



#### The Specialist Solution for Daily Work

Welcome the biggest lift mounted sprayer on the market.

The functional design and even better overall performance sets new standards for lift mounted sprayers. MEGA is utilizing the space between tank and cabin to make space for the large RinseTank, the covered sides protect all important elements as the TurboFiller, filters and storage space.

The EasyConnect system allows an easy and quick mounting or demounting of the sprayer, while the integrated storage wheels are easily hidden when the sprayer is in use. When driving, the AirRide suspension helps stabilizing the boom and provides more comfort for the driver. With the ability to spray faster and carry more liquid, the HARDI MEGA is approaching the trailed market.

#### Whole new design concept.

The large RinseTank is utilizing the empty space between tank and tractor. This brings the centre of gravity closer to the tractor in combination with the known short center section, the MEGA is closer to the tractor than other lift mounted sprayers.

When the MEGA is parked on the ground, there is 8° backward angle. This gives an easier access when coupling and brings, when in working position, the sprayer in a vertical position, so the boom lift has the best working performance.

The left and right side are covered, so they can be easier cleaned and there will be no mud on the valves and fluid components.

Another design feature is the integrated fluid channel between the main and RinseTank.

All hoses and wires are covered and have a fixed position.



#### **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 8600 and HC 9600

"Touch the future" with integrated electronics. The HC 8600 and HC 9600 controllers provide growers with a powerful, full featured precision farming tool. AutoSectionControl, guidance and data logging are standard features of the ISOBUS terminals.

The MEGA is also available as ISOBUS version, here the sprayer can be controlled by an existing ISOBUS Terminal.



#### **DilutionKit**

DilutionKit gives the possibility to flush and rinse the boom and tank or the boom alone without leaving the driver's seat. All return lines and agitation will be flushed when spraying out the diluted liquid from the main tank.

#### **SPECIFICATIONS**

- Tank size: 1800, 2200 l
- Controller: HC 6500, HC 8600, HC 9600
- TurboFiller: High capacity, easy to operate
- Equipment level:

D version: prepared for DilutionKit

- Liquid system: Simple to operate with many features
- Chassis: High tensile steel chassis
- **PRO booms:** Compact, vertically folded booms from 15 to 28 m
- The Specialist Solution for Daily Work
- Functional design Center of gravity close to the tractor
- Biggest lift mounted on the market
- AirRide Air suspension for impressive boom performance

## WorkZone

The MEGA has been designed with a strong focus on user-friendliness and ease of operation, and the WorkZone is a fine example of this. In this area, everything you need to operate the sprayer is available, with all primary functions placed in easy to reach positions and everything designed to be simple and logical to operate.

#### CleanWater tank for hand washing

The 15 I tank is integrated into the design of the WorkZone and ensures an easy cleaning of the WorkZone.

#### Integrated ladder to get access to tank lid

A traversable ladder is fixed in the WorkZone on the left side of the sprayer to facilitate access to the tank lid.

The lid is located close to the latter, on the left side, allowing easy inspection of the tank. The design of the tank gives the operator excellent visibility of all tank walls as well.



#### **Good service ability**

To aid in service accessibility, the majority of electronic components and connections are located in a box behind the main tank. Well protected.

#### **Easy access to filters**

The filters are placed on the right side behind the cover and can be reached easily from the ground.

#### Protected placement of gauges

Gauges for monitoring the condition of the suction filter and the pressure gauge are mounted on the RinseTank platform.

This provides excellent visibility from the tractor and good protection as they are integrated into the tank design.

#### SafetyLocker

A SafetyLocker is located on the right side.



- 1. SmartValve pressure
- **2.** Agitation valve
- **3.** SmartValve suction
- 4. CleanWater tank valve
- **5.** PumpFiller coupling
- **6.** RinseTank filling
- **7.** TurboFiller
- **8.** TurboFiller operating unit

- 9. Valve Filter cleaning / Ext. cleaning
- **10.** EasyClean filter
- **11.** Cyclone Filter
- **12.** SafetyLocker
- **13.** Pressure regulation valve DynamicFluid4 (behind cover)



# **Liquid system**

#### **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.

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.



The MEGA 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





#### Dynamic fluid system based on 4-sensor technology

The fluid system on the MEGA is a new concept developed to obtain shorter response time and thereby more precise application in the field.

With its 4-sensor technology and no leakage design, DynamicFluid4 results in faster regulation with the highest possible accuracy and works with a fast "feed forward" regulation software to deal with all the challenges in modern spraying.

Also challenges forced by tractors with stepless transmissions, the DynamicFluid4 is programmed to cope with different driving behaviours and fast speed changes giving the crop the absolute right dosage.

The DynamicFluid4 system will calculate the consequences of the increased RPM and make the regulation instantly. The DynamicFluid4 property of pro-acting is based on 4 sensors in the fluid system measuring RPM, position of regulation valves, flow and pressure. Combined with a specific new software and a new, unique ceramic regulation valve, DynamicFluid4 is offering precision in the application rate giving the best performance available on the market.

#### Stability and safety

The sensors of DynamicFluid4 each have their individual task, but they will also work as back up for each other, and the regulation will continue. Regulation can be done manually.

#### RinseTank

The 200 I (1800) and 250 I (2200) RinseTank is integrated into the sprayer's design to allow safe and efficient cleaning in the field.

#### **Powerful agitation**

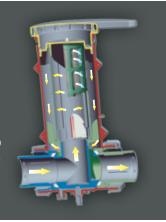
Use of Venturi nozzles increases the input for agitation by approx. 4 times. The nozzles are positioned so there are no blind spots in the tank. The agitation concept has proven to be extremely efficient for both liquid and powder.



#### 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.

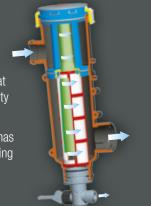
This ensures that the filter is cleaned when needed and only when needed. When cleaning the filter, all you have to do is to twist the lid 90°. This will close a main tank valve in the bottom of the filter and open the filter for inspection.



#### 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.





#### **VPZ** booms

The VPZ booms are designed and manufactured utilising our knowledge and experience as the world's leading sprayer specialist. The boom offers every conceivable facility to meet different spraying requirements.

The VPZ booms from 20 to 28 m have integrated AntiYaw damper on the boom wings. The lattice boom structure ensures a strong and rigid boom; the bases for exact and uniform spray distribution. The nozzles, spray lines and hoses are all well protected within the boom design.

The PRO boom is durable, and reinforced boom hinges ensure a steady boom in spraying position. A spring-loaded break-away section secures the tip of the boom.



#### **Robust and straight boom**

There are locking devices between the different boom elements to secure a straight and reliable boom without yaw movements, the basic for a good spray distribution in the field.



#### **Precise folding**

Due to an overtop folding mechanism of the outer boom element on the 27/28 m version, the sprayer length is equal on the 20 to 28 m version, so the centre of gravity is always close to the tractor.

The boom, has in transport still some freedom to move up and down in combination with the hydraulic damper on the lift a longer live time is secured.



#### High boom lift

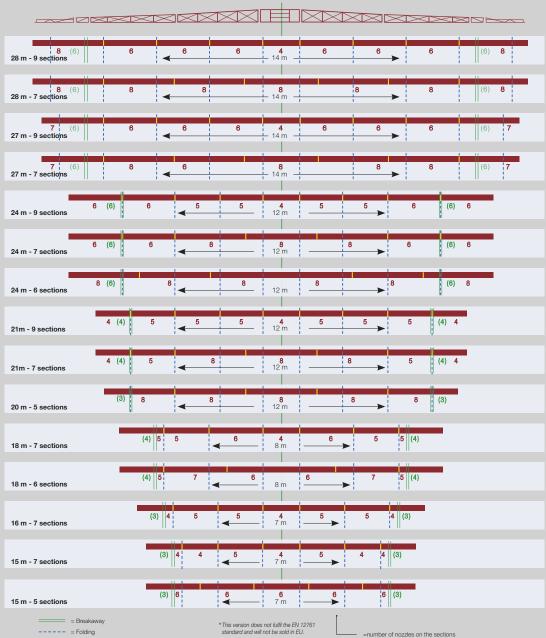
A long boom lift with a fast reacting cylinder and hydraulic damper allows a boom working height setting from 50 cm to 210 cm.

A hose guiding channel over the boom lift makes the MEGA sprayer with VPZ booms even more reliable.

#### **Boom sections**

The vertically folded PRO boom has 3, 4 or 5 segments on each boom wing.

The drawing illustrates how many nozzles each boom section has, and where the boom is folded.







#### Easy access to fluid system

The SmartValve on the left side can be easily reached by taking the shields away. The filters are placed on the right hand side behind the covers and can be reached easily from the ground.



#### **AntiYaw**

The whole range of VPZ booms is equipped with an AntiYaw device. The AntiYaw is incorporated into the boom on VP and on the boom centre on VH.

The AntiYaw secures optimal spray application and minimizes stress on the sprayer.

#### AirRide suspension for impressive boom performance

Polyurethane dampers absorb the movements. The dimensions of the dampers ensure that they do not get over-compressed when the tank is full, which will make them last longer.

During road transport the MEGA and consequently the boom will not be pushed so hard. In field conditions the boom suspension will work better so the boom can be run in optimum height over the crop.

#### **EasyConnect**

The upper linkage is self-detecting the sprayer in a safe position. The EasyConnect system allows to connect first the hydraulic hoses and PTO shaft and than drive backward and finish the coupling process.

The EasyConnect system can be added to MEGA sprayers later, as it is a bolt-on solution.

#### Category 2 and 3 coupling

The 2200 I version has standard category 3 coupling, the 1800 I can be ordered with category 2 or category 3.











#### **HARDI FT Front Tank**

The HARDI front tank can be used in different set-ups. Depending on the demands, either a nurse tank to bring more water into the field or a second chemical tank is used. The tank is made in high impact polyethylene and has a liquid free level indicator on top of the tank, which can be seen from the driver seat. The linkage is made for a Cat 2 front linkage.

#### **Nurse tank solution**

The basic tank and frame can be used as a nurse tank solution; in this case on the 5-way suction valve on the MEGA is a connection free. In the field the water from the front tank can be sucked into the main tank, new chemicals can be added, and the spray job can continue without driving back to the filling station.

#### **Chemical tank solution**

By adding an agitation pump kit and an electric valve kit, the front tank can be used as a separate chemical tank. The operator can thus choose from the driver seat, whether he wants to use the spray solution from the front tank or from the main tank.

On the MEGA the pressure empty function will be used for pumping liquid from the rear to the front tank. On the suction side a remote S93 valve will be added. The return from sections as well as agitation is still active on the main sprayer, so the operator has to control that the main tank is not overfilled.

The front tank has as standard a 135 I rinse tank. Which the optional 12 V pump a continuous cleaning of the front tank can be done.

#### **TECHNICAL DATA**

Tank size (net/gross)	RinseTank	Width (cm)	Height (cm)	Length (cm)	Weight (kg)
1200 / 1260	135	185	110	130	150
1500 / 1580	150	190	115	140	180

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.

# **Controller**

#### HC 8600 and HC 9600

The complete integration of all important information on one work screen is a highly demanded criterion for most farmers. The HC 8600 and HC 9600 have multicolour HD touch screens that are very easy to operate while providing an optimal overview for maximum control of the spray job.

#### **Integrated electronics**

From the working screen the driver can operate AutoHeight, AutoSectionControl as well as guidance and dosing. The view can be switched between 2D and 3D when guidance is active. The HC 9600 is able to divide the information with split screen for a better overview.

#### Data management and data transfer

The HC 8600 and HC 9600 have USB ports and WiFi adapter as standard, allowing data to be exchanged. This simplifies application reporting, providing an easy way to generate detailed application reports for governmental record keeping.

Reports provide location, product information, applied totals, field areas, applied maps and field boundaries. The data can be transferred to different farm management software.

The HC 9600 automatically creates an application report in a pdf-format which can be saved, emailed or printed. For this no additional software is required.

Basic information about weather, soil conditions, products, etc. can be added.

#### ISOBUS terminal

The HARDI MEGA can be operated with a universal ISOBUS terminal. The customer can order the MEGA and use the intelligent functions like AutoSectionControl direct from his own ISOBUS terminal if supported.

To make the complex sprayer operation easier, the proven HARDI JoyStick will be delivered with the MEGA sprayer.

#### HC 6500

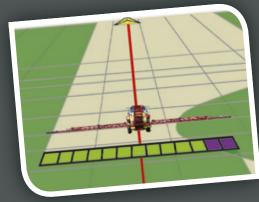
The HC 6500 is designed only for spraying and has for years proven it easiness in practical use around the world. The colour display and HARDI JoyStick operation, together with a user-friendly menu, will make the MEGA an even more obvious choice.

There are no compromises in functionality to meet the demand for other implements. The ergonomic optimal design supports the demands given by long working hours and easy operation.

All buttons are placed in a logical way which harmonizes with the corresponding function. As an example, all functions often used during the spray job are placed in the HARDI JoyStick, so these functions can be activated without lifting the arm from the arm rest of the seat. To make it as easy and simple as possible, the connection between sprayer and tractor is made with only one cable.







#### **AutoSectionControl**

The automatic GPS based positioning system opens and closes boom sections as the sprayer passes over areas already sprayed. Standard on HC 8600 and HC 9600 terminals.



#### **AutoSlant**

Automatic control of boom height and slant functions of the boom.

AutoSlant is available for the vertically folded VPZ booms from 20 to 28 m. AutoSlant is integrated in the ISOBUS terminal.

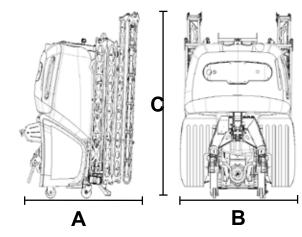
# **Technical specifications**

Tank size (net/gross)	1800	2200
Pump 364 (194 I/min)	•	•
Pump 464 (280 I/min)	•	•
RinseTank	200 I	250
CleanWater tanks	15 l	15 l

#### Weight, kg (empty)

15 m - 16 m PRO	1697	1747
18 m PRO	1755	1805
20 m VPZ	1820	1870
21 m VPZ	1830	1880
24 m VPZ	1850	1900
27 m VPZ	1855	1905
28 m VPZ	1865	1915

Measurements, cm	AxBxC	AxBxC
15 m - 16 m PRO	221 x 234 x 288	221 x 234 x 288
18 m PRO	221 x 234 x 315	221 x 234 x 315
20 m VPZ	242 x 234 x 292	242 x 234 x 292
21 m VPZ	242 x 234 x 292	242 x 234 x 292
24 m VPZ	244 x 234 x 327	244 x 234 x 327
27 m VPZ	244 x 234 x 328	244 x 234 x 328
28 m VPZ	244 x 234 x 328	244 x 234 x 328



- A = Total length in cm
- B = Maximum transport width in cm
- C = Total height in cm

## Features



SafetyLocker



Filling device



InLine Filters



Boom lights (optional)



External Cleaning (optional)



BoomPrime (optional)



Nørre Alslev, Denmark



Lleida, Spain



Savigny, France



Beaurainville, France



Davenport,



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.

#### **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 of the Danish testing scheme, the UK NSTS (National Sprayer Testing Scheme), and the German JKI (Julius Kühn Institut). This ensures that the highest quality sprayers are delivered to farmers.



Together with the Delta/Magni treatment of nuts, bolts and other items, we supply high corrosion protection of our products.



### **HARDI INTERNATIONAL A/S**

