

Class leading features

Easy to operate - Simple to service



RANGER



RANGER 550 *Value Achieved*



Tank:	550 gal. designed for optimal stability and lowest residue.	Liquid system:	Economical and logical manifold system.
Frame:	High absolute clearance. Low centre of gravity.	Axle:	Adjustable from 60" to 90".
Pump:	ACE model 206 hyd. drive or 150 PTO drive centrifugal pumps	EAGLE booms:	Simple and strong booms in 45 & 60 ft sizes.
Operating unit:	Electrically operated pressure regulation, on/off and sections.		



Fluid System

A simple pressure manifold / electric pressure regulating fluid system ensures trouble free flow of the chemical solution.



The suction valve located at the front of the service platform allows fluid selection from the main tank or optional 63 gal. flush tank.



Pump

An Ace centrifugal pump system is available in 540/1000 RPM or as a hydraulic drive. The centrifugal pump is a simple solution for the producer looking for a low cost option. The economical choice



Service Platform

A new easy-up service platform that is accessible from either side makes filling and routine maintenance simple. Easy-up service platform is standard on the RANGER 550.



High Clearance Axle

Adjustable track width from 60 to 90 inches, ground clearance of 24 inches and 12.4 x 28 inch tires allow this sprayer to adapt to most field conditions



EVC Controls

The EVC electric controls feature remote controlled section valves and pressure regulation. The section valves also have the constant pressure feature which allow the operator to shutoff individual sections and maintain accurate application rates. The pressure regulator and section valve can be manually overridden in case of an electrical failure.

RANGER 550 EAGLE SPB 45 and 60 ft booms

Standard:

ParaLift for height control
Symmetric fold of boom
wings

Optional:

Single-side folding
Individual boom tilt

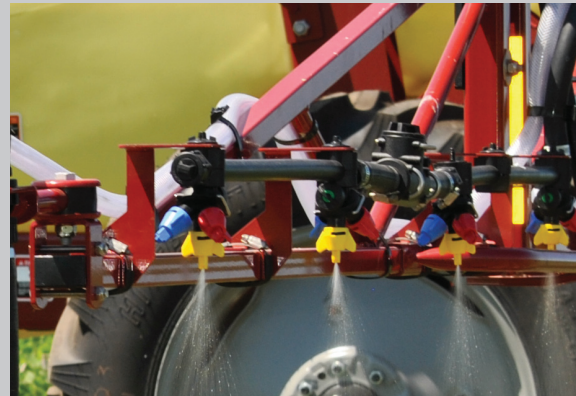
EAGLE booms

feature a rugged two-dimensional structure and a coil spring self-stabilizing trapeze boom suspension. This combination provides for many years of trouble free use even in the toughest field conditions.



ParaLift

The ParaLift system on the RANGER gives superior crop clearance over H – Frame type lift systems. The ParaLift system allows for 20" to 60" of boom height adjustment.



Nozzle Bodies

The nozzle bodies are located behind and above the bottom of the boom structure giving them maximum protection.

A non-directional spring loaded break-away system protects the boom from damage. EAGLE boom is the solution if rough conditions and or if a high driving speed are required.

RANGER 2000 EAGLE SPB 45, 50, 60 and 66 ft booms

Standard:

ParaLift for height control
Symmetric fold of boom wings

Optional:

Single-side folding
Individual boom tilt



Hydraulics

The EAGLE boom is available with three different hydraulic set-ups. HY-version gives an easy folding where left and right side of the boom are folded symmetrically. HZ-version is electro-hydraulic and gives the possibility of individual tilt and single-side folding. HV-(550 only) Individual wing fold and center lift



Break away

The EAGLE boom is standard with a forward and rearward spring loaded break away



RANGER 2000 *Quality Designed*



Tank: 550 gal. designed for optimal stability and lowest residue.

Frame: High absolute clearance. Low centre of gravity.

Pump: HARDI diaphragm pumps - Positive displacement / Self-priming

Operating unit: Electrically operated pressure regulation, on/off and sections.

Liquid system: Intuitive and logical manifold system.

Axle: Adjustable from 60" to 90".

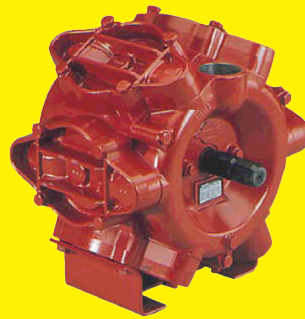
EAGLE booms: Simple and strong booms in 45,50, 60 & 66 ft sizes.



Manifold Fluid System

The work zone is where all primary functions are placed in easy-to-reach positions. Everything needed to operate the sprayer is available in this area, and it is designed in a simple and logical way.

The manifold is prepared for options as RinseTank, cleaning nozzle and TurboFiller.



Pump

HARDI Diaphragm pumps are designed for the application of crop protection products and liquid fertilizers. The principle of the HARDI diaphragm pump separates the liquid from vital parts of the crankshaft and bearings. This makes for years of dependable service.

The advantages of HARDI diaphragm pump

- 30 – 89 GPM depending on pump model
- Capable of 220 PSI
- Able to run dry without damage
- Easy to service
- Positive displacement
- Self priming



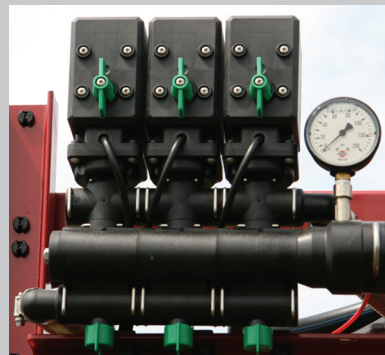
High Clearance Axle

Adjustable track width from 60 to 90 inches, ground clearance of 27 inches and 11.2 x 38 inch tires allow this sprayer to adapt to most field and crop conditions



Service Platform

A large service platform with step makes filling and routine maintenance simple. Standard on the RANGER 2000.



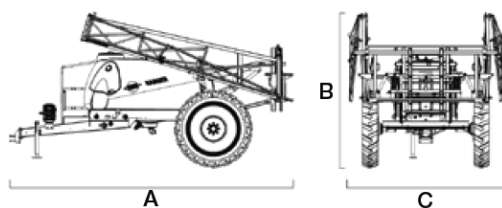
EVC Controls

The EVC electric controls feature remote controlled section valves and pressure regulation. The section valves also have the constant pressure feature which allow the operator to shutoff individual sections and maintain accurate application rates. The pressure regulator and section valve can be manually overridden in case of an electrical failure.

Specifications

Boom	EAGLE
Tank, gal (net)	550 (550 & 2000)
Pumps, type	Ace 206 or 150 (550 only) HARDI 1303, 363 or 463 (2000 only)
Booms, ft	45, 50, 60, & 66
Hydraulic outlets needed	(HY models) 1 single + 1 double acting
Hydraulic outlets needed	(DHP models) 1 double acting
Weight drawbar (empty tank)*, lbs	360
Weight total (empty tank)*, lbs	3470
Total length*, in (A)	213
Total height*, in (B)	114 (11.2 x 38)
Width with boom in transport position*, in (C)	120
Track width, in	60 – 90
Length draw to axle, in	156
Ground clearance, in	24 (28" Tires) 27 (38" Tires)
RinseTank, gal	63 (optional on 550)

* Measurements: EAGLE 60'



Hoje Taastrup, Denmark



Norre Alslev, Denmark



France



Spain



USA



Australia

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.

Optional Accessories

Controller



Well proven reliable spray controllers: • HC 2500 or • HC 5500

TurboFiller



Capacity induction hopper which makes the filling of chemicals fast and easy.

RinseTank 63 gal



RinseTank is mounted at the rear of the main tank above the axle to optimize weight distribution.

Read more at www.hardi-us.com

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HARDI - Your Sprayer Specialist

Easy to use

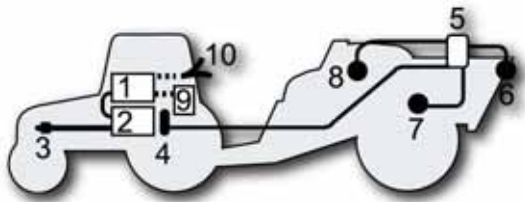


HC 5500



HC 5500

HARDI Controller 5500 is more than a basic rate controller. It has many features that will enhance the liquid system on your sprayer and allow you to access more information on the work carried out. How could you work without it?



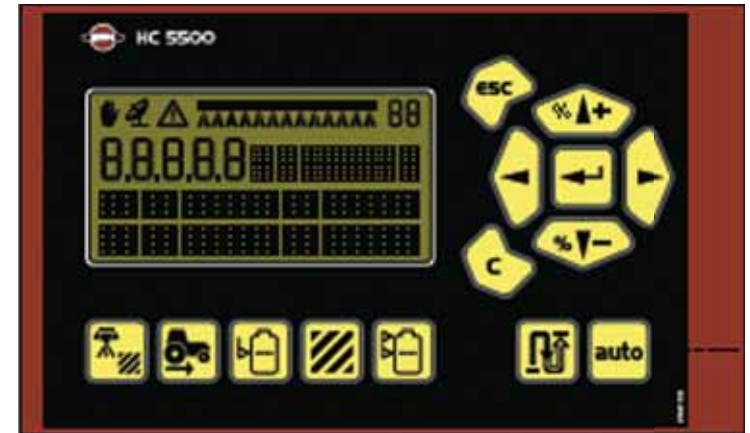
Preset keys for everyday use

Changing the readout of vital information while spraying must be quick and easy. A series of presets for the readout of volume rate, speed, tank contents, area treated and total volume sprayed are at your fingertip. They will appear in the large format area of the screen.

Preset keys become short cut keys. Values that need to be altered from job to job, like programmed volume rate, can be accessed by a short cut through the preset keys.

Sprayer computer components

1. HC 5500
2. Spray control box
3. Power supply
4. Cable to sprayer
5. Junction box
6. Flow transducer
7. Speed transducer at wheel
8. Fill transducer (optional)
9. Printer (optional)
10. Foot pedal switch (optional)



Distance or area left readout

The guesswork of whether the tank will empty in the middle of a run is forever gone. The distance or area left is constantly calculated.

AUTO key

The "hand" icon shows whether the volume rate is in automatic or manual mode



To scroll up or increase a value

To move the cursor to the left

To enter a menu or accept a value

To move the cursor to the right

To scroll down or decrease a value

To escape a menu

To clear a value



Navigation keys

When spraying, the navigation keys can be used to change the volume rate in a set percentage or volume.

The navigation keys are mostly used to code in the initial values.

Full integration

It is so simple to fit. The design is fully integrated with the other control boxes so the HC 5500 is the natural choice for your HARDI sprayer. It typically takes only one cable connection to connect. The sprayer control box already has the necessary plug.

Freedom of placement

The HC 5500 is small enough not to clutter the tractor cabin. It can be located independently from the controls. It is logical to locate it in the line of travel while the controls can be located close to the operator.

Large clear screen

The black text on green background is easy to read, even in bright sunlight. The 4" x 2" screen can show more than 5 lots of information simultaneously. The screen has back-lighting for night time spraying.

Crucial information in large format

Vital on-the-go information is displayed in a larger format so it is easier to read.

Quick start to go spraying

An available Quick Guide is enough to get you spraying. An in-depth explanation of functions and possibilities can be fully explored, step by step, in the comprehensive operators' manual.

Quick to attach

It takes only a couple of seconds to set the equipment in the tractor cabin. The turn of a wing bolt is all that is needed to secure the HC 5500 and controls. Audio and visual alarms. Alarms can be set to warn of incorrect volume rate, low tank contents, excessive speed and for optional transducers e.g. high or low pressure if a pressure transducer is being used. A warning is also given if a boom section is left switched off.

No battery for memory

HC 5500 does not rely on batteries to maintain the memory when the power has been disconnected. This simplifies storage.

Spray with and without HC 5500

As extra security, it is still possible to continue spraying even if the HC 5500 is removed from the sprayer.

Advanced farming ready

The volume rate may be supplied from an external source e.g. a site specific application map or a remote sensor. An icon on the screen will indicate when this is active.

Registers, hard copy and data transfer

Up to 98 registers with real names can be used. A copy of the register information and HC 5500 configuration can be made with a 12 Volt printer. It is also possible to transfer the data to an office PC.

Auto Foam marker

To ease operation of the HARDI Foam marker, the HC 5500 can be set to turn it on an off and switch sides automatically. Status is shown on the screen.

Auto ON/OFF

The main ON/OFF can be set to open or close at a certain speed. This allows the operator to fully concentrate on driving.

Menu location identification

Once a menu is opened, a number is shown for every menu. This is a great aid to identify your exact location in the menu system.

Changes of volume rate

The HC 5500 can be programmed to increase or decrease the volume rate in freely chosen percentage steps or 3 different rates.

Clock and alarm function

Includes date, time of day, stopwatch and an alarm.

Toolbox menu

This menu is a collection of helpful items. These include distance measurement, a stopwatch and alarm clock, service interval readout and a diagnostic components check.

Logbook menu

This menu groups all data collection methods. It includes printing to a 12 Volt printer and data dumping to an office printer. This could be done, for example, using the Hyper Terminal function in Microsoft Windows.

Minimum speed and pressure setting

The pressure regulation valve can be automatically prevented from regulating under a set speed or pressure.

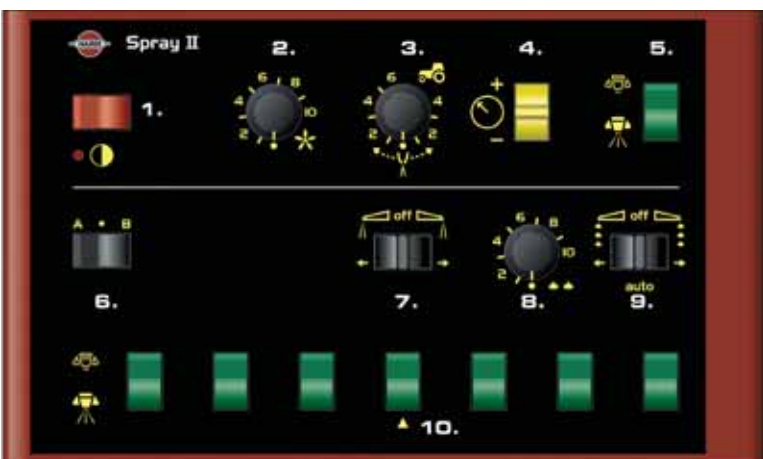
This prevents a poor spray pattern from the nozzles.

Service intervals

Sprayer service reminders are displayed when the service interval is due.

Nozzle check interval

Nozzles do wear and once the limit is reached they should be changed. This can be easily forgotten or over looked. After a certain number of hours, a reminder to check nozzles is displayed.



HC 5500

Readout:

1. Boom section status.
2. Active register (area trip).
3. Large format readout of volume rate, speed, tank contents, area treated and total volume sprayed, distance or area left.

Status for manual spraying, external rate and service interval reminders are also shown when relevant.

The third and fourth line can be set up by the operator to show the following:

- Programmed and actual volume rate.
- Flow rate.
- Optional transducer readout.
- Actual time.
- Work rate.
- Actual volume rate.
- Actual tank contents.
- Actual speed.
- Volume and area covered.
- Active boom width.

Spray box

1. Power switch
2. Air volume (TWIN only)
3. Air slot (TWIN only)
4. Manual pressure regulation
5. Main ON/OFF
6. Valve function A-B*
7. End nozzle ON/OFF*
7. Foam marker regulation*
9. Foam marker ON/OFF*
10. Boom section valves

* Optional equipment



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The Sprayer