



SELFPROPELLED
ALPHA TITANIUMline



HARDI – Your Crop Care Partner


4200 / 5100 l


DELTA FORCE 24-39 m
TWIN FORCE 18-36 m
ALU 24-44 m

ALPHA *TITANIUMline*



For more info visit:
alpha.hardi.com

Intelligent capacity

Lightweight, nimble and easy to manoeuvre, yet with an unmatched output capacity per weight unit

The ALPHA TITANIUM line is made for every spray task

This self-propelled sprayer is optimised for capacity and advanced performance at an affordable price. A range of intelligent features and equipment, such as automatic height control, track width adjustment and floating suspension, guarantees application precision and speed. Everything is controlled from the comfort of the EvoCab. With its state-of-the-art interior, superior visibility and intuitive operator interface, the cab is designed with comfort, productivity and safety in mind. From the cab's excellent air quality to the lower-than-average consumption of both fuel and chemicals, we commit to protecting the farmer and the environment.

Full control from the cabin

All functions are fully controlled from the cab and underline the level of optimization, the driver controls all spray and hydraulic functions directly from the cab with the right hand located on the SprayCenter.

Drivers safety

To give the operator an optimized view in all directions, the ALPHA TITANIUM line is developed with a "3-pillar-concept", giving more than 335° of unobstructed view, while ensuring the highest safety, thanks to the category 4 cabin standard.

Comfort and flexibility

To offer you full flexibility in the field, the ALPHA TITANIUM line can be equipped with hydraulic track width adjustment – and together with the FloatRide air suspension, you will get an unparalleled level of comfort.

Save chemicals and minimize drift

Minimizing the environmental impact of spraying by lowering the consumption of plant protection products up to 30% – and reducing drift by an astonishing 80% at the same time – the air-assisted TWIN FORCE boom will give you the best return on investment for your bank and climate accounts.

The conventional DELTA FORCE is a versatile boom that can be modified to suit all requirements. The many combinations of widths and folds offer the farmer great flexibility.

Obtain full control of your spray job with the automated single nozzle on/off feature – AutoNozzleControl – that not only save you up to 10% chemicals but also gives you ultra-precise spraying with minimal overlapping, which minimises the environmental impact.



Tank
4200 / 5100



HARDI SprayCenter
All functions are fully
controlled from the cabin



Hydraulic Track width Adjustment
180-280 cm – adjustable on the go



Booms with exceptional stability
DELTA FORCE 24-39 m
TWIN FORCE 18-36 m
ALU 24-44 m



Driver safety and comfort
More than 335° unobstructed
panoramic overview



FloatRide air suspension
Improved suspension,
stability and balance

Comfort and safety

Category 4 specifications for filtering and pressurisation

Automated mirror folding for transport

More than 335° unobstructed panoramic overview

Fully adjustable suspension seat and steering column

Passenger seat with an integrated, air-cooled lunch box

The EvoCab is designed with performance and driver safety and comfort in mind

Ergonomics. Visibility. Optimisation

HARDI's main focus in developing the state-of-the-art EvoCab has been ergonomics. All features of the spacious cab – from the comfortable seat to the operator-friendly SprayCenter controller – are designed for maximum operator comfort.

The unique 3-pillar cab design ensures excellent visibility. Tinted safety glass all around, even at the rear of the cab, provides the operator with more than 335° unobstructed panoramic overview of operations, including clear lines of sight to the boom.

Safety & health

The spacious EvoCab is optimised for both safety and comfort. Equipped with an oversized automatic climate control suitable for extreme weather conditions, the cab provides a pleasant, quiet and stress-free work environment.

To protect the operator, the EvoCab is designed in accordance with Category 4 specifications for filtering and pressurisation, offering protection against dust, aerosols and vapours.

Comfortable seat

To provide the highest level of comfort – even when spending long hours in the field in rough conditions – the EvoCab is equipped with a fully adjustable suspension seat.

A passenger seat is located to the left of the operator, with an integrated, air-cooled refrigerator underneath.

Maintain full control



The ALPHA offers a wide array of customisable functions for optimum spray performance and precision

SprayCenter

The ALPHA TITANIUM line is one of the most versatile high-capacity self-propelled sprayers on the market.

All spray and hydraulic functions are fully controlled from the EvoCab. Primary switch functions are located within easy reach at the right-hand seat-mounted SprayCenter, while secondary switch functions are grouped directly above the operator's head.

Intelligent spray performance

The SprayCenter also combines the fingertip-controlled multifunction HARDI Grip joystick with an ISOBUS HC 9700 12,1" touch-screen controller. By integrating all important information on one screen – with split-screen mode allowing for simultaneous viewing of different aspects of spraying or other concurrent operations – the operator is ensured a complete overview at all times.



Complete integration



Extend the user interface to any iOS or Android device



HC 9700

Feature	HC 9700
Mode of action	12.1" (30.7 cm) Touch screen
ISOBUS Universal Terminal	✓
Mini view screens	3
Dashboard & Interaction Keypad	✓
USB ports	✓
WiFi adapter	✓
Horizon XTEND	✓
AutoSectionControl	✓
Lightbar Guidance	On screen
Coverage Mapping	✓
Data Logging	✓
Variable Rate Application	✓
Application Report	✓
Boom Height Control	UT
Camera Support	✓
ISOXML data transfer	✓ In/Out

Full ISOBUS control

The ISOBUS and AEF certified HC 9700 terminal integrates all important information on one screen to give you a complete overview of a spray job. The 12.1" multicolour HD touch screen allows for 2D and 3D as well as split-screen viewing.

The ALPHA is approved and certified

- AEF ISOBUS
- ENTAM
- Agrirouter ready

Easy data transfer

Fitted with USB ports and a WiFi adapter, the HC 9700 allows for easy data exchange with the objective to simplify application reporting and record keeping. Data can be transferred to most farm management software.

Work from your phone or tablet

Use your mobile device or tablet to perform calibration, diagnostics, tank refilling and many other sprayer activities. The XTEND technology uses WiFi to extend the user interface to any iOS or Android device.

Ready for field maps

The HC 9700 terminal offers the possibility to import/export parcel maps in ISOXML format. Hereafter, you can use AutoSectionControl to shut off boom sections automatically in accordance with the map – applying the right dose to the right place at the right time. Avoiding excessive spraying reduces expenses and greens your business.

HC 9700 benefits:

- High application precision
- Less usage of chemicals
- No overlapping areas

Intelligent application



AutoSectionControl

Field

AutoNozzleControl

Headland

Double-sprayed area

Minimise chemical usage and costs

GPS-controlled AutoSectionControl

Excess usage of chemicals is reduced with the GPS-controlled AutoSectionControl as a supplement to the manual guidance system. AutoSectionControl opens and closes boom sections automatically to avoid spraying headlands or other areas more than once. Not only is this of benefit to the farmer and his economy, but also to the environment.

Automated single nozzle control for maximum precision

Obtain full control of your spray job with our automated single nozzle on/off feature – AutoNozzleControl. In combination with the instant spray control offered by our PrimeFlow system, AutoNozzleControl gives you ultra-precise spraying and faster driving speed with minimal overlapping.

AutoNozzleControl also allows you to switch off specific nozzles when turning on the headland and when spraying next to sensitive areas.

The system controls each nozzle automatically. In auto mode, the sprayer works with sections of 50 cm

AutoNozzleControl benefits:

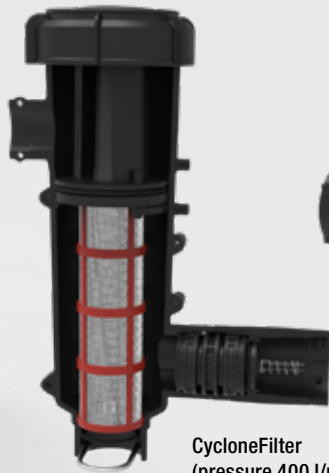
- Save up to 10% chemicals
- Avoid crop damage
- Minimise the environmental impact.



Farmer focus



The HARDI diaphragm pump
(280-334 l/min)



CycloneFilter
(pressure 400 l/min)



EasyClean filter
(suction 450 l/min)



Large capacity – For all your spray tasks

The liquid system – fast and reliable

The ALPHA TITANIUM line's fluid system (DynamicFluid4) employs advanced fluid dynamics and application rate control to deliver fast response and accurate target rate application.

Pressure, flow, pump speed, forward speed, boom sections and application rate are monitored and processed using advanced computations. The DynamicFluid4 processor analyses the spraying data 20 times a second and provides boom pre-emptive rate control capability, altering the flow with pinpoint precision.

- The liquid system can be operated from the cabin or from the ground.

The diaphragm pump

At the heart of the ALPHA TITANIUM line sits the robust and easy-to-service pump that HARDI is so well known for. The invention of this pump constituted the foundation upon which HARDI was founded more than 60 years ago. HARDI was the first to use diaphragms to separate the liquid from bearings, crankshaft and other vital pump parts, thereby allowing the pump to run dry without damage.

Large-dimension filters

- The HARDI EasyClean filter is a high-capacity suction filter.
- The HARDI CycloneFilter is a unique, self-cleaning pressure filter, providing high efficiency without limiting flow.

Bigger tanks – higher productivity

Despite being light, the ALPHA TITANIUM line offers some of the biggest tank systems on the market (4200 and 5100 l). By optimising the ALPHA TITANIUM line's weight distribution, we have designed a sprayer with an excellent output capacity per weight unit. Less time needed to refill the tank means higher productivity, without having to compromise on performance, even in wet or otherwise challenging field conditions.

The fact is that the ALPHA TITANIUM line is a self-propelled sprayer for all your spray tasks.

The WorkZone – Intuitive operation

The WorkZone on the left-hand side of the sprayer provides the operator with safe control of all sprayer functions – filling, mixing, agitation and spraying.

The WorkZone has protective covers that swing upwards to provide the operator with covered space for work in all kinds of weather.

- Comfortable, large and secure WorkZone
- Easy access to filters
- Remote access to engine RPM and the pump
- All stationary spraying operations can be performed from the FluidBox next to the TurboFiller, without the need to enter the cabin
- Hydraulically operated lift system, brings the TurboFiller with integrated work table, to your safe and comfortable working position

TurboFiller – Fast and efficient mixing

The shape of the hopper and its special TurboDeflector at the bottom create a cyclone effect to incorporate even the most difficult-to-mix compounds.

- Rapid filling and transfer into main tank
- High mixing capacity for powders and liquids
- 35 l capacity with stainless steel contents indicator
- Hopper with integrated table at work height
- Rinse gun for cleaning larger bottle and hose down powder
- Built-in rinsing system – 2 rinse nozzles and 1 external lance



Automation for easy operation

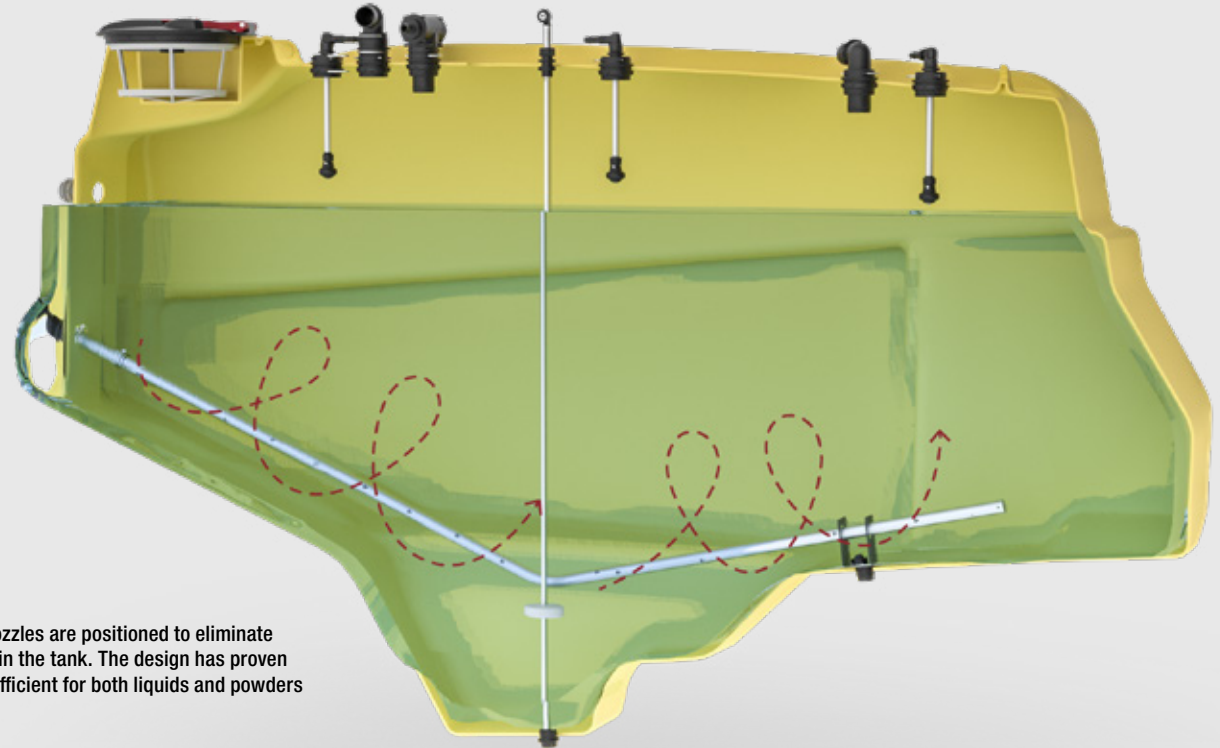


AutoFill – Fast and accurate filling

Set the volume, connect the hose – leave the rest to AutoFill, allowing the operator to carry out other tasks simultaneously.

- No overfilling – AutoFill stops at programmed volume
- Choose between maximum content or volume added
- Start/stop control at the FluidBox in the WorkZone
- Agitation is reduced automatically for maximum fill effect

Agitation nozzles are positioned to eliminate blind spots in the tank. The design has proven extremely efficient for both liquids and powders



AutoAgitation – Perfect agitation

Fully automatic agitation for minimal filling time.

- Ensures even agitation as the tank empties
- Maximum agitation without foaming
- Minimal tank residues upon completion of spray job
- Automatic readouts of tank contents on terminal
- Manual override available through the FluidBox

AutoWash – Easy, accurate and safe cleaning

Reduces residues to best in class – using only 600 litres of rinsing water.

- Operated from the tractor cabin
- No contamination of operator and tractor cabin
- No pesticide cross-contamination
- Choose one of three rinse programmes – the rest is automatic
- In-field washing using multiple rinse operations
- Five rotating rinse nozzles in the main tank for a thorough wash

Instant spray control



Always prepared

As an optional extra, the ALPHA TITANIUM line can be equipped with PrimeFlow, a pressure-fed boom fluid system that guarantees rapid priming and prevents sedimentation and clogging. When spraying is started, liquid has already been distributed in the entire boom, circulating at the requested pressure through the spray lines. When spraying is stopped, the liquid will continue to circulate at a standby pressure.

Even when spraying at low pressure, the spray lines are completely drained, leaving only a small residual volume, which means less liquid is required for cleaning.

PrimeFlow

- Electrically operated motor at each nozzle body
- No untreated areas at spray start
- No chemical sedimentation in the spray lines
- Flushing of boom lines without spraying
- Dynamic setup of sections from 1 to 12 nozzles
- HARDI PENTALET holders for five nozzles



AutoSelectDuo – higher flexibility

Increase work rates with automatic nozzle change on the go in response to changing field and weather conditions – all operated from the cabin.

- Three combinations of two sets of nozzles
- Applicable for speed variations of e.g. 8-15 km/h depending on nozzle type and pressure
- Change application rate at a constant speed and pressure
- Maintain optimal droplet size
- Particularly useful at the headland or other slowdown zones
- 2x2 nozzles for more “ready to use” nozzle sets.

Unparalleled flexibility



Flexible track width adjustment on-the-go

The ALPHA TITANIUM line offers unparalleled flexibility when it comes to the adjustment of track width. Changing between different tramlines, crops, fields or roads has never been easier with the hydraulic adjustment of track width (depending on tyre dimensions):

- Version S 180 to 280 cm
- Version M 220 to 320 cm

With up to 1 m between minimum and maximum, the ALPHA TITANIUM line is one of the most adaptable sprayers on the market.

Hydraulic track width adjustment on-the-go is available on an ALPHA TITANIUM line with FloatRide.

Clearance – fixed height of 1.20 or 1.65 m

With a standard ground clearance of 1.20 m, the ALPHA TITANIUM line will clear most tall crops, but an even higher ground clearance up to 1.65 m (depending on tyres size) is available as an option.

- ALPHA on the left-hand side: Standard ALPHA with clearance of 1.20 m. This machine is fitted with an optionally sweet corn bonnet to protect the cooler and engine from straw and pollen. Front straw divider and air intake from above.
- ALPHA on the right-hand side: ALPHA with the 1.65 m clearance.

Improved suspension – stability and balance

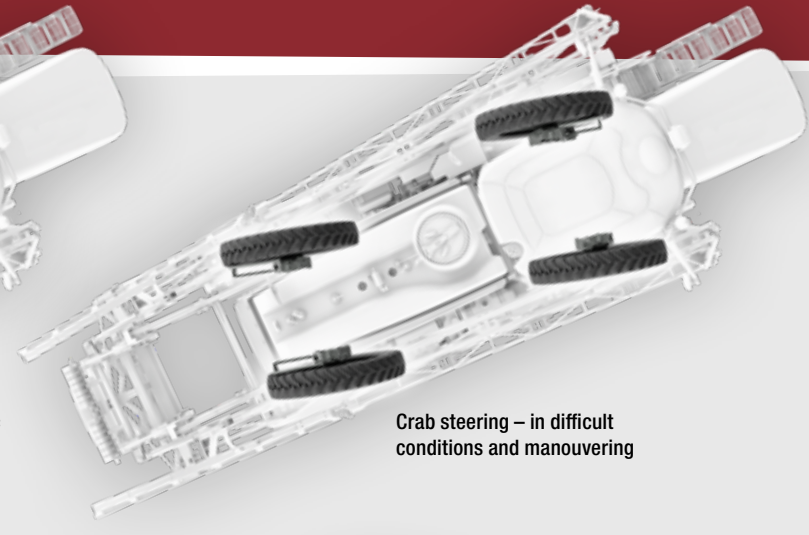
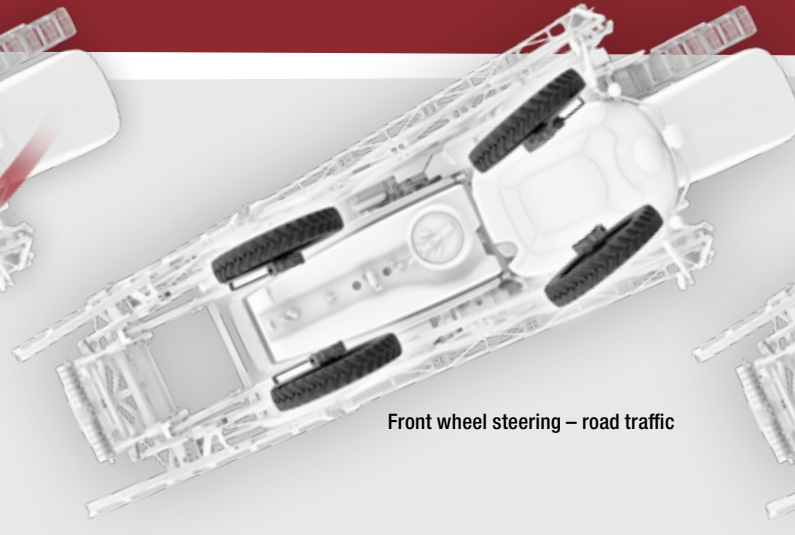
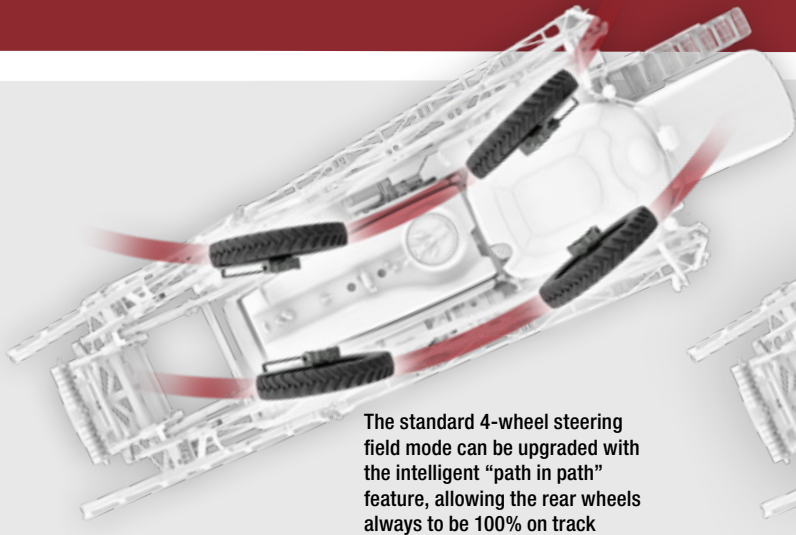
An ALPHA TITANIUM line with improved pneumatic floating suspension (FloatRide) rather than standard coil springs offer unmatched control. A system of triple air-bags, two in front and one larger in the rear axle guarantee superior drivers comfort and boom stability as well as keep the ALPHA balanced on slopes.

Chassis height – and crop clearance – is maintained regardless of tank volume.

By allowing for individual wheel movement of up to 18.5 cm, the ALPHA TITANIUM line with FloatRide is optimised for maximum comfort, even at high spraying speeds.

FloatRide is standard on ALPHA TITANIUM line 5100 and optional on ALPHA TITANIUM line 4200.

Freedom of movement



Light, nimble and easy to manoeuvre

The ALPHA TITANIUM line has been designed with an effective weight distribution between front and rear axles, with slightly more weight on the front (59% on the front with a TWIN FORCE 30 m boom) to strike a perfect balance between drive-ability and minimal compaction.

Precision steering

The ALPHA TITANIUM line is equipped with a permanent 4-wheel drive. Steering modes include 2-wheel, 4-wheel and crab steering for high manoeuvrability, even on sloping terrain, in wet conditions or to protect sensitive soils. Transitions between steering modes are easily managed from the cabin. Re-alignment of the rear wheels is automatic. A lock is activated for road travel. On top of this, the ALPHA TITANIUM line is designed for a very small turning radius, down to 4.62 m for 4200 and 5.56 m for 5100.

For a higher level of control and safety in the field, the ALPHA can be equipped with the intelligent "path in path" feature, allowing the

rear wheels to always follow the front wheels either manually, by foot pedal, or automatically, which is especially useful on slopes. A slope sensor on the chassis permanently measures the slope to allow the angle of inclination of the wheels to be adjusted. It also automatically reverses the inclination of the wheels when the slope changes direction, for example in headlands.

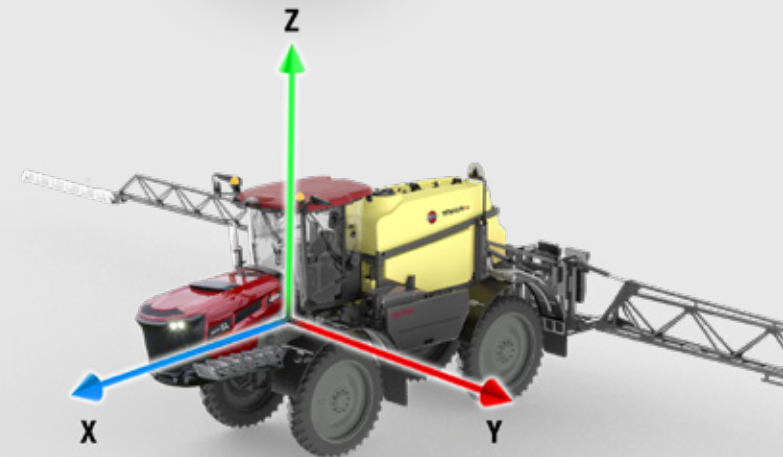
The ALPHA TITANIUM line also offer the optional AutoSteering. By using GPS signal, all straight driving is managed by the AutoSteering system, allowing perfect driving paths.

Following mudguards on high clearance

On high clearance models, near-wheel mudguard can be offered. The mudguards follow the wheels when turning and keeping the nozzles clean in dry and wet conditions. This option requires a minimum track width of 2,25 m.



GPS AutoSteering for perfect driving paths



More power. Less fuel

The EcoDrive engine

Our advanced EcoDrive engine management system will give you more power and flexibility for managing torque with less noise. It also reduces fuel consumption by more than 30%. EcoDrive is standard on the ALPHA TITANIUM line and is a great companion with the Deutz 6 engine.

Hilly conditions

The EcoDrive will maintain a consistent driving speed with comfortable regulation and a constant low engine speed. For very hilly conditions, an optional powerful transmission can provide 25% to 50% higher torque with DiamondTrack or SAPE.

Accordingly, to field conditions, ALPHA TITANIUM line offers Standard transmission, DifferentialLock, HillyTerrain or Full electronic traction control.

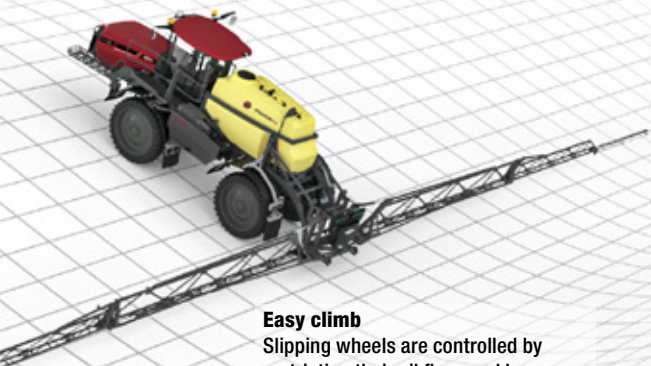
Three driving modes

The operator can customise the ALPHA TITANIUM line's transmission to suit the changing requirements of spraying, using three driving modes

– Comfort, Normal and Power.

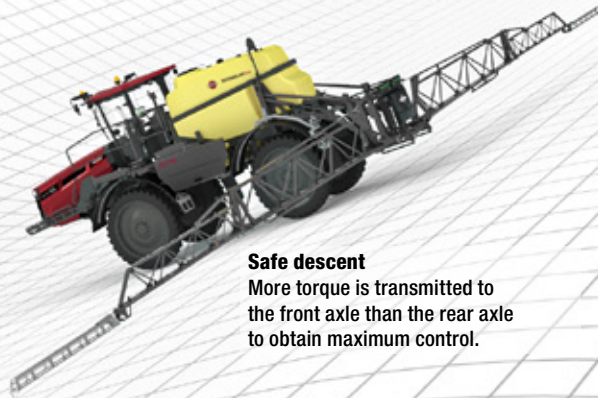
The engine specifications

- Deutz 6 cyl. 245 hp / 180 kW (Tier 4 final / Stage V)
- Deutz 6 cyl. 217 hp / 160 kW (Tier 3a), depending to country regulation



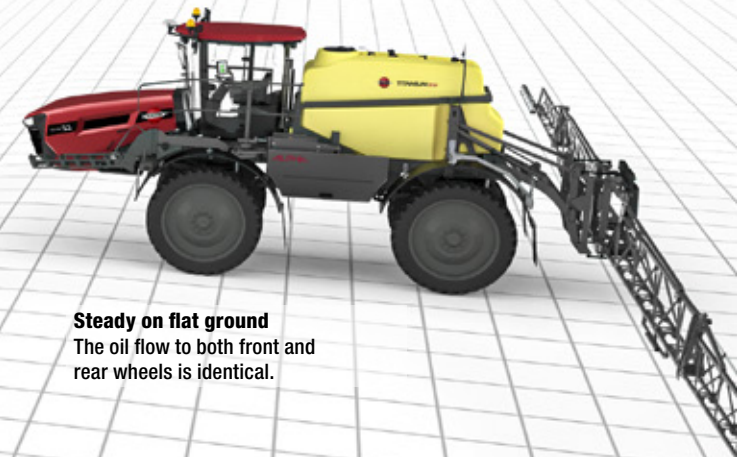
Easy climb

Slipping wheels are controlled by restricting their oil flow, and by transmitting more of the engine torque to the rear axle than the front axle.



Safe descent

More torque is transmitted to the front axle than the rear axle to obtain maximum control.



Steady on flat ground

The oil flow to both front and rear wheels is identical.

Outstanding boom stability



Fully automatic boom control systems

The ALPHA offers two levels of boom management systems: AutoTerrain or ActiveSlant. Depending on the level chosen, the system can regulate, e.g. height, slant, tilt and yaw for superb boom stability and distinguish itself from others by preventing rather than correcting unintended boom movements. Using ultrasonic sensors on the boom wings and roll sensors at the centre, they monitor and correct the boom's movements before the boom is disturbed.

A stable boom means less wear and tear on the sprayer as well as its operator. The sprayer will have a longer lifespan, and the operator will experience less fatigue and stress from having to constantly monitor the boom.

The AutoTerrain system has been tested under rigorous field conditions, showing excellent performance when spraying with low boom heights at high driving speeds of more than 15 km/h. When turning on the headland, the system will counter the booms natural pendulum tendency to dip on the inner side. The result is a level boom throughout the turn. AutoTerrain eliminates the risk of the boom hitting the ground.

The boom management systems secure the correct distance from spray nozzle to target, by that as well increase efficacy from the crop protection product applied to protect against diseases, bugs and insects.



AutoTerrain

For more challenging field conditions

- Boom height
- Hydraulic slant
- Individual tilt of boom wings and NegativeTilt
- 5 ultrasonic sensors with integrated roll sensors
- Temperature-controlled proportional valves
- Optional extra on all booms

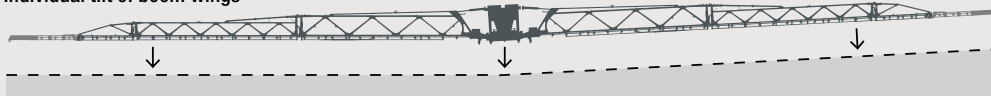


ActiveSlant

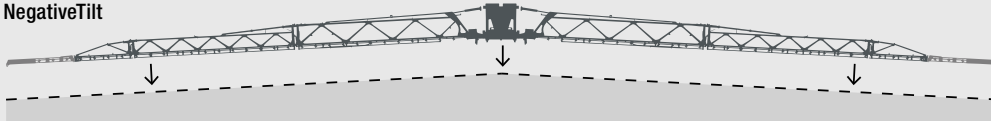
For less challenging field conditions

- ActiveSlant controls boom height and slant.
- Boom height
- Hydraulic slant
- 2 ultrasonic sensors with integrated roll sensors
- Optional extra on all booms

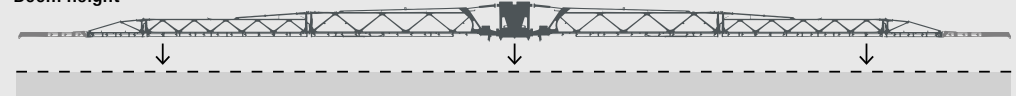
Individual tilt of boom wings



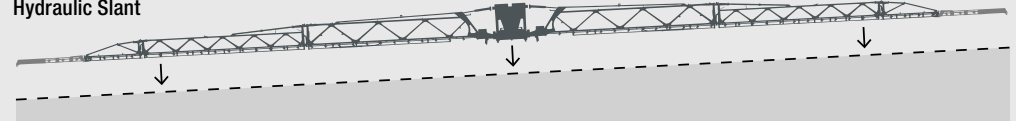
NegativeTilt



Boom height



Hydraulic Slant



DELTA FORCE – a big boom for big jobs



Flexibility, productivity and performance

Wide in field – compact on the road

The conventional DELTA FORCE is a large boom of 24 to 39 m with a unique three-dimensional design and features meant for perfect boom control at high speed. HARDI's boom-folding system allows the operator to spray at different widths – with or without folding the last section. Despite its width, the DELTA FORCE is compact in transport and storage. It folds into an elegant 2.55 m.

Market's best stability

The boom's simple yet effective pendulum suspension controls boom movements. Together with the boom's low centre of gravity, the suspension guarantees perfect boom balance in a flat as well as hilly terrains – and enables fast headland turns. With just two pa-

rameters to adjust (centre springs and damping), the DELTA FORCE boom is easy to customise and maintain.

To minimise the horizontal boom movement the DELTA FORCE boom is standard equipped with a hydraulic AntiYaw damping system between the centre section and the boom wings.

Less drift

The DELTA FORCE can also be fitted with extra nozzle holders to allow for nozzle spacing of 25 cm in addition to the standard 50 cm. Now, the farmer can use smaller nozzles with a finer spray to optimise coverage. He can also work with lower boom heights to reduce drift. The only requirement is a good boom management system – and the DELTA FORCE fitted with HARDI AutoTerrain is the best on the market.

DELTA FORCE features

- Designed with future farming requirements in mind
- High-tensile steel and fishtail welding
- Mechanical locking of the boom segments
- SoftOpen/SoftClose thanks to cylinders with end-of-stroke damping
- 25 or 50 cm nozzle spacing
- Nozzles protected for lower boom height and better drift control
- Superb boom stability with AutoTerrain and NegativeTilt
- Precise application with hydraulic AntiYaw damping



For more info visit:
alpha.hardi.com

HARDI DELTA FORCE is available in:

3-fold:

- 39/27/15 m, 32/25/15 m
- 36/27/15 m, 30/21/12 m
- 36/24/13 m, 28/21/12 m
- 33/25/15 m, 27/21/12 m

2-fold:

- 30/15 m,
- 28/14 m,
- 27/14 m,
- 24/12 m



24-39 m



AutoTerrain



NegativeTilt



AntiYaw



A stop-and-lock system avoids slack between the boom sections, which are folded and unfolded smoothly with SoftOpen/SoftClose.



The unrivalled AutoTerrain boom management system uses advanced ultrasonic sensors to secure constant boom height. Works in either Soil Mode™, Crop Mode™ or Hybrid Mode™.

TWIN FORCE – a boom for ultimate capacity



Save time, money and environmental impact

The air-assisted TWIN FORCE boom employs the world's best system for spray control. Using an adjustable curtain of air to entrain and direct the spray, TWIN FORCE can reduce drift by an astounding 80%. The result is close to no loss of plant protection products or contamination of adjacent areas.

Air-assisted spraying also guarantees better spray penetration and coverage than conventional applications. All this translates into real savings for the farmer of at least 50% on water usage and up to 30% on plant protection products.

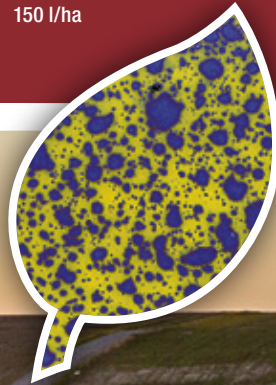
TWIN FORCE gets the job done faster. Efficient drift control means more spraying days – as spraying can be done under more windy conditions – as well as higher application speeds and fewer filling stops. The result is higher sprayer productivity. In fact, TWIN FORCE will increase your spray capacity by up to 100%.

TWIN FORCE features

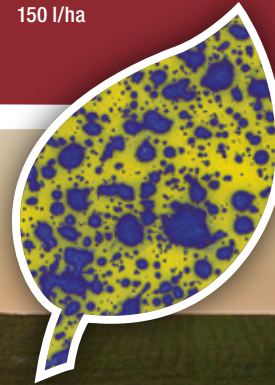
- Increase spray capacity by at least 100%
- Reduce drift by up to 80%
- Save plant protection products by up to 30%
- Save water by at least 50%
- Improve crop penetration and coverage
- Improve spray economy
- Faster spray speeds
- Optimal field timing
- 30+ years' experience

The blue colour shows
the coverage of the weed

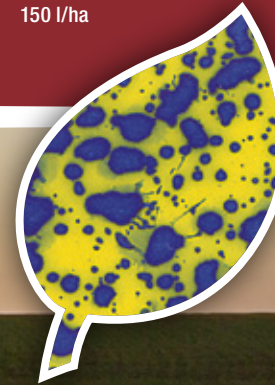
HARDI ISO F 110
150 l/ha



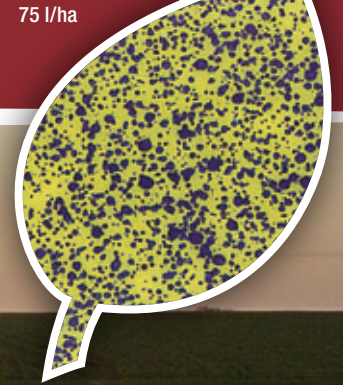
HARDI ISO LD 110
150 l/ha



HARDI INJET
150 l/ha



HARDI TWIN
75 l/ha



For more info visit:
twin.hardi.com

HARDI TWIN FORCE is available in 2-fold for:

ALPHA 4200:

18/12 m, 28/14 m,
20/12 m, 30/15 m,
21/12 m, 32/17 m,
24/12 m, 33/17 m,
27/14 m, 36/18 m

ALPHA 5100:

18/12 m, 30/15 m,
24/12 m, 32/17 m,
27/14 m, 33/17 m,
28/14 m, 36/18 m



18-36 m



AutoTerrain



NegativeTilt



AntiYaw



The Air-assisted TWIN FORCE boom employs the world's best system for spray control. Two powerful blower units provide air to the left and right boom sides.



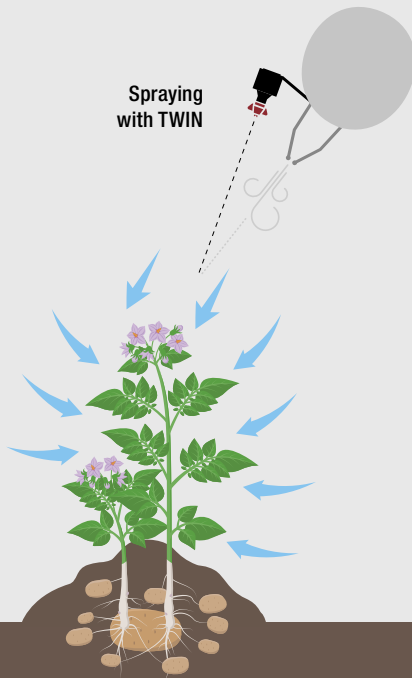
The TWIN concept



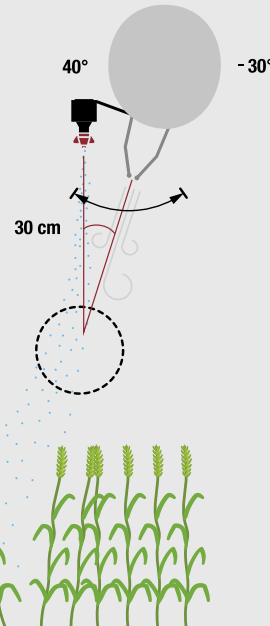
Conventional spraying



Spraying with TWIN



The concurrent angling of air and spray is a distinctive and important feature of TWIN FORCE.



More options for spray control

TWIN FORCE gives the operator more options for spray control than other air-assisted sprayers. By adjusting the air curtain's speed and angle, from no air to full air, in effect producing two sprayers in one (hence the name – TWIN), the operator can guide all droplets, irrespective of size, to the target.

Two powerful blower units provide air to the left and right boom sides. Each blower can be stepless adjusted to a maximum output of 2,000 m³/h per metre of boom and a maximum airspeed of 35 m/sec.



TWIN FORCE offers the market's best return on your investment – on both your bank account and your environmental account

High impact – high capacity

Weather dictates most everything a farmer does, and spraying is no exception. Wind in particular can force a farmer to interrupt or postpone spraying due to drift. With efficient drift control, this is virtually a thing of the past.

Not only does air-assisted spraying prevent small droplets from drifting by blowing them downwards. It also opens the crop to their penetration. The air curtain parts and rustles the crop to expose all

surfaces to the spray, and the droplets' extra momentum created by the air propels them into the crop.

As a result, TWIN FORCE improves crop penetration, distribution and coverage over conventional applications, even in dense crops.

Proven and tested

The outstanding performance of TWIN FORCE has been confirmed by numerous case stories from around the world along with field trials and studies.

One independent, scientific study from the Research Centre Flakkebjerg/Aarhus University, Denmark, demonstrated that the spray application quality of a HARDI TWIN sprayer with a 24 m boom was unaffected by high wind at driving speeds of 8 to 12 km/h.

The researchers concluded that TWIN gives a more uniform deposition and significantly lower drift than conventional applications, especially in windy conditions. The study confirmed that TWIN can reduce spray drift by up to 80% – translating into a reduction in use of chemical products of up to 30%.

The ALU boom – Width without weight

Light, wide and strong

An aluminium boom provides an attractive return on investment due to its lower weight. The lower weight reduces wear and tear on the boom and the sprayer itself. Specially developed tube profiles with internal ribs make it exceptionally strong and durable. The non-painted aluminium material is corrosion-resistant.

The lower weight also makes it possible to build wide booms to boost productivity.

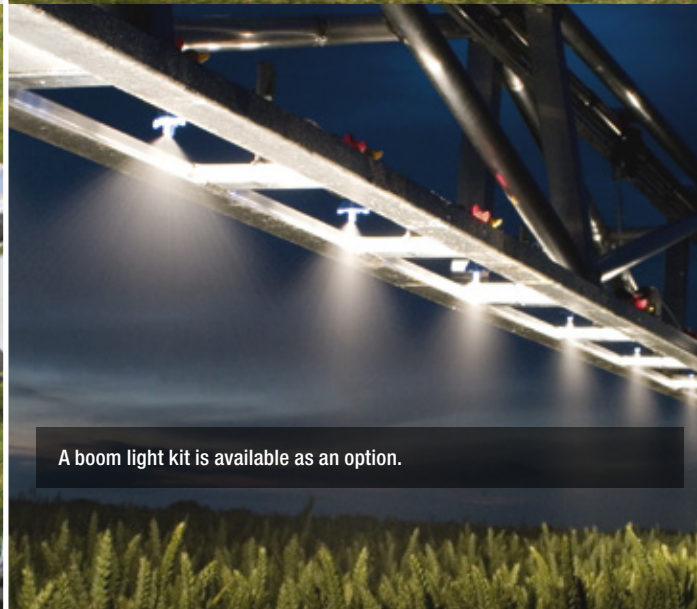
The aluminium boom is available from 24 m to 44 m.



Aluminium boom structure (TR4 24 to 33 m).



Aluminium boom structure (RHA 36 to 40 m and RA 42 to 44 m).



A boom light kit is available as an option.

ALU booms are available in 2-folds:

TR4:

24/15 m 30/16 m
27/15 m 32/18 m
28/15 m 33/18 m

RHA:

36/18 m
38/19 m

RA:

40/20 m
42/21 m
44/22 m



24-44 m



ActiveSlant
up to 33 m



AutoTerrain
from 36 m

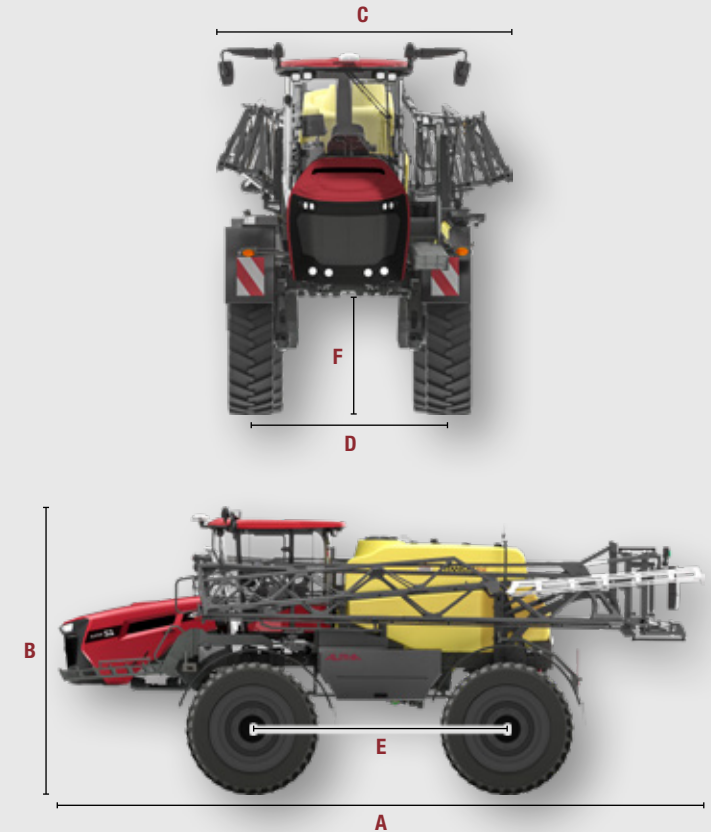


AntiYaw

Technical specifications

ALPHA TITANIUM line	42	51
Tanks		
Main tank, 4200 l Nominal (Full 4500 l)	✓	✗
Main tank, 5100 l Nominal (Full 5400 l)	✗	✓
RinseTank 600 l	✓	✓
CleanWater Tank 15 l	✓	✓
TurboFiller 35 l	✓	✓
Frame		
Coil spring chassis suspension	✓	✗
FloatRide chassis suspension	+	✓
Tarpaulin shield under frame	✓	✓
ParaLift	✓	✓
Hydraulic moving footbridge to minimise transport width	✓	✓
Pack 10 LED lights on Cab, Center section and WorkZone	+	+
Pumps		
Pump 464/10, 280 l/min	✓	✓
Pump 464/12, 334 l/min	+	+
Filling capacity water, 490 l/min	✓	✓
Filling capacity TurboFiller, 120 l/min	✓	✓
Boom		
TWIN FORCE 18-36 m	(✓)	(✓)
DELTA FORCE 24-39 m	(✓)	(✓)
ALU 24-44 m	(✓)	(✓)
Liquid system		
EFC	✓	✓
DynamicFluid4	✓	✓
AutoSelectDuo	+	+
PrimeFlow (not for ALU boom)	+	+
Valves		
SmartValves	✓	✓
FastFiller	✓	✓
AutoFill, AutoWash, AutoAgitation	+	+
Filters		
EasyClean filter	✓	✓
Self-cleaning / Cyclone filter	✓	✓

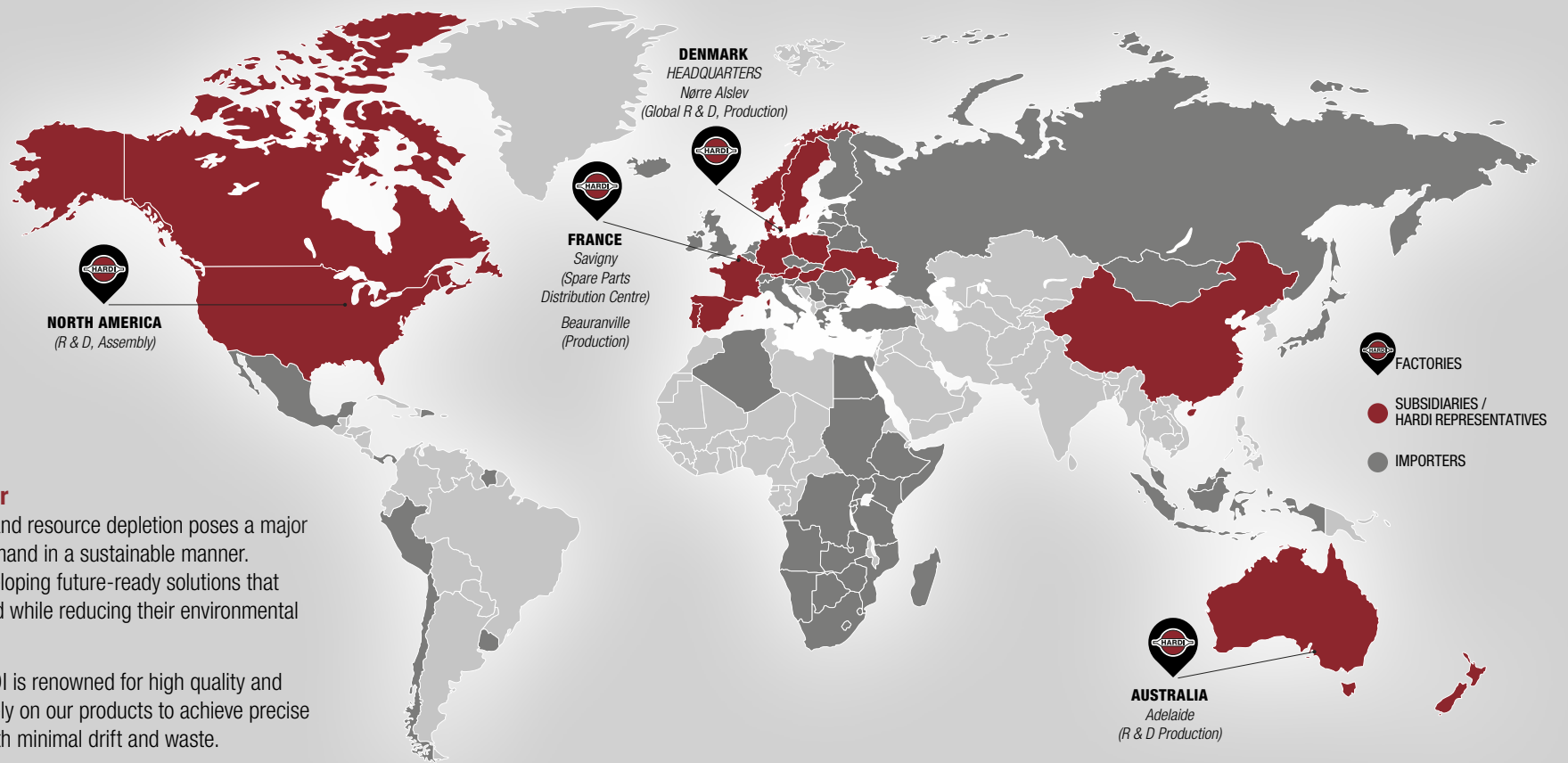
ALPHA TITANIUM line	42	51
Electronics		
HC 9700	(✓)	(✓)
Pressure sensor on the boom	✓	✓
AGM antenna for AutoSectionControl and manual steering	(✓)	(✓)
AGS antenna for AutoSectionControl and AutoSteering	+	+
Trimble ready ISOBUS FMX/GFX for ASC and AutoPilot	+	+
AutoTerrain / ActiveSlant	+	+
Camera (1 to 4)	+	+
Engine and Drive train		
6 cylinders Deutz 160 kW (217 hp) Tier 3a, not for EU	+	✗
6 cylinders Deutz 180 kW (245 hp) Tier 4 final – Stage V	✓	✓
EcoDrive Hydrostatic 4-wheel transmission 40 km/h	✓	✓
EcoDrive Hydrostatic 4-wheel transmission 50 km/h	+	+
Fuel tank 400 l	✓	✓
4-wheels steering	✓	✓
Mechanical track adjustment, 40 cm sliding range	✓	✓
Hydraulic Track Adjustment (HTA) – electronic control Version S 180 to 280 cm (only with FloatRide) Version M 220 to 320 cm (only with FloatRide)	+	+
Mudguards	✓	✓
Measurements and weight		
Turning radius 200 cm track width (middle of chassis), cm	491	556
Weight (basic machine, empty)*, kg	11.220	11.950
(A) Total length*, m	9.5	10.23
(B) Total height*, cm	390	395
(C) Width with ALU boom (24-44 m), m	2.55	2.55
(C) Width with DELTA FORCE boom (24-39 m), m	2.55	2.55
(C) Width with TWIN FORCE boom (18-30 m), m	3.00	3.00
(C) Width with TWIN FORCE 3.1 boom (32-36 m)	3.45	3.45
(D) Track width manual sliding axle** (380/90 R46), cm	182-329	182-329
(D) Track width HTA axle** (380/90 R46) Version S 180 to 280 cm Version M 220 to 320 cm	180-320	180-320
(E) Wheel base, cm	370	430
(F) Clearance (380/90 R46), cm	120/165	125/165



✓ Included ✗ Not included + Optional extra

* Dimension and weight are given for ALPHA TITANIUM line 36 m TWIN FORCE boom, 380/90 R46 tyres and chassis clearance 120 cm

** Minimum track width is wider with wider tyres (depending on axle type)



HARDI – Your Crop Care Partner

The acceleration of climate change and resource depletion poses a major challenge to meeting future food demand in a sustainable manner. At HARDI, our dedication lies in developing future-ready solutions that help our customers to maximise yield while reducing their environmental impacts.

Trusted by farmers worldwide, HARDI is renowned for high quality and well-designed machinery. You can rely on our products to achieve precise dosage and targeted applications with minimal drift and waste.

With over 60 years of experience behind us, HARDI INTERNATIONAL A/S remains a global trendsetter in the application of crop protection products. Head-quartered in Denmark, we are present in more than 100 countries through a network of subsidiaries, agents and importers.

Join us in practising sustainable agriculture as we work towards beneficial outcomes for both you and the environment.

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