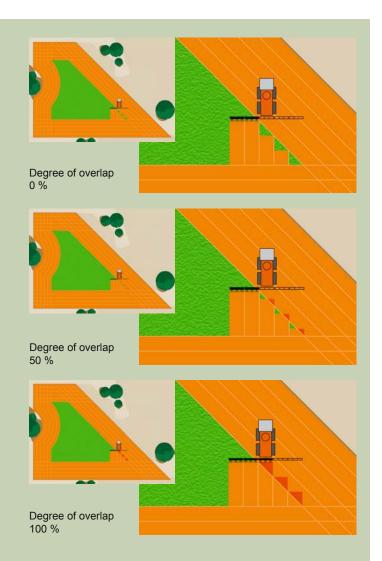
cator AMATRON 3 will constantly display and check the actual pressure.

The computer includes a job management set-up (with 20 field record memories) and the ability to download to an automatic field related documentation (ASD) system is possible. AMATRON 3 also features a serial interface for the connection of GPS terminals and nitrogen sensors.

#### **Automatic steering**

New to the Pantera is the option of automatic steering. The system comprises of a pre-fitted hydraulic valve kit, especially developed for the Pantera, and the AMAZONE System 150 (consisting of the steering system, an AGI-3 receiver with EGNOS correction, GX45 terminal and NMEA output cable). Automatic steering cannot be retrofitted.

### Yet more precision with GPS-Switch and GPS-Track!



Available as special option: the automatic GPS-Switch part-width section control and the GPS-Track parallel driving aid, which are also operated via the AMATRON 3.

#### **GPS-Switch for AMATRON 3:**

This GPS assisted on-board computer system automates the exact control of the machine on the headlands, around the field border and when spraying in wedges. The working width and the arrangement of the part width sections are taken into account.

The automatic GPS-Switch part width section control offers precision, comfort and safety: Simply select the desired degree of overlapping and leave the switching off in automatic mode. So, even more difficult circumstances, such as wider working widths, limited visibility at dawn or dusk or in high crops can be mastered. In addition: you save on plant protection agents and also help to protect the environment. And the driver can fully concentrate on monitoring the performance of the sprayer.



#### **GPS-Track for AMATRON 3:**

The GPS-Track parallel driving aid proves to be an enormous advantage for guidance in the field. It features various track modes, such as A-B line and contour travel and an obstacle function. The bouts are numbered all the way across. The deviation from the true line is shown on the display – clear steering guidance that helps keep you on track. Also the distance to the next bout is precisely indicated – ideal for orientation, for example when finding the correct row in maize.

## The finest chassis technology

# The chassis – light-footed, compact, intelligent!

- ✓ Unique tandem chassis with hydro-pneumatic suspension
  - unique smooth boom guidance
- ✓ Longitudinal tandem for high stability
  level when cornering or when working across slopes
- ✓ Infinitely variable track width adjustment from 1.80 m to 2.40 m
  - for all crops and all customers
- Large ground clearance up to 1.10 m no damage in rape and maize
- Headland management for both steering and boom functions
  - stress relief for the driver and gentle boom treatment
- Narrow transport width compact in road traffic







2-wheel steer 4-wheel steer







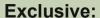
Dog leg steer

### Chassis management: uniquely good!

#### Pantera – with light-footed intelligence

The special tandem chassis of the Pantera not only ensures the perfect adaptation to ground undulations, but also a high boom stability – especially of course, in sloping terrain. Thanks to the level regulated hydropneumatic suspension, the Pantera operator also enjoys the maximum level of comfort.

The combination of this unique chassis design and the proven AMAZONE boom suspension additionally ensures an optimally smooth boom ride even under the most arduous of conditions.

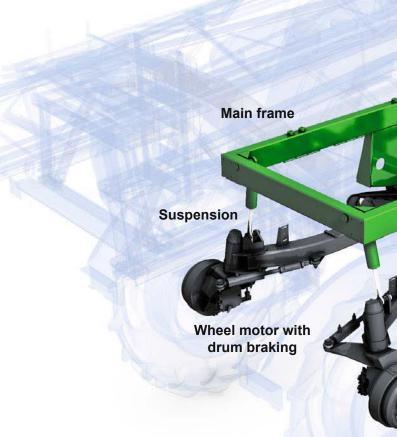


**Automatic suspension management** 

Softer settings for constant forward speeds
Harder setting during acceleration and when
manoeuvring

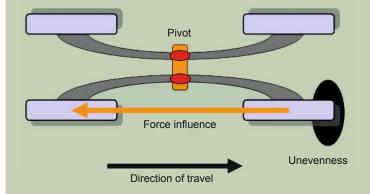
# The advantages of the Pantera chassis concept

- Superbly strong frame with proven chassis components
- Pendulum frame for optimised soil contact and reduced slip
- 3. Comfortable and safe driving behaviour from the longitudinal tandem
- 4. Hydro-pneumatic suspension system with level regulation
- 5. Reliable hydraulic system no air regulation
- Smooth boom ride, reinforced by additional boom parallel damping



#### The unique longitudinal tandem:

#### **AMAZONE** Pantera



The unevenness under the right hand front wheel is compensated by the elongated tandem

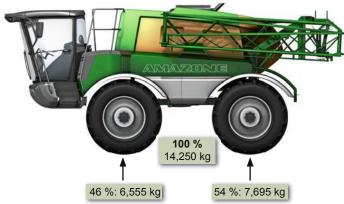
- The pivot point is only slightly lifted
- ✓ Only a slight transmission onto the frame



#### Weight distribution at the optimum!

The even weight transfer to the front and rear wheels is the ideal pre-condition for efficient traction. This is why the Pantera 4001 features, with a full tank, an optimum weight distribution of approximately 50 % - 50 % to each the front and rear axle. Depending on the tank level and the boom type, the weight distribution varies only by around 5%.

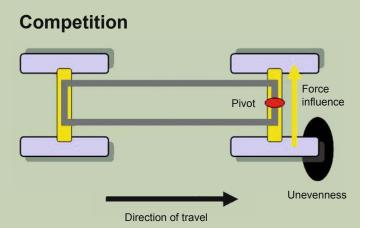
#### Pantera 4001, 36 m, 520/85R38 Unladen weight 9,900 kg



(Weight distribution when full & with the booms folded out)

#### **Traction control as standard**

The drive torque of the four wheel motors is constantly being monitored electronically and then regulated to ensure the optimum vehicle behaviour even under difficult conditions. Power-hunger, physical differential locks are omitted. In the field, even in wet conditions, you will always comfortably get through. However, also on the road the ASR always ensures a safe trip.



## **High daily outputs**

### **Intelligent logistics**

With the optionally offered drawbar, you can pull a two axle water tanker of up to 12 t total weight behind the

Pantera. This makes for very high daily outputs, even when used as a one-man operation.





## Almost unlimited – the superb ground clearance

The big ground clearance of 1.10 m also proves to be an important advantage for the Pantera in practice.

This is an advantage that is of benefit for you especially when spraying rape at flowering, or even also in

taller maize crops – a more gentle plant treatment can hardly be possible. Even the wheel drive lines are additionally covered with stainless steel sheeting.







### Steering management: it has to be manoeuvrable!

## Be relaxed when working – even on the headland

In spite of the vehicle size, the minimal turning circle of the Pantera is only 4.50 m when in all-wheel steer. This is helped by a short wheelbase and sharp steering angle.

With this superb manoeuvrability, the daily acreage outputs can be optimised enormously, especially in small fields.

The switching between 4-wheel and 2-wheel steer is carried out via the multi-function joystick.

The "dog leg steer" function facilitates perfect operation to keep within the wheel marks, even when working on sloping terrain. The steering re-adjustment is also done via pressing a button on the multi-function joystick. Also, in wet conditions and on sensitive soils, the off-set track driving using the dog leg steer proves to be a decisive advantage.

The Pantera shows its intelligence even on the headland: once the headland-management is activated in the AMADRIVE terminal, the all wheel steer is automatically switched on when the sprayer is switched off and when the boom is raised. After switching on again, out from the headland, the two-wheel steer again ensures the perfect boom ride.

The speed-related regulation of the all-wheel steer, offered exclusively by AMAZONE, is a guarantee of an optimised horizontal boom guidance. At speeds of more than 8 km/h the steering angle is automatically reduced, preventing an extreme acceleration of the boom in the direction of travel.

As a special option, AMAZONE offers solutions for GPS assisted automatic steering. This enables you to obtain an exact track-to-track accuracy of only a few centimetres.



## Track width adjustment in no time at all

The fully automatic track width adjustment, fitted as customers. Once the desired track width has been pre-selected, the exact centimetre precise setting is



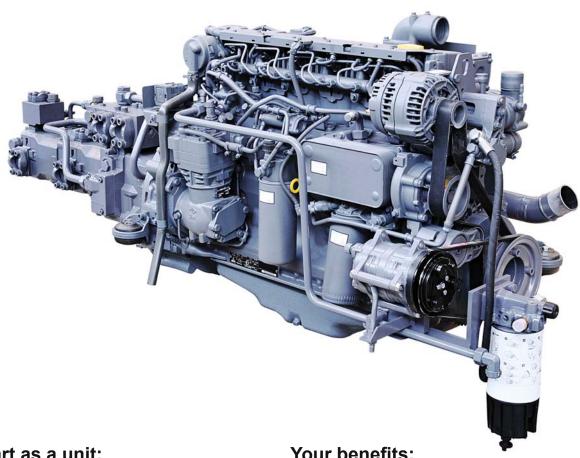
## **Drive-line management with optimised** fuel efficiency

#### Pantera - high-powered intelligence

#### Infinitely variable power

The powerful, 6 cylinder Deutz engine with Common-Rail injection technology and 200 HP convinces by its high efficiency and low fuel consumption. Thanks to the modern hydrostatic drive mechanism, you can drive the Pantera with absolute infinite variability.

This system allows, even at a low engine speeds, high start up torques and a very dynamic acceleration.



#### The heart as a unit: engine and hydrostatic drive

#### 6-cylinder DEUTZ diesel engine 147 kW (200 HP) max. rated

- ✓ Turbocharger with intercooler
- √ Common-Rail injection technology
- 6.06 litres capacity
- Tier IIIA emission standard

#### Your benefits:

- ✓ Infinitely variable hydrostatic drive from 0 to 40 km/h (the permissible maximum speed may vary, depending on the national road traffic regulations)
- √ State-of-the-art fuel management on the road and in the field with ECO and POWER mode
- √ Tailor-made speed regulated radiator fan drive
- ✓ Proven Deutz technology with a comprehensive service network

## Operation at optimum fuel saving: ECO or POWER

The new and optimised engine revs regulation enables you to operate the Pantera always at the optimum fuel consumption efficiency. If ECO mode has been selected in the AMADRIVE terminal, the engine searches for the optimum operating point for torque and revs, depending on the relevant driving situation.

When spraying on the flat, an engine rev reduction down to 1,200 RPM is possible. The automatic rev adaptation takes place constantly and sensibly between 1,200 and 1,900 RPM.

If, however, you are working on steep slopes in hilly terrain, reinstate maximum output of up to 2,300 RPM via the POWER mode.

#### Good power/weight ratio

Of course, also the low unladen weight of the Pantera 4001 (9,300 kg with a 24 metre boom gives a good power/weight ratio) is an advantage for a low fuel consumption. So, the fuel tank volume of 230 litres enables high work rates over long days.

#### Plenty of clean air for good cooling

#### Well thought out cooling systems

- Demand orientated rev regulation at low power and cooler temperatures, even switching off the fans when possible
- √ Layout beyond the reach of dirt
  - left hand: charge air, hydraulics
  - right hand: engine, air-conditioning

#### **Example in ECO mode**

- 1. On the flat, around 80 KW (107 HP) is required
  - the engine runs at 1,300 RPM
- 2. The machine travels up hill: the torque increases under load
  - the speed remains constant
- 3. The slope carries on: the power requirement increases to 120 kW (160 HP)
  - the engine control automatically increases in the revs to 1,600 RPM
  - the speed remains constant at a slightly increased fuel consumption



# Brake management: your safety is paramount!

#### Pantera – safe intelligence

When the speed is reduced the hydrostatic dual circuit braking of the Pantera is activated and elegantly brakes the vehicle down to a complete stop.

Especially noticeable here is that with the hydrostatic deceleration of the vehicle the built-in trailer braking system is also energised early.

With this technology you always brake safely on the road. The air braking system is an important safety feature that enables safe braking, for example, on an emergency stop from 40 km/h or with a filled water tanker on behind (the permissible maximum speed may vary, depending on the national road traffic regulations).





### Modern, high-flow hydrostatic transmission

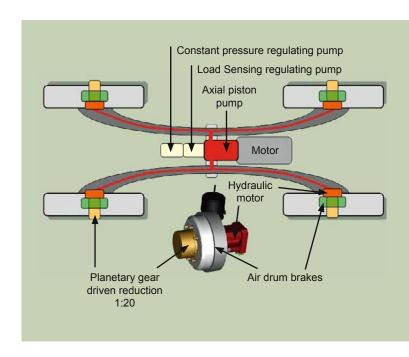
#### Pantera –flexible intelligence

#### Three hydraulic pumps for full capacity

There is a clear division of responsibilities for the high quality Linde hydraulic pumps.

Because of the large diameter wheels, very high torques are needed, especially when starting off from stationary. The intelligent drive concept of the Pantera doesn't build up these high forces hydraulically but translates these into mechanical forces via the planetary gearboxes. This makes for a guaranteed drive when working in unfavourable ground conditions and when driving off.

The electrically adjustable wheel motors are, depending on the driving situation, always optimally set, no matter whether maximum torque or maximum revs are required.





High-flow hydrostatic transmission with reduction gearboxes in the wheel hubs

- √ High torque at all times
- ✓ No speed change steps
- ✓ Possibility of larger wheel diameters
- ✓ The adjustable axial piston pump delivers the oil flow to the hydrostatic drive motors
- Every motor is individually speed regulated (traction control)
- ✓ A fixed reduction ratio in the planetary gearboxes drive the wheels

# The tanks: integrated into the total concept

#### Optimised for professional use!

The 4,000 litre spray agent tank, deeply positioned in the frame, ensures a favourable centre of gravity and an even weight transmission on to all four wheels of the Pantera. The spray agent and fresh water tank consist of high grade glass fibre reinforced plastic with smooth internal and external walls. The low positioned outlet sump ensures smallest residual volumes even

in sloping terrain. The electronic fill-level indication and the three rotating high pressure nozzles for the internal cleaning are part of the standard equipment.

The 500 litre rinse tank with fill-level indicator is located at the rear of the Pantera.



#### **Everything safely stowed!**

In a special compartment underneath the cab there is sufficient space for the convenient storage, for example, of the suction hose.

The dust proof toolbox is located under the access into the cab. Here, a hand wash tank and soap dispenser is also fitted.



# The operator station: well organised and automated

#### Standard: Comfort-Pack

With the Comfort-Pack, the Pantera features a professional equipment level for the automation of the spray agent liquid circuit. Control of the most important functions of the spray agent circuit (filling, agitator intensity and cleaning) are carried out remotely via the AMATRON 3.

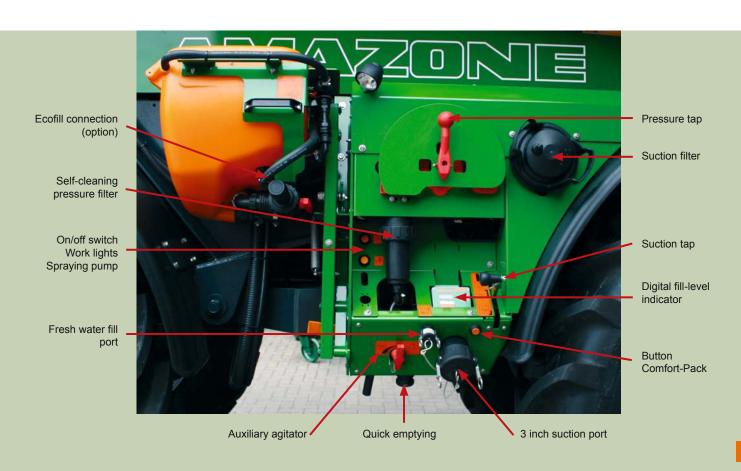
In this way the desired filling amount can be pre-selected and the filling procedure is automatically isolated. The "Rührmatic" system provides a continuous, fill-level dependent adaptation of the agitation intensity. When drawing in fresh water, the agitators are automatically shut off. For the treatment of the remaining area the targeted addition of fresh water is possible. With the flushing function, the booms can be cleaned without changing the original concentration. The automatic cleaning provides a reliable dilution of residual amounts and internal tank cleaning.

In addition to this automatic control you can also actuate all the functions by hand on the operator station.

Alternatively available as special option: the bowser fill port which offers the possibility of filling under pressure.

# Optional: dirt cover for the operator station and the hydraulically actuated induction bowl

The entire operator station can be enclosed with a cover to minimise dirt on the control valves and taps, etc. On request, the induction bowl can now also be lowered hydraulically; an additional comfort feature for the already well-equipped Pantera.



# Spray liquid management thought out in detail

#### High output pumps

Twin high-performance, easily accessible piston diaphragm pumps (530 l/min.) ensure that the spraying process can even be conducted at high volumes and speeds and yet there is sufficient agitator capacity always available. The pump speed can be adjusted from choice within a range of 400 to 540 rpm.

This enables you to drive with low revs, for example, at low application rates. High filling capacities with the 3" suction hose are achieved at revs as low as 800 RPM. The spray pump can be switched on and off at the operator station.



## Canister flushing with the induction bowl

To ensure unproblematic cleaning of spray agent canisters and to fully utilise its content, the canister is flushed using the rotary nozzle. Of course, the closed induction bowl can also be flushed for self-cleaning. The induction bowl when closed is dust-proof. No dirt enters the system and no liquid escapes.

# Induction bowl and power injector

Powdery substances and large quantities of urea are dissolved quickly and safely by the induction bowl with the rinse ring and additional nozzle, and simultaneously inducted by the power injector. The extraction and cleaning from large containers can be greatly simplified by using the Ecofill connection.





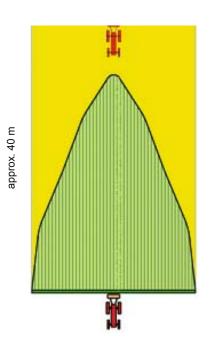
### With DUS you shorten the distance unsprayed

# Ingeniously simple – simply ingenious: DUS – the pressure recirculation system

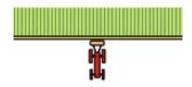
The AMAZONE DUS pressure recirculation system guarantees the safe circulation within the entire system. When starting the spraying operation all the hoses including the spray lines are filled under pressure in the reverse direction with the mixed spray agent. This means the spray lines are always full and immediately ready to use over the entire working width. There is no waiting on the headland. Every time individual partwidth sections are shut off, during turning the operation and during transport, the spray liquid circulates continually thanks to the pressure control. This reliably prevents deposits, blockages or segregation in the spray lines.

The concentration of the spray liquid always remains constant right up to the nozzles, so the start of spraying is carried out without any problems after, for example, a change of ingredients. During the cleaning operation, fresh water flushes the spray lines out right up to the nozzles without any spraying being necessary. During cleaning, the concentrated spray liquid is routed back into the spray liquid tank via the pressure recirculation system.

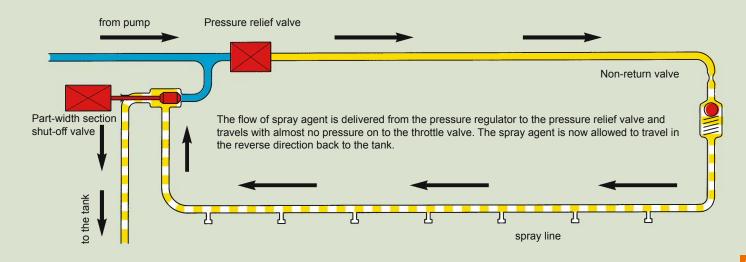
### without DUS



### with DUS



Immediately sprays over the full working width





# Super-L boom: simultaneously superbly light and superbly compact due



#### Pantera – with clever intelligence

#### AMAZONE booms in profile design

At the same time: light – robust – compact – durable On the Pantera self-propelled sprayer the Super L boom proves its extraordinary qualities.

Thanks to the special AMAZONE profile design, it is not only light and extremely sturdy but also very compact. Even with the maximum boom width of 40 m the transport width is still only 2.55 m. In the transport position the booms are located behind the cab. That means: no obstruction of the driver's view and no dripping of liquid within reach of the cab.

Premium boom quality ensures a long service life even when working at very high work rates.

#### Your benefits:

- √ Tried and tested modular system of the Super-L boom ranging from 24 m to 40 m, extremely sturdy and durable
- √ Wide height adjustment range of 0.50 m to 2.50 m.
- Central pendulum adjustment and hydraulic tilt adjustment of the boom provide smooth boom travel even at high speeds
- √ Standard: Profi-fold I independent, one sided folding that is flexible in all working widths
- ✓ Option: tip angling (Profi-fold II)
- Option: Distance-Control for automatic boom ride height

## to the special AMAZONE aircraft wing design

#### The joint: always play-free!



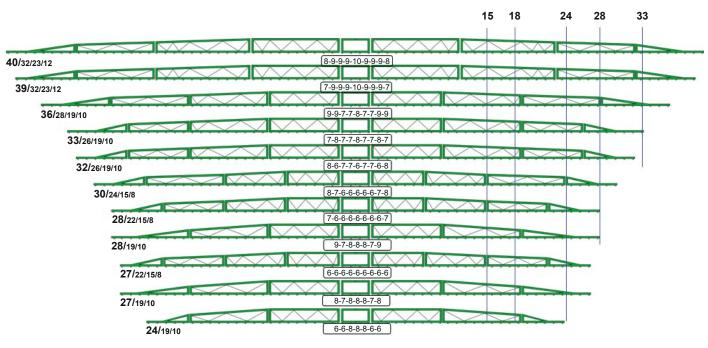
#### Stainless steel hydraulic fittings



The hydraulic fittings are made from high-grade steel for a longer service life and an improved resale value.



#### Super-L boom working widths: from 24 to 40 metres



Number of nozzles / part-width sections Other layouts possible

### With Profi-fold it's even better!

#### Flexible, fast and precise

**Profi-fold** – flexible and comfortable.

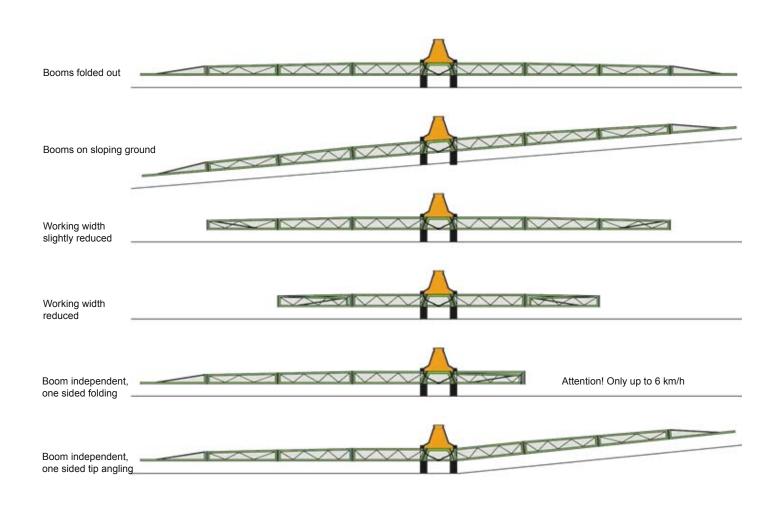
All hydraulic functions can be carried out reliably and simply via AMATRON 3 from the cab. Actuation via the multi-function joystick is especially comfortable.

#### Profi-fold I:

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 II:

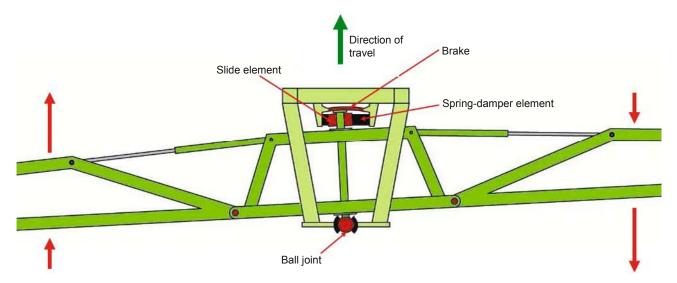
Additionally with individual, independent tip angling.



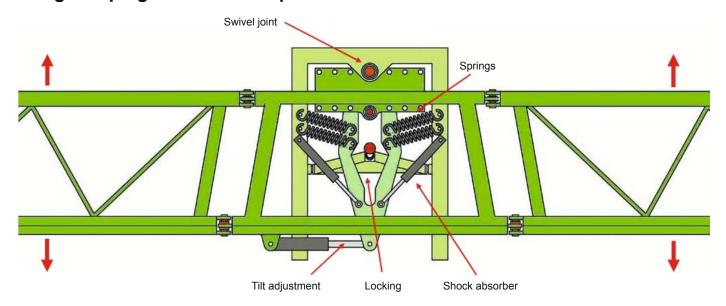


# The 4-fold shock damping suspension on the Super-L boom

#### Swing damping in the horizontal plane (top view):



#### Swing damping in the vertical plane:



#### Your benefit:

Reduced boom movement even at high operational speeds

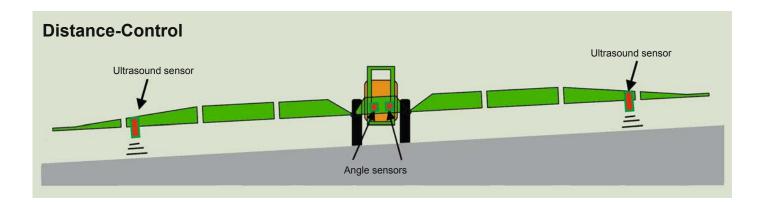
## Boom ride management: AutoLift or Distance-Control? It's your choice!

With the automatic AutoLift boom lift (standard execution) the boom is raised into the desired height every time the boom is switched off. During spraying it lowers again to the target height.

Alternatively with Distance-Control automatic boom guidance, it is the perfect special option available. With the aid of Distance-Control, the boom follows the crop canopy, where it is automatically raised at the headland and further regulated for height and tilt.

Distance-Control enables either the automatic height and tilt regulation, or tip angling and tilt adjustment in conjunction with Profi-fold II.

The driver concentrates on the correct spray application; the computer concentrates on the optimum boom ride!

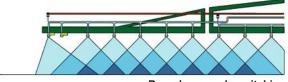




# Boundary nozzle switching – three varieties for all applications

#### **Border nozzles**

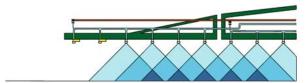
For precision border spraying between two sensitive crops, the boundary nozzles can be used to make sure the spray pattern is accurately defined.



Boundary nozzle switching

#### **End nozzles**

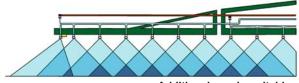
If a one metre buffer zone around the edge of the field needs to remain unsprayed due to distance constraints, end nozzle switching can be used.



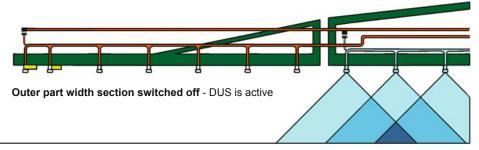
End nozzle switching

#### Additional nozzles

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.



Additional nozzle switching





#### Your benefits:

- Direct electric control of the nozzle body
- Every nozzle body is integrated in the DUS circulation!



### External wash down kit

### High pressure spray lance for effective external cleaning





# Liquid fertilisation – mature solutions for high outputs

The Pantera is especially suited for liquid fertilisation: the use of high grade plastics, good paintwork and the virtually exclusive use of stainless steel ensures a long service life even for liquid fertilisation operation.

For large droplet application of liquid fertiliser AMAZONE offers multiple hole nozzles (3 or 7 hole) or also the FD sluice nozzle.

On request, the Super L-boom can be equipped with a second spray line. The off-set nozzle bodies then allow the attachment of drag hoses in a distance of 25 cm. Stainless steel (VA) weights improve the position of the drag hoses in the standing crop.







# Special optional equipment ...

#### ... for all applications

To double the maximum application rates both the pumps can be switched into parallel. **This HighFlow option offers new dimensions in efficiency!** 

In this way, large amounts of liquid fertiliser can be applied at higher forward speeds.

For vegetable applications, then rates of 2,000 l/ha at 5 -6 km/h are possible.

These larger amounts are only possible with an additional spray line and doubling up of the nozzle equipment at a distance of 25 cm.



### The sprayer specialist advises...

# ...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 the agricultural sector a wide range of nozzles from Agrotop, Lechler and Teejet.

## Single and multiple nozzle bodies

The nozzle bodies fitted into the boom profiles with integrated diaphragm check valves reliably prevent dripping from the nozzles. Self-adjusting bayonet caps guarantee a quick nozzle change without tools. The triple or quadruple nozzle bodies are suitable for 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.



### The correct nozzle selection...

# ...is the basis for success in plant protection

The long 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. The split spray pattern ensures a more even deposit on the front and back of the plant and is an interesting alternative, for example, when carrying out ear treatments.

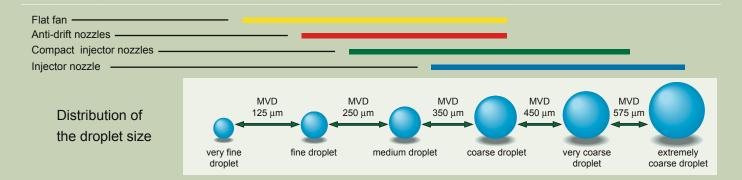
For speeds greater than 10 km/h, the TD HiSpeed nozzle with its asymmetrical spraying angle is becoming a new industry trend.



Agrotop Airmix 110-04



Use of TD HiSpeed nozzles



# Feedback from users regarding the AMAZONE self-propelled sprayer

Since 2008, contractor Holger Thomsen has operated an AMAZONE self-propelled sprayer across more than 5000 hectares per year: "As a contractor, one has to use the technology that customers do not have themselves. Therefore, for plant protection only a self-propelled sprayer is worth considering for us."

#### Holger Thomsen's experiences with...

...the all-wheel steer of the self-propelled sprayer:
"When turning at the headland, we only leave two
tracks with the self-propelled sprayer, that means, we
do not do so much damage in growing crops."

...the hydro-pneumatically suspended tandem chassis of the self-propelled sprayer: "It compensates for the ground undulations better. This results in a very even boom ride."

...the ground clearance of 1.10 m: "It plays a part, for example, when treating rape at flowering, because the plants are hardly damaged."

...the drive-line of the self-propelled sprayer: "With the infinitely variable hydrostatic drive-line and the 200 HP engine, the self-propelled sprayer is well equipped to maintain speeds on the road but also in the field without any problem. Engine and drive-line are suited for the size of this machine."

...the hydraulically adjustable track width of the selfpropelled sprayer: "It proves to be of advantage, for example in spring, for herbicide treatment in maize. If, in the future, some customers want to convert their maize crops to narrow spacing, such an easy to handle track width adjustment is actually absolutely essential."



Contractor Holger Thomsen, Uphusum, Germany

### **Service**

#### You can rely on us

The AMAZONE Pantera self-propelled sprayer is a technically enhanced, high-quality vehicle that must be always ready for use and produce maximum performance at all times.

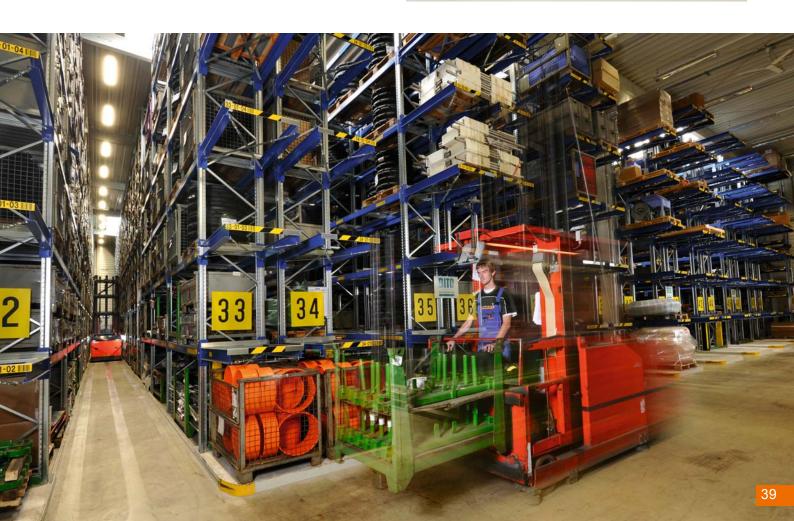
Our sales partners and the AMAZONE customer service team are always close by your side with expertise, reliability and rapid solutions.

Our spare parts service guarantees rapid delivery of original parts around the clock thanks to state-of-the-art logistics systems.

We are always there for you.







# Standard execution Pantera self-propelled sprayer

- Hydro-pneumatic spring suspended tandem chassis automatically regulated fill-level and forward speedrelated suspension system
- Infinitely-variable, automatic central track width adjustment from 1.80 m to 2.25 m (or depending on tyres up to 2.40 m)
- Hydraulic 2-wheel steering, 4-wheel steering and Dog-leg steering
- Headland management with automatic switchover from 2-wheel to 4-wheel steer and lifting of the booms with AutoLift
- Forward speed 40 km/h (the permissible maximum speed may vary, depending on the national road traffic regulations)
- Infinitely-variable hydrostatic individual wheel drive with traction control
- · Pneumatic braking system with drum brakes

- 6 cyl. DEUTZ turbo diesel engine, Common-Rail injection technology, Tier IIIA exhaust gas emissions standard, maximum power 147 KW (200 HP) according to ISO 14396
- ECO mode: fuel saving, power dependent engine speed regulation on the road and in the field
- CLAAS Vista cab, climate control, heating, airsuspended comfort seat, adjustable steering column,
   CD radio with Bluetooth hands-free mobile phone connection, sun visors for front and rear windows
- AMADRIVE touch screen colour terminal (10.4") for vehicle operation
- Parking, front and full beam headlights, 4-way front work lights, 2-way side work lights and 2-way sideview work lights in the cab roof, lighting of the booms from the front and three work lights on the operator terminal, the filling lid and the fuel tank



- Spray pump AR 280 (280 l/min capacity), agitation pump AR 250 (250 l/min capacity)
- Pump speed control from the terminal and remote pump isolation on the operator station
- Suction port with 3" suction filter (32 mesh) and fill port to the fresh water tank
- Pressure gauge, self-cleaning 1"1/4 pressure filter (50 mesh) and part-width section control, quickemptying port
- Comfort-Pack for automatic filling, fill level-dependent agitation control and in-cab remote cleaning
- Super-L boom with spray line, pendulum compensation and Profi-fold I boom actuation
- 4000 I spray agent tank with agitator, fill level indicator, 500 I fresh water tank
- Induction bowl, internal tank cleaning nozzles

- Electronic sprayer control with the AMATRON 3 on-board computer with job memory and serial interface
- Multi-function joystick for both control of the vehicle and the spraying operation
- Hand wash tank, soap dispenser, exterior wash down kit, external digital fill-level indicator



# State of the art optional equipment



#### **Central Iubrication**

The fully automatic central lubrication system ensures that the correct maintenance schedule is adhered to, yet with a minimum of downtime and expenditure. With the Pantera, all the grease points are covered including the parallelogram frames.



### **Technical data: Pantera 4001**

Nominal volume	4,000 I
Actual volume	4,200 I
Fresh water tank	500 I
Hand wash tank	18
Ground clearance with 340/85R48	1.10 m - 1.20 m
Spraying height, min. / max.	50 cm - 250 cm
Max. transport speed (maximum permissible speed may vary depending on the national road traffic regulations)	40 km/h
Max. working speed	20 km/h
Engine power	147 kW (200 PS)

Unladen weight	9,300 - 10,000 kg
Total weight in accordance with StVZO	14,500 kg
Fuel tank	200 I
Hydraulic oil	120 I
Length (transport)	8.40 m
Width (transport)	2.55 m
Height (transport)	3.70 bis 3.80 m

Dimensions	Load index	permissible load carrying capacity at 40 km/h / at a pressure of (bar)	Track width (mm)	Cross-sectional width (mm)	Outer diameter (mm)
300/95 R 52	149 A8	3,250 kg / 3.6 bar	1,800 - 2,250	310	1,889
340/85 R 48	152 A8	3,550 kg / 4.0 bar	1,800 - 2,250	385	1,825
380/90 R 46	159 A8	4,375 kg / 3.2 bar	1,800 - 2,250	392	1,844
420/80 R 46	151 A8	3,450 kg / 2.4 bar	1,800 - 2,250	410	1,872
460/85 R 42	153 A8	3,650 kg / 2.1 bar	1,800 - 2,360	467	1,850
520/85 R 38	155 A8	3,875 kg / 1.6 bar	1,800 - 2,400	540 / 545	1,838 / 1,857
620/70 R 38	170 A8	4,075 kg / 1.6 bar	1,900 - 2,500	608	1,864
650/65 R 38	160 A8	3,780 kg / 1.4 bar	1,900 - 2,500	618	1,828
710/60 R 38	161 D	3,875 kg / 0.8 bar	2,000 - 2,600	712	1,814

Illustrations, content and technical data are not binding!

#### **AMAZONE** sprayers generate profit



UF mounted sprayer, 900, 1,200, 1,500 and 1,800 litres, 12 to 28 m



Front tank 1001 for UF, 1,000 litres



UG trailed sprayer, 2,200 - 3,000 litres, 15 to 28 m



UX trailed sprayer, 3,200 - 4,200 - 5,200 - 11,200 litres, 15 to 40 m



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