

### **SARITOR**

The SARITOR with infinitely variable four-wheel drive hydrostatic transmission delivers the traction to stay in front of the sprayer range.

SARITOR is HARDI-built from the ground up and sets new standards in broad acre spraying. It offers 4000 or 5000 I tank capacities with 36 to 42 m TERRA FORCE boom.

Crop clearance is 1.45 m, and the track width can be hydraulically adjusted from 3 to 4 m providing a large stable platform for boom stability.

Four-ride level air bag suspension elements and hydraulic shock absorbers provide smooth spray performance and exceptional operator comfort.

A sturdy hydraulic fold down ladder and wide walkway with safety hand rails allow easy access to the cab.

The cab is generous and uncluttered with ample room for the operator and instructor. Visibility in all directions is exceptional.





Tank: Engine:

Cummins 6 cyl. 275 hp 4WD hydrostatic Transmission: transmission HC 9500 Controller Controller:

Chem transfer: TurboFiller Clearance: 1.45 m Track width: 3 - 4 m

TERRA FORCE 36-42 m Boom: Pump: ACE 650 I/m WetSeal run-dry centrifugal pump



#### Access

A sturdy ladder, wide platform and safety hand rails provide easy access to the cab. The ladder hydraulically folds up when spraying.

The lighting package combines work and driving lights.

## The Cab

Large, spacious and uncluttered, with top level comfort for long spraying days and nights. It is quiet and provides excellent operator visibility.

Climate control air conditioning with 10 air outlets provides set-and-forget comfort levels.

Tinted safety glass, front sun visor and two rear pull down blinds minimise glare into the cab.

The view to the boom and the field is superb. Turning on headlands and keeping an eye on the boom has never been easier.

The forward sloping bonnet enhances the field of view for road transport, and a rear facing camera is standard.

The instructor's seat is large and comfortable, and can fold up and out of the way.

A fold down foot peg on the side of the cab provides a step to easy access the cab roof.





#### Field of view

The use of large full length and curved glass panel with narrow pillars provide unobstructed view from the cab and gives the best visibility for total control during spraying.



#### Climate control

Set-and-forget climate-control air conditioning with dust and charcoal filters provides operator comfort.

Ten air conditioning air vents ensure uniform air and temperature distribution.

## Operator environment

An air-ride fully adjustable seat provides exceptional operator comfort for rough paddock conditions.

The joystick hydrostatic control and SprayCenter are attached to and move in unison with the driver's seat. The HC 9500 and engine management displays are ideally located and within easy reach while driving.

The SprayCenter switching is logically placed and grouped for easy fingertip operation. It is illuminated for night use.

The Steering column pivots in two places and extends to provide adjustment for the most comfortable driving position. Turning indicators, driving lights, high/low beam and hazard light selection are here. In-cab storage is included in the arm rest console, draw under the seat and pocket behind the seat for the operator's manual.

Auxiliary spare 12-volt power socket is standard.





### **Drivers seat**

Comfortable, high quality driver's seat can be fully adjusted and has its own suspension to provide many hours of fatigue free spraying.

The seat can be adjusted for weight, height, lumber, back, leg and motion.



### Ceiling control console

Additional control switch functions are grouped in a console just above the operator's head.

Windscreen wipers, work lights and rotary beacon are controlled here.

For night work a lighting package of work, flood and HID are controlled from this console.

## **SprayCenter**

Everything you need is at your finger tips. All managed through the HC 9500 display and SprayCenter control console. Spraying has never been easier.

The joystick combines the hydrostatic drive and vital spraying control functions. Forward, reverse and braking are operated by pushing forward or pulling back on the joystick. Spray ON/OFF, section control, boom height and wing tilt functions are also managed from the joystick.

All the secondary control functions are managed from the SprayCenter.

Fluid system selection switches for pump ON/OFF, nozzle pressure, auto rate control, end nozzle, agitation, main tank and RinseTank are logically placed and easily operated.

The arm rest SprayCenter console can also be adjusted forward and back to suit individual arm length and joystick operation position and comfort.





### SprayCenter secondary functions

Hydrostatic bias selector, forward speed and engine revs can be manually selected. Cruise control automatically manages the power and bias to maintain the operating speed selected.

On-the-go hydraulic track width adjustment, dynamic boom control, pendulum lock and fold function switches are here.



#### HC 9500 Controller

Delivers the highest level of performance and application precision.

The HC 9500 all-in-one split screen terminal provides guidance mapping, auto steer, auto section, application rate, tank contents, boom height, dual boom, direct injection, spray records, field notes variable rate application and more.

The SARITOR is AutoSteering ready.

## Mixing filling and transfer

A WorkZone cover supported by a gas strut protects the fluid system and provides operator protection when the boom is folded and standing under the nozzles.

A fast fill coupling and ball valve is lowered to enable easy hose connection. An optional hydraulic drive banjo transfer pump can be fitted.

A venturi ejector creates the vacuum required for self-fast filling, direct chemical suction and TurboFiller chemical transfer.

The main and flush tank drain valves double as fill valves and can be used when batch loading and water filling are done simultaneously.

The CycloneFilter at the pressure side can be set to self-clean or can be manually purged.

A locker is used to store chemical handling safety equipment, and a 30 I CleanWater tank provides ample water for personal hygiene.





#### Centralised WorkZone

The WorkZone console provides switching for electric motor drive valves that control main or RinseTank Venturi, pump ON/OFF, tank rinse nozzles, boom nozzle, engine rpm and agitation. A LED identifies which valve is in operation.

A 60S hand gun run by a flojet pump connected to the RinseTank is used to clean up around the WorkZone.



#### TurboFiller

Lowering the TurboFiller into the operating position is easily made with a spring-loaded drop down bracket that automatically locks for transport.

The TurboDeflector in the bottom of the TurboFiller creates a powerful liquid rotation, and a rinse nozzle is accessible to clean out containers.

## DynamicFluid4 liquid system

The SARITOR DynamicFluid4 liquid system is driven by a high performance Ace 650 Wet Seal run-dry centrifugal pump, which can achieve 60 to 120 l/m rate change in 1.5 seconds.

The SARITOR liquid system delivers the target rate without lag whether sections are switched ON or OFF, changing speed or turning in or out of headlands.

Advanced fluid dynamics and rate control processes are employed 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 pre-emptive rate control capability, altering the pump speed with pinpoint precision.

The proportional hydraulics used to control the pump speed are highly accurate, smooth but incredibly fast.





### Compatibility

Precision in spraying is a prerequisite.

DynamicFluid4 challenges conventional methods of rate control and the powerful all in one full featured HC 9500 is a precision farming tool.

Seamless compatibility with all the spraying and guidance information on one screen and precise immediate response rate regulation make spraying easy.



#### Main tank and RinseTank

The main and RinseTanks are fully integrated keeping the centre of weight as low and as far forward of the rear axle as possible.

The 600 I RinseTank is positioned just behind the cab and under the front of the main tank.

The rinse nozzles easily reach all surfaces of the tank for rinsing between fills.

### **TERRA FORCE boom**

Built strong utilising heavy-duty threedimensional truss construction for high performance and is available in sizes 36, 38, 40 and 42 m.

The TERRA FORCE truss boom design is able to withstand incredible yaw forces created during cornering, accelerating, braking and auto steering. These forces are absorbed through a hydraulically dampened parallelogram suspension system.

With on-the-go stability control the dynamic boom centre can be set from the cab to suit the operating condition.

When the boom is open, the wing locks provide a positive locking mechanism ensuring the wing performs as one.

The TERRA FORCE boom is designed to reduce turbulence over and around the nozzle.

Optional BoomPrime allows the boom to be primed with chemical before spraying is started or flushed.





### T25 boom fitting system

New fluid system for boom T25 - Tube diameter 25 mm.

- Optimized for capacity (app. 25% larger cross section in boom and feed tubes)
- Mounted inside the boom profile for optimal nozzle protection
- Fittings are designed without casting-/ parting lines and for use of thick, less sensitive o-rings to obtain the best possible sealing.



#### Wide ParaLift

The boom is supported by a wide ParaLift which enhances stability and is hydraulically dampened for smooth ride and performance.

Individual wing tilt is standard – incorporate shock absorber elements to provide individual wing suspension.

### **AutoTerrain**

TERRA FORCE with optional AutoTerrain sets new standards in wide boom performance. AutoTerrain maintains a lower boom height and provides better drift control.

AutoTerrain maintains the set boom height following the ground like a magnet regardless of the terrain it travels across.

AutoTerrain is a pre-emptive stability and auto height control system that deals with the cause of boom movement.

AutoTerrain seamlessly monitors roll through the centre and the height of the boom off the ground 10 times every second. When a change is detected,

AutoTerrain simultaneously corrects the boom position relative to the ground contour by angling it through the centre pendulum.

AutoTerrain helps to spray more safely, protecting the boom from ground strikes, and preventing incorrect spray height whilst increasing productivity through wide boom performance.



#### AutoTerrain benefits

- Better boom stability
- Constant and uniform boom height
- Lower boom height
- Better drift control
- Minimise risk of boom damage
- Reduced downtime due to breakage
- Less dependence on operator control
- Cut operator fatigue
- Greater productivity
- Less wear and tear



### Roll and height sensors

AutoTerrain monitoring roll and height sensors 10 times every second, simultaneously correcting boom position relative to the ground contour by angling it through the centre pendulum.

No need for boom wheels, no need to be constantly on the wing tilts.

## **Hydrostatic Drive and Cruise**

A fully integrated Sauer-Danfoss hydrostatic 4WD transmission, powered by a Cummins QSB 6.7 I 275 hp engine, is capable of 55 km/h.

The Cummins engine is designed to deliver reliability where high performance is essential.

The 4WD hydrostatic No-Spin Sauer-Danfoss technology optimises performance providing speed, torque and progressive acceleration.

Combined they deliver maximum fuel efficiency.

Forward speed, reverse and braking are controlled by pushing forward or pulling back the joystick. Internal wet discs provide ultimate braking.

Speed and power bias can be selected manually with the rotary switch and engine revs.

When cruise control is selected, the power and bias to maintain the operating speed is automatically managed.





## Ride, clearance and track width

SARITOR delivers exceptional ride comfort and boom performance with the help of four large air bag suspension elements assisted by hydraulic shock absorbers.

The front and rear suspension each consist of four heavy-duty link arms and one panhard rod to provide a trailing suspension system which offers natural movement over rough conditions.

The under chassis crop clearance is 1.45 m and the track width is hydraulically adjusted from 3 m to 4 m. At 4 m the wide track provides an exceptionally stable platform enhancing boom ride and performance.

Mudguards and mud flaps are standard and follow the wheel when steering or adjusting the track width.

Each wheel axle can be hydraulically adjusted independent on the others providing for the opportunity to run the front and rear at different track widths if required.





### Suspension - front and rear

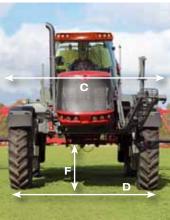
The trailing linkarm suspension system with ride level air bags and hydraulic shock absorbers delivers robust reliability smooth boom ride, performance and operator comfort.



#### Chassis

The C-section bolted chassis is designed to flex and provide maximum movement when driving over contours and taildrains.





### Standard features:

4000 or 5000 I capacity 600 I RinseTank and rinse nozzles TERRA FORCE boom 8 section boom distribution 275 hp Cummins engine 4WD hydrostatic transmission Cruise control 2-wheel steer AutoSteering ready 3-4 m hydraulic track width Air bag suspension 1.45 m clearance Mudguards and mud flaps 500 I storage locker HC 9500 all-in-one touch screen controller with AutoSectionControl AgLeader 2500 GPS receiver Electronic TankGauge sensor SprayCenter control Wide ladder and platform Climate control ACE 650 I/m WetSeal run-dry centrifugal pump TurboFiller induction FastFiller

## Options available:

AutoTerrain boom height control
BoomPrime
Boom line filters
Solenoid end nozzles
Banjo fast fill
Front mounted fast fill
Roof mounted bracket for extra lighting
ParaDyme AutoSteering
Under boom lighting

## **Technical specifications:**

Tank		4000 and 5000	
Pumps, type		ACE WetSeal run-dry centrifugal pump	
Pump capacity, I/min		650	
Boom, type		TERRA FORCE	
Boom width, m		36, 38, 40 or 42	
Controller		HC 9500	
Engine		Cummins QSB 6.7 I 275 hp	
Fuel tank capacity, I		600	
Transmission		4WD Sauer-Danfoss hydrostatic	
Suspension		Air bag with shock absorber	
Steering		2-wheel steer	
Track adjustment, m		3 to 4 hydraulic	
Turning circle (curb to curb), m		20.5 (radius 10.25)	
Transport speed, km/h		55	
Weight (empty), kg		14500 (5000 I and 42 m)	
Total length, m	Α	9.5	
Total transport height, m	В	4.07 (wheels set 380/90 R50)	
Width with TERRA FORCE, m	С	Work 4 (transport 3.5)	
Track width, m	D	3 to 4 (wheels set 380/105 R50)	
Wheel base, m	Е	4.26	
Clearance, m	F	1.45 (wheels set 480/80 R50)	
RinseTank, I		600	
CleanWater tank, I		30	
Storage locker, I		500	

Tyre options:	4000	5000
Standard	380/90 R46	480/80 R50
Options available	420/80 R46	380/90 R50
	520/85 R38	520/85 R46
		620/70 R42

# HARDI INTERNATIONAL A/s

Helgeshøj Allé 38 • DK 2630 • Taastrup • Denmark E-Mail: hardi@hardi-international.com • www. hardi-international.com



The Sprayer

