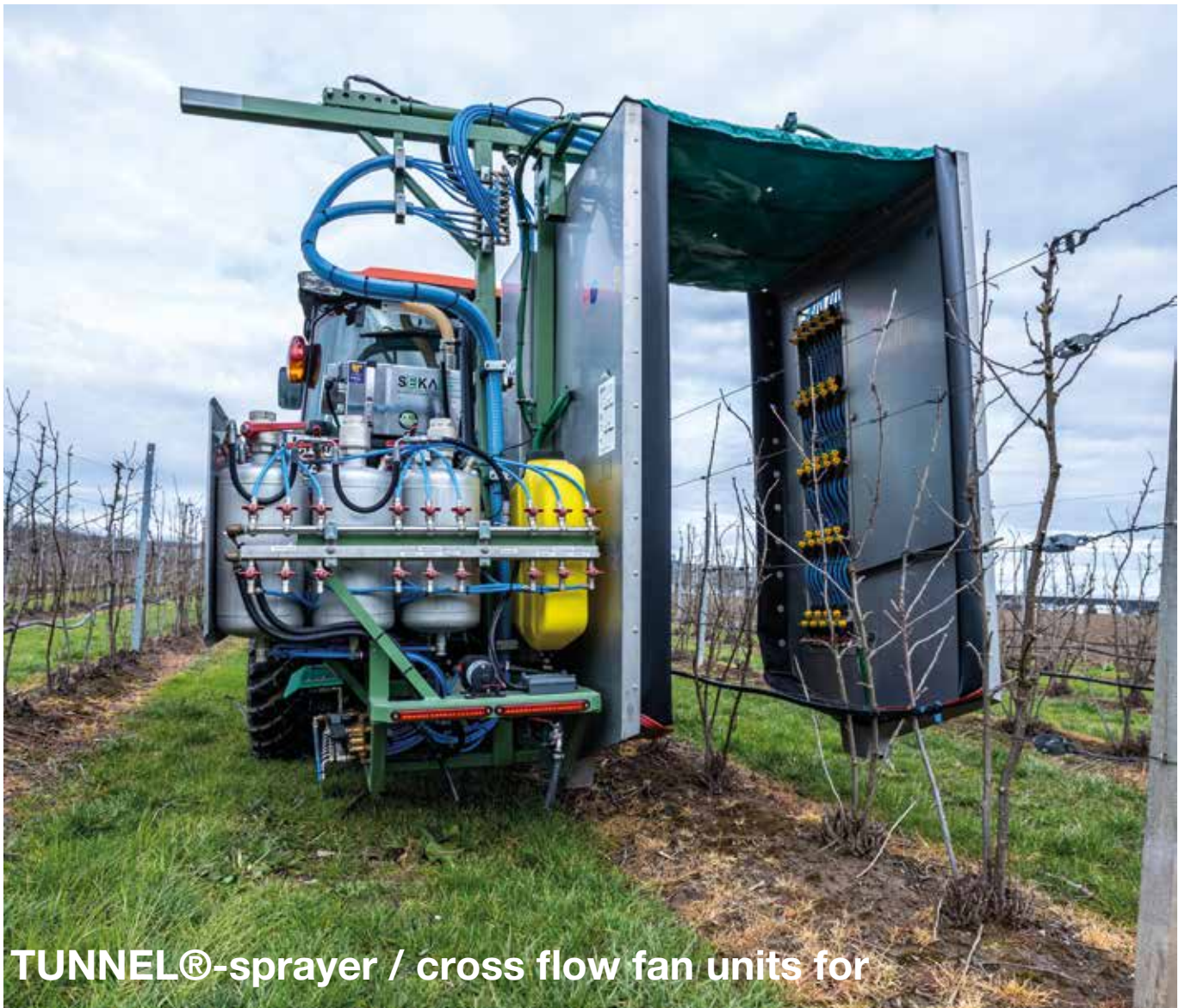


# LIPCO

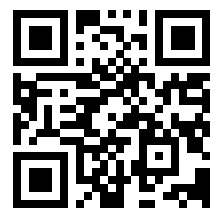
## PLOT SPRAYERS



**TUNNEL®-sprayer / cross flow fan units for**

manufacturers of pesticides | institutes | testing operators |  
testing providers

[www.lipco.com](http://www.lipco.com)



# Over-row TUNNEL® sprayer

saddle-mount unit **TSG-A1**

for 3-point attachment to tractor · with stepless width adjustment

**Technical data:**

Max. row height	: 2.30 m (90 in.)
Width adjustment	: 0.20-1.10 m (8-43 in.), stepless
Application on both sides	: with recycling

**Equipment:**

- Frame with hydraulic width adjustment
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, hydraulic device
- **LIPCO** TUNNEL® with two nozzle tubes each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)

# Over-row TUNNEL®sprayer

## trailer unit **TSG-N1**

with articulated drawbar · with stepless width adjustment

**Technical data:**

Max. row height	: 2.30 m (90 in.)
Width adjustment	: 0.20-1.10 m (8-43 in.), stepless
Application on both sides	: with recycling

**Equipment:**

- Frame with hydraulic width adjustment
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, power take-off drive
- **LIPCO** TUNNEL® with two nozzle tubes each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)
- Hydraulic steering drawbar and height adjustment as an option)



# Over-row TUNNEL® sprayer

mounting unit **TSG-R1**

for connection to caterpillar vehicles / dumper

- with stepless width adjustment



## Technical data:

Max. row height	: 2.20 m (87 in.)
Width adjustment	: 0.20-1.10 m (8-43 in.), stepless
Application on both sides	: with recycling

## Equipment:

- Frame with hydraulic width adjustment
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, hydraulic device
- **LIPCO TUNNEL®** with two nozzle tubes each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)
- HINOVA Doc Trak: hydraulic width adjustment of caterpillar frame as an option

# Over-row cross flow fan unit

saddle-mount unit / trailer unit **GSG-A1/N1**

Same equipment as TSG-version, but equipped with cross flow fans (air assistance)  
for connection to  
caterpillar vehicles / dumper



## Technical data:

Max. row height : 2.30 m (90 in.)  
Width adjustment : 0.20-1.10 m (8-43 in.), stepless  
Application on both sides : with recycling

## Equipment:

- Frame with supporting arm for cross-flow fan
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, hydraulic device
- One nozzle tube each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)

LIPCO tangential fan type QS			
Type	Fan length (mm / in.)	Fan ø (mm / in.)	Max. row height (m / in.)
QS 12/140	1,385 / 55	125 / 5	2.20 / 87
QS 15/160	1,590 / 63	250 / 10	2.20 / 87
QS 15/190	1,900 / 75	250 / 10	2.50 / 98
QS 15/250	2,535 / 100	250 / 10	3.10 / 122
QS 15/285	2,865 / 113	250 / 10	3.30 / 130
QS 15/315	3,180 / 125	250 / 10	3.50 / 138

# Over-row cross-flow fan unit

Mounting unit **GSG-R1**

for connection to caterpillar vehicles/dumper



one-sided position of fans  
for working under hail protection mesh  
in fruit growing



Retrofit kit for over-row using in viticulture,  
the outer fan can be rotated hydraulically

## Technical data:

Max. row height	:	3.50 m (138 in.)
Width adjustment	:	0.20-1.10 m (8-43 in.) (viticulture) / none (fruit growing), stepless
Application on one side	:	without recycling
Possibility of using the sprayer	:	under hail protection mesh!

## Equipment:

- Frame with supporting arm for cross-flow fan
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, hydraulic device
- One nozzle tube each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)
- Kombi-kit with add-on fan in viticulture (over-row) as an option

# Over-row TUNNEL® sprayer

## Trailer unit **TSG-NO1**

for lower link attachment to tractor

- with stepless width adjustment
- with drawbar incl. steering drawbar
- with tangential crossflow fans



### **Technical data:**

Max. row height	:	2.50 / 3.00 / 3.50 m (98 / 118 / 138 in.)
Width adjustment	:	0.20-2.20 m (8-87 in.), stepless
Application on both sides	:	with recycling

### **Equipment:**

- Frame with hydraulic width adjustment
- Pressure tanks made of stainless steel (quantity and volume)
- Double-sided compressor with balance tank, power take-off shaft
- **LIPCO TUNNEL®** with two nozzle tubes each pressure tank
- More tanks and nozzle tubes upon request
- Tank for fresh water / rinsing / hand-wash
- Electrical control
- Control unit (armature, pressure control, display)



# Over-row sprayer TSG/GSG





# Technology

**LIPCO**-application unit, construction and design are made upon costumer request:

## Pressure tank made of stainless steel

- Raw material 1.4571
- Pressure tank test classification 2 or 3
  - pressure equipment directive (97/23/EG) with test certificate
- Permitted overpressure +16 bar / -1 bar (vaccum)
  - test pressure 22.9 bar permitted temperature +50 °C
- Filling hole 2“ ball valve made of stainless steel
- Tank can pressureless be emptied by a 3-way valve
- Integrated cleaning nozzle
- Pneumatic agitator
- Savety valve on every tank
- One-way-valve
- Modular construction - can be upgraded



## Volume of tank (in liter)

Tank made of stainless steel		Max. working pressure 16 bar					
Volume (l.)	6	12	17	25	30	55	
Product	96	192	272	400	480	880	

## Nozzles: arrangement (upon request)

- Nozzle leverage arranged in a row or shifted arrangement
- Distribution block PA
- Equipment nozzle block: simple nozzle/double nozzle is individually lockable or screwed in a block
- Nozzle configuration with flat fan nozzles upon request (standard/injector)



Nozzle tube shifted arrangement



Nozzle tube arranged in a row



Distribution block PA shifted arrangement



Distribution block PA arranged in a row

# Technology

## Compressor

Compressed air production for pressure tanks made of stainless steel

two-step piston compressor with fan propeller and suction filter

block aggregate type BK 119, oil lubricated

max. 15 bar, 578 l/min

hydraulic device ( hydraulic pump power of 30 l/min is necessary or via PTO shaft - 5 KW

weight 26.5 kg



compressor type BK 119

## Control / armature / handling



manual control



full electric control, programmable (with data transfer)

**LIPCO** – control box with toggle switch, control lamp, pressure control, electric control and control unit as an option,

arrangement/operating position upon agreement

system compressed air manometer:

class of accuracy 1.0, 1/2", D. 100, scale division=0.5 bar

## Pressure tank filling unit electrical



# Technology

## Recycling of non-deposited plant protection agent: return to the PE tank

When system operation via compressed air a 12 V submersible pump is used.  
When using of a piston diaphragm pump, non-deposited plant protection agent is returned via **LIPCO** injector extraction system (venturi nozzle).



12 V submersible pump



collection tray with injector TSG (without air support)



collection tray with injector GSG (tangential fan)

## Fresh water recycling tank - hand-wash tank made of polyethylene

The size of the tank depends on the number of pressure tanks / test procedure and are putted together individually:



Volume tank (l.)	L x W x H (mm)
hand-wash tank 15 l.	420 x 135 x 400
30	500 x 130 x 580
50	800 x 170 x 420
85	630 x 340 x 680
105	630 x 340 x 780
200	960 x 560 x 550
300	1050 x 605 x 760
400	1050 x 605 x 1015



# **LIPCO** product program



We produce additionally:

**TUNNEL®-sprayers for  
viniculture and fruit growing  
and for similar special crops**



**Over-row cross-flow fan units  
for viniculture and fruit growing  
and for similar special crops**



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



**Harvesting machines for  
stone fruits and seed fruits**



**Underplant cultivators for  
viniculture and fruit growing**



**We look forward to hearing from you.**

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