



Proven technology with large capacity

MASTER plus

1000 / 1200 / 1500 / 1800



Proven technology with large capacity

MASTER plus

1000 / 1200 / 1500 / 1800



Simple, robust and easy to use

The popular MASTER plus is completely designed around its key functions. An integrated Quick Hitch, well-arranged MANIFOLD fluid system and versatile boom range are just some of the features that make spraying more efficient and general handling a pleasure.

The large range of high quality features makes the MASTER plus a perfect choice for the demands of modern farmers.

Concept

The need for a simple, reliable sprayer with optimum serviceability and capacity is universal. MASTER plus is arranged with its weight close to the tractor and a low centre of gravity to provide maximum stability. The pump is mounted on the rear frame of the chassis for easy service access, and the PTO is not excessively angled when the sprayer is lifted up.



TurboFiller

TurboFiller is a high capacity induction hopper which makes the filling of chemicals fast and easy.

The unique TurboDeflector creates a powerful liquid circulation in the hopper and mixes all types of chemicals quickly and safely.

The cleaning of containers and the TurboFiller itself is managed by a rotating nozzle.

A multifunctional 3-valve operating unit and a cleaning pipe make the chemical filling easy and efficient.



HC 5500

The HC 5500 controller provides precise application regardless of forward speed.

The HC 5500 computer is a user friendly multi function processor designed to control more features and provide more information than comparable systems.

A HARDI SprayBox III option adds remote pressure regulation and section control from the cab, with manual over-ride in case of an electrical failure.



Front Tank

Master plus can take the value of a large linkage sprayer one step further with its optional front tank.

This second tank can be installed on the front of the tractor as a useful source of extra water or mixed chemical to extend spraying capacity, or as a simple counter-balance to the weight of the main tank for improved handling and safety.

SPECIFICATIONS

- ▶ **Tank size:** 1000 / 1200 / 1500 and 1800 l
- ▶ **Controller:** HC 5500 with EVC-3 Electronic Valve Control
HC8600 with Auto Section Control
ISO Connection
- ▶ **TurboFiller:** High capacity, easy to operate
- ▶ **Liquid system:** Simple to operate with many features
- ▶ **Chassis:** High tensile steel chassis
- ▶ **HYS booms:** Compact, vertically folded boom – 12 m, 15 m, 18 m
- ▶ **TWIN STREAM:** Air assisted boom system – 12 and 15 m
- ▶ **FLEXFORCE:** Wide coverage hydraulic fold boom – 21 m

- ▶ Easy to operate
- ▶ Proven application system
- ▶ Quick hitch
- ▶ Drift reducing HARDI nozzles

Manifold system

Easy to operate

All primary functions of operation are built into a centrally located manifold system. The colour-coded valves and icons are easy to understand.

The MANIFOLD valves operate all the fluid system functions on the sprayer; easily reached and logically incorporated into the MASTER design.

EVC operating unit with pressure relief and constant pressure

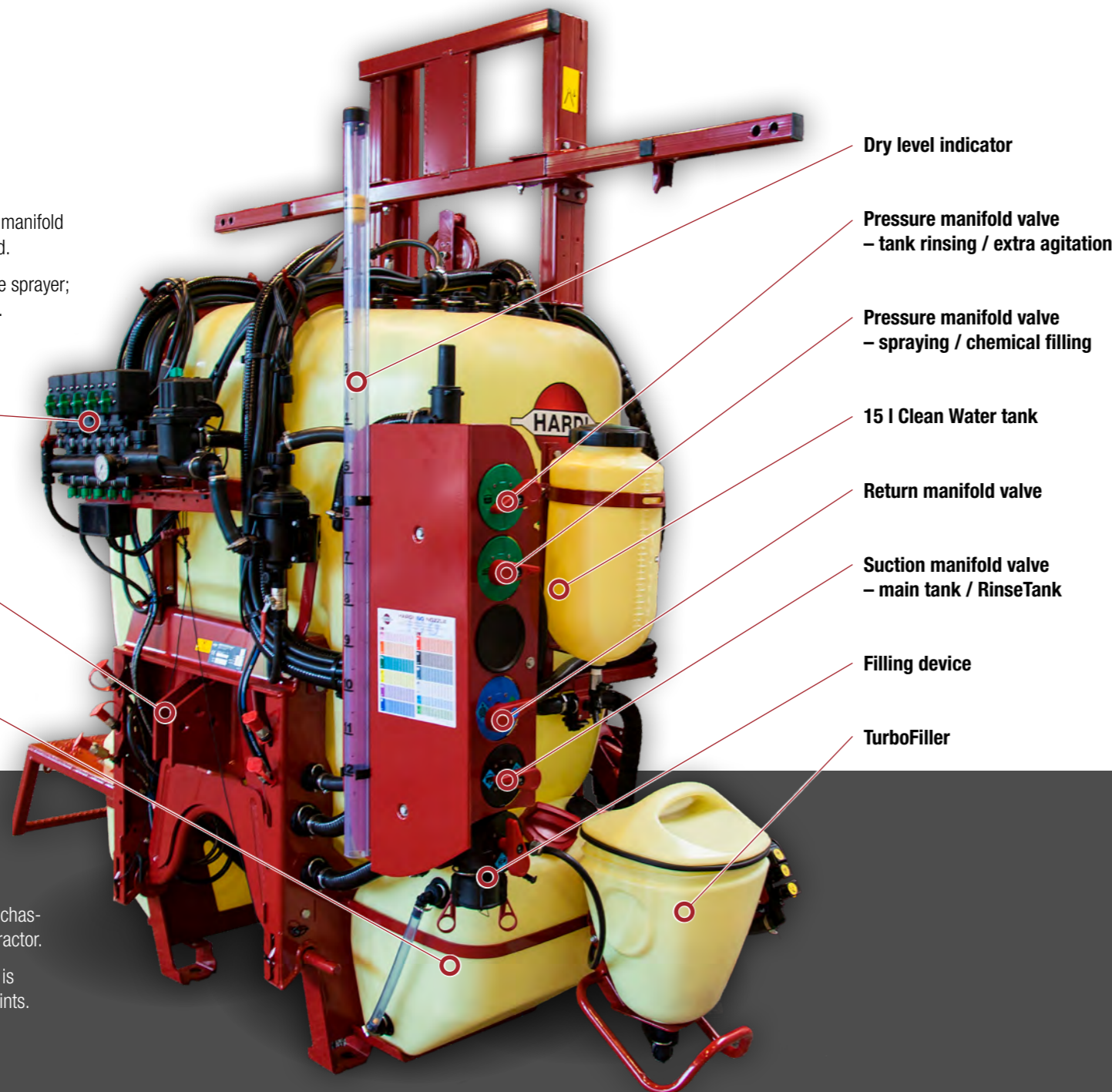
Quick Hitch

RinseTank

Quick Hitch

The Quick Hitch (cat.II) is an integrated part of the chassis and ensures easy and safe attachment to the tractor.

To secure the sprayer attachment, the Quick Hitch is locked by safety hooks at the lower attachment points.



Liquid system

Polyethylene tank

A high-impact polyethylene tank gives MASTER plus durable performance. The tank design ensures efficient agitation, easy flushing and complete emptying through a deep sump. Pressurised agitation is standard, to provide consistent agitation of the most difficult mixtures.

TurboFiller with TurboDeflector

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.

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.



EVC operating unit

The EVC electric controls feature remote-controlled section valves and pressure regulators. The section valves are fitted with a constant pressure device and a pressure drop line. These features allow the operator to shut off individual sections and maintain accurate application rates. All vital parts of the EVC control unit are completely sealed off from the liquid.

RinseTanks

Single or Dual 80 l RinseTanks are integrated into the sprayer's design to allow safe and efficient cleaning in the field; a very important component of good agricultural practice.



HARDI diaphragm pumps – the heart of the sprayer

The MASTER 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

Booms



FLEXFORCE boom – 21 m
Designed to provide more efficient coverage over large pastures and cropping areas, the 21 m FLEXFORCE boom is fitted with triplet nozzle heads as standard, and has an ISOBUS Slant Tilt Kit installed (see below) for maximum control and flexibility while spraying.

MB boom – 12 m
The simple 12 m MB boom is a popular, manually folded boom – with hydraulic folding also available as an option. The MB boom features trapeze suspension as standard, for self-stabilisation and prolonged boom life. Air bag suspension can also be chosen as an option.

HYS boom



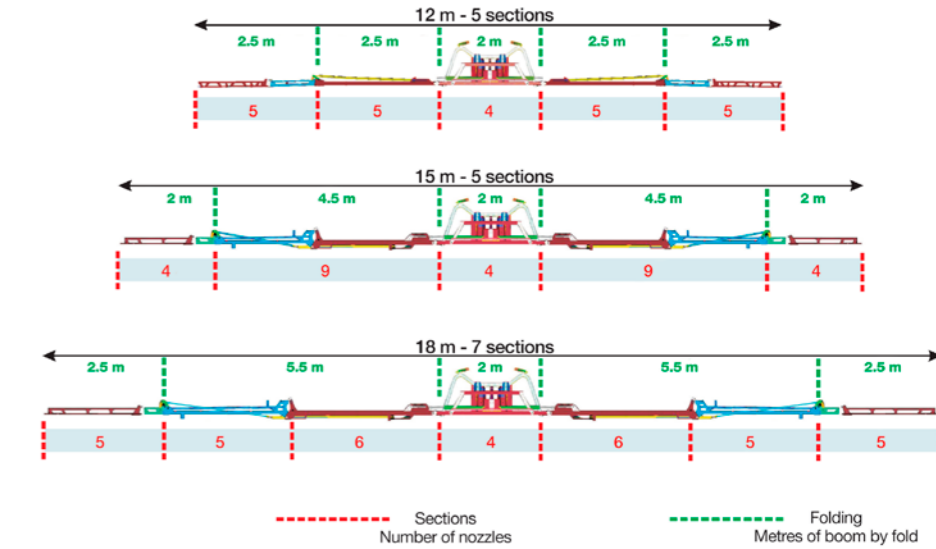
HYS boom – 12 m, 15 m or 18 m

The Master plus is ideally suited to paddock spraying and the HYS is an ideal boom for this kind of work.

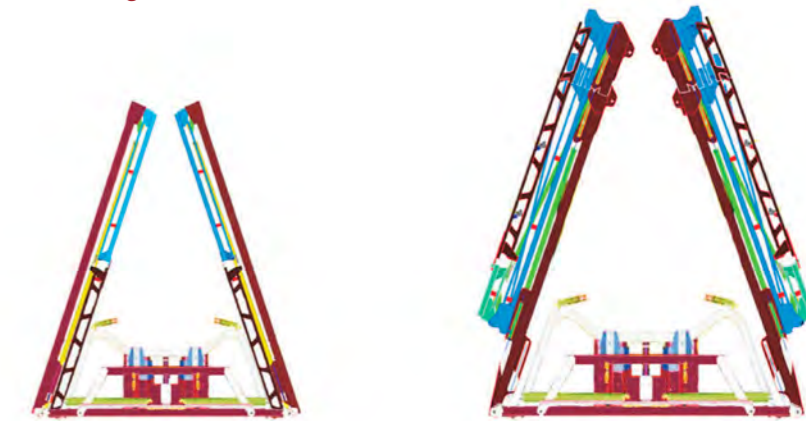
HYS features hydraulic folding, and each side can be folded independently to assist with avoiding obstacles or managing terrain. The fully folded HYS boom fits within the width of the sprayer chassis, allowing for easier movement between paddocks or on the road.

The nozzle bodies are protected by the boom structure, and can be divided into boom sections for even greater spraying control.

HYS Boom sections and nozzles

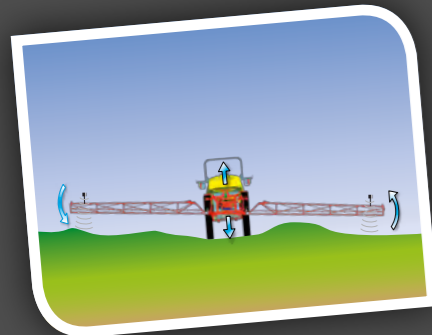


HYS Boom folding



12 m Boom 2.35 m wide x 2.40 m high
(Bi-articulated)

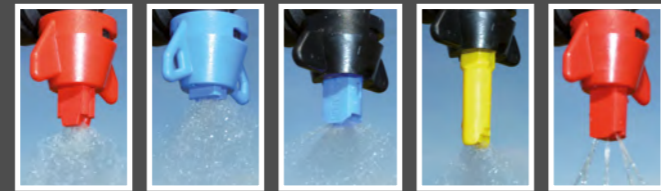
15 m Boom 2.45 m wide x 2.65 m high
18 m Boom 2.55 m wide x 3.15 m high
(Tri-articulated)



Slant Tilt Kit

The HARDI Slant Tilt Kit that is offered with the FLEXFORCE boom adjusts the angle of the boom wings to help maintain correct nozzle height when spraying across sloping ground.

The Slant Tilt system integrates with the tractor's ISOBUS terminal.



MINIDRIFT LOWDRIFT MINIDRIFT DUO INJET QUINTSTREAM

HARDI Nozzles

Precision made for exact application, HARDI nozzles provide extended pressure range performance and droplet consistency across five broad categories.

Each MASTER plus boom option can accept all HARDI nozzles; with single MINIDRIFT nozzles fitted as standard.



TWIN STREAM boom

The most proven spraying system in the world

TWIN STREAM

The HARDI TWIN is the most proven spraying system in the world and has shown its reliability. Its unique form of air assistance provides magnificent drift control, unmatched fieldwork rates, and notable chemical savings.

HARDI TWIN user survey results

- The work rate of one TWIN sprayer is equivalent to two conventional sprayers.
- An average of 16% pesticide reduction compared to conventional spraying techniques.

The TWIN STREAM is available in 12 and 15 m spray widths. The angling of the air curtain and nozzles – as well as adjustment of the air speed – are important features for minimising drift and optimising coverage.



HARDI TWIN STREAM delivers increased spray opportunities, reduced drift, reduced chemical usage, more accurate placement, and faster spraying speeds – for greatly result in improved economy!

Up to 100% more spray capability

Timing is everything! While wind conditions can always limit spraying days, the TWIN STREAM system can more than double the number of days when spraying is possible. At the same time you can spray faster and spend less time refilling, thanks to the reduced water consumption.

Save up to 30% on chemicals

Many trials throughout the years have shown a better chemical efficacy using TWIN. This reates an opportunity to reduce the chemical dose, and some users have seen up to 30% reduction in their farm chemical consumption through a season.

TWIN ADVANTAGES:

- › Reduced drift
- › Save up to 30% in chemicals
- › Better penetration in the crop
- › Improved spraying economy
- › Lower water consumption
- › Higher capacity
- › Hydraulic AntiYaw dampening
- › More than 30 years' experience in TWIN

Save money on your spraying budget ...

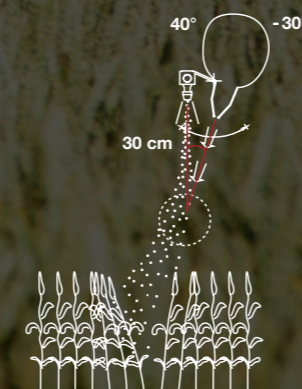
Insert your input numbers at www.hardi-twin.com, and it will show you just how much money you can save on your spraying budget.

www.hardi-twin.com

The powerful blower unit is driven by the tractor's hydraulic system. Hydraulic boom slanting is optional, requiring one extra double-acting tractor outlet.

Angling of the spray ranges from +/-18°, and the fan blower provides 1500 m³/h/m boom width at speeds up to 27m/s.

The angling of the air curtain together with the spray swath is a distinctive and important feature of the HARDI TWIN. This allows for more precise application depending on crop and weather conditions.



Front Tank



HARDI FT Front Tank

A Front Tank helps increase the Master plus spray capacity while safely distributing the extra weight – especially on hilly terrain or on smaller fields.

In some cases it can be preferable to a larger Master plus, as it preserves tractor balance, handling and maneuverability. Depending on user requirements, the Front Tank can be used as a simple counterweight, an extra water supply, or as a second chemical tank.

The tank itself is made from high impact polyethylene and has a liquid free level indicator on top of the tank, which can be seen from the driver's seat.

Agitation kit

The optional Front Tank Agitation Kit ensures the spray solution in the Front Tank is mixed well. A robust 12V stainless steel centrifugal pump keeps the chemical mixed while the rear tank is emptied.

TECHNICAL DATA

Tank size (net/gross)	Width	Height	Length	Weight
1400	176 cm	84 cm	148 cm	152 kg

The linkage is made for a category 2 front linkage.

The national legislations regarding axle overhang, road safety equipment and front axle load should be considered.

HC 5500 Controller

HC 5500

The HC 5500 Controller truly puts you in the driver's seat.

As well as providing precise rate control regardless of forward speed, the HC 5500 has a range of added features that allow you to monitor and manage the accuracy of your spray delivery from the cab.

The LogicMenu and large, dedicated keys make vital spraying information easy to access, while the data is presented on bright, daylight-viewable screen.

Forward speed, spray rate, tank contents, area treated and total volume sprayed can all be checked with the press of a button. You can also check distance or area left to spray at any stage.

Spray rates can be changed on the go, using one-touch up and down arrows – especially valuable for orchard and vineyard spraying, where the rate can be adjusted to suit changing canopy conditions along the row.

HC 5500 is also offered with JobCom for connecting the EVC to GPS-based automation systems.



Technical specifications

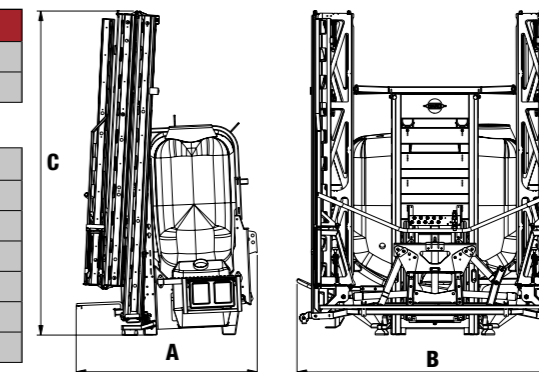
Tank size (net/gross)	1000 (1100)	1200 (1320)	1500 (1600)	1800 (1895)
Pump 364 (194 l/min)	•	•	•	•
Pump 464 (263 l/min)			•	•

Weight, kg empty

MB 12 m	351	359	500	508
HYS 12 m	773	781	922	930
HYS 15 m	882	890	1031	1039
HYS 18 m	926	934	1075	1083
FLEXFORCE 21 m	916	924	1065	1073
TWIN STREAM 12 m	933	966	NA	NA
TWIN STREAM 15 m	1022	1055	NA	NA

Measurements, cm

	A x B x C	A x B x C	A x B x C	A x B x C
MB 12 m	135 x 235 x 240	135 x 235 x 240	200 x 235 x 240	200 x 235 x 240
HYS 12 m	155 x 235 x 240	155 x 235 x 240	220 x 235 x 240	220 x 235 x 240
HYS 15 m	155 x 245 x 265	155 x 245 x 265	220 x 245 x 265	220 x 245 x 265
HYS 18 m	155 x 255 x 315	155 x 255 x 315	220 x 255 x 315	220 x 255 x 315
FLEXFORCE 21 m	155 x 265 x 340	155 x 265 x 340	220 x 265 x 340	220 x 265 x 340
TWIN STREAM 12 m	190 x 260 x 271	203 x 260 x 271	NA	NA
TWIN STREAM 15 m	190 x 260 x 348	203 x 260 x 348	NA	NA



A = Total length in cm

B = Maximum transport width in cm

C = Total height in cm

(Boom shown is for illustration purposes only)

Standard Fittings

- ▶ 194 l/m HARDI 364 pump
- ▶ EVC-3 electric control
- ▶ 3 section distribution
- ▶ Minidrift nozzles

Options

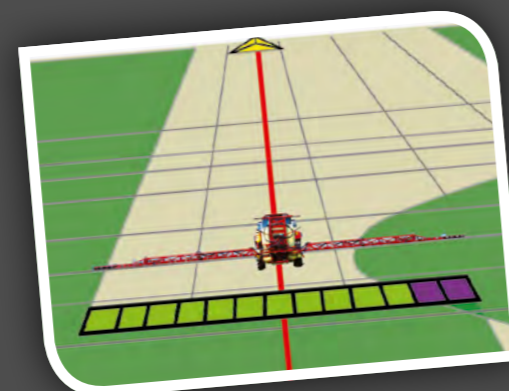
- ▶ 263 l/m HARDI 464 pump
- ▶ Extra section valves
- ▶ HC 5500 for EVC
- ▶ HC 5500 with JobCom for EVC
- ▶ ISO connection
- ▶ HC 8600 with AutoSection unlocked
- ▶ 12 m MB boom
- ▶ MB boom Airbag suspension
- ▶ 12 m HYS boom
- ▶ 15 m HYS boom
- ▶ 18 m HYS boom
- ▶ Triplet nozzles
- ▶ 21 m FLEXFORCE boom
- ▶ 12 m TWIN STREAM boom
- ▶ 15 m TWIN STREAM boom
- ▶ LOWDRIFT nozzles
- ▶ MINIDRIFT Duo nozzles
- ▶ INJET nozzles
- ▶ QUINTASTREAM nozzles
- ▶ Slant kit for FLEXFORCE boom
- ▶ Electric Speed Regulation for TWINSTREAM boom
- ▶ 30m reel with 3/8 hose & 60S handgun
- ▶ 50m reel, hose and 60S handgun
- ▶ 80L Rinse Tank with rinse nozzle
- ▶ Dual 80L Rinse Tank with rinse nozzles
- ▶ TurboFiller 25L
- ▶ Quick Fill with 2" camlock
- ▶ Chem suction venturi with probe
- ▶ Foam marker TFL 25L, double sided
- ▶ 15L Handwash Tank
- ▶ Fenceline nozzle manual x2
- ▶ Fenceline nozzle solenoid x2
- ▶ Boom in-line filters



HC 8600 Controller

Available as an option, the HARDI HC 8600 Controller is installed with AutoSection control enabled, ready to connect your choice of GPS system.

The durable 8.2-inch touch screen gives you fingertip control of sprayer functions and performance.



AutoSectionControl

Connected via the optional HC 5500 with JobCom for EVC or HC 8600 Controller, AutoSection Control uses GPS-based tracking to open and close boom section valves while spraying.

AutoSection seamlessly prevents repeat coverage of any sprayed areas during turning or swath overlap, to avoid excess treatment and conserve expensive chemical.

Options



Additional section valves



InLine Filters



Fence line nozzles



Foam marker



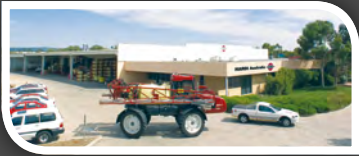
Hose reel



Filling device



Hand wash tank



Adelaide,
Australia



Nørre Alslev,
Denmark



Lleida,
Spain



Savigny,
France



Beaurainville,
France



Davenport,
USA

HARDI

The Sprayer

HARDI AUSTRALIA PTY LTD

is a subsidiary of HARDI INTERNATIONAL, a world leader in sprayer technology.

The majority of HARDI sprayers and booms sold in Australia and New Zealand are manufactured here. We employ more than 100 engineering, testing, distribution and support staff in 15,000 square metres of modern facilities, located on our 10-hectare site in Adelaide, South Australia.

Leading the world

For over 60 years, HARDI INTERNATIONAL has single-mindedly dedicated itself to improving the efficiency and precision of sprayed plant protection. Now a world leader in the field, HARDI recognises its role in global food security through the safe and sustainable application of agricultural compounds.

The Australian product development centre works closely with five other HARDI development centres internationally, to share local innovations with the world and to streamline the delivery of global improvements at home.

Quality assurance

All sprayers leaving the HARDI AUSTRALIA factory are extensively tested in our own test facilities. We then provide ongoing support through our extensive service and dealer networks.



Built to last

Together with the Delta/Magni treatment of nuts, bolts and other items, we finish all our products with comprehensive water and chemical protection.

The high-technology surface treatment involves five processes, including a zinc-phosphate pre-treatment and oven-baked polyester powder coating of all major components.

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



HARDI AUSTRALIA P/L

534 – 538 Cross Keys Rd, Cavan SA 5094 · Tel: +618 8343 9999 · Fax: +618 8343 9960
E-mail: hardi@hardi-aus.com · www.hardi.com.au · www.hardi.co.nz



#HARDIsprayers

HAU MARKETING 897361 EN 07 2017