

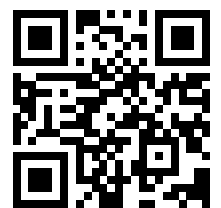
LIPCO

RECYCLING-(OVER-ROW) CROSS FLOW FAN UNIT GSG

Eco-Spray
up to 40 % agent use reduction
95 % loss reduction approved
no restriction



viniculture | fruit growing | tree nurseries | special crops
| ornamental plants



Over-row cross flow fan unit



Advantages of using this spraying technology:

- The new fan arrangement (suction- and pressure sides are opposite) reduces the consumption of plant protection agent by up to 40 % , thus achieving JKI* 95 % drift reduction class
- Extremely smooth running at max. speed
- High spraying performance (time saving) due to multirow treatment - up to 4 rows (both sides) are possible with **GSG-NV-VM2**.
- Improved deposit values due to air-assisted, double-sided application
- More pesticides available
- No problems with neighbouring cultures
- User protection
- Government funding possible
- JKI*-approved, please refer to section „Approved plant protection equipment“
- Mandatory argumentation for organic farms

*JKI = Julius-Kühn-Institut



Modern spraying technology is characterised by:

The greatest benefit is the recycling of the non-deposited plant protection agent.

No other agricultural device can withstand this comparison today.

The recycling sprayer starts in spring - with low foilage - with 70 % recycling rate. With the last spraying and high foliage, there is still a recycling rate of 30 %.

The advantage of the **GSG** unit is that the non-deposited liquid is sucked off by hydroinjectors and returned to the tank again.

Over the entire season, savings up to 40% can be expected.

Spraying – Returning – Recycling!

With a cultivation area of 20 ha. (49 acres), a GSG spraying unit saves up to 70,000 EURO of spray agent in 10 years.



Savings per hectare (2.5 acres):	
Spray agent costs per year and hectare (per 2.5 acres)	1,000 Euro
conventional sprayer:	650 Euro
LIPCO GSG sprayer:	350 Euro
saving per hectare (per 2.5 acres)	



Nozzle chart







Recycling sprayer




$$\text{Output per nozzle (l/min)} = \frac{\text{Driving speed (km/h)} \times \text{Row distance (m)} \times \text{Output (l/ha)}}{600 \times \text{No. of open nozzles per tunnel}}$$


$$\text{Output (l/ha)} = \frac{600 \times \text{Output per nozzle (l/min)} \times \text{No. of open nozzles per tunnel}}{\text{Driving speed (km/h)} \times \text{Row distance (m)}}$$

LIPCO cross-flow fan sprayer GSG

Output rate Lechler ID/IDK 90 flat fan venturi nozzle	Spray  90°	Nozzle size  ISO 01 - 03	Pressure range  Note maximum nozzle pressure according JKI!
* = 95% loss reduction agreed by JKI / Germany			

	pressure bar	Output rate l/min with pressure in bar					
		IDK 90-0067C black*	IDK 90-01C orange*	IDK 90-015C green*	IDK 90-02C yellow*	ID 90-025C purple*	ID 90-03C blu*
	4.0	0.31	0.45	0.68	0.92	1.15	1.37
	5.0	0.35	0.51	0.76	1.03	1.28	1.53
	6.0	0.38	0.55	0.83	1.13	1.40	1.68
	7.0	0.41	0.60	0.90	1.22	1.52	1.81
	8.0	0.44	0.64	0.96	1.30	1.62	1.94
	9.0	0.47	0.68	1.02	1.38	1.71	2.06
	10.0	0.49	0.72	1.07	1.45	1.81	2.17
	11.0	0.52	0.75	1.13	1.53	1.90	2.28
	12.0	0.54	0.78	1.18	1.60	1.98	2.38

Output rate ALBUZ ® CVI 80° flat fan venturi nozzle	Spray  80°	Nozzle size  ISO 015 - 03	Pressure range  Note maximum nozzle pressure according JKI!
* = 95% loss reduction agreed by JKI / Germany			

	pressure bar	Output rate l/min with pressure in bar					
		CVI 80-01 orange*	CVI 80-015 green*	CVI 80-02 yellow*	CVI 80-025 purple*	CVI 80-03 blu*	CVI 80-04 red*
	5.0	0.52	0.77	1.03	1.29	1.55	2.07
	6.0	0.57	0.85	1.13	1.41	1.70	2.26
	7.0	0.61	0.92	1.22	1.53	1.83	2.44
	8.0	0.65	0.98	1.31	1.63	1.96	2.61
	9.0	0.69	1.04	1.39	1.73	2.08	2.77
	10.0	0.73	1.09	1.46	1.82	2.19	2.92
	12.0	0.80	1.20	1.60	2.00	2.40	3.20
	14.0	0.86	1.29	1.73	2.16	2.59	3.46
	16.0	0.92	1.38	1.85	2.31	2.77	3.70

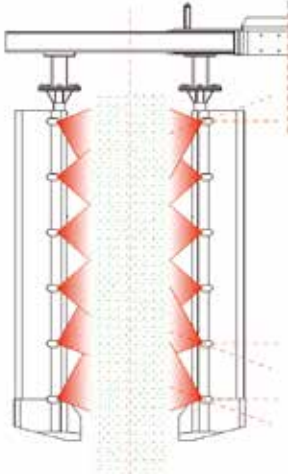
Flat fan nozzle approx. 3 – 5° crossed against each other.

Values apply for water with 20°C, pressure measured directly on the nozzle.

Check value prior to application with adequate measuring device. Because of application, refer also to manual.

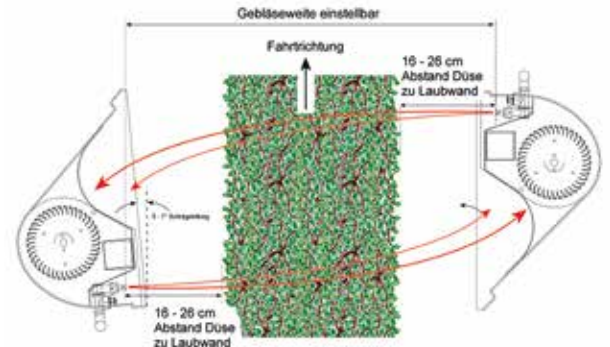
Technology:

With the **LIPCO** fan unit **GSG**, drift is becoming a valuable spray agent. Non-deposited spray agent returns via recycling technology and is filtered back to the spray agent tank. This protects the environment and saves you a lot of money.



Recycling:

New fan arrangement (suction- and pressure sides are opposite) thus consistently high recycling rates, less drift and better deposit of plant protection agent.



Equipment testing:

Worldwide equipment testings with identical good result:

Spray agent is evenly spread on lower- and upper side of the leaves.

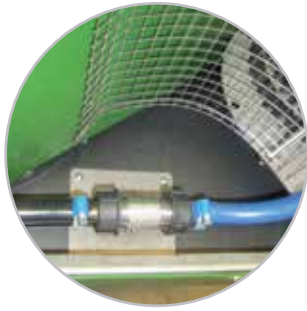


EU funding:

LIPCO recycling sprayer are listed in the register of loss reducing equipment (90 / 95 %), in the German investment funding program for the agricultural sector (Agrarinvestitionsförderprogramm AFP) as well as in the register of loss reducing equipment – reduction of plant protection product, thus EU funding is possible.

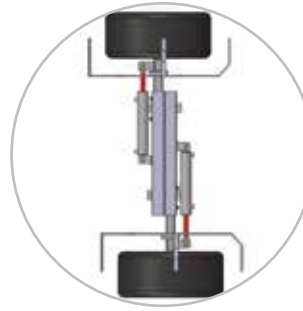


Options / extras:



Recycling pan

- Recycling pan with built-in hydraulic injector and coarse strainer, thus no additional pump required.

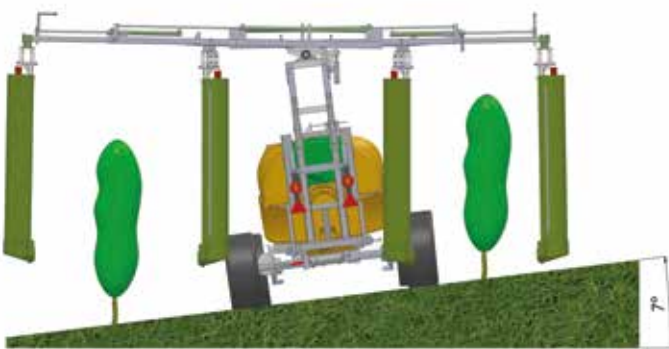


Adjustable axle

- For units **NV** (hydraulic version as option, stroke 2x300 mm / 2x10 in.), wheels are stepless adjustable to max. row width → smooth running. Driving on public roads with axle adjusted to 2m (79 in.) width.

Slope compensation

- compensates up to 7° side slope (additional height adjustment necessary)



Own hydraulic

- (as option)
- If the tractor has a pump capacity of less than 25 l/min, the hydraulic equipment is usually not sufficient to run **GSG**. In this case, a gearbox with 2 oil pumps is fitted to the plant agent pump. Thus the tangential fans of the implement are independent of the tractor.



Cross flow fan suspension

- flexible pendulum suspension



LIPCO QS 150 cross flow fan

- modular system
- with stepless hydraulic drive, flat fan venturi nozzles, individually adjustable
- length from 1.00 - 3.10 m (39 – 122 inch)
- PVC lamellas: no corrosion, easy to clean, less weight of the cross flow fans
- less drift: Air needed is not suctioned from outside the tunnel but from inside. So no air has to be pressed to the outside. The result: better air circulation and less drift.

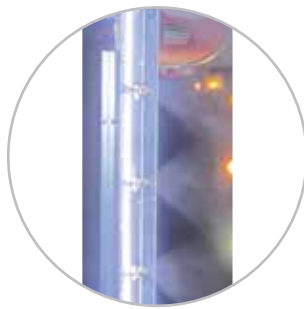


Options / accessories:



Hydraulic pivoting drawbar

- plant protection agent pump of all **LIPCO** trailer units is mounted on the drawbar thereby maximum angle of turn without wide-angle PTO shaft



Nozzle lighting

- indirect lighting of nozzles for optimal nozzle function control, especially for working during the night



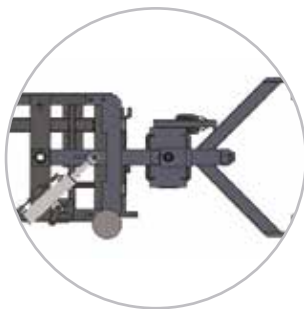
Tandem oscillating axle

- hydraulic wheel adjustment (left and right side each 300 mm (12 in.))
- hydraulic dual-circuit brake as an option



Hydraulic height adjustment

- standard stroke 300 mm (12 in.)
- retracting during turning progress
- exact position of the first nozzle



Steering drawbar

- hydraulic drawbar, activation via control box (recommended in combination with side slope and/or tight turning radius)



Flat fan venturi nozzles

- Flat fan venturi nozzles for large droplet application :
- very good fixation on the leaves
 - less drift
 - better recycling rate



Working light

- LED, between fans



Filling mixer

- mixer for all kinds of plant protection agent

Control system:



LIPCO control box standard

- digital pressure display and control of hydraulic functions via button



LIPCO control box

- digital pressure display and control of hydraulic functions via button
- control of effective spray output



LIPCO control box

- digital pressure display and control of hydraulic functions via button
- control of effective spray output
- regulation of effective spray output, extended modules and interface via documentation



LIPCO control box recycl-pilot

- digital pressure display and control of hydraulic functions via button
- electrical monitoring and control unit with digital display
- incl. on-board computer and automatic row width control as well as geodata
- with control, plot cards and documentation
- free use of spray tools basic (monitoring of spray unit and recording of spray datas)
- operation via tablet or smartphone (Android)

Saddle-mount unit TSA-1

(one row) · without recycling · for 3-point attachment to tractor



Photo: sprayer equipped with support wheels (optional at extra cost)



sprayer with 300 l or 400 l tank
(other tank sizes upon request)

saddle-mount unit with one-sided
crossflow fan equipment
WITHOUT recycling



Photo: crawler-mounted
vehicle with **TSA-1**



Technical data:

Max. row height	2.20 m (87 in.)
Fan distance adjustable (outer dimension)	0.85 – 1.30 m (33 – 51 in.)
Tank width	1.00 m (39 in.)
Weight	285 kg (630 lbs.)

Tractor requires 1x double-acting operating valve or
1x pressure and 1x free return flow.

Trailer unit TSN-1

(one row) · without recycling · for lower link attachment to tractor



sprayer unit with 600 l, 1,000 l or 1,500 l tank

saddle-mount unit with one-sided crossflow fan equipment
WITHOUT recycling



Photo: **TSN-1** / 1,000 l –
with tires 10.0/75-15.3 10PR

Technical data:

	600 l tank	1,000 l tank	1,500 l tank
Max. row height	2.20 m (87 in.)	2.20 m (87 in.)	2.20 m (87 in.)
Fan distance adjustable	0.70 – 1.50 m (28 – 59 in.)	0.70 – 1.50 m (28 – 59 in.)	0.70 – 1.50 m (28 – 59 in.)
Tank width	1.00 m (39 in.)	1.14 m (45 in.)	1.24 m (49 in.)
Weight	465 kg (1,025 lbs.)	492 kg (1,085 lbs.)	528 kg (1,164 lbs.)
Standard tires	195 R14C 8PR	10.0/75-15.3 10PR	11.5/80-15.3 10PR

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.

Conversion set GSG-U-VM1/2

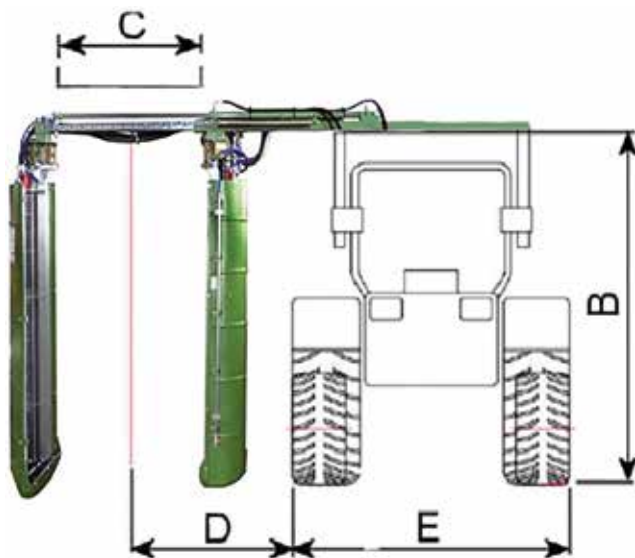
(right/left) · with recycling

For:

- existing trailer or saddle-mount sprayer
- mounts on tractor on roll bar, center mounting and leaf-cutting frame



Conversion set with one/two-sided crossflow fan equipment, **WITH** recycling



Required capacity of plant protection agent pump:

single-row equipment: min. 90-100 l/min
double-row equipment: min. 120-130 l/min
Required oil capacity from tractor 25 l/min



Technical data:

Max. row height	B=2.20 m (87 in.) (depending on set-up)
Width adjustment	C= up to 1.10/1.30 m (43/51 in.)
Minimum row width	width of tractor/trailer/saddle-mount unit D= movable row space + 0.80 m (32 in.) one-row design D= movable row space + 1.20 m (47 in.) two-row design
Weight	approx. 150 kg/unit (331 lbs./unit)

Tractor requires 1x double-acting operating valve, 1x pressure and 1x free return flow.

Attachment kit for trailer and saddle-mount unit GSG-UK-VM2

(two rows) · with recycling · for trailer/saddle-mount unit



For attachment to trailer/saddle-mount unit instead of existing fan-blower unit



Attachment kit with two-sided crossflow fan equipment (hydraulic driven), **WITH** recycling



Photo: **trailer unit with GSG-UK-VM2**

Minimum required basic equipment – trailer/saddle-mount unit:

Pump 130 l, 20 bar, incl. pressure filter unit and armature

Oil quantity required from tractor 30 l/min

Base frame with tank and attachment unit

(sufficient base frame stability because of additional weight of 340 kg (750 lbs.) is required)

As option : complete hydraulic equipment including control box

Technical data:

Attachment kit (length x width x height)	0.80 x 2.10 x 2.30 m (32 x 83 x 91 in.)
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43 in. / 51 in.)
Row width	1.70-2.40 / 3.20 m (67-95 / 126 in.)
Weight	approx. 480 kg (1,058 lbs.)

Tractor requires 2 double-acting operating valves and 1x pressure and 1x free return flow.

Saddle-mount fan unit GSG-A-VM1

(one row) · with recycling · for 3-point attachment to tractor



saddle-mount unit with one-sided crossflow fan equipment
WITH recycling and 300 l tank
 (400 l, 500 l and 600 l tanks instead of 300 l tank are possible)



Photo: **GSG-A-VM1** with 300 l tank

Technical data:

Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10 / 1.30 m (43 / 51 in.)
Minimum row width	1.50 m (59 in.)
Weight	approx. 420 kg (930 lbs.)

Tractor requires 1x double-acting operating valve and 1x pressure and 1x free return flow.

Saddle-mount fan unit GSG-A-VM2

(two rows) · with recycling · for 3-point attachment to tractor



saddle-mount unit with two-sided crossflow fan equipment
WITH recycling and 300 l tank (400 l and 500 l tanks instead of 300 l tank are possible)

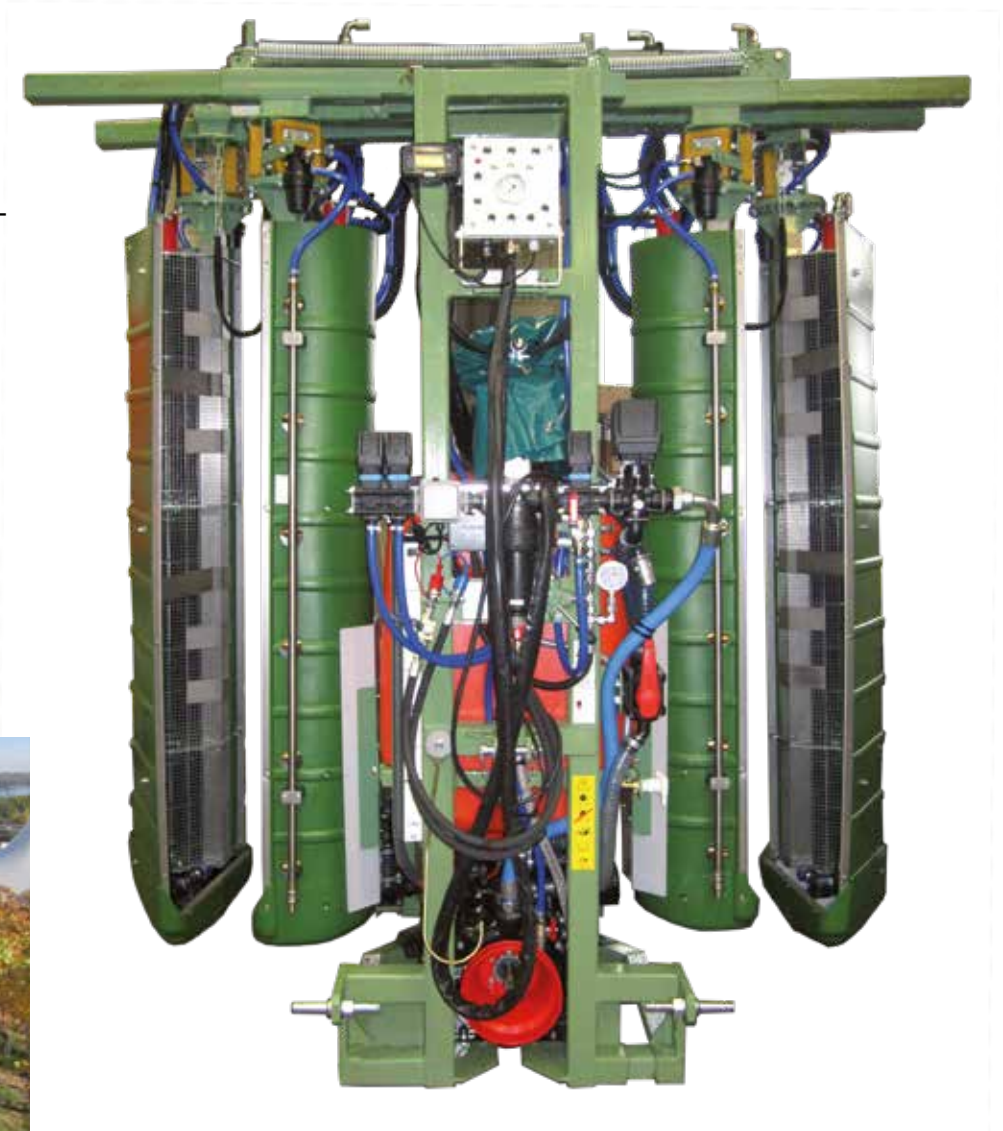


Photo: **GSG-A-VM2** with 300 l tank



Photo: **GSG-A-VM2** with 300 l tank

Technical data:

Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	2.00-2.40/3.20 m (79-95/126 in.)
Weight	approx. 520 kg (1,146 lbs)

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.

Saddle-mount fan unit with trailer tank GSG-AN-VM2

(two rows) · with recycling · for 3-point attachment to tractor



saddle-mount unit with two-sided crossflow fan equipment, **WITH** recycling, combined with **LIPCO** trailer tank



Photo: **GSG-AN-VM2** with trailer tank 1,000 l

Technical data:

Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	1.40-2.40 m (55-95 in.) – trailer tank 600 l 1.70-2.40/3.20 m (67-95/126 in.) – trailer tank 1,000 l 1.80-2.40/3.20 m (71-95/126 in.) – trailer tank 1,500 l
Weight	approx. 480 kg (1,058 lbs.) – without trailer tank

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.

Recommendation: total width of tractor wheels min. 1.40 m (55 in.)



Photo: **GSG-AN-VM2** with trailer tank 600 l

Trailer tank for coupling to saddle-mount fan unit GSG-AN-VM2



Trailer tank with tank cleaning nozzle and injector agitator.
Filling mixer integrated in filling screen.



Trailer tank 600 I,
Tires 26/12.00-12 8PR



Trailer tank 1,000 I,
Tires 10.00/75-15.3 8PR



Trailer tank 1,500 I,
Tires 11.5/80-15.3 8PR



Trailer tank hitch
– eyelet, upright

Technical data:

	Trailer tank 600 I	Trailer tank 1,000 I	Trailer tank 1,500 I
Tank width	1.00 m (39 in.)	1.14 m (45 in.)	1.24 m (49 in.)
Outer width including wheels	1.03 m (41 in.)	1.24 m (49 in.)	1.35 m (53 in.)
Total length	2.45 m (97 in.)	2.75 m (108 in.)	2.90 m (114 in.)
Weight	285 kg (628 lbs.)	320 kg (706 lbs.)	348 kg (767 lbs.)
Standard tires	195 R14C 8PR	10.0/75-15.3 10PR	11.5/80-15.3 10PR

(length-adjustable drawbar as standard)

Trailer tank with adjustment shaft GSG-VN-VM2

600 l tank

(two rows) · minimum row width 1.30 m (51 in.) ·
with recycling · for lower link attachment to tractor



Trailer tank with two-sided crossflow fan equipment, **WITH** recycling



Photo: **GSG-NV-VM2** with 600 l tank,
with tires 195/55-R 10C

Technical data:

	GSG-NV-VM2 with 600 l tank
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	1.30-2.00 m/1.60-2.40 m (51-79 in./63-94 in.)
Tank width	1.00 m (39 in.)
Weight	approx. 980 kg (2,160 lbs.)
Standard tires	195 R14C 8PR Outer track width min. 1.03 m – max. 1.63 m (min. 41 in. – max. 64 in.)

Tractor requires 1x double-acting operating valve or
1x pressure and 1x free return flow.



Photo: **GSG-NV-VM2** with 600 l tank,
with tires 195/55-R10C

Trailer tank with adjustment shaft GSG-VN-VM2

1,000 l tank

(two rows) · minimum row width 1.60 m (63 in.) · with recycling ·
for lower link attachment to tractor

 Trailer tank with two-sided crossflow fan equipment, **WITH** recycling



Photo: **GSG-NV-VM2** with 1,000 l tank,
tandem oscillating axle and tires 225/55-R 12C

Technical data:



GSG-NV-VM2 with 1,000 l tank	
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	1.60-2.00 m/1.70-2.40 m/1.70-3.20 m (63-79 in./67-94 in./67-126 in.)
Tank width	1.15 m (45 in.)
Weight	approx. 1,120 kg (2,470 lbs.)
Standard tires	10.0/75-15.3 10PR outer track width min. 1.24 m – max. 1.84 m (min. 49 in. – max. 72 in.)

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.





Trailer tank with adjustment shaft GSG-NV-VM2

1,500 l tank

(two rows) · minimum row width 1.80 m (71 in.) ·
with recycling · for lower link attachment to tractor



Trailer tank with two-sided crossflow fan equipment, **WITH** recycling



Photo: **GSG-NV-VM2** with 1,500 l tank
and tires 11.5/80-15.3 10PR

Technical data:

	GSG-NV-VM2 with 1,500 l tank
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	1.80-2.40/3.20/3.50 m (71-94 in./126 in./138 in.)
Tank width	1.24 m (49 in.)
Weight	approx. 1,250 kg (2,760 lbs.)
Standard tires	11.5/80-15.3 10PR outer track width min. 1.35 m – max. 1.95 m (min. 53 in. – max. 77 in.)

Tractor requires 1x double-acting operating valve or
1x pressure and 1x free return flow.



Photo: **GSG-NV-VM2** with 1,500 l tank
and tires 225/55-R12

Trailer tank with adjustment shaft

GSG-NV-VM2

2,000 l tank

(two rows) · minimum row width 2.00 m (79 in.) · with recycling · for lower link attachment to tractor



Trailer tank with two-sided crossflow fan equipment, **WITH** recycling



Photo: **GSG-NV-VM2** with 2,000 l tank
and tires 480/45-17 10PR

Technical data:



Photo: **GSG-NV-VM2** with 2,000 l tank,
with tires 23/10.50-12 8PR

GSG-NV-VM2 with 2,000 l tank	
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10 m / 1.30 m (43 in./51 in.)
Row width	2.00-2.40 / 3.20 / 3.50 m (79-94 in./126 in./138 in.)
Tank width	1.42 m (56 in.)
Weight	approx. 1,380 kg (3,042 lbs.)
Standard tires	380/55-17 10PR (flotation) outer track width min. 1.65 m – max. 2.25 m (min. 65 in. – max. 89 in.)

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.

Trailer tank with adjustment shaft GSG-NV-VM2

3,000 l tank

(two rows) · minimum row width 2.40 m (95 in.) · with recycling
for lower link attachment to tractor



Trailer tank with two-sided crossflow fan equipment, **WITH** recycling



Photo: **GSG-NV-VM2** with 3,000 l tank,
with tandem oscillating axle with tires 24/12.00-12 8PR

Technical data:

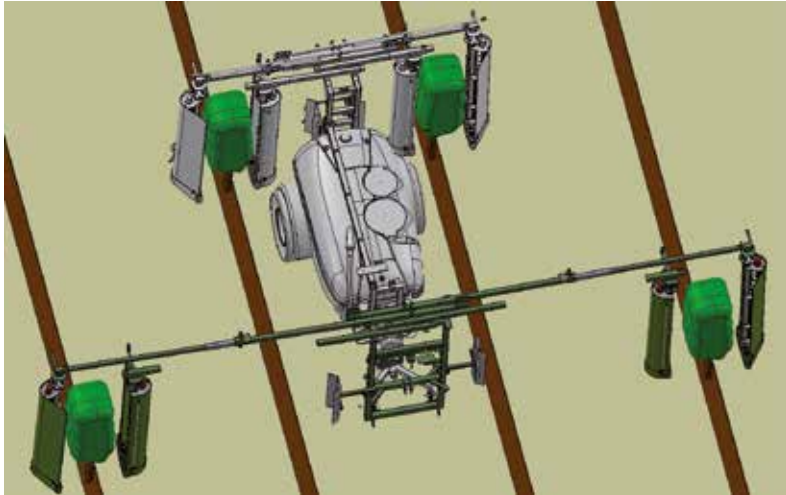
	GSG-NV-VM2 with 3,000 l tank
Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10/1.30 m (43/51 in.)
Row width	2.40-3.20/3.50 m (94-126 in./138 in.)
Tank width	1.65 m (65 in.)
Weight	approx. 1,840 kg
Standard tires	380/55-17 10PR (flotation) outer track width min. 1.92 m – max. 2.52 m (min. 76 in. – max. 99 in.)

Tractor requires 1x double-acting operating valve or 1x pressure
and 1x free return flow.

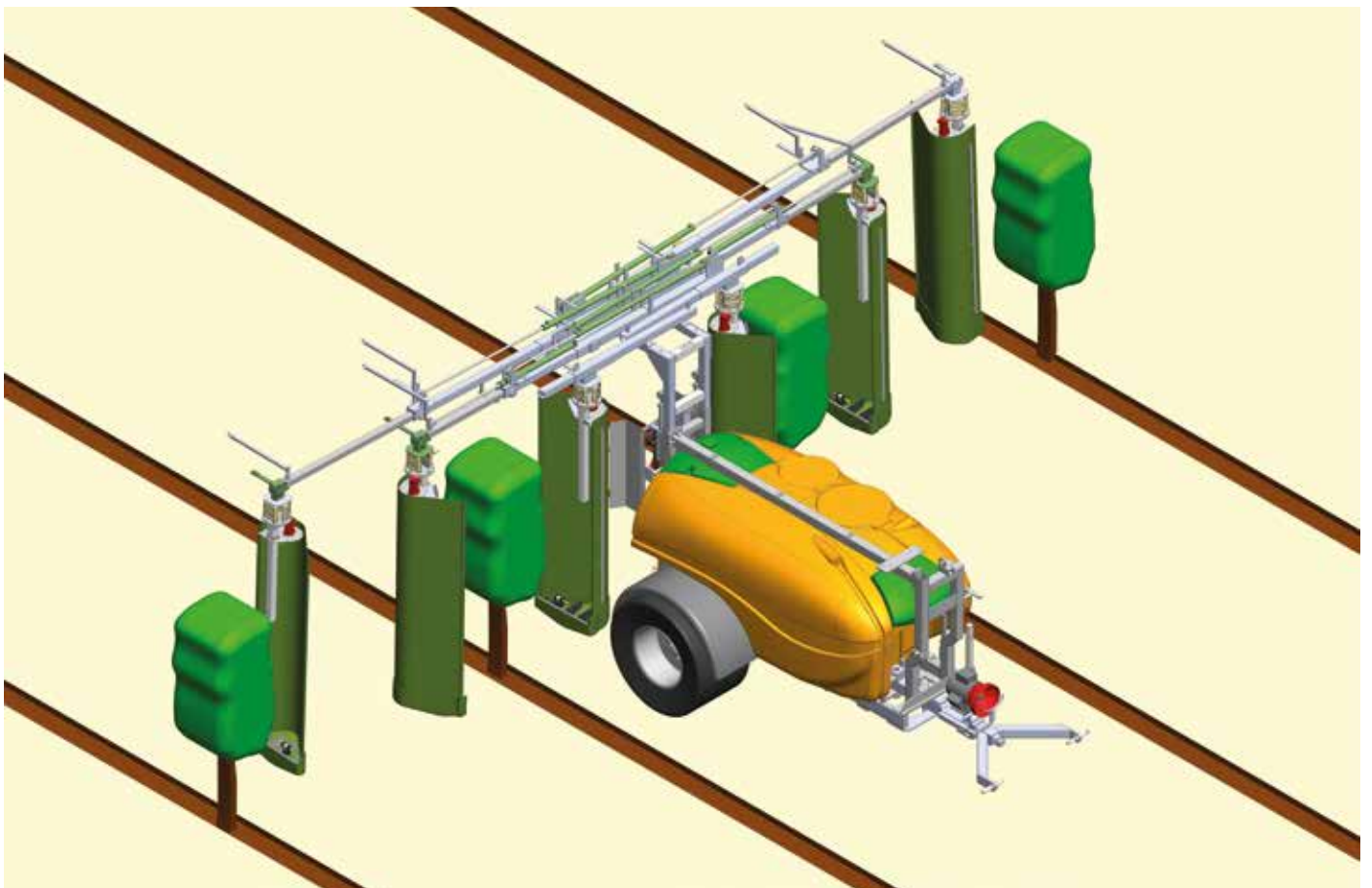


Saddle-mount frame

(two rows) · in combination (extension) with **LIPCO-GSG-NV-VM2** ·
for double-sided 3- or 4-row treatment



Transport position QS 150 in hinged position
(with own hydraulic)



Tires for TSN / Trailer tank / GSG-NV-VM2

Tires for GSG-NV-VM	Size inch	Tire denomination	Rims size	Tire width Ø	Tracking width (mm) 600 l tank	Tracking width (mm) 1,000 l tank	Tracking width (mm) 1,500 l tank	Tracking width (mm) 2,000 l tank	Tracking width (mm) 3,000 l tank
Oscillating tandem axle	10	195/55-R10C	5/67/112	195/460	1160-1560	1280-1880			
Oscillating tandem axle	12	225/55-R12C	5/67/112	225/540		1350-1950	1350-1950		
Oscillating tandem axle	12	23/10.50-12 8PR	5/67/112	250/580			1480-2080	1560-2160	
Oscillating tandem axle	12	24/12.00-12 8PR	6/161/205	320/580			1580-2180**	1760-2360**	2030-2630**
Wide tires	12	26/12.00-12 8PR	6/161/205	320/670	1260-1660	1350-1950	1550-2150		
Radial tires	14	195 R14C 8PR	5/67/112	195/664	1030-1430*				
Flotation tires	14.5	300/55-14.5	6/161/205	300		1260-1860	1340-1940		
Terra tires	15	31/15.5-15 8PR	6/161/205	425/795		1500-2100	1580-2180	1650-2250	1920-2520
Implement tires	15.3	10.0/75-15.3 8PR	6/161/205	270/740	1170-1570	1240-1840*			
Implement tires	15.3	11.5/80-15.3 10PR	6/161/205	300/830		1270-1870	1350-1950*	1550-2150	1820-2420
Implement wide tires	17	380/55-17 10PR	6/161/205	380/840		1450-2050	1550-2150	1650-2250*	1920-2520*
Implement wide tires	17	480/45-17 10PR	6/161/205	480/840			1660-2260	1850-2450	2120-2720

Special tires

*Standard tires

additional track offset of 6/12 cm (2.4-4.7 in.) per side possible (add desired track offset to dimension) for axles with brakesystem: + 6 cm (2.4 in.)

2-agent sprayer BS2

(one row) · without recycling · for lower link attachment to tractor

Attachment between tractor and sprayer
(GSG-NV-VM2)



- 300 l PE tank with attachment frame
- 3-point mounting between tractor and sprayer kat. I and lower link attachment for **LIPCO** pivoting drawbar (for GSG-NV-VM sprayer, attachment extension of 27 cm (11 in.) on sprayer side)
- pump 40 l, 40 bar with hydraulic drive, armature
- suction filter 50 mesh
- switch on/off via motor-driven valve
- control box included

Front attachment
(mounting plate or three-point attachment)



- fiberglass-tank 250 l, front side roundfilling, injector agitator and filling mixer integrated in filling screen
- 40 l pump, 40 bar with hydraulic drive, armature
- suction filter 50 mesh
- to switch on/off via motor-driven valve
- including control box

Attachment to GSG-saddle-mount fan unit, with additional pump



- 200 l PE tank, with attachment frame, injector agitator
- 40 l pump, 40 bar with hydraulic drive, armature
- suction filter 50 mesh
- to switch on/off via motor-driven valve
- including control box

Saddle-mount unit GSG-S-VM1/2/3

(one/two/three rows) · for selfdriving harvester



Saddle-mount unit with one- to three-sided crossflow fan equipment, **WITH** recycling



Technical data:

Max. row height	2.20 m (87 in.)
Width adjustment	up to 1.10 m (43 in.)
Row width	1.80-2.50/3.20 m (71-98/126 in.)
Road use	3.00 m (118 in.)
Weight	approx. 2,300 kg (5,070 lbs.)



Saddle-mount unit GSG-S-VM multi-row

for high clearance tractor



Saddle-mount unit with multi-rowed crossflow fan equipment, **WITH** recycling

Technical data:

Max. row height	1.50 m (59 in.)
Width adjustment	up to 1.10 m (43 in.)
Row width	0.90-1.20 m (35-47 in.)
Weight	approx. 1,500 kg (3,300 lbs.)



Plot sprayer

For manufacturers of pesticides,
institutes,
testing operators,
testing providers

! Can be used in fruit growing **AND** viniculture!



(user protection: driver's cab with protection category 4)

LIPCO application unit, construction and design are made on customer request

Pressure vessel made of VA	modular system
Nozzles	arrangement upon request
Compressor	compressed air generation for pressure vessels made of VA
Control/armature/handling	manual or fully-electric programmable control
Pressure vessels of fill unit	electric
Recycling non-deposited spray liquid	in PE tanks
Fresh water recycling tank	hand wash tank made of PE





Trailer-mount unit OSG-NVM

(one row) · with recycling · for lower link attachment to tractor



Trailer-mount unit with one-sided crossflow fan equipment, **WITH** recycling for a one row treatment in fruit growing



Photo: **OSG-NVM** / 1,000 l tank
with oscillating tandem axle and tires 300/55-14,5 (flotation)

Technical data:

	1,000 l tank
Max. row height	3.10/3.50 m (122/138 in.)
Width adjustment	1.20-2.40 m (47-94 in.)
Standard tires	master wheel tank 480/45-17 10PR 1W, outer wheel 10/75-15.3 AS 10PR
Weight	approx. 1,410/1,500 kg (approx. 3,108 lbs./3,307 lbs.)

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow.

Trailer-mount unit OSG-NVM

(two rows) · with recycling · for lower link attachment to tractor



Trailer-mount unit with two-sided crossflow fan equipment, **WITH** recycling for a two-row treatment in fruit growing



Photo : **OSG-NVM2** / 1,500 l
with oscillating tandem axle, tires 225/55-12



LIPCO under tree cultivator **UBM** 180/200/225
(hydraulic drive, 50-60 l/min oil quantity
from tractor required)

Technical data:

	1,500 l tank
Max row height	3.10 / 3.50 m (122/138 in.)
Width adjustment	0.60-2.40 m (24-94 in.)
Row width	2.20-3.50 m (87-138 in.)
Road use	2.60 m (102 in.)
Standard tires	tandem oscillating axle (without track displacement) with tires 24/12.00-12 8PR (lawn profile)
Weight	approx. 2,380 kg / 2,490 kg (approx. 5,250 lbs. / 5,490 lbs.)

Tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow, minimum oil volume of 40 l/min required (without own hydraulic).

Tires for all OSG-NVM (one row or two rows)

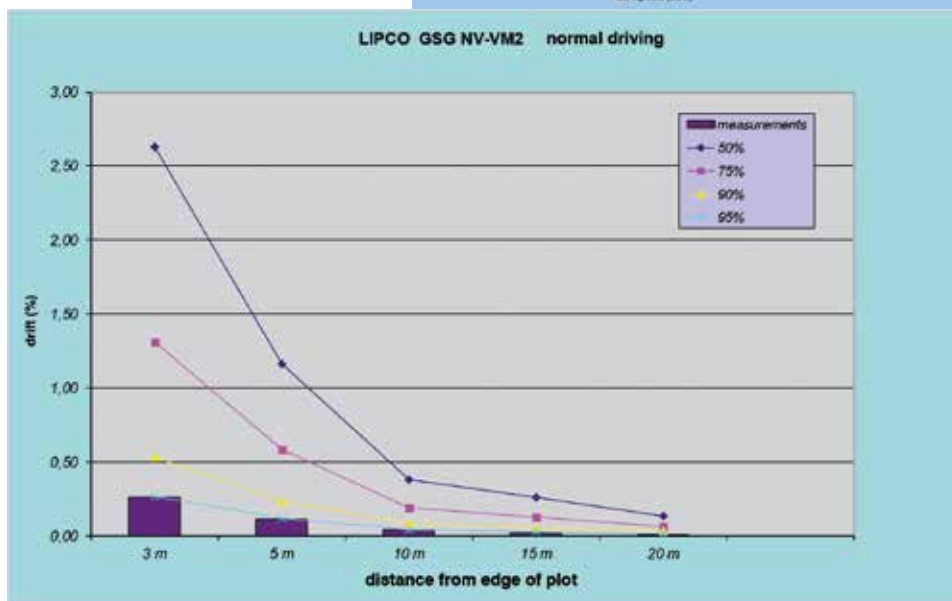
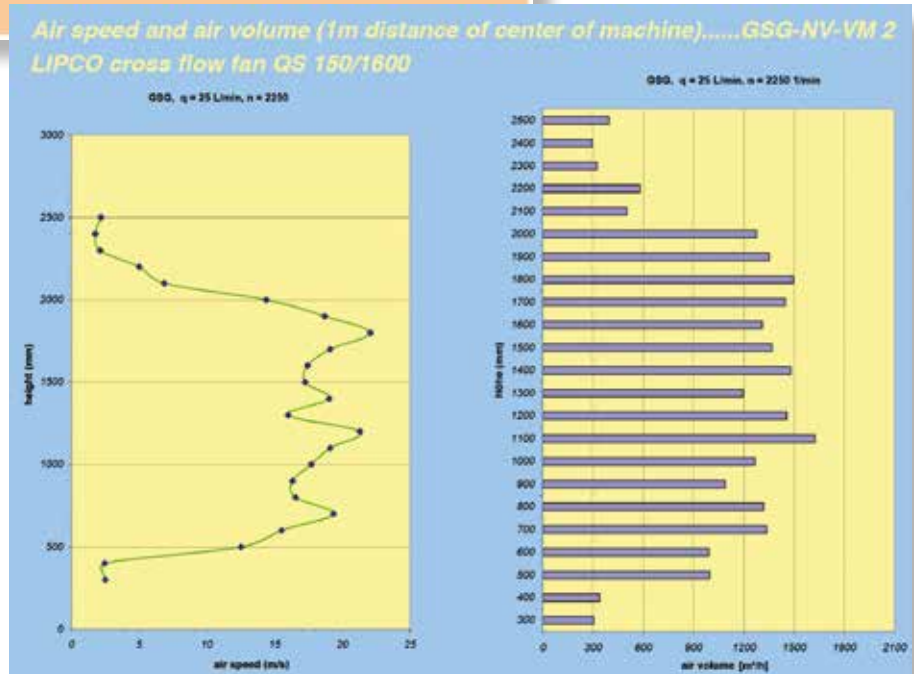
Tires for OSG-NVM	Size inch	Tire denomination	Rimsize	Tire width Ø	Tracking width (mm) OSG-NVM2 1,500 l	Tracking width (mm) OSG-NVM2 2,000 l
OSG-NVM one row						
Implement tires	15,3	10.0/75-15.3 AS 8PR	6/161/205	270/740		*
Implement wide tires	17	480/45-17 AW 10PR	6/161/205	480/840		*
Fixed tandem axle	14.5	300/55-14.5 (Flotation)	6/161/205	300/690		*
OSG-NVM two rows						
Oscillating tandem axle	12	23/10.50-12	5/67/112	250/580	1440-2040	1550-2150
Oscillating tandem axle	12	24/12.00-12 8PR	6/161/205	320/580	1620-2220	1780-2380
Fixed tandem axle	15	31/15.5-15 8PR	6/161/205	380/720	1550-1950	1750-2350
Fixed tandem axle	14.5	300/55-14.5 (Flotation)	6/161/205	300/690		1440-2040
Fixed tandem axle	15	29/14.00-15 TL 12PR	6/161/205	356/737	1520-2120	1580-2180

special tires

*standard tires

additional track offset of 6/12 cm per side possible - add desired track offset to dimension*/

Let's compare



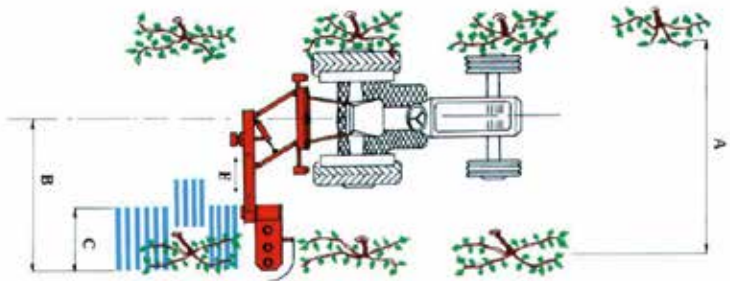
Underplant cultivator BP2/4

for three-point attachment to tractor
(rear attachment)



The advantages:

- own hydraulic
- drive via PTO shaft 540 rpm
- hydraulic parallel displacement via push-button
- adjustment of the working depth of the tines via supporting wheels
- adjustable inclination of tines
- additional manual activation of the sensor via electric push button (driver operated)
- counter-rotating rotary heads with 2 tines each (no soil displacement, therefore flat surfaces)



BP 2 rotary heads,
for viniculture



BP 4 rotary heads, for fruit
growing (front attachment
as an option)

	A	B	C	D	E	weight
BP 2/4						
	Row distance min	Lateral adjustment max	Working width tines	Parallel adjustment	Linear adjustment	Weight
Dimensions	m (in.)	m (in.)	m (in.)	m (in.)	m (in.)	kg (lbs.)
BP 2 – 2 rotary heads	1.50 (59 in.)	1.42 (56 in.)	0.35 (14 in.)	0.38 (15 in.)	hydr. or mech. ad- justm. 0.32 (13 in.)	370 (816 lbs.)
BP 4 – 4 rotary heads	2.50 (98 in.)	2.40 (94 in.)	0.70 (28 in.)	0.48 (19 in.)	hydr. adjustment 0.60 m (24 in.)	450 (992 lbs.)

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

LIPCO product program



We produce additionally:

TUNNEL®-Sprayers for viniculture and fruit growing and for similar special crops



Harvesting machines for stone fruits and seed fruits



Carrier vehicles and implements for landscaping, for municipal services and facility services



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