

# Comfort and flexibility

Ergonomics, Visibility and Optimization



# ALPHA

evo VariTrack



## EvoCab

### **EvoCab optimizes visibility with 3-pillar design**

The new large spacious EvoCab is specifically developed by HARDI with its "3 pillar design", which provides a new standard for visibility with more than 320° view from the cabin.

An extreme low sound level in the EvoCab and the automatic climate control give the sprayer pilot an optimization of the overall performance of his machine.

An air cooled lunch box and an extra seat to the left of the pilot support the idea of the optimized space this machine provides.



### **HARDI SprayCenter**

All functions are fully controlled from the cab and underline the level of optimization, the pilot can gain from this machine.

Maximum human engineering ergonomics have been the highest priority in the design phase, large and spacious environment. The pilot can operate all spray and hydraulic functions directly from the cab with the right hand located SprayCenter.



### **GPS**

Equipped as standard with GPS AutoSectionControl and manual guidance system, ALPHA evo has a GPS receiver placed at the back of the cab. A special bracket has been designed to open the roof without moving the receiver. This to be able to keep all settings.

## Ergonomics

While developing the new Evo-Cab, HARDI's main focus has been the driver ergonomics. All switches which are to be used when driving are placed as close as possible to the driver.

All primary switch functions have been placed on the new Spray-Center following the seat and consequently the driver.

Secondary switch functions are grouped on the roof just above the operator's head and easily touchable from the driver's seat.

## Optimization

With Ergonomics and Visibility, Optimization was the third high focus area when developing the EvoCab. Operator comfort areas like automatic climate control, space, sound level or air carbon filtering have been developed to give maximum comfort and minimum stress to the driver.



## Full control with integrated electronics

### HC 9500

All the main spraying functions are operated with the fingertip multifunction joystick in conjunction with the HC 9500 12.1" touchscreen controller to provide the highest level of performance and application precision.

The HC 9500 controller provides the grower with a powerful, full-featured precision farming tool for guidance, data logging, application report generation, automated steering and more.

### ISOBUS compatibility

The HC 9500 offers compatibility with the ISO 11783 (ISOBUS) Virtual Terminal Standard. So the HC 9500 could also operate as the HC 6500.



### Suspension - Comfortable ride

A newly developed rear suspension based on one spring with integrated shock absorber increases driving performance and ensures reliability.



### Comfortable seat

A high quality ALPHA evo seat provides you with an excellent level of comfort when you spend many hours in the field. Fully adjustable to be adapted to everybody, this suspended seat combined with machine suspension provides you with good comfort even in rough conditions.



### Co-driver seat and lunch box

Left to the spray pilot, the trainer seat is located. Under this seat the lunch box is the facility.



### Deutz engine

The ALPHA evo VariTrack is equipped with a Deutz engine that meets emission standards in force (TIER III). The 6-cylinder turbo-charged engine develops 175 hp at 2400 r/min. (190 hp standard with TWIN boom). The fan drive Viscous coupling significantly reduces the noise level in the cabin. Diesel tank of large capacity (260 l).

### Easy maintenance

The front opens by tilting and sliding the two covers (upper and lower) and gives easy access for maintaining the engine.

The hydrostatic transmission is controlled by a hydraulic SAUER pump. 4 hydraulic motors are controlling the speed in three ranges. This function is controlled by the handle and a multifunction knob 5 positions: parking, road, field, uphill, downhill.

The new transmission management «Easy Drive» offers three driving modes: Comfort, Normal, Power to adapt to all user profiles.

A storage compartment with a capacity of 200 l, on the right side of the sprayer, allows the storage containers and other accessories.

Ground clearance of 1 to 1.12 m depending on tires.



### 4 wheel drive and steering:

The ALPHA evo VariTrack can operate the field in either two- or four-wheel drive mode.

The four-wheel drive mode is activated by a pedal in the cabin and has an automatic back to origin function.

## EasyDrive

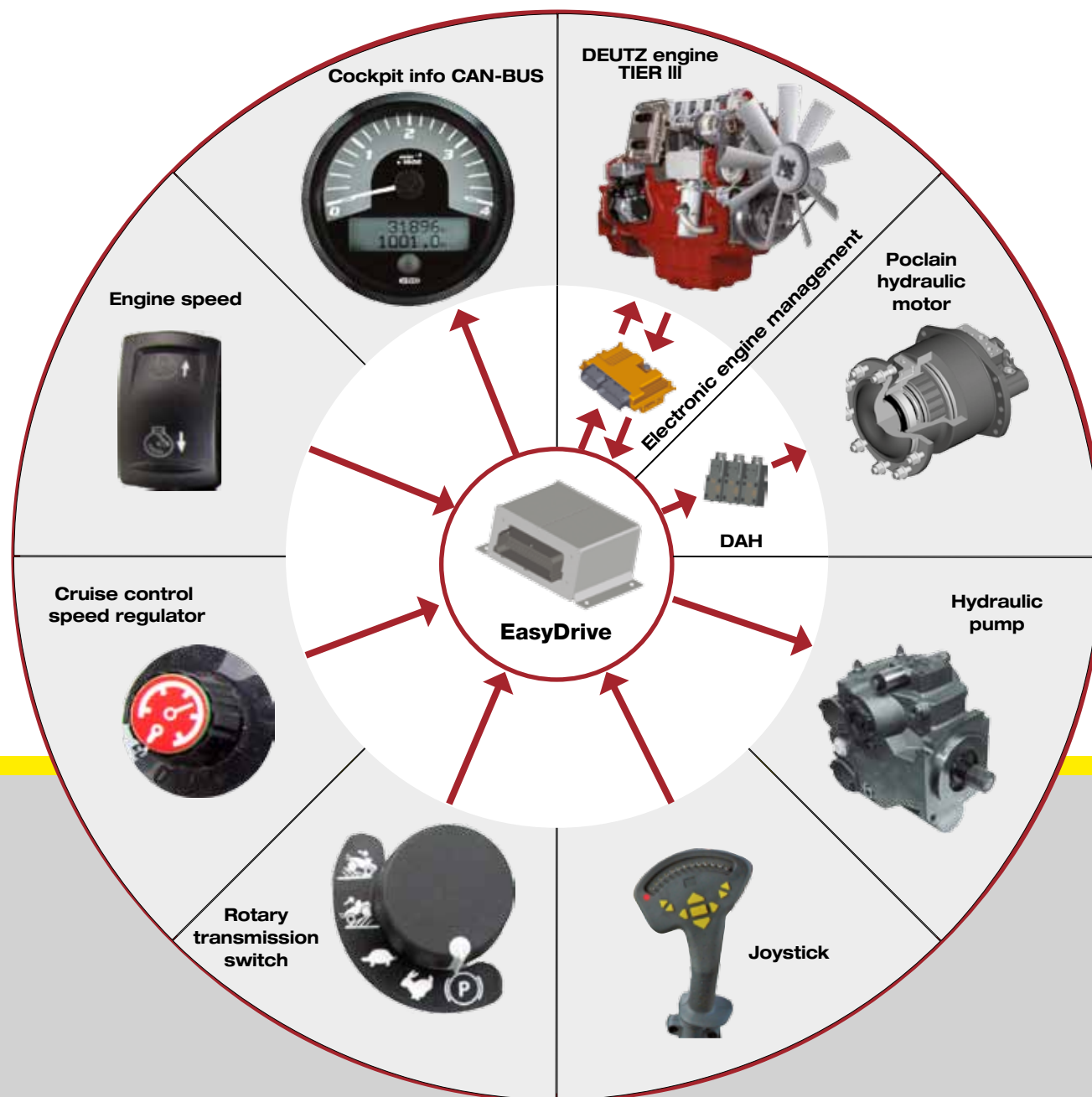
EasyDrive coordinates the different components of the ALPHA evo transmission.

EasyDrive optimises the global capacities of the transmission (speed/torque, progressive acceleration and braking, going through the gears under load) and establishes a new standard in terms of ease, safety and driving comfort.

Cruise control adjusted by pilot is standard on all ALPHA evo VariTracks. This ensures a perfect stable speed for a very accurate application.

### User benefits:

- Reduced fuel consumption (up to -25% in consumption) and reduced costs per hectare (Automotive Service)
- Reduced noise level in cabin
- Improved quality and control of the spray (Cruise control)
- Increased work rate
- Ease of control (anti-stall, overspeed management, etc.)
- Increased security during manoeuvres at the farm, road travel, and during phases of field work
- Management of the error codes in case of anomalies





## Driving 40 km/h on roads or steep hills!

With version 40 km/h you can increase travel speeds on the road to increase the flow of your work and reduce your costs per hectare.

For optimum safety, the ALPHA 40 km/h are equipped with an additional dynamic braking on front axle activated by a pedal cab.



Parking configuration



Road configuration

To comply with legislation regarding the road width for a speed allowed on the road at 40 km/h (type approval MAGA), a bridge mechanism of the ramp against the cabin has been developed for the transport configuration. In this way the road size never exceeds 2.55 m with Alu boom or 3.00 m with TWIN.

Parking position, the left arm ramp departs wholly releasing the platform for access to the cabin.

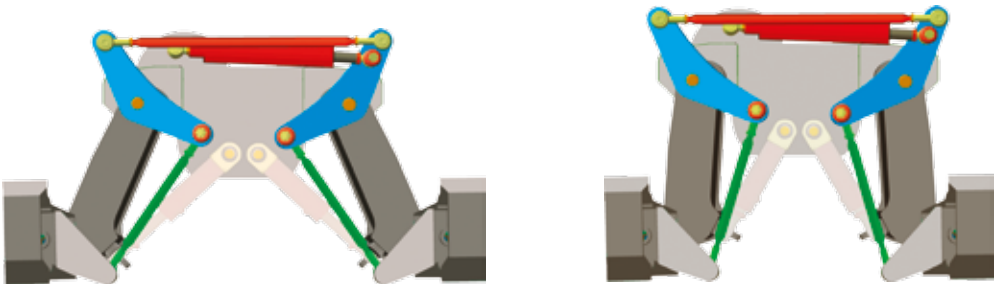
On road to the field, the visibility is optimal. Drive safely!

# High flexibility anywhere

The track width very easily adapts in a range of 45 cm.

There are no additional adjustments to make because the wheel alignment and steering are automatically kept by a very simple mechanical connection.

This innovative solution means easy adaptation from one track width to another, which secures a higher capacity of the entire machine.



ALPHA 2500	AXLE	270/95R38 320/85R38	380/85R34	460/85R30 540/65R30
	S	1.80 - 2.25	1.90 - 2.35	2.00 - 2.45
	M	2.00 - 2.45	2.10 - 2.55	2.20 - 2.65
ALPHA 3000	AXLE	300/95R42	380/85R34	420/85R34 480/70R34 460/85R34 520/70R34
	S	1.80 - 2.25	1.90 - 2.35	2.00 - 2.45
	M	2.00 - 2.45	2.10 - 2.55	2.20 - 2.65



The hydraulic track width can be controlled and monitored directly from a controller within the cabin.



# SprayCircle

## Documentation

- USB port for data transfer
- Smart report as pdf
- Real time data-logging
- Transfer to farm management software

## AutoFill

- Time saving so other tasks can be done
- Automatic safety OFF sensor prevents overfilling
- Agitation is automatically reduced for maximum fill effect
- Capacity: 600 to 800 l/min

## TurboFiller

- To handle large quantities of powders and liquids
- High capacity is a result of high vacuum combined with rotation of the liquid forced by the TurboDeflector placed in the bottom of the hopper

## AutoWash

- Only programme choice needed as the rest is automatic
- Operator and tractor cabin are not contaminated
- Time is saved as process is controlled from cabin
- Effective so pesticide cross-contamination is avoided

## AutoSectionControl

- Product savings of 3% or more are documented
- Operator fatigue is greatly reduced
- Precision shut-off can be individually set up

## Guidance

- The display indicates the next tramline
- 5 different driving pattern can be used

## Spraying - AutoHeight

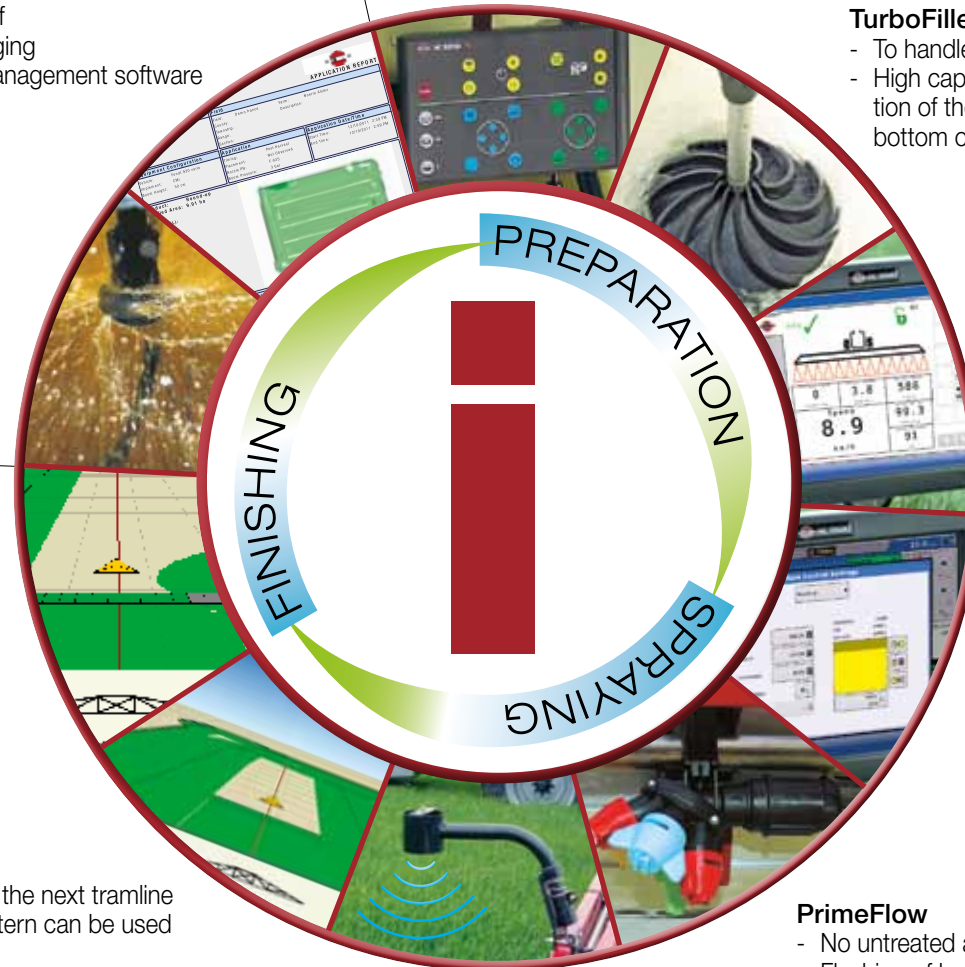
- With the support from the precise HARDI Auto Height system, you can choose your active boom height settings on crop or soil height.
- The height is measured with 3 or 5 ultrasonic sensors.

## PrimeFlow

- No untreated areas at spraying start
- Flushing of boom lines without spraying possible
- Pressure system for safe and reliable work
- Individual section width can be programmed from 1 to 12 nozzles

## AutoAgitation

- Maximizes agitation without foaming
- Minimizes tank residues when spraying is finished
- Automatic tank contents readout on the HC 9500 display





## Liquid system



### Pump

The ALPHA liquid system is driven by the robust grease-lubricated HARDI diaphragm pump. The diaphragms separate the liquid from the vital parts of the pump such as its bearings and crankshaft, ensuring reliable and durable operation.

HARDI diaphragm pump features:

- Self-priming
- Able to run dry without damage
- Easy to service
- Grease-lubricated crankcase

### TurboFiller

The HARDI TurboFiller is developed to handle large quantities of powders and liquids. Its high capacity is a result of high vacuum combined with rotation of the liquid forced by the TurboDeflector placed in the bottom of the hopper.

Changing from transport to the 95 cm high filling position is easily made by means of a spring-loaded bracket with automatic transport lock.

A multifunctional 3-valve operating unit and a cleaning pipe make the chemical filling easy and efficient. The cleaning of containers and the TurboFiller itself is managed by a rotating nozzle.



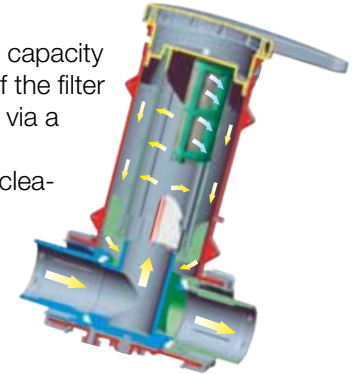
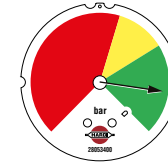
### EasyClean filter

The EasyClean filter is a high capacity suction filter. The condition of the filter can be constantly monitored via a SafeSpray vacuum gauge.

This ensures that the filter is cleaned when needed and only when needed. When cleaning the filter, all you have

to do is to twist the lid 90°.

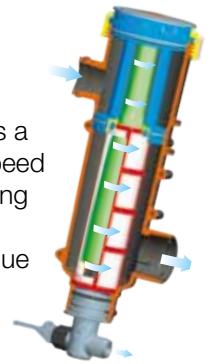
This will close a main tank valve in the bottom of the filter and open the filter for inspection.



### CycloneFilter

The CycloneFilter at the pressure side is a unique self-cleaning filter with a high-speed cyclone action that increases the cleaning capacity of the filter significantly.

In addition, the CycloneFilter has a unique boost function allowing the filter to be flushed when needed.



### WorkZone

The liquid system can be operated from the cabin or from ground by a controller located next to the TurboFiller.



### AutoWash

- Only programme choice needed as the rest is automatic
- Operator and tractor cabin are not contaminated
- Time is saved as process is controlled from cabin
- Effective so pesticide cross-contamination is avoided
- Residuals negligible at the end of the spray task

## Booms

### Aluminium

Aluminium booms are constructed of 4 or 5 round tubes in a three-dimensional trellis structure. The profiles have internal ribs which reinforce the boom strength while keeping an incomparable resistance to corrosion.

The aluminium booms are equipped with PENTA NOZZLES.

ALPHA evo VariTrack is available with Pommier aluminium booms from 24 to 32 m.

#### **HARDI TWIN - the ultimate in capacity, weather independence and application technology**

- Spray faster - increase capacity up to 100%
- Optimal field timing
- Drift reduction
- Save up to 30% in chemical consumption

With efficient drift control it is much easier for the operator to be able to spray the entire field. Under most conditions the farmers get at least twice as many hours for a safe and efficient spray job with the TWIN sprayer compared to conventional spraying.

The TWIN FORCE is available in sizes from 18 to 28 m (only on 2500 l version).



Cut of ribbed profiles



A boom light kit is available as an option.



Aluminium boom structure (TR4)



## Technical specifications

Tank	2500 l	3000 l
Pumps, type, l/min	463 – 276 / 463H – 322 l/min	
Booms	ALU, TWIN FORCE	
Controller	HC 9500	
Engine	6 cyl. Deutz TIER III 129 kW 175 hp / 190 hp on TWIN boom	
Transmission	Hydrostatic Easy Drive transmission 28 or 40 km/h	
Suspension	Mechanical with shock absorber	
Steering	Hydrostatic 4-wheel	
Track adjustment	Mechanical adjustable track / hydraulic as an option	
Turning radius (200 cm track width)	462 cm	
Weight (empty)*	7790 kg	7820 kg
Total length	(A)	821 cm
Total height (460/85R54)	(B)	385 cm
Width with Alu boom 24 – 32 m	(C)	255 cm
Width with TWIN (18 – 28 m)	(C)	300 cm
Track width (460/85R54)	(D)	180 – 265 cm
Wheel base	(E)	364 cm
Clearance (460/85R54)	(F)	102 cm
Rinse tank, l	330	
Clean water tank, l	15	
Filling capacity, l/min	800	
Filling capacity TurboFiller, l/min	125	

\* Weight is with 28 TR4 aluminium boom





*Høje Taastrup,  
Denmark*

*Nørre Alslev,  
Denmark*

*Savigny,  
France*

*Beaurainville,  
France*

*Davenport,  
USA*

*Lleida,  
Spain*

*Adelaide,  
Australia*

## HARDI - The Sprayer

HARDI INTERNATIONAL A/S is an international group whose basic idea is to satisfy the user's requirements for quality products which ensure efficient, punctual and precise application of crop protection products. Our world-wide distribution and sales network comprise more than 100 countries where we are represented by importers, agents and sales subsidiaries. These are situated in Sweden, Norway, Denmark, the UK, France, Spain, North America, Germany and Australia.

Since 1957 HARDI has committed to the ever-increasing demands for efficient and precise plant protection. HARDI is the trendsetter within application of crop protection products. To achieve this position continued developments and innovation are essential. HARDI is committed to the long term future of plant protection.



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## Superb surface treatment

The high-technology surface treatment contains 13 treatments, including an Oxsilan pre-treatment and powder coat painting of all major components.

Together with the Delta/Magni treatment of nuts, bolts and other items, we supply high corrosion protection of our products. The chassis, the boom and all other steel parts have been pre-treated with Oxsilan followed by a high-quality coating of powder paint.

## Testing procedures

Sprayers leaving HARDI INTERNATIONAL A/S are tested according to the strictest quality standards.

The staff of the assembly line is accredited to match the demands from both NSTS (National Sprayer Testing Scheme), UK and JKI (Julius Kühn Institut), Germany. This ensures that the highest quality sprayers are delivered to farmers.



Read more at [www.hardi-international.com](http://www.hardi-international.com)

HARDI reserves the right to change the specifications without notice.  
Illustrations shown may include optional extras and accessories.

