



ZATURN

ORCHARD



■ **Versatile and Robust**



**Versatile - but
uncomplicated**



Model	Capacity		Pump	Treatment system	Air kit
	(Litres)	(US Gallons)			
ZATURN	1000	270	363/7 321/10	Hydro pneumatic	AG820 AG750
	1500	400			
	2000	520			



Versatile

The ZATURN is suited to a wide range of crops and will meet your requirements for optimised small bush or large tree spraying. An adjustable blower with 2 speed gearbox and 3 fan blade settings are the key to the wide range of air volumes.

Robustness and simplicity

The overall design of the ZATURN is based on HARDI's many years of experience in orchard spraying. The AG blowers are equipped with a centrifugal clutch which ensures a smooth start up and shut down and avoids drive line damage when tractor revs are not constant when driving in difficult conditions.

Economical

The AG blowers are fitted with a two-speed HARDI gearbox which allows easy change of the air volume, and enables running the tractor at lower revolutions to save fuel. The gear lever is designed with a unique anti disengagement system.

Operator safety

Operator safety is an important priority when HARDI develop new products. The liquid manifold is situated separately from the application zone. As an option a rinse tank can be fitted, allowing you to clean out the sprayer at any time.



The compact AG750 air kit is ideal for narrow orchards, where a precise but gentle breeze is required for spraying. The air kits are made from impact resistant polyethylene with a smooth snag free profile. Equipped with bottom flaps to provide superior control of the air, and avoiding ground dust turbulence in the spray mist. The larger AG820 fan house is equipped with a larger diameter fan combined with a turbo channel which provides outstanding air distribution.



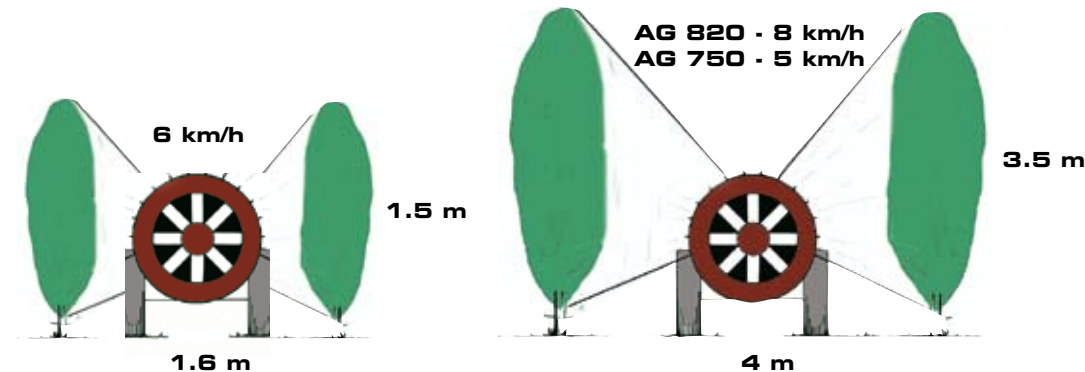
The ZATURN Heavy Duty chassis is designed for tough conditions, due to its strength and low centre of gravity. In extreme conditions a HD bumper can be fitted. The strong chassis allows DUO deflectors to be fitted. The DUO deflectors improve application in larger trees as well as reducing spray drift. (See page 2) (Only available on AG 820).

Smaller bushes

Most vines or berry crops require an air breeze to carry the spray in a way that does not damage the grapes or berries.

Larger trees

Larger trees with a higher vegetation density require a powerful air supply to penetrate and apply the spray liquid uniformly and precisely inside the canopy.



The flexibility of the AG air kits allows the sprayer to be adjusted for optimal use whatever your crop needs are.



The BKC operating unit, with its constant pressure regulator system and HARDI MATIC pressure regulator, is a precision tool that governs and controls your water volume rates and the -

all important - dose. The BKC system is designed with HARDI MATIC technology, which allows variation in tractor engine rpm whilst remaining in the same gear and will maintain the desired application rate.



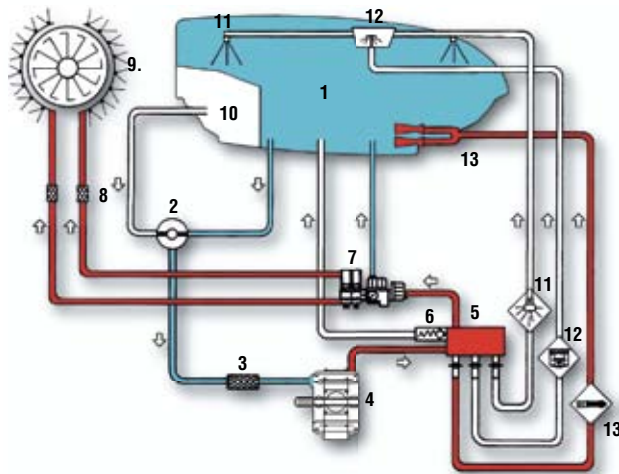
The electrically operated EVC control unit provides a comfortable and safe operator environment. The EVC unit with its left and right section valves allows individual on/off without affecting the pressure, thanks to constant pressure sys-

tem. The EVC is designed with HARDI MATIC technology, which maintains your application rate whilst in the same gear.

Ask your dealer for more options.

Function diagram

- | | |
|----------------------|--------------------------------|
| 1. Main tank | 9. Spray line |
| 2. Three way valve | 10. Rinsing tank |
| 3. Suction filter | 11. Rinsing nozzle |
| 4. Pump | 12. Filter flush |
| 5. Pressure manifold | 13. Venture agitation |
| 6. Safety valve | 11 and 12 are optional |
| 7. Operating unit | according to country |
| 8. In-line filter | well as technical residue kit. |



Suction filter with three-way valve to select between rinsing tank and main tank. The three-way valve allows cleaning of the filter without spilling residual spray liquid on the ground.



In-line pressure filters for HLC system

HARDI HD gearbox with anti disengagement system on AG 820



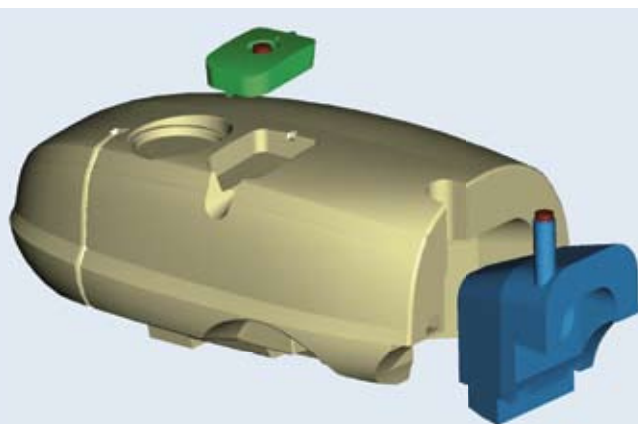
Pump characteristics

Self-priming
Can run dry

Diaphragm pumps

363/7

Number of diaphragm elements	6
RPM	540
Maximum pressure, (bar)	20
Volume, (l/min)	140
Power consumption, (kW)	5.4
Lubrication	grease



Tank

Smooth, aerodynamic design ensures that crop and branch damage is kept to a minimum. Safe and practical filling point situated at the side of the tank for ease of filling. Made in the best material available for chemical tanks. The UV resistant polyethylene is corrosion free, bump-proof and flexible. The very smooth surface of the tank secures efficient cleaning inside and outside. The rinsing tank is placed at the rear with an easy accessible filling point. Safety and precision are key words in HARDI: A 15 litre clean water tank is situated where the operator needs it. Two tank gauges allow the operator to check the level from either the tractor seat or the filling point.

Application system

Nozzle holders

HARDI mistblowers are fitted with brass nozzle holders and can be closed individually or aimed at the canopy. All nozzle holders are fitted with non-drip valves which instantly stop the liquid flow when closing a section or the main on/off.

ZATURN mistblowers are standard equipped with single nozzle holders, and double nozzle holders are available as optional extras.



Single nozzle holder



Double nozzle holder

Nozzles



1299

Ceramic hollow cone nozzles



ISO 03 F110

110° flatfan nozzles

Also a wide range of injector nozzles are available for drift reduction.



The AG820 with 8 synthetic fan blades, very resistant to impacts from foreign elements, such as small stones. Light kit is fitted as optional. V deflector can be fitted as optional.
Ask you dealer for more options.



The tree deflector is very suitable for hedge pruned trees such as apples, pears and similar planted formations.

DUO T gives an improved drift control



The DUO V deflector is very suitable for smaller bushes such as blackberry, raspberry, vine and similar.

DUO V gives an improved drift control

Air kit	AG750	AG820
Blower type	axial	axial
Diameter (mm)	750	820
Fan material	Aluminium and synthetic polymer	Aluminium and synthetic polymer
Gear box speeds	2 + neutral	2 + neutral
Power consumption (kW)	see below	see below
Adjustable fan blades	✓	✓
Centrifugal clutch	✓	✓
Liquid system	Hydropneumatic	Hydropneumatic

Range of air supply from AG750

Gear /m³/h	Pitch 1	kw	Pitch 2	kw	Pitch 3	kw
1°	14.000	4	21.000	6	28.000	10
2°	21.000	6	28.000	10	35.000	18

Range of air supply from AG820

Gear /m³/h	Pitch 1	kw	Pitch 2	kw	Pitch 3	kw
1°	31.000	15	38.000	26	45.000	33
2°	38.000	26	45.000	33	52.000	44

Real field data, not air tunnel data.

Factory settings - second pitch.

Technical specifications

Model	ZATURN 1000	ZATURN 1500	ZATURN 2000
A	3395	3595	3945
B	1535	1590	1590
C	1200	1350	1500
D off set	70	70	70
Weight empty	450	695	770

Measures (mm) and weight (kg)

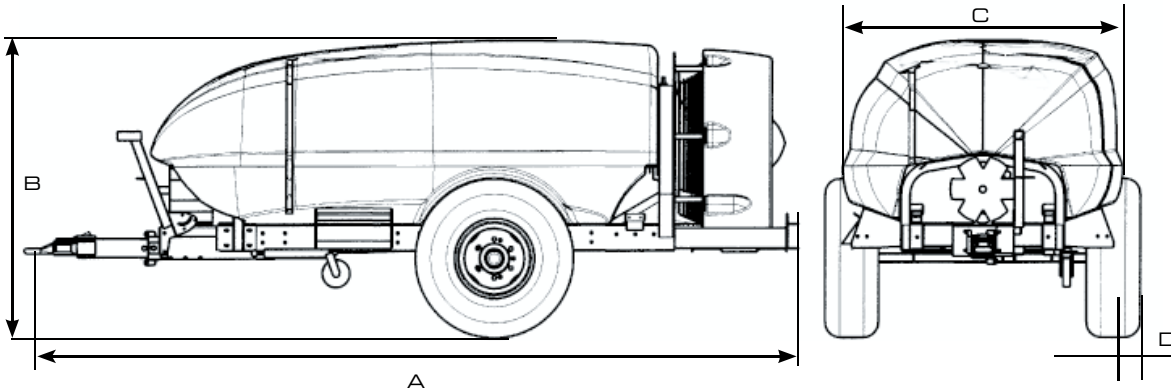
For duo deflector add 500 mm in height

Measurement A for sprayers fitted with drawbar with fork hitch

Long drawbar with ring hitch add 640 mm

Articulated drawbar add 260 mm

* Off-set is where the wheel is wider than the tank, only data for one side is stated, multiply by two.



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

10 years' spare part supply guarantee • Manuals in your language • Internet documentation on spares.

HARDI - Your sprayer specialist

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 worldwide distribution and sales network comprise more than 100 countries where we are represented by importers, agents and sales subsidiaries. Latter are situated in Sweden, Norway, Denmark, the UK, France, Spain, North America, Germany and Australia.

The key words to ensure a leading position in the world market of equipment for crop protection are research and development of quality products. When we develop new sprayers or components we have defined the following essential key words: Strength, reliability, capacity, economy, operational friendliness, service, precision and price. Any development is compared to these facts.

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.

HARDI INTERNATIONAL A/S

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HIA MARKETING
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