

# MasterSpray

Field sprayer overview



**Perfect  
start!  
Fully  
equipped!**

- Delivery from specialist dealers -

**VOGEL**  **NOOT**  
SOIL SOLUTIONS

# Modern crop protection with Vogel&Noot



IN 280 with FH 918 piping



## Crop protection today

Modern crop protection is a basic requirement for professional agriculture, as it ensures sustainable production and at the same time accommodates the interests of consumers and ensures environmental protection.

The aim of crop protection is to protect plants and crops from harmful organisms. Crop protection must however only be performed in a suitable way. The implements must

therefore meet modern requirements. Furthermore, without crop protection, it is not possible to obtain good yields. Cost-effectiveness therefore plays a crucial role at

Vogel & Noot. VN field sprayers set new standards in productivity, spray quality and efficiency. See for yourself!

# The right technology is crucial








## Advanced crop protection

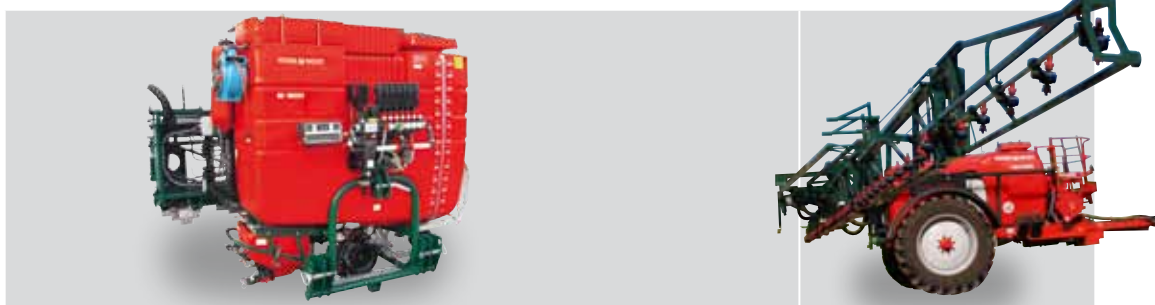
**Vogel & Noot** focuses on proven and innovative technology with its new field spraying program **Master Spray**. The field sprayers meet the high requirements for sustainable crop protection. The highest production quality, most modern technology and simplest operation ensure maximum efficiency and cost-effectiveness.

The VN field sprayers impress with their perfect technology. As mounted sprayers or as a towed version, working widths of 12 – 30 m are possible. Innovative equipment details ensure secure handling and maximum convenience. Tank volume of up to 4600 l.

## Advantages

-  Clear arrangement of all operating elements
-  Innovative integrated implement system
-  High efficiency and operational reliability
-  Precise application with electronic control
-  Filling and disposal centre for the greatest possible protection of users and the environment

## The range



Field sprayers		IS 63	IS 83	IS 800	IS 1000	IS 1200	IS <sup>pro</sup> 1480	IS <sup>pro</sup> 1680	IS <sup>pro</sup> 2000	IN 280	IN 360	IN 460
Design		Mounted attachment							Trailer			
Actual tank content	l	660	880	880	1100	1350	1480	1680	2000	2800	3600	4600
Working widths	m	12 - 15		12 - 24			12 - 27			15 - 30		
Pump capacity	l	135 - 256							256 - 400			

# Tractor linkage technology for excellent efficiency



VN MasterSpray covers a huge surface area thanks to a working width of 12 – 30 metres. There is a spray linkage type for the operational

requirements of every spray. The variable nozzle equipment allows for optimal adaptation to a specific crop and local climate conditions.

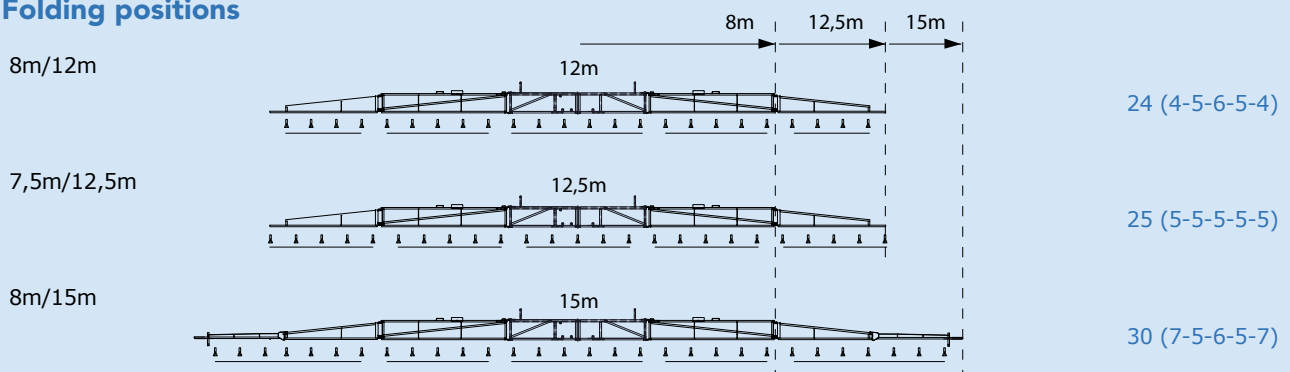
## FH 400 – The compact version



Very stable composite grid construction from square bar steel. The swivel arms of the boom lock into place independently when folded out and the extension arms yield to obstacles in either direction of travel. The pendulum suspension features continuously adjustable damping and absorbs impacts from uneven parts of the ground, which keeps the tractor linkage parallel to the ground even on slight lateral slopes. In this way both the nozzle guidance and the distribution of the agent are optimised.

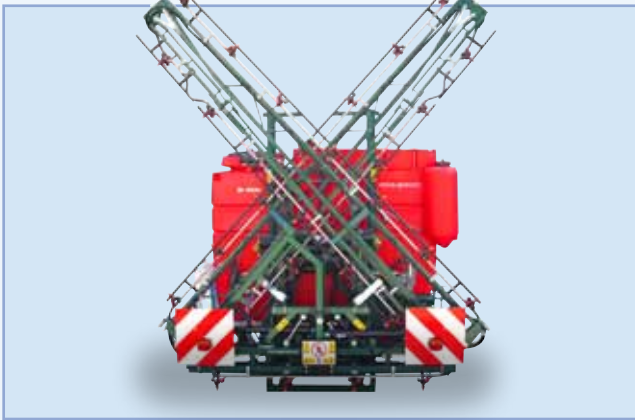
- For implements IS 63, IS 83
- Working widths 12, 12.5, and 15 m.
- Transport width 2.75 m

### Folding positions





## XFH 600 – The X-folder

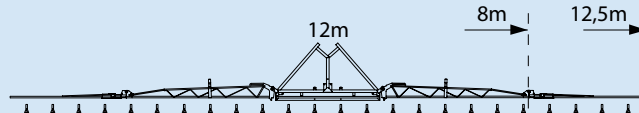


The special feature is the one-sided asymmetrical folding option, which can be deployed on either side. Comes as standard with hydraulic slope compensation and height adjustment. All pipings are made from Nirosta and are well protected with the nozzle holders and nozzles. With appropriate electronic equipment, all folding functions on the boom valve can be preselected. For the beam operation, only a double-acting control unit (folding) and a single-acting control unit (height adjustment) are then required. A 3-way nozzle holder is included in the basic equipment.

- For implements **IS, ISpro 1480, ISpro 1680 and ISpro 2000**
- Working widths **12, 12.5, and 15 m.**
- Transport width **2.50 m**

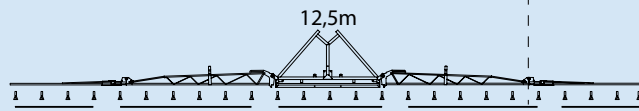
### Folding positions

2m/8m/12m  
5m/7m/10m asym.



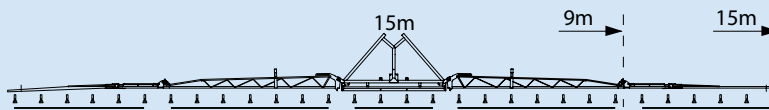
24(4-6-4-6-4)

2,5m/7,5m/12,5m  
5m/7,5m/10m asym.



25(5-5-5-5-5)

2m/9m/15m  
5,5m/8,5m/12m asym.



30(6-7-4-7-6)

## FH 800 – The stable version

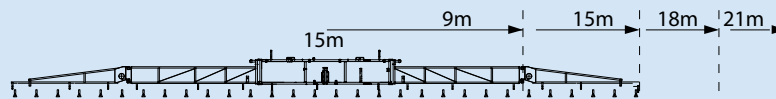


Composite grid construction designed for use over large surface areas and for withstanding extremely high loads. Your tractor requires just one single-acting and one double-acting connection for the hydraulic folding system. The 18 and 21 m piping can only be folded asymmetrically on one side. The extension arms are equipped with breakaway protection, nozzle protection plates and impact bars in order to protect the nozzles.

- For implements **IS 83, IS 800, IS 1000, IS 1200, ISpro 1480, ISpro 1680, ISpro 2000 and IN 280**
- Working widths **15, 18, and 21 m.**
- Transport width **2.98 m**

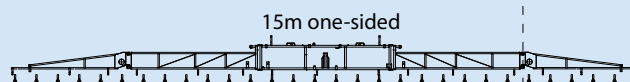
### Folding positions

3m/9m\*/15m



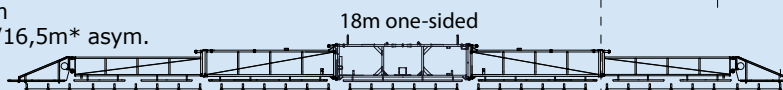
30 (6-6-6-6-6)

3m/9m\*/15m  
9m/12m\* asym.



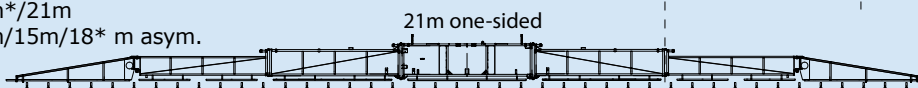
30 (6-6-6-6-6)

3m/9m/15m\*/18m  
6m/10,5m/13,5m/16,5m\* asym.



36 (9-6-6-6-9)

3m/9m/15m\*/21m  
6m/9m/12m/15m/18\* m asym.



42 (6-6-6-6-6-6)

\* by hand

# Tractor linkage technology for excellent efficiency

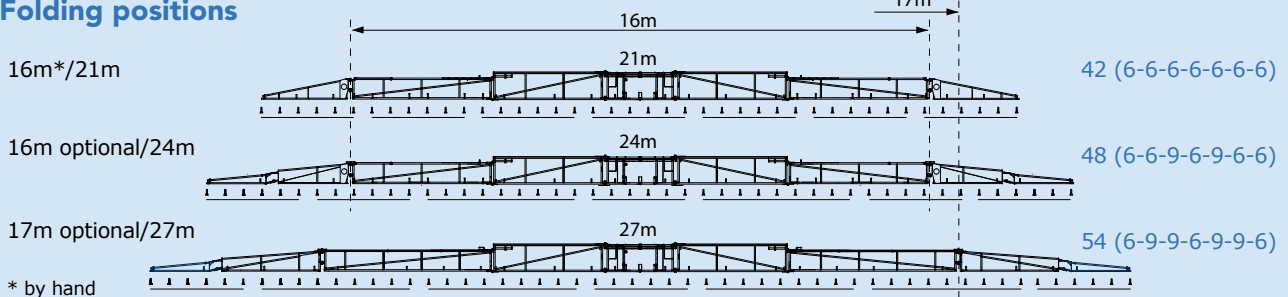
## FH 900 – The efficient version



Due to its small, compact design, this is the ideal piping for inexperienced users. The central section provides stability whilst absorbing the horizontal and vertical variations in the ground. This absorption keeps the distance between the nozzles and the ground even. Breakaway protection shields the nozzles from damage over the entire working width. The booms are folded lengthwise to the side of the tank for travel on roads. An additional plus for safety: no projecting boom sections. Nozzle pipe made from stainless steel.

- For implements **IN 280**
- Working widths **21, 24, and 27 m.**
- Transport width **2.60 m**

### Folding positions



## VFH 1200 – The vertical version

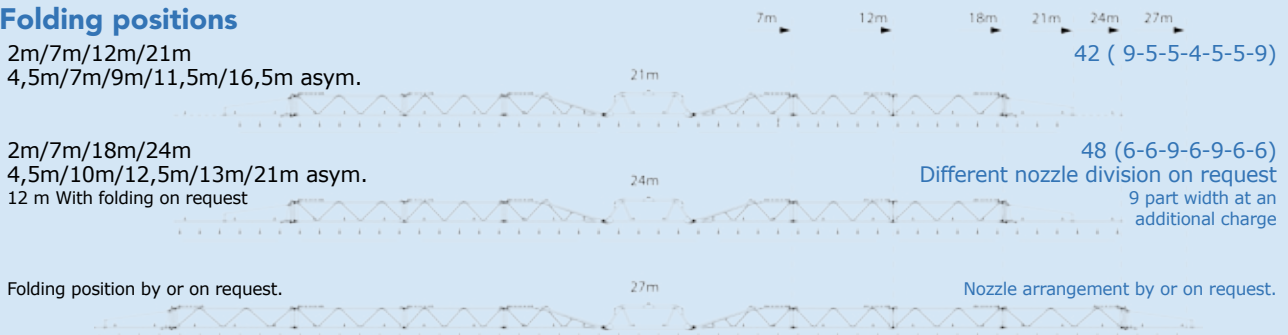
**NEW**



The vertically folded piping for the professional sector. In the transport position, the piping is located compactly behind the implement. The stable piping can be folded on one side, and additional angling is possible (variable geometry). Stainless steel pipes with a triple nozzle fitting as standard. All linkage is fitted with a hydraulic circulating oil block. The hydraulic supply to the entire sprayer takes place exclusively via one single-acting control unit with a depressurised return line.

- For implements **IS 1200, IS<sup>pro</sup> 1480, IS<sup>pro</sup> 1680, IS<sup>pro</sup> 2000**
- Working widths **21, 24 m and 27 m (only for IS<sup>pro</sup>)**
- Transport width **2.50 m**

### Folding positions





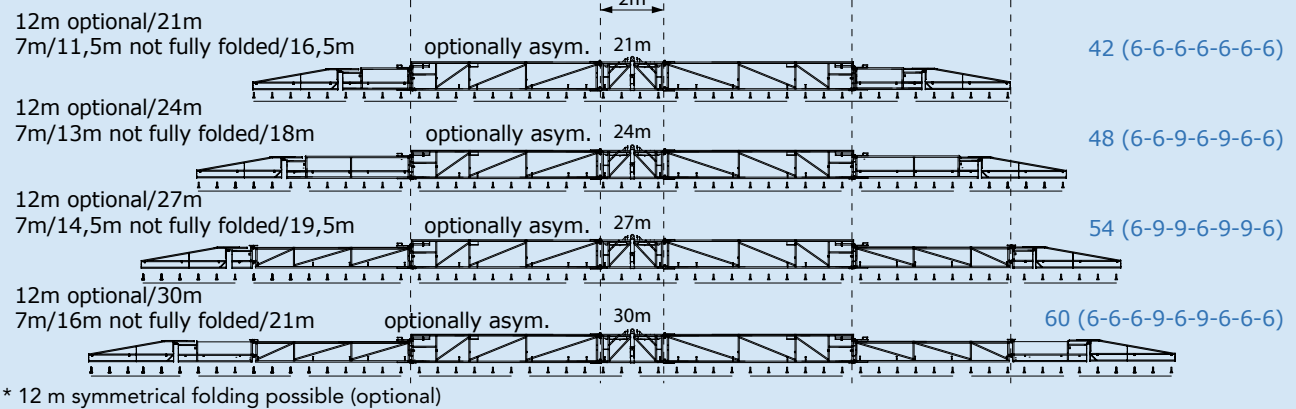
## FH 903 – The versatile version



With absorption pendulum suspension for the best dynamic spray pattern and with **12 m symmetrical working width reduction** as well as one-sided asymmetrical folding (optional). The central section provides stability whilst absorbing the horizontal and vertical variations in the ground. This absorption keeps the distance between the nozzles and the ground even. Breakaway protection shields the nozzles from damage over the entire working width. The booms are folded lengthwise to the side of the tank for travel on roads. Nozzle pipe made from stainless steel.

- For implements **IN 360** and **IN 460**
- Working widths **21, 24, 27 and 30 m**
- Transport width **2.70 m**

### Folding positions



### One-sided folding

(optional)



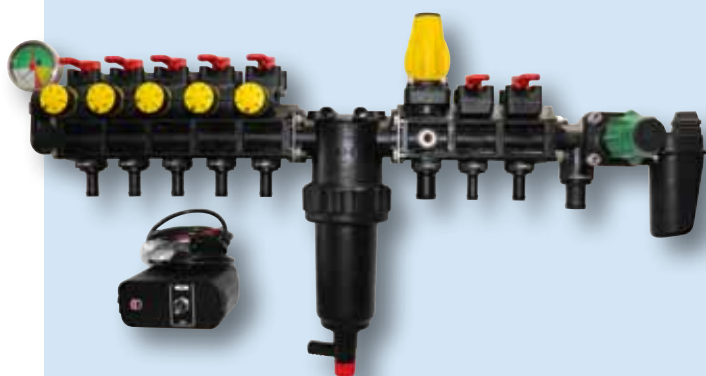
### Symmetrical 12 m folding

(optional)



# Metering technology – precise and upgradeable

The metering boom valves are extremely resistant to aggressive substances, thanks to the use of high quality materials such as VA or viton. Simple and logically designed, the operator interface is user-friendly. A suitable metering technique is available for every area of use.



## **Dosicontrol® 203/205 Eco**

### **Hand-switched boom valve with 3 or 5 boom sections**

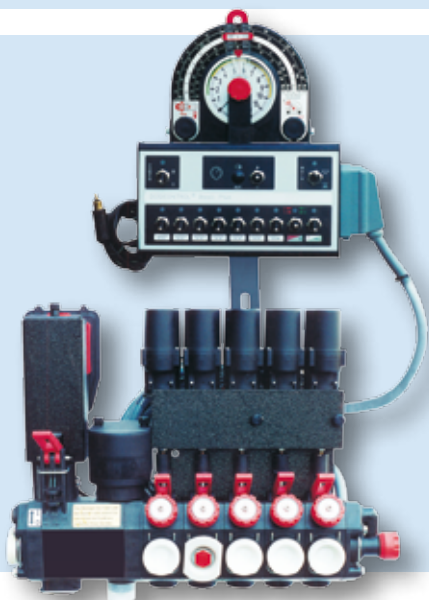
With the Eco boom valve, the central circuit board (back suction) is electrically switched on and off remotely from the tractor. The part widths can be switched on and off manually.



## **Dosicontrol® 205 Pro**

### **Electric remote control boom valve with 5 part widths**

- Operating panel with integrated manometer
- Two additional shutoff valves for internal cleaning and second load, e.g. external cleaning, etc.
- Large filter



## **Dosicontrol® Basic**

### **Remotely operated with electric motor**

The convenient solution with

- Reliable drive motors on central circuit board and all boom sections
- Large operating panel with metering compass and DK 110 manometer
- Clear operation and handling with convenient display and controls
- Can be updated to an electronic version





### Spraylight

- Simple, logical operation procedure – just press one button to start work
- 7 boom section switches with main shutoff
- 4 hydraulic functions, 3 hydraulic functions with circulating oil
- Manual or automatic control of the dispersion amount
- 20 day counters and one overall counter
- Display of pressure, speed, dispersion amount, tank capacity, boom section status, flow rate and area coverage



### Basicpro + Comfortpro

- Both terminals are ISO-BUS-compliant and meet standard 11783
- Basicpro with a 5.7" TFT colour display
- Comfortpro with a 10.4" TFT colour display and outstanding readability
- Up to 9 boom sections, with option of up to 13 boom sections
- USB stick for data transfer
- Special hydraulic functions in abundance, circulating oil regulation
- As optional: GPS-boom section switching, parallel driving, Distance Control (automatic linkage control), precise Exacttracpro tracking, electronic fill level display, job management (Comfortpro series), multifunctional handle, electronic pressure sensor, connection of up to 2 cameras (requires terminal with GSM modem), analogue or radio control



### Dosicontrol® E 854

The fully electronic sprayer computer. Simple, logically designed operation

- Backlit, graphics-capable screen
- Impact data storage, electronic tank display available (optional)
- Path measurement with auto-start function
- Adjustment of application rates in realistic percentage increments
- Manual operation possible at any time if required
- Lots of other functions, circulating oil regulation (optional)
- Potentiometer control with determination of centre for slope compensation (optional)
- Hydraulic switch for Exact Trac with integrated folding functions (optional)
- Integrated switching mechanism for boom sections (up to 9 sections), no additional control box required

# Pumps – pumped full of spray technology

As well as metering technology, pumps also have a decisive impact on the performance and work quality of field spraying. For every MasterSpray system, VN supplies pumps with required specific outputs from 117 l/min. to 400 l/min. Every pump is suitable for liquid fertiliser and has a drive in a full oil bath.

**As standard!  
All pumps suitable  
for liquid fertiliser**



## IS series

### MA 140

135 l/min, 0–20 bar, robust three-cylinder piston membrane pump.

Drive in full oil bath.



## IN series

### MA 260

256 l/min, 0–20 bar, robust six-cylinder piston membrane pump.

Drive in full oil bath with through drive.

**Optionally also for IS implements  
Standard for IS<sup>pro</sup> 1680  
and IS<sup>pro</sup> 2000**



### MA 170

170 l/min, 0–20 bar, robust four-cylinder piston membrane pump.

Drive in full oil bath.



### MA 320

329 l/min, 0–20 bar, low-maintenance, robust six-cylinder piston membrane pump.

Drive in full oil bath with through drive.



### MA 230

228 l/min, 0–20 bar, robust six-cylinder piston membrane pump.

Drive in full oil bath.



### MA 400

400 l/min, 0–20 bar, low-maintenance, robust six-cylinder piston membrane pump.

Drive in full oil bath with through drive.



# Agitator – when the focus is on top performance

## Efficiency with the whirlpool effect

The injector agitator, which can be continuously adjusted for flows of up to 500 l/min. and switched off, adapts the intensity of the agitation – regardless of speed – to your specific requirements.

Agitating nozzle tubes across the entire tank bottom ensure complete agitation and an even concentration of spraying agent. A 'whirlpool effect' that also works reliably for high concentrations and fast sedimenting agents.

Acting as an anti-sloshing baffle, the rinse tank is set very deep into the solution tank at an angle for a neutral centre of gravity. This gives stability and safety in every filling situation.

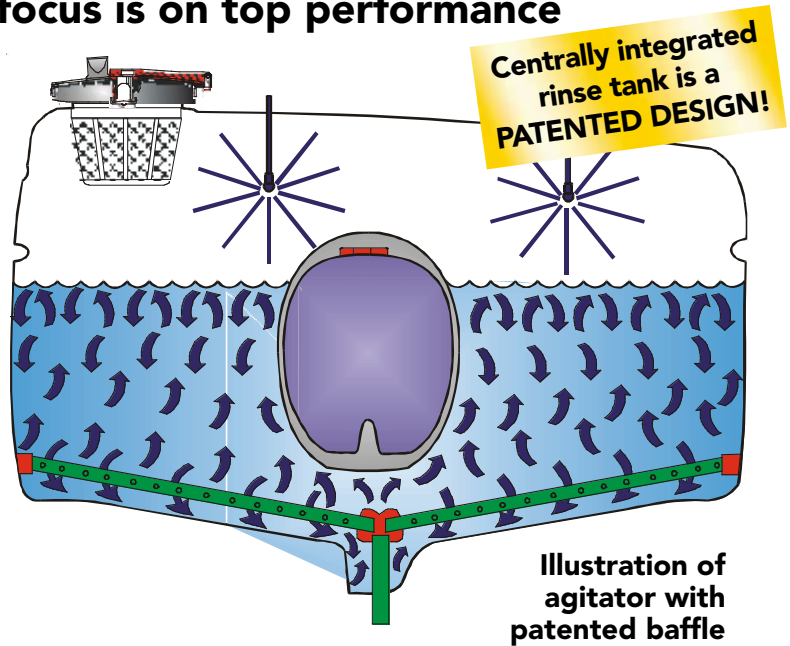
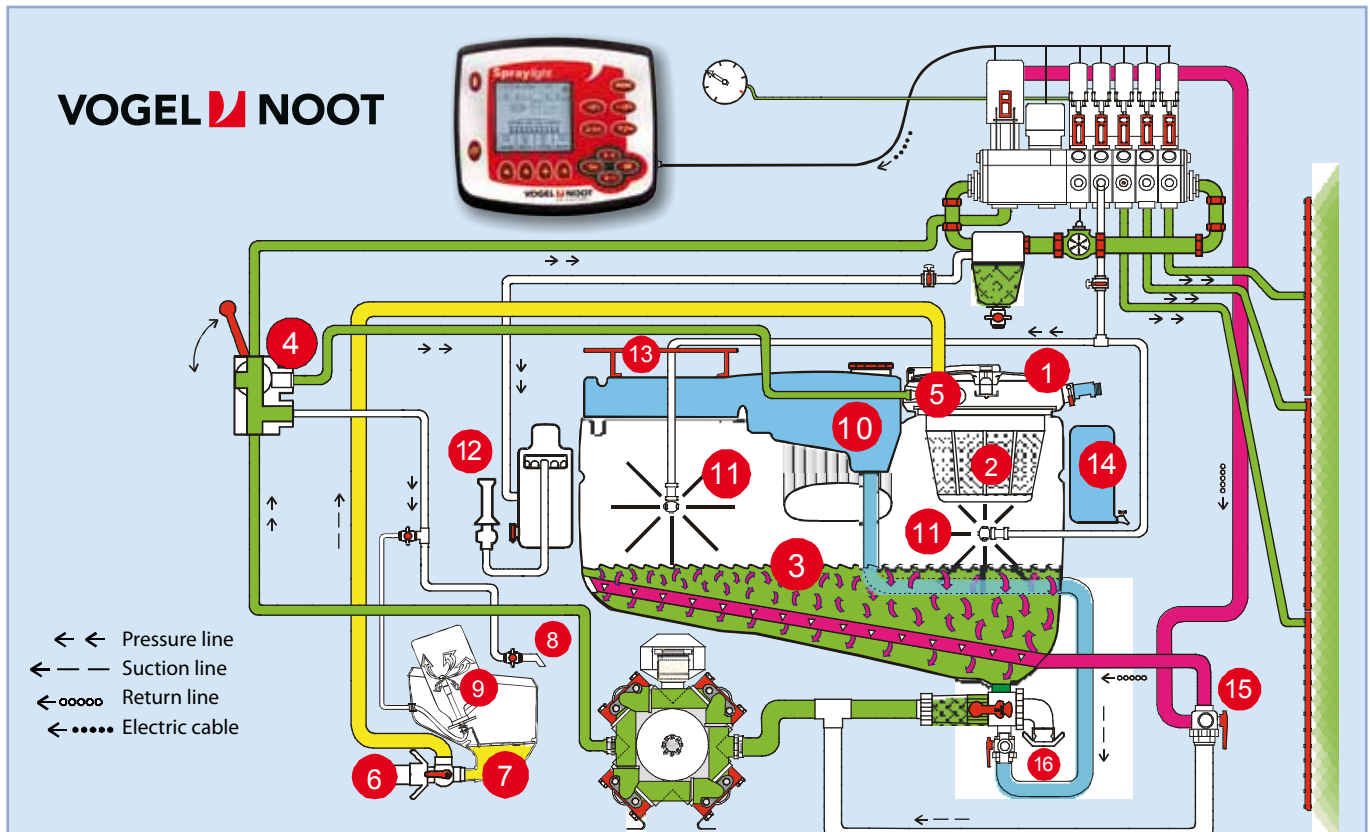


Illustration of agitator with patented baffle



← ← Pressure line  
 ← — Suction line  
 ← ○○○○ Return line  
 ← ..... Electric cable

## Integrated efficiency down to the last detail

- |   |  |  |  |
|---|--|--|--|
| <p>1 Water line connection for filling area with safety flow regulator segment, injector outlet between lid and strainer, which forces the liquid to be filtered</p> <p>2 Large volume strainer, Ø 400 mm – 27 l</p> <p>3 Tapered tank ensures minimal technical residue</p> <p>4 Quick pressure regulation. One turn of the hand directs</p> | <p>the flow of the pump to the boom valves, the injector or the rinse valve/packaging rinsers</p> <p>5 Injector produces low pressure for filling funnel (7) and (6) FU4 filling hose</p> <p>6 External suction with FU4 camlock</p> <p>7 Filling funnel for any spraying agent formulas</p> | <p>8 Rinse valve for cleaning and for moistening powdered spraying agents</p> <p>9 Packaging rinsers</p> <p>10 Rinse tank for complete cleaning of the system, even if tanks are partially filled</p> <p>11 Internal cleaning of tank: Two rotating cleaning nozzles clean the tank right in the field</p> | <p>12 Outer cleaning of equipment: Hose drum for cleaning the entire unit whilst at the fields</p> <p>13 Central support for sprayer</p> <p>14 Separate hand wash tank, 20 litre content. Hygienic protection for users</p> <p>15 Agitator shutoff</p> <p>16 External suction for filling via pump</p> |
|---|--|--|--|

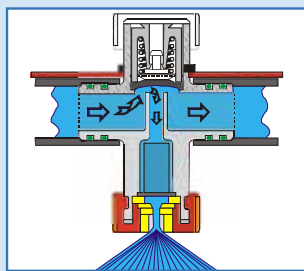
# Technical specifications – IS mounted sprayers

Type/model	IS 63	IS 83	IS 800	IS 1000	IS 1200	ISpro 1480	ISpro 1680	ISpro 2000
<b>Actual capacity (litres)</b>	660	880	880	1100	1350	1480	1680	2000
<b>Nominal capacity (litres)</b>	600	800	800	1000	1200	1400	1600	1900
<b>Working width (metres)</b>								
with linkage FH 400	12 - 15	12 - 15	-	-	-	12 - 15	12 - 15	12 - 15
with linkage XFH 600	12 - 15	12 - 15	12 - 15	12 - 15	12 - 15	12 - 15	12 - 15	12 - 15
with linkage FH 800	-	15	15 - 21	15 - 21	15 - 21	15 - 21	15 - 21	15 - 21
with linkage VFH 1200	-	-	-	-	21 - 24	21 - 27	21 - 27	21 - 27
<b>Pumps</b>								
MA 120, 117 l/min	Serie	-	-	-	-	-	-	-
MA 170, 170 l/min	-	Serie	Serie	Serie	-	-	-	-
MA 200, 198 l/min	-	-	-	-	Serie	Serie	-	-
MA 260, 256 l/min	-	-	-	-	-	MP	Serie	Serie
<b>Height (cm)</b>								
with linkage FH 400	244	244	-	-	-	244	244	244
with linkage XFH 600	280 - 310	280 - 310	280 - 310	280 - 310	280 - 310	270 - 310	270 - 310	270 - 310
with linkage FH 800	-	230	230	230	230	230	230	230
with linkage VFH 1200	-	-	-	-	320	320	320	320
<b>Weight (kg)</b>								
with linkage FH 400	386 - 416	415 - 445	-	-	-	923 - 941	943 - 961	973 - 991
with linkage XFH 600	450 - 475	495 - 530	495 - 530	515 - 540	562 - 597	1010 - 1045	1030 - 1065	1060 - 1095
with linkage FH 800	-	686	686 - 960	695 - 970	760 - 1035	1113 - 1375	1133 - 1395	1163 - 1425
with linkage VFH 1200	-	-	-	-	960 - 990	1375 - 1523	1395 - 1543	1425 - 1573
<b>Transport width (cm)</b>								
with linkage FH 400	275	275	-	-	-	275	275	275
with linkage XFH 600	250	250	250	250	250	250	250	250
with linkage FH 800	-	298	298	298	298	298	298	298
with linkage VFH 1200	-	-	-	-	250	250	250	250
<b>Transport length (cm)</b>								
with linkage FH 400	146	146	-	-	-	145	145	145
with linkage XFH 600	135	135	135	135	135	155	155	155
with linkage FH 800	-	158 - 180	158 - 180	158 - 180	158 - 180	180 - 200	180 - 200	180 - 200
with linkage VFH 1200	-	-	-	-	180	200 - 220	200 - 220	200 - 220

All specifications are approximate!

## Nozzles for every application

VN supplies an extensive range of high quality nozzles for its masterspray field sprayers for every application. Depending on the equipment, the dispersion amount, spray pattern and spray direction of the field sprayers can be adapted for particular crop and application conditions.



**Closed cap**  
No mix is sprayed if a membrane is damaged. Membrane easily accessible.

## Flushing funnel

Flushing funnel for fast and safe filling of all kinds of spraying agent, including urea. Filling with powerful injector. Can easily be pulled out like a drawer for filling. A seal prevents ingress of dirt. Canister cleaning by rotating nozzle and freely movable rinse valve. Rinsing of

funnel by stainless steel ring line.









# Technical specifications – IN trailed sprayers

Type/model	IN 280	IN 360	IN 460
<b>Actual/nominal capacity (litres)</b>	2.800 l / 2.500 l	3.600 l / 3.200 l	4.600 l / 4.200 l
<b>Working width (metres)</b>			
with linkage FH 800	15 - 21	-	-
with linkage FH 900	18 - 27	-	-
with linkage FH 903	-	21 - 30	21 - 30
<b>Rinse tank/hand wash tank</b>	290 l / 15 l	460 l / 42 l	460 l / 42 l
<b>Pumps</b>			
MA 260, 256 l/min	Series	-	-
MA 320, 329 l/min	optional	Series	Series
MA 400, 400 l/min	-	optional	optional
<b>Length (cm)</b>			
without linkage	402 - 441	528 - 567	567
with linkage FH 800	477 - 530	-	-
with linkage FH 900	536 - 616	-	-
with linkage FH 903	-	730 - 781	730 - 781
<b>Width (cm)</b>			
with linkage FH 800	298	-	-
with linkage FH 900	265	-	-
with linkage FH 903	-	270	270
<b>Height (cm)</b>			
without linkage	265 - 277	271 - 283	308 - 320
with linkage FH 800	278 - 290	-	-
with linkage FH 900	346 - 358	-	-
with linkage FH 903	-	346 - 358	346 - 358
<b>Weight (kg)</b>			
without linkage	1.850 - 2.005	1.995 - 2.390	2.055 - 2.450
with linkage FH 800	2.270 - 2.702	-	-
with linkage FH 900	2.691 - 2.955	-	-
with linkage FH 903	-	2.836 - 3.730	2.836 - 3.790
<b>Tyres<sup>1</sup></b>			
270/95R54	optional	-	-
12.4-46 (300/95R46-AS profile)	Series	Series	-
16.9-38 (420/85R38-AS profile)	optional	optional	-
18.4-38 (460/95R38-AS profile)	optional	optional	Series
20.8-38 (520/85R38-AS profile)	on request	optional	optional
580/70R38	-	-	optional
620/70R38	-	-	optional
<b>Track width<sup>2</sup></b>	1.500 - 2.000 mm	1.500 - 2.000 mm	1.700 - 2.000 mm
<b>Ground clearance</b>	71 cm	65 - 85 cm	65 - 85 cm
<b>Axle spring system</b>	-	optional	optional
<b>Transport speed</b>	25 km/h	25 km/h	40 km/h


<sup>1</sup> Note permitted total weight    <sup>2</sup> Larger track widths available on request, track width of 1,500 mm possible with 12.4R46 eT-130 tyres  
**All specifications are approximate!**



# Electronic versions for IS and IN series MasterSpray systems

	suitable for		Item-no.		
	IS	IN			
<b>Spraylight computers</b>					
<b>Tractor with signal socket (deceleration)</b> Additional charge on top of price for DC 205 Basic		x	SY200844		
<b>Tractor without signal socket (sensor)</b> Additional charge on top of price for DC 205 Basic		x	SY201041		
No additional charge on top of price for E 854			x	SY201055	
<b>Accessories:</b>					
<b>Electronic pressure sensor</b> (recommended)		x	x	SY201117	
<b>8 m extension cable</b> (required for IN series)			x	SY201054	
<b>Tank Control</b> Tank contents measurement with filling control			x	x	SY201039
<b>Basic<sup>PRO</sup> on-board computer (ISO-BUS-compatible)</b>					
<b>Tractor with signal socket (deceleration)</b> Additional charge on top of price for DC 205 Basic		x		SY200852	
<b>Tractor without signal socket (sensor)</b> Additional charge on top of price for DC 205 Basic		x		SY200858	
Additional charge on top of price for DC 205 Basic				x	
<b>Additional charge ISO-BUS without tractor job computer</b>				x	
<b>Additional charge ISO-BUS with tractor job computer including signal socket</b>			x		
<b>Additional charge ISO-BUS with tractor job computer including sensor</b>			x		
<b>Comfort<sup>PRO</sup> on-board computer incl. ISO-BUS and job management</b>					
<b>with tractor job computer including signal socket</b> Additional charge on top of price for DC 205 Basic		x		SY200862	
<b>with tractor job computer including sensor</b> Additional charge on top of price for DC 205 Basic		x		SY200858	
Additional charge on top of price for E854 without tractor job computer				x	
<b>(both on-board computers are only an option when piping has circulating oil block)</b> <b>ISO-BUS model for tractors with existing ISO-BUS on request</b>					
<b>Accessories:</b>					
<b>Electronic pressure sensor</b> (recommended)		x	x	SY200860	
<b>8 m extension cable</b> (required for IN series)			x	SY201054	

# Electronic versions for IS and IN series MasterSpray systems

		suitable for		Item-no.
		IS	IN	
<b>Tank Control</b> Tank contents measurement with filling control		x	x	SY201039
<b>Multifunctional handle</b> Safe and convenient control of implement functions		x	x	SY200859
<b>Distance control</b> Automatic height guidance for sprayer linkage Ultrasound sensors set the required distance for the plant canopy.		x	x	SY200869
<b>Section control*</b> Automatic boom section switching by GPS		x	x	SY201038
<b>* Track leader</b> Parallel driving equipment necessary for automatic boom section switching		x	x	SY201036
<b>* D-GPS receiver</b> necessary for automatic boom section switching, accuracy of +/- 15-30 cm		x	x	SY201037
<b>Lightbar</b> External display of steering direction from track leader. Ideal for positioning in the driver's field of vision		x	x	SY201235
<b>Analogue camera with 11 m cable</b> A simple way of monitoring and controlling work processes.		x	x	SY201060
<b>Additional costs:</b> <b>Terminal with GSM modem is necessary</b>		x	x	



# Accessories for Master Spray IS and IN

		suitable for		Item no.:
		IS	IN	
<b>Filling hose</b> 7 m long with camlock connection and suction filter		x	x	SY101229
<b>C-pipe filling (hydrant connection)</b> Left side 2" C-connection with flow regulator segment for fast and safe filling.			x	SY138050
<b>EcoFill connection</b> On the implement, only for IS <sup>pro</sup> 1480, 1680, 2000 and IN implements		x	x	SY200884
<b>Adaptor cable for tractor deceleration</b> To fit Dosicontrol E 854 Wheel sensor on implement no longer included		x	x	SY200896
<b>2. Tank filling status display</b> required in Austria for IS 600 for IN implements		x -	- x	SY200055
<b>Electronic filling status display</b> for display of tank contents that is accurate to the litre, the measurement electronics do not come into contact with the spray liquid To fit Dosicontrol E 854		x	x	SY200240
<b>Additional price for MA 170:</b> Pump MA 230 (228 l/min.),		x		
<b>Additional price for MA 260:</b> Pump MA 320 (329 l/min.), PTO shaft drive only for IN 280			x	
<b>Additional price for MA 320:</b> Pump MA 400 (400 l/min.), PTO shaft drive for IN 360 / 460			x	
<b>Symmetrical 12-metre folding system</b> Only for 903 piping, double-acting hydraulic cylinder instead of linkage traction rods, control direct or via oil circulation block. More flexible adaptation of working width, e.g. for slurry tanker (note hydraulic functions)			x	SY147188

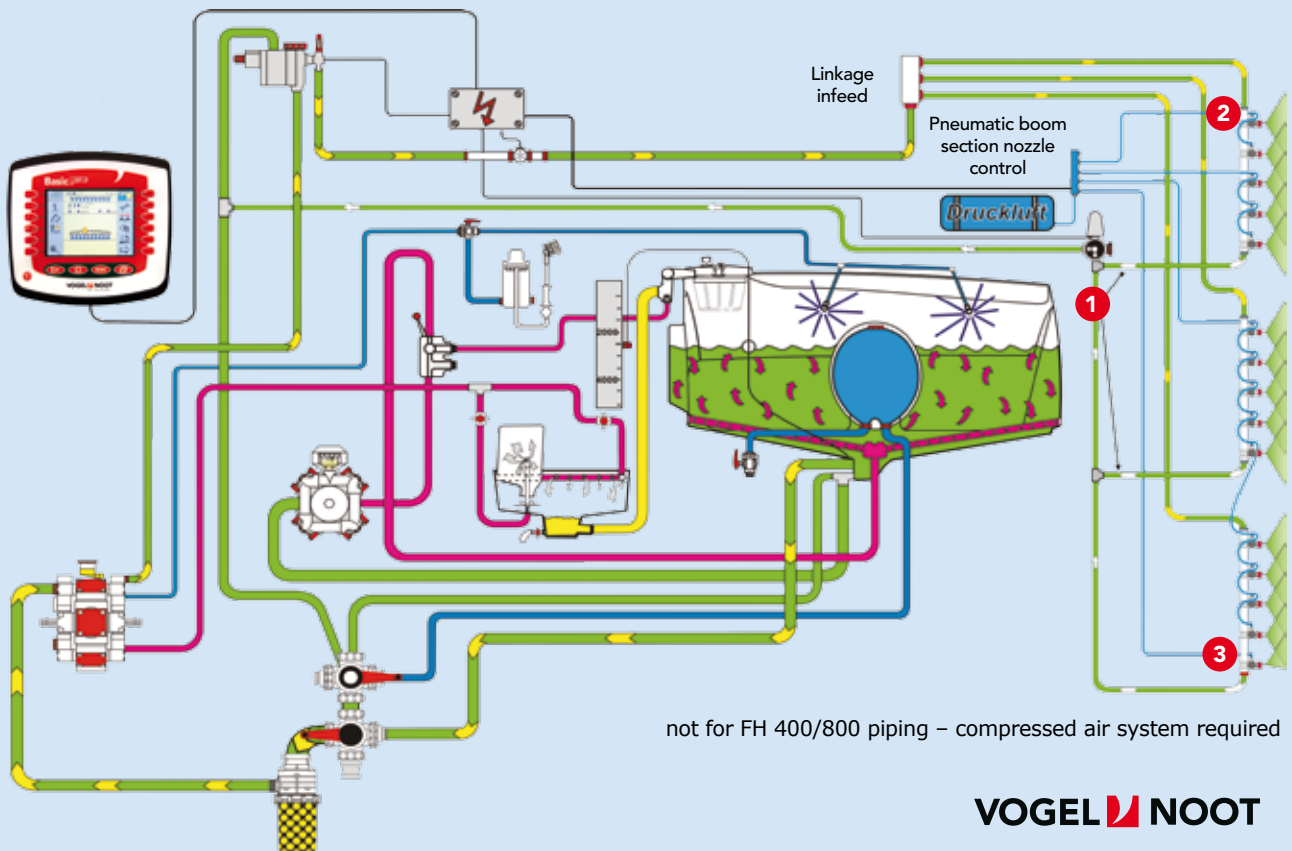


# Accessories for Master Spray IS and IN

		suitable for		Item no.:
		IS	IN	
<b>One-sided folding system for 903 piping</b> 1. Extension arm cannot be fully swung in, only in conjunction with symmetrical 12 m folding system (note hydraulic functions)			x	SY146533
<b>Hydraulic extension arm folding system</b> for 818, 821 and 900 piping (note hydraulic functions)		x	x	SY143763
<b>Foam marking system SM 07600-0</b> For all field spray piping up to 21 metres. 12V DC compressor, right/left switching, storage hopper with mount, hose and 2 nozzles for producing the foam cone		x	x	SY135965
<b>Rear trailer coupling</b> Only for 2-axle trailers, cannot support any static vertical load, maximum total weight of trailer 8000 kg Only for IN 360/460 <b>PLEASE NOTE:</b> The road traffic act must be observed!!			x	SY200883
<b>Axle mount for track width 2.25 m</b> (not for air suspension)			x	SY200886
<b>4-way swivel nozzle D 40-1</b> without nozzles, for all package-folded piping Price per item		x	x	SY116903
<b>4-way swivel nozzle DF 40-0</b> without nozzles, for all lengthwise-folded piping Price per item			x	SY144124
<b>Ball head K 80</b> for lower hitch Additional charge for 40 mm towing eye			x	SY200841
<b>Swivelling towing eye, 50 mm diameter</b> for lower hitch (only for export) Additional charge for 40 mm towing eye			x	SY200842

# Equipment – IN trailed sprayers

## Pressure circulation piping with pneumatic nozzle switching mechanism



not for FH 400/800 piping – compressed air system required

**VOGEL NOOT**

### Pressure circulation with automatic valve regulation

- 1 Even when driving to the fields, the entire liquid system is put under spray pressure, which ensures:
  - Precise, immediate start of spraying with the correct spray pressure over the entire working width.
  - No triangular shapes of damage or disease, or missing metering due to pressure build-up when switching on or switching boom sections.
  - Very high circulation volume, no accumulation, continuous homogenous spray liquid.
  - Rinsing with clear water – without spraying, reduces the technical residue – simplifies the cleaning process.
  - Pressure circulation, even on headland.
  - Safe and convenient thanks to automatic valve regulation.
  - For all field spray piping with VA piping system.
  - Can be combined with all Dosicontrol® electronic variants.

### Variable nozzle switching mechanism and boom section arrangement

The advantages of the new pneumatically regulated nozzle switching mechanism are easily visible:

- very short reaction/switch times
- variable, individually configurable nozzle and boom section allocation

- 2 **Distance switching mechanism**

Simple adaptation to all conditions, even in different regions, convenient and safe control directly from the tractor cabin.

- 3 **Edge nozzle switching mechanism**

Sharply confined and exact down to the last centimetre with the IS edge nozzle, individually switchable in order to protect land at water's edge, the edge of fields or sensitive neighbouring crops. Robust design of pneumatic valves using very high quality materials (VA, Viton, etc.).



FH 903 piping (linkage) with asymmetric folding system

## Drawbar variants for trailed field sprayers

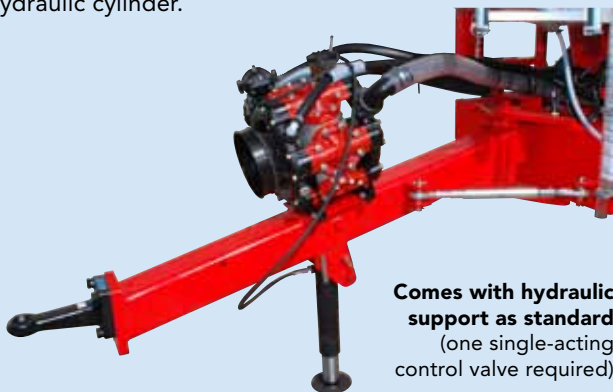
### V-drawbar

The fixed yoke attachment provides safety and stability when travelling quickly on roads. An optimal attachment for long drives for up to 40 km/h.



### Lower hitch

This yoke attachment combines stable road travel with the benefit of precise tracking. When driving round bends or correcting the track on steep side slopes, tracking is manually adjusted for each situation with a double-acting hydraulic cylinder.



**Comes with hydraulic support as standard**  
(one single-acting control valve required)

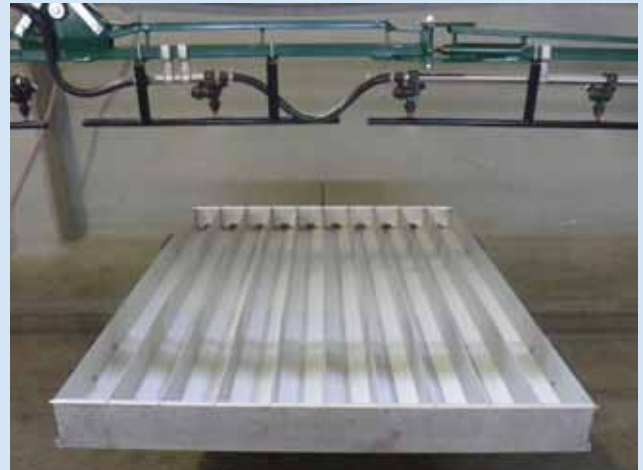
### Lower hitch

In future, we will fit our IN 280/360/460 trailed sprayers with the new drawbar for the lower hitch. Towing eyes with diameter of 40 mm (as standard) or the modern K 80 tow ball coupling and, for export, a swivelling towing eye can also be fitted.



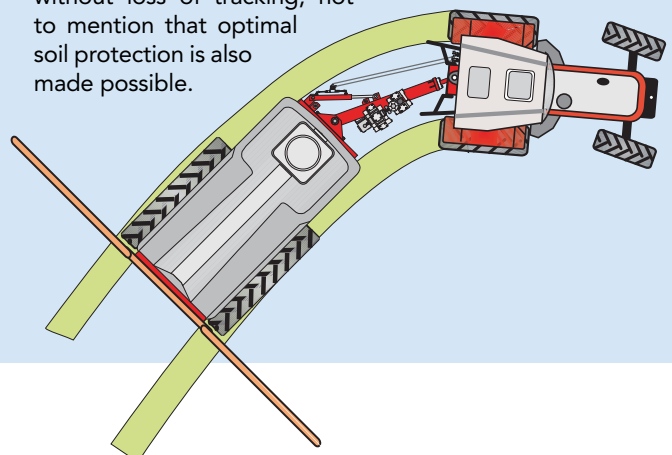
## Nozzle test stand

At Vogel & Noot, implements are checked thoroughly before delivery. The state of the art electronic field sprayer test stand is used to determine the transverse distribution and total output of the nozzles on the field spraying equipment. In addition, the pump performance and manometer are tested by qualified specialists.

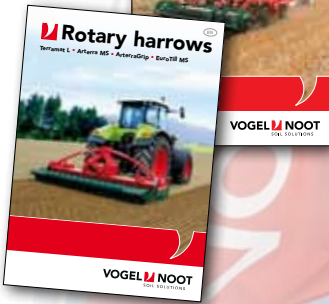


### Highly accurate tracking – for even the smallest turning circle

The genuine even track drawbar "Exact Trac" from Vogel & Noot provides complete tracking accuracy with the smallest possible turning circles. The example here clearly shows the benefit: Quality of use and time-effectiveness are increased without loss of tracking, not to mention that optimal soil protection is also made possible.



# Competence – Advice – Service – Worldwide



Further information also  
in our main folders.

## VN – The product range from the soil specialists



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Disc harrows



Rotary harrows



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