Fliegl
AGRARTECHNIK

We are Fliegl.

Tanks and slurry technology

www.fliegl.com GB

Innovative by tradition

The name Fliegl has a decades-long reputation for quality, innovative action and practical solutions for agriculture. These are advantages which have made Fliegl, for example, the No.1 in Europe for agricultural trailers. Whether it's about tippers, original push-off trailers, slurry technology or harvest logistics: Fliegl will always have the optimum concept for you.

1975

1998

2003

2008

2008

2011

1983


2007


2013

2017

Innovative, top-quality products

Just because an idea is new, it doesn't necessarily mean that it's a good one. At Fliegl, we rigorously check every single product. We know the demands of the market and we are in constant contact with the practitioners. Our engineers and designers use the very latest CAD systems to develop products that are consistent down to the last detail and provide clear practical benefits. Innovations from Fliegl Agrartechnik are always concrete solutions for real tasks.

German quality in action worldwide

Despite globalisation, Fliegl has consistently developed and produced in Germany, and one reason for this is our trained and qualified staff. From engineers to apprentices, we look for skills that we can develop through continuous education and training. Another factor is the high technical standard in Germany, which provides the ideal conditions for developing our ideas into the high-quality products expected of the Fliegl brand.

MEMBER OF AEF

www.fliegl.com

Hydraulic bell gate for vacuum tank, robust and impervious to residual matter (ideal for litter manure)

Foam separator starting from 10,600 litres

Suction nozzle – to left or right – for easy suction

Turbo filler on left or right side possible

Hydraulic filling dome (400 mm or 600 mm)

Compressors available with the widest variety of power levels*

The compressor is lubricated fully automatically by a drip oiler.

Battioni MEC II 11,000 L heat-resistant

Battioni Ballast 13,500 L heat-resistant

Vacuum tank VFW

Volume: 3,000 L to 30,000 L

Ideal for powerful slurry application

- **Impervious to high proportions of foreign objects**
- **Can be combined with any Fliegl slurry spreader**
- **Suitable for almost any substrate, as well as for water**

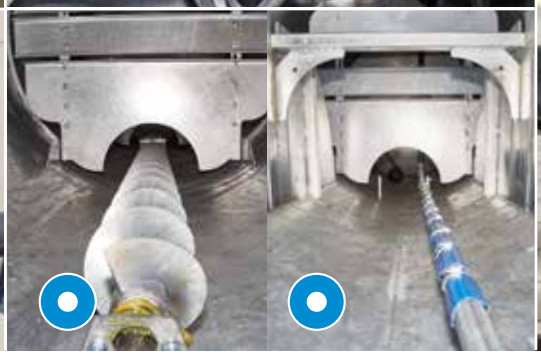
Over/under-pressure valve 0.5 bar

Overpressure valve 0.5 bar

Additional siphon up to 8,600 litre

Hydraulic compressor changeover

Mechanical filling dome Ø 400 mm



Optimal homogenisation of the slurry
Left: Hydraulic internal agitator with paddle screw
Right: Air agitator

Discharge accelerator with or without shredding cutter

Standard equipment **Optional**

Hertell 10,000 L
heat-resistant

Hertell 14,000 L
water cooled and
heat-resistant

* The illustrations show just a few examples from our range

Pump tank PFW

Volume: 5,000 L to 27,500 L

Pump case with sight glass and foreign object separator

Suction nozzle 8”

External control of the suction/pump slider

Control panel for tank + distributor
Illustration: Red flashing light to protect the pump from running dry

Sensor for automatic pump changeover

Tapered three-way gate slider with mechanical flow adjustment

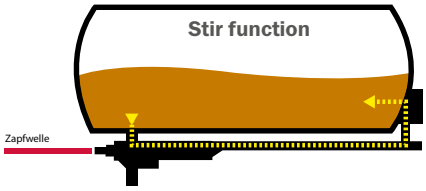
Perfect technology for high power suction

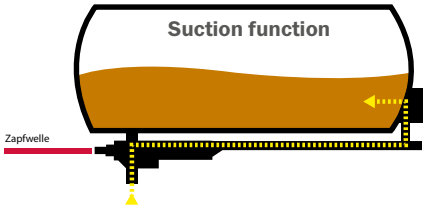
Suction manifold with sight glass

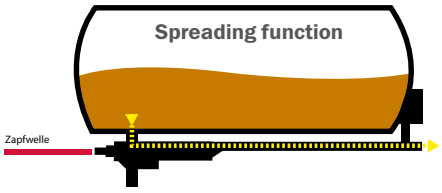
Tandem pump tank
PFW 12,000 L MAXX-Line

Eccentric screw pump, 4,000 or 6,000 litre

The eccentric screw pump ensures pulsation-free flow. The auger-type rotor has no trouble in delivering even very thick slurries at high flow rates and high pressure, so even deep slurry pits are not a problem for this pump. The pump is connected to the rear or front of the tank, pumping slurry in at the rear and out from the front.
The 3-way gate slider is used to switch between filling or emptying, or stirring inside the tank.







Hydraulic push cover

Rotary piston pump

Equipment pictured: Vogelsang GmbH & Co. KG, 49632 Essen/Oldb.

- High suction and spreading power
- Low noise emission
- Can be combined with any Fliegl slurry spreader
- Linear flow during the spreading process at the same PTO shaft speed

and spreading

Standard equipment Optional

- High flow rates
- Low maintenance with long running times

Hydraulic push cover

Fill level indicator on the top of the tank

High pressure tank HFW

Volume: 5,000 L to 25,000 L

The ideal solution for farms with external filling

Centrifugal pump 6,500 L/min.

Sprinkler nozzle

Rinsing line (stir function)

Standard equipment Optional

Poly-Line tanker

Volume: 6,000 L to 18,500 L

Available as pump tank, high-pressure or transport tank

Mounting bracket for drag shoe spreader
and four-point hydraulics

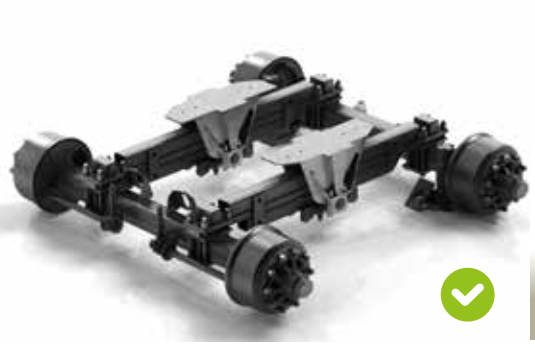
PFW 9000
with Skate 90 drag shoe spreader

PFW 15,500 with “mole” slurry disc harrow 6 m

PolyLine available in numerous equipment variants, e.g. with telescopic axle

- **Ground pressure shifting**
- **Extremely high stability on slopes**

- GFK tank – Made in Germany
- Easy to clean
- Extremely low centre of gravity
- Sturdy frame construction
- Low net weight



Boogie SB floating assembly with 18,500 L

High-pressure tank HFW 12.500 with centrifugal pump and sprinkler nozzle

Standard equipment Optional

A show of strength

AGRO TRUCK **tanker trailer**

25,000 l or 27,500 l

Tank mounting for hook lift

STF 27,500 in vacuum version

in pump version with
Vogelsang rotary piston pump

STF 25,000 three-axle with transfer arm

STF 27500 tanker trailer
with integrated dolly

Ideal for combined transport

Either pump or vacuum version

Tanker trailer STF 25,000 l and 27,500l

- Volume 25,000 l or 27,500 l
- Two-axle or three-axle version
- Air suspension
- Steering axle with automatic locking
- 40 - 60 or 80 km/h version
- Vacuum or pump version
- Filling dome D600 mm
- Rear docking
- Suction nozzle 8”
- Internal agitator pneumatic or hydraulic
- Electromagnetic control

Transfer arm swivels to either side

Centrifugal pump
6,500 L/min.

High performance

Simple technology

High transfer capacity

Road X Poly Line 29000 Tridem

- Push cover for external filling
- Transfer arm 6“, length 6 m incl. hopper for storage
- Riser pipe with docking funnel 8“
- Hydraulic forced steering
- Tyres: 445/65-R22.5

Road X Poly Line with mechanically driven rotary lobe pump for suction

HFW 16,000 Tandem with centrifugal pump and transfer arm, swivels to either side

The slurry suppliers

Tanker trailers for your tractor vehicle

Two-axle transport tanker TFW 16.000

Various SERIES - with a big equipment plus!

Steel tanks in many different sizes – for every requirement!

JUMBO Line
Vacuum

Jumbo Line tanks are specially designed for smaller farms where there are steep slopes. These tanks are distinguished by their particularly low centre of gravity, from 5,000L with offset axle as standard!

JUMBO Turbo Line
Vacuum

Jumbo Turbo Line tanks differ from the Jumbo Line tanks in that they have an additional centrifugal pump. Thanks to the combination of compressor and centrifugal pump, a hydraulically swivelling sprinkler nozzle can be mounted as an option. So even slurry can be spread even on steep slopes that are difficult to negotiate. (Follow the national regulations on the use of fertilisers)

JUMBO Line Plus
Pump & Vacuum

The standard Boogie SB floating assembly combined with the 30.5“ wheels ensure secure and soil-friendly working on slopes.
The hydraulically shifted axle assembly allows variable increase in the drawbar load at the rear of the tractor, which means increased pulling power and traction.

MAXX Line
Pump & Vacuum

Maxx Line tanks have customised equipment and they are distinguished by their robust design.
Suitable equipment variants can be selected for the widest range of applications and regions.

TWIST Line
Pump

The Fliegl TWIST LINE is a state of the art slurry tanker, which not only goes easy on your soil but also offers unmatched manoeuvrability in the field
The central mounting of the axle allows it to be tilted by 11° against the tank body and thus putting the single axle tanker into dog walk.
Additional soil compression is prevented
As soon as the axle turns, the optional three point hydraulic is carried along. An additional mounting for attachments is not necessary.

ALPHA Line
Pump & Vacuum

Alpha Line tankers not only provide special operating and ride comfort, they are also especially distinguished by their extensive basic equipment which uses the very latest technology. These tanks were designed for professional and intensive applications and can be fitted with the widest variety of additional options!

MAXX Line PLUS
Pump & Vacuum

MAXX Line Plus tanks are impressive with their high power and extensive basic equipment. With their standard 750/60-R30.5 tyres, these tanks are gentle on the land. Practicality and efficiency were of particular importance to us when developing this tank line!

BIG FOOT
Vacuum

What sets the Fliegl BIG FOOT tanker apart are the standard 800/60 R34 tires
Especially in boggy and wet conditions slurry can be distributed with lowest ground pressure and best weight distribution
Wheel cut-outs are custom made depending on the tires
Even on steep slopes the hydraulic suspension offers superb ground adjustment while providing highest driving comfort

Vacuum tank
Jumbo Line

Volume: 3,000 L to 8,600 L

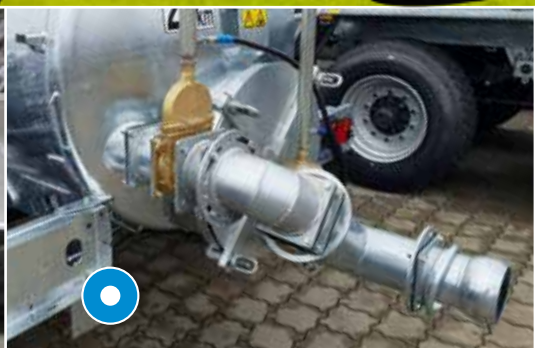
Jumbo Line	Tank length (shell)	Tank diameter
VFW 3,000	3,000 mm	1,100 mm
VFW 4,000	3,000 mm	1,250 mm
VFW 5,000	3,000 mm	1,400 mm
VFW 6,200	4,000 mm	1,400 mm
VFW 7,500	4,000 mm	1,500 mm
VFW 8,600	4,000 mm	1,600 mm


Filling dome D400 mechanical or hydraulic available


Mudguards


Blind rear flange and pre-fitted for downhill emptying


Mounting bracket for drag hose or drag shoe spreader as STANDARD starting from 5000 litres

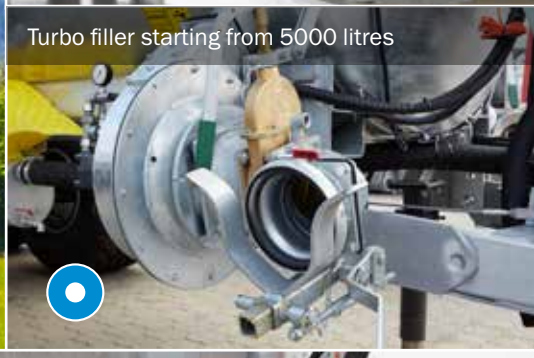

Downhill emptying (with internal pipe)

Ideal for farms where there are very steep slopes

READY FOR ANY CHALLENGE!

- 6“ suction nozzle (starting from 5000 litre)
- Turbo filler (starting from 8.600 litre)
- Pneumatic internal agitator
- Hydraulic compressor changeover
- Top or bottom hitch
- Various brake systems
- Various drawbar eyes
- Different speed versions
- Different tyre variants
- Different compressor variants
- Various slurry distributors
- Ladder


Additional siphon


Turbo filler starting from 5000 litres


With offset axle starting from 5000 litre: Low centre of gravity ensures optimal handling on slopes


Silencer with oil separator

Standard equipment Optional

Vacuum tank
Jumbo Turbo Line

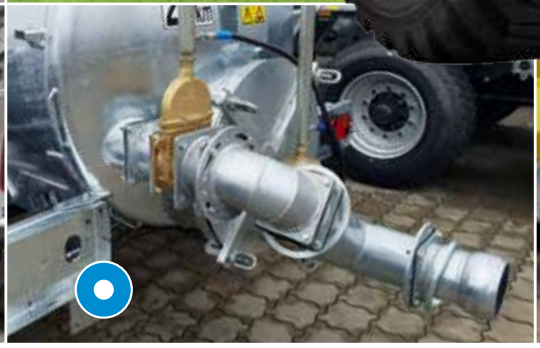
Volume: 3,000 L to 8,600 L

Jumbo Turbo Line	Tank length (shell)	Tank diameter
VFW 3,000	3,000 mm	1,100 mm
VFW 4,000	3,000 mm	1,250 mm
VFW 5,000	3,000 mm	1,400 mm
VFW 6,200	4,000 mm	1,400 mm
VFW 7,500	4,000 mm	1,500 mm
VFW 8,600	4,000 mm	1,600 mm

Filling dome D400 mechanical or hydraulic available

Impact head spreader over centrifugal pump

Mounting bracket for drag hose or drag shoe spreader STANDARD starting from 5000L



Downhill emptying

Turbo filler starting from 8.600 litres

Ideal for very steep slopes with its sprinkler nozzle

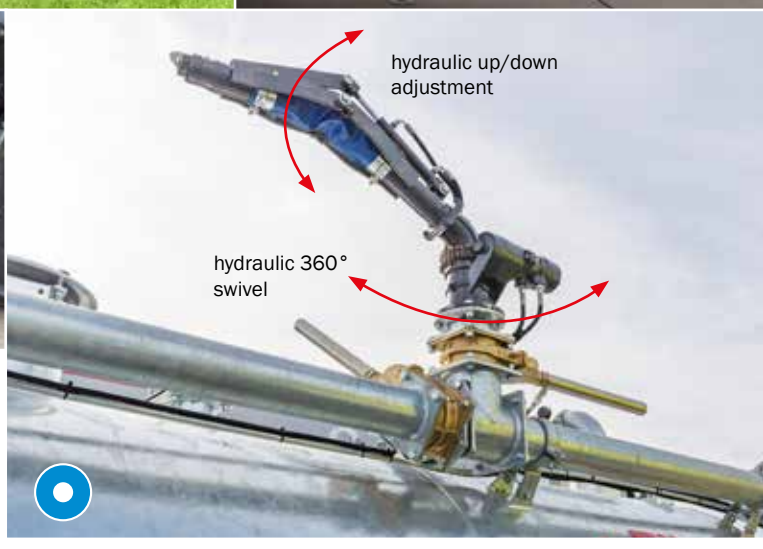
READY FOR ANY CHALLENGE!

- With 6“ suction nozzle (starting from 5000 litre)
- Turbo filler (starting from 8.600 litre)
- Pneumatic internal agitator
- Compressor and centrifugal pump with hydraulic changeover
- Ladder
- Top or bottom hitch
- Various brake systems
- Various drawbar eyes
- Different speed versions
- Different tyre variants
- Various slurry distributors
- B-connection with manual slider

Compressor and centrifugal pump combination

Tank tipping cylinder with drop support leg starting from 5000L

With offset axle starting from 5000 litre: Low centre of gravity ensures optimal handling on slopes



Hydraulic sprinkler nozzle

Standard equipment Optional

Vacuum or pump tank
“Jumbo Line Plus”

Volume: 14,000 L to 18,000 L/ Tandem

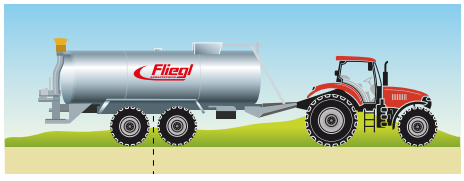
Hydraulic forced steering

Available with 23 t or 24 t permitted total weight

Optional in the “Natural farming” special edition

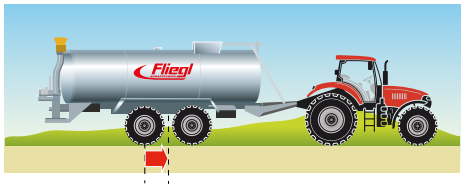
Push cover 700 mm x 700 mm

Hydraulically shifted axle assembly



Optimal adaptation of drawbar load: stepless hydraulic, also for attaching slurry spreaders, such as a drag shoe spreader

Axles are displaced backward for field application
High drawbar load = more traction by the tractor



Axles are displaced forward for road application
Low drawbar load = high ride comfort and low wear

Hydraulic axle adjustment

High ride comfort and

For vacuum tank:
Turbo filler at centre under tank

Jumbo Line Plus	Tank length (shell)	Tank diameter
VFW/PFW 14,000	6,000 mm	1,700 mm
VFW/PFW 16,000	6,000 mm	1,800 mm
VFW/PFW 18,000	6,000 mm	1,900 mm

“Jumbo Line Plus” vacuum tank

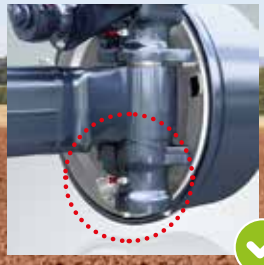
Suction nozzle 8”

Ball head
K80

OPTIONAL FOR PFW/VFW

- Four-point hydraulics
- 5 or 6 way control blocks

Steered



Straight-ahead travel

Steering axle
A **BPW axle** in the **410 x 180 mm** brake drum version is mounted as standard on all Jumbo Line Plus tanks

Boogie SB floating assembly

Wheel arch and tyres
Tyres 750/60-R30.5“
Optional: Rear tyres 750/60-R30.5“
Front tyres 850/50-R30.5

Hydraulic drawbar suspension

stable handling on slopes

Standard equipment Optional

Vacuum or pump tank
“MAXX Line”

Volume: 5,000 L to 25,000 L

MAXX Line	Axles	Tank length (shell)	Tank Ø
VFW 5,000	1	3,000 mm	1,400 mm
VFW/PFW 6,200	1	4,000 mm	1,400 mm
VFW/PFW 7,500	1	4,000 mm	1,500 mm
VFW/PFW 8,600	1	4,000 mm	1,600 mm
VFW/PFW 10,600	1	5,000 mm	1,600 mm
VFW/PFW 8,600	2	4,000 mm	1,600 mm
VFW/PFW 10,600	2	5,000 mm	1,600 mm
VFW/PFW 12,000	2	5,000 mm	1,700 mm
VFW/PFW 14,000	2	5,500 mm	1,800 mm
VFW/PFW 16,000	2	6,000 mm	1,800 mm
VFW/PFW 18,000	2	6,000 mm	1,900 mm
VFW/PFW 20,000	3	7,000 mm	1,900 mm
VFW/PFW 25,000	3	7,450 mm	2,000 mm

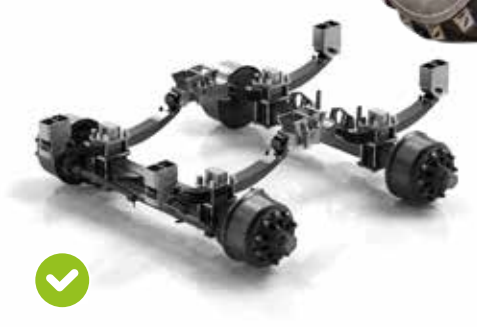
OPTIONAL FOR PFW/VFW

- Four-point hydraulics
- 5 or 6 way control blocks

Turbo filler with quick coupler

For pump tank: Hydraulic push cover

“TITAN” axle assembly
up to MAXX Line 14,000 L



“Gigant” axle assembly
for MAXX Line 16,000 L

PFW 12.000 MAXX Line Tandem

Pre-fitting for filling dome 400 mm

Drawbar suspension

For vacuum tank: Foam separator

Suction nozzle 8”

Ball head K80

“Gigant Plus” axle assembly
Starting from MAXX Line 18,000 L

Tyres up to 26.5“ max. possible

Blind flange as standard
Front right, left and rear

Versatile and robust

Standard equipment Optional

Vacuum or pump tank
“MAXX Line Plus”

Volume: 14,000 L to 18,000 L/ Tandem


Hydraulic forced steering

Pre-fitting for filling dome 400 mm

Available with 23 t or 24 t permitted total weight

Foam separator


For vacuum tank:
Turbo filler at centre under tank


“Gigant” axle assembly
for MAXX Line Plus 14,000 L


“Gigant Plus” axle assembly
for MAXX Line Plus 16,000 L and 18,000 L


Wheel arch and tyres
Tyres 750/60-R30.5“
Optional: Rear tyres 750/60-R30.5“
Front tyres 850/50-R30.5

Vacuum/pump tank MAXX Line Plus	Tank length (shell)	Tank diameter
VFW/PFW 14,000	6,000 mm	1,700 mm
VFW/PFW 16,000	6,000 mm	1,800 mm
VFW/PFW 18,000	6,000 mm	1,900 mm

OPTIONAL FOR PFW/VFW

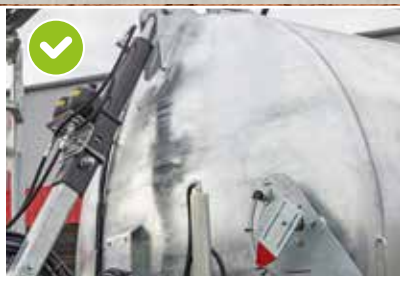
- Four-point hydraulics
- 5 or 6 way control blocks

“MAXX Line Plus” pump tank


Steered


Straight-ahead travel

Steering axle
A **BPW axle** in the **410 x 180 mm** brake drum version is mounted as standard for all MAXX Line Plus tanks


Hydraulic drawbar suspension

Top-class equipment for high impact

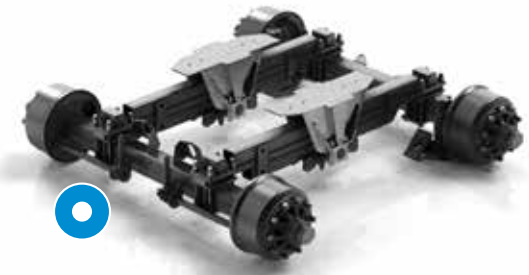
Standard equipment Optional

Vacuum or pump tank
“Alpha Line”

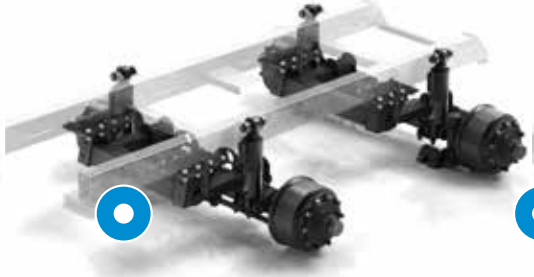
Volume: 10,600 L to 27,500 L

Tanks with maximum operating comfort and the very latest technology for professional and intensive applications

LARGE SELECTION OF AXLE ASSEMBLIES



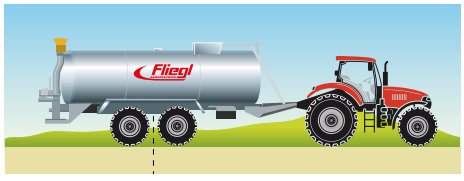
Boogie SB floating assembly
(14,000 – 20,000 litre)



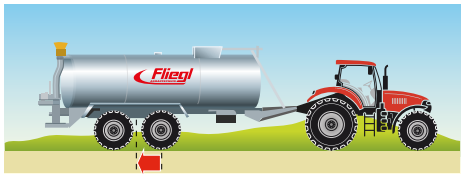
Hydraulic axle suspension
(14,000–20,000 litre)

Air suspension
(14,000 – 27,500 litre)

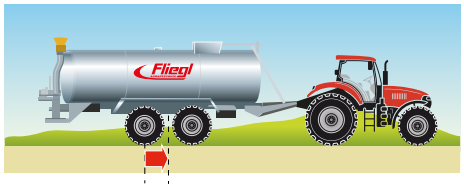
Hydraulically shifted axle assembly



Optimal adaptation of drawbar load by mechanical axle shift (standard equipment) or hydraulic stepless adjustment (optional). Also for attaching slurry spreaders, such as a drag shoe spreader



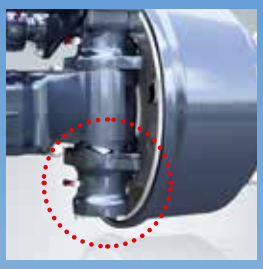
Axles are displaced backward for field application
High drawbar load = more traction by the tractor



Axles are displaced forward for road application
Less drawbar load = greater ride comfort and less wear

Hydraulic axle adjustment

Steering axle
A **BPW axle in** the **410 x 180 mm** brake drum version is mounted as standard for all Alpha Line Plus tanks



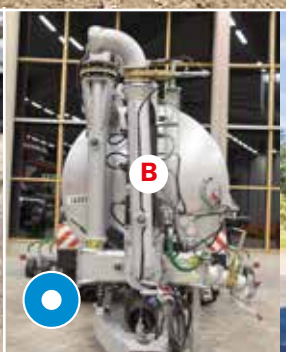
Steered

Straight-ahead travel

OPTIONAL FOR PFW/VFW

- Four-point hydraulics
- Fliegl Flow Control
- 5 or 6 way control blocks
- For vacuum tanks:
  Turbo filler at centre under tank
- Fliegl “Slurry Tanker”
- “Manure Sensing” nutrient measurement
- Hydraulic forced steering

Drawbar with hydr. suspension on both sides



A: Suction arm 4500mm length, swivels to both sides
B: Centre suction nozzle allows suction on either side

Telescopic axle (only possible with Boogie SB floating assembly)

Alpha Line	Axles	Tank length (shell)	Tank Ø
VFW/PFW 10,600	1	5,000 mm	1,600 mm
VFW/PFW 12,000	1	5,000 mm	1,700 mm
VFW/PFW 14,000	1	5,000 mm	1,900 mm
VFW/PFW 14,000	2	6,000 mm	1,700 mm
VFW/PFW 16,000	2	6,500 mm	1,800 mm
VFW/PFW 18,000	2	6,500 mm	1,900 mm
VFW/PFW 20,000	2	7,000 mm	1,900 mm
VFW/PFW 23,000	3	7,450 mm	2,000 mm
VFW/PFW 25,000	3	7,450 mm	2,100 mm
VFW/PFW 28,000	3	7,450 mm	2,150 mm

Standard equipment Optional

Vacuum tank »BIG FOOT«

Volume: 16.000 L and 18.000 L

Die Bodenschoner

Hydraulic drawbar suspension on both sides

Tyres 800/60 R34

Hydraulic axle suspension

Turbo filler at centre under tank

Vacuum tank BIG FOOT	Tank length (shell)	Tank diameter
VFW 16.000	6.500 mm	1.800 mm
VFW 18.000	6.500 mm	1.900 mm

Pump tank »Twist« volume 13.000 L

Tyres 900/60 R32

Fliegl TWIST is a single-axle manure tanker with crab steering.
TWIST does not generate crab steering through Ackerman steering but through a turnable steering system. Thereby the axle as a whole is twisted hydraulically around the vertical axle until up to 11°. Thus an offset of the chassis which has an around 4 m length is possible at approximately 1m (965 mm). As a result, the chassis can drive completely offset of the tractor.

The three point hydraulic is carried along with the axle while steering

Hydraulic rotatable suction arm 8“

Central mounted axle with hydraulic steering for dog walk

Serienausstattung Optional

Accessories

With Fliegl accessories, your tanker becomes an effective ‘response vehicle’ with which you have all factors under control.

LED lights

LED light package

Doppelumschaltventil

Load sensing or constant flow control block

Load sensing or constant flow control block

Digital flow meter

Plexiglas fill level indicator

Fill level indicator with float ball

Tyre pressure control system for soil-friendly field applications, with one/two wire system

Piston compressor with up to 3.3 m^3 air output

- **More comfortable coupling and uncoupling**
- **Tank can be completely emptied**
- **Perfect suspension on the road**

Ladder

Hydraulic filling dome
Sizes: Ø 400 mm and Ø 600 mm
Opens to right or left depending on mounting

Digital tank meter

Robust drop support leg

Hydraulic supporting foot

Four-point hydraulics with
lifting force 4,500 kg

Filling technology

Turbo filler with quick coupler (6” or 8”)
On left, right or rear possible

Pump tank suction nozzle 8”

Turbo filler at centre under tank
Suction process possible on right or left

Suction nozzle (optionally with 8” turbo filler)
Possible on left or right.
With docking station; pressure sequence valve and hydraulic compressor changeover

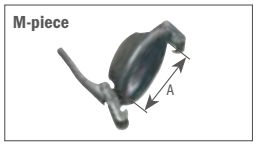
At A: suction arm
4500mm length, swivels to either side
At B: suction nozzle at centre
can be set for suction on either side

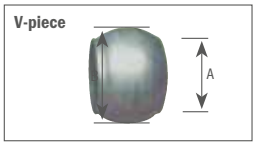
Elefant 8” suction nozzle
Possible on left or right.
Length 5000 mm with four-way control block
Turbo filler with telescopic extension 1500 optional

Slurry couplings

All Fliegl tanks are fitted with the “Italian System” as standard.

THE “ITALIAN” SYSTEM





This system has a **lever welded to the M-section**. On the **V-piece is a ball with a loose clamping ring**.
This ring must have a sharp edge where the lever of the M-piece engages. If this edge has been machined to make it round, it is called the “Bazzoli Siegperle” system.

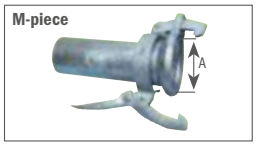
To determine the size of the Italian coupling, measure either the outside diameter of the V-piece or the inside diameter of the M-piece.
The outside diameter of the V-piece or the inside diameter of the M-piece must be the same for the M-piece and the V-piece. The coupling hose connector is measured by the outside or inside hose diameter.

Sizes of the Italian system

M-piece (with O-ring)	**V-piece (with loose clamping ring)**	**Hose sizes**
inside dim. A 131 mm = 4"	outside dim. B 130 mm / inside dim. A 100 mm = 4"	4" = 100 mm
inside dim. A 151 mm = 5"	outside dim. B 150 mm / inside dim. A 120 mm = 5"	5" = 120 mm
inside dim. A 181 mm = 6"	outside dim. B 180 mm / inside dim. A 150 mm = 6"	6" = 150 mm
inside dim. A 245 mm = 8"	outside dim. B 240 mm / inside dim. A 205 mm = 8"	8" = 200 mm
inside dim. A 301 mm = 10"	outside dim. B 300 mm / inside dim. A 254 mm = 10"	10" = 250 mm
inside dim. A 371 mm = 12"	outside dim. B 370 mm / inside dim. A 304 mm = 12"	12" = 300 mm

Quick coupler 6“

THE “PERROT” SYSTEM



This system has a movable ring on the **M-section to which the lever is attached**. The **V-section has a cone** and consists of only one part. To determine the size of the Perrot coupling, measure either the outside diameter of the V-piece or the inside diameter of the M-piece. The coupling hose connector is measured by the outside or inside hose diameter.

Sizes of the Perrot system

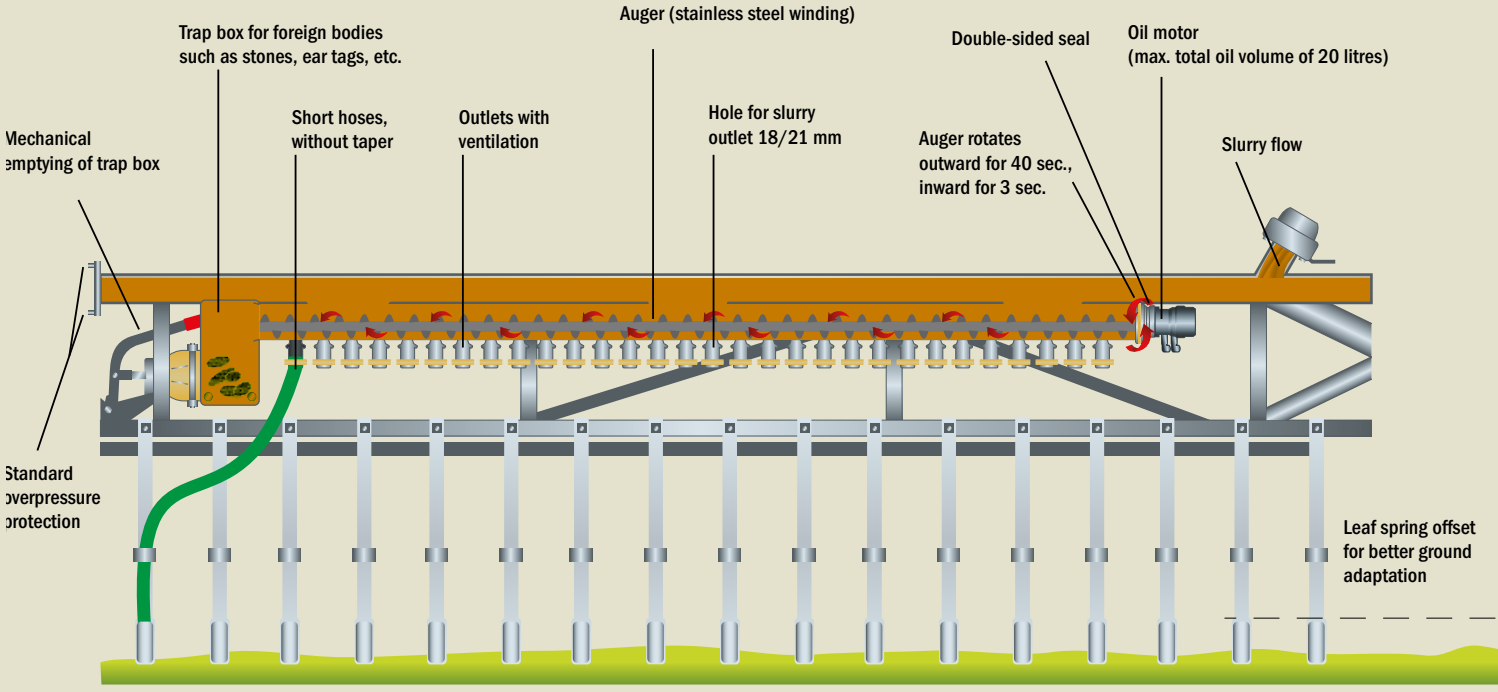
M-piece (with O-ring)	**Perrot V-piece**	**Hose sizes**
inside dim. A 150.0 mm = 4"	outside dim. B 155 mm / inside dim. A 108 mm = 4"	4" = 108 mm
inside dim. A 171.5 mm = 5"	outside dim. B 179 mm / inside dim. A 133 mm = 5"	5" = 133 mm
inside dim. A 203.5 mm = 6"	outside dim. B 211 mm / inside dim. A 159 mm = 6"	6" = 159 mm
inside dim. A 288.0 mm = 8"	outside dim. B 313 mm / inside dim. A 216 mm = 8"	8" = 216 mm

Perrot quick coupler 6”

The Fliegl screw distributor
a unique system!

Function

The function of the screw (50 - 60 rpm) is not to distribute slurry, but to carry any foreign objects outwards into the storage box. A timing relay is set so that the screw runs for about 40 seconds towards the outside and for 5 seconds towards the inside.



Invincible against foreign objects | No clogging

Uniform longitudinal and cross spreading – even on slopes

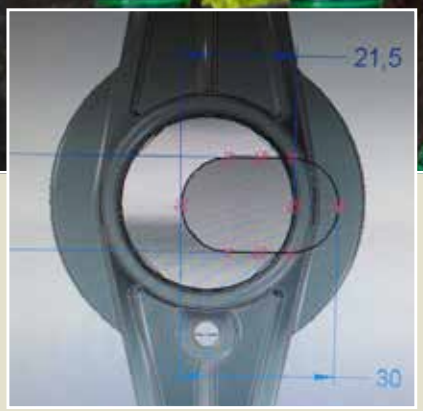
Storage box (with SKATE and GARANT) for foreign objects, emptied mechanically or hydraulically

Foreign objects such as pieces of wood, stones, ear tags etc. are separated effortlessly out of the system

The possibility of the exact dispensing of manure fluency with the Fliegl **FlexFlow**

Fliegl's innovation Flex Flow is based on two half-shell troughs out of V2A material. The basic trough is equipped with an oval flow opening that has a length of 30mm and a width of 18mm. The bottom trough has round opening outlets which can be shifted.

By switching the bottom trough, the manure flow can be changed variably which makes a spread rate from 5 to 70 m³ per ha at equal driving speed possible.

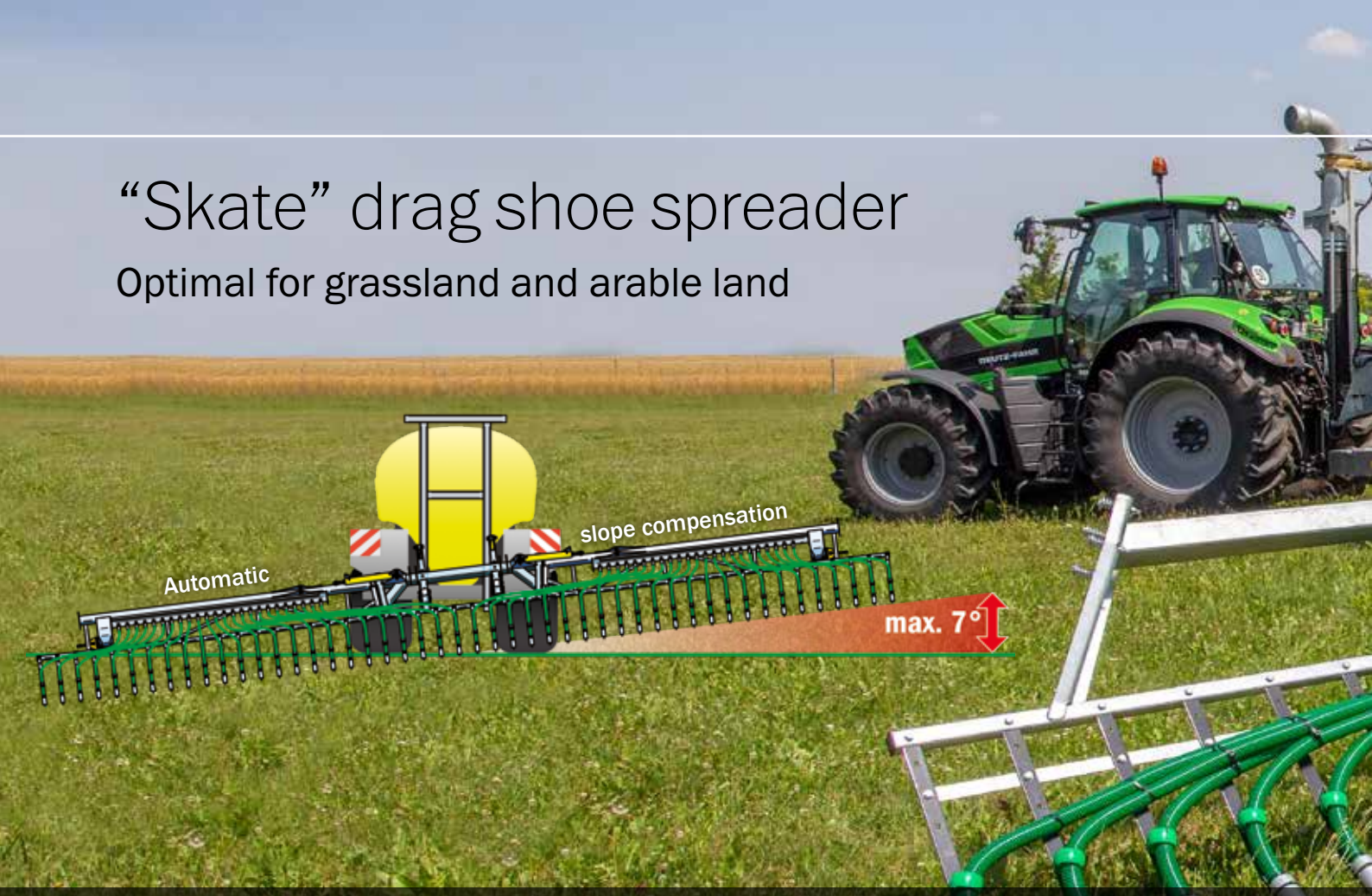


Spring suspension kit of FlexFlow

- FlexFlow ensures perfect longitudinal and lateral distribution for every application rate
- With the help of FlexFlow it is possible to adapt to a flow rate that has been changed by pump speed
- Any form of manure or digestate can be applied with FlexFlow, regardless of viscosity, fibre content or dry matter content
- FlexFlow enables the application of extremely low slurry volumes with above average nutrient levels
- FlexFlow provides a flexible choice of driving speed in terms of traction requirements and ground conditions

“Skate” drag shoe spreader

Optimal for grassland and arable land



		SKATE 60	SKATE 75	SKATE 90	SKATE 120	SKATE 150	SKATE 180	SKATE 210	SKATE 240
Working width	m	6	7.5	9	12	15	18	21	24
Number of outlets		24	30	36	48	60	72	84	96
Weight	kg	660	790	1100	1300	1550	1850	2800	3300
Transport width (top/bottom)	mm	2300/ 2600	2300/ 2600	2300/ 2600	2300/ 2600	2300/ 2600	2300/ 2600	2600/ 2990	2600/ 2990
Boom ends folded hydraulically	m	-	-	-	-	-	opt. 18/15	21/15	24/18

Fliegl SKATE 210 with pendulum frame for better slope compensation (only for SKATE 210/240)

SKATE

Working widths 6 - 24 m

- Solid design but nevertheless low net weight through special frame and distributor construction
- No loss of drawbar load as the drag shoe spreader rests on the ground
- High coulter pressure of 8 kg per injector shoe
- With automatic slope compensation as standard
- Specially tilted swivel joints ensure an extremely slim transport position and therefore good all round vision
- Very narrow transport width of about 2,300 mm at the top
- Automatic drip stop as the distributor is swivelled up by comfort control
- Outstanding slurry distribution, low maintenance and low oil requirement (max. 20l) thanks to the **Fliegl screw distributor**
- No kinks on the outlet hoses when folding in/out, thanks to the special folding mechanism

- Sprung injector shoes for optimal ground adaptation
- Mechanical or hydraulic boom section control possible
- Mechanical shut-off of individual hose outlets possible
- Simple mounting directly on the tank possible
- Comfort control with automatic folding and headland function as standard
- Controlled by a tractor control unit (pressureless return required) or by Load Sensing
- Control through Isobus possible
- Narrow hose spacing of 250 mm, therefore optimal for grassland and arable land

Thick manure straps are a thing of the past with the Fliegl TWIN!

Fliegl TWIN

Fliegl TWIN is a y-formed trailing shoe spreader. It splits the liquid manure fluency, halves the quantity of liquid manure and simultaneously doubles the discarded liquid manure straps.

»**less pollution**«,
more infiltration!

Deposition with previous nozzle
(undivided manure strap)

Deposition with Y-nozzle TWIN
(divided manure strap)

Advantages

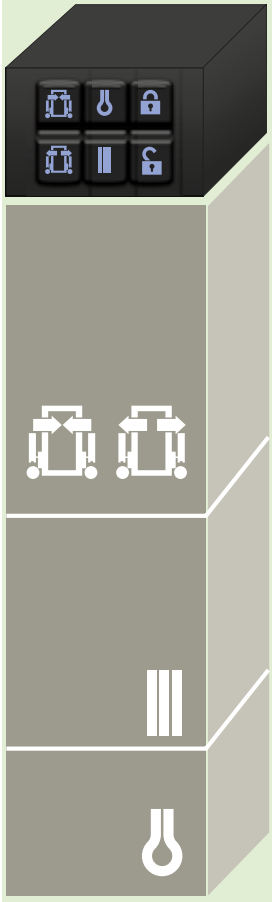
- **Less fodder contamination**
- **Higher efficiency in spreading liquid manure**
- **Marvelous lateral and longitudinal distribution**
- **Increase of substratum infiltration**

Control

Control through ISOBUS

Operator interface for Fliegl SKATE in combination with ISOBUS terminal
Optional: Section control

"EASY" comfort control (standard equipment)



- Relieves the driver and prevents operator errors
- The ergonomic control panel is backlit and can be easily disconnected from the cable by the connector, so it can be left in the tractor
- Folding of the distributor arms is monitored by sensors at all positions, so the folding is synchronised and dampened even on slopes.

AUTOMATIC FOLDING

The distributor...

- is lifted out of the mechanical transport lock
- folds the distributor arms backwards
- is lowered into working position

AUTOMATIC SPREADING

- Gate slider opens
- Spreading augers start working

AUTOMATIC HEADLAND FUNCTION

- Spreading augers switch off
- Gate slider closes
- Distributor folds up

EASY comfort control panel

ISOBUS adapter cable allows quick changeovers

Using the ISOBUS adapter, the SKATE can be operated either with the standard EASY comfort control or through an ISOBUS terminal.
So it is easy to change between older and newer tractors.

Storage box opens mechanically or hydraulically

Specially tilted swivel joints

Control block with oil filter

Special folding mechanism prevents any kinking of the outlet hoses

Automatic slope compensation for optimal ground adaptation

Hose spacing 250mm

SKATE

Extremely low overall height

Extremely compact transport width of 2600 mm at bottom and 2300 mm at top

Angle sensors on left and right for even folding on slopes

Coulter pressure 8kg

Uniform spread quality with short outlet hoses

Integrated overpressure protection

Accessories...

Boom width section control
mechanical or hydraulic

Hydraulic functions controlled by load-sensing
(flat-sealing connector in sizes T4/P3/LS1)

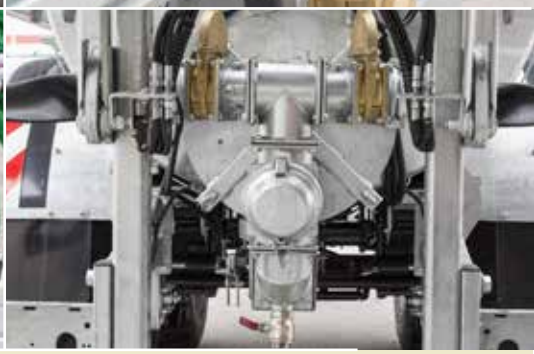
Can be upgraded for extremely high fibre content: shredding cutter to be mounted centrally between tank and distributor (oil capacity 60l required). Controlled directly from the towing vehicle control unit

With support wheels for quiet working at higher ground speeds

Mechanical shut-off
of individual hoses

Holder for suction line
(shown here in the folded-up state)

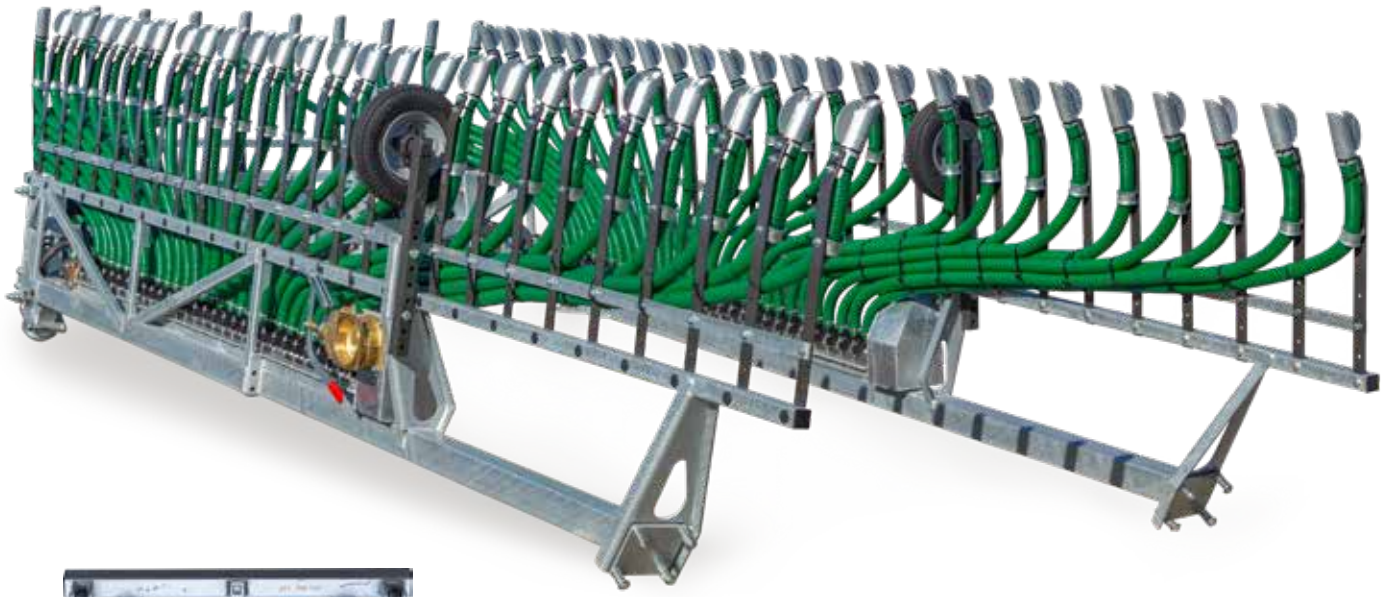
Hydraulic emptying of trap box



T-piece for an additional outlet
(e.g. for a baffle plate spreader) in
combination with lateral shut-off.

Ideal for upgrades

Included with delivery: Pre-assembled drag shoe spreader, control panel and control block, H-frame, transport lock, T-piece with flexible hoses for the slurry feed



...even for tanks from other manufacturers

Retrofit: pay attention to the drawbar load and permitted total weight of the existing tanker

Also suitable for third-party GFK tankers

Fliegl »Snake«

variabel einsetzbar für Gülleverschlauchung

- Working widths 8.50 / 12.00 / 15.00 m
- Package-type folding ensures extremely compact transport dimensions with 2.60 metre width and max. 3.80 metre height
- equipped with the proven Fliegl screw distributor
- drip-stop at the headland by hydraulic fold-up

Tow bar

- Hydraulically swivelled tow bar allows exact guiding of the slurry hose and ensures comfortable turning at the headland
- Centred by two chains of equal length
- The spreader can also be easily used in combination with a self-propelled slurry carrier, irrespective of the container size
- The Fliegl Flow Control digital flow meter cam be used to ensure even slurry application

- Slurry application which is very gentle on the soil
- Slurry application even in extremely wet weather and on marshy ground
- Perfect system for steep lateral slopes

Ideal for self-propelled systems

The Fliegl SNAKE can be connected to any self-propelled slurry distributer. That makes it an unmatched system in its flexibility.

The distributer folds behind the vehicle. Form and size of the tank do not matter in this case.

Additional supports on the tank are not necessary. The dribble bars do not reach to the cab which improves visibility significantly.

The very compact construction makes the SNAKE a safe and reliable system, especially during road transport.

“Garant” drag shoe spreader

Storage box to separate foreign objects

Garant 150 loose

Screw distributor control unit

Pressure sequence valve

Working width 6 - 18,00 m

- Slurry is deposited in strips directly on the soil surface
- With the proven Fliegl screw distributor
- Foreign objects are carried automatically into the storage box
- Layout and structure of the frame and distributor arms as on the Fliegl SKATE
- Controlled by two tractor control units (1x for folding mechanism, 1x for screw distributor)
- Required oil capacity 20l max.
- Lowest power requirement

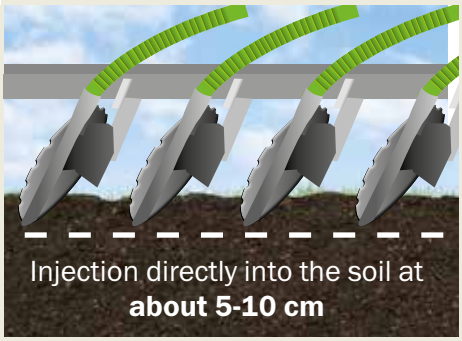
Optionally with the "Easy” comfort control

“Vario-Disc” slurry injector

Patented system for perfect incorporation in grassland and arable land

Stepless disc adjustment

Because of the slanted position of the discs, the soil is opened up so that the slurry can be directly injected



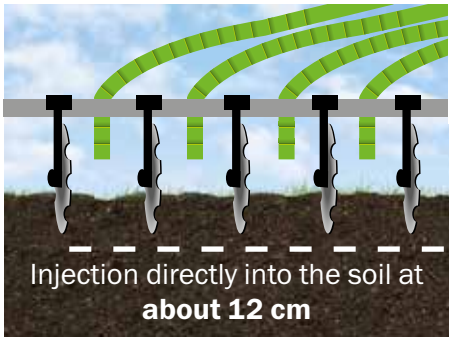
Targeted depositing of the slurry under the turf

Working widths 3,00 m, 5,60 m and 7,15 m

- Grassland and arable land application
- Can be mounted on almost any slurry tank
- With the proven Fliegl screw distributor
- Frame fully galvanised
- Maintenance-friendly
- Hydraulic folding
- Adjustable support wheels
- Sturdy angular contact roller bearings
- Disc diameter 530 mm

“Mole” compact disc harrow

Easy-pull soil cultivation and targeted incorporation of slurry in one operation

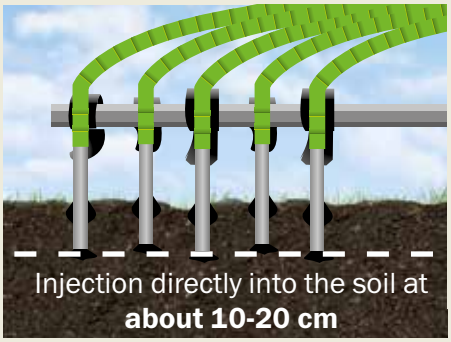


Working widths 3,00 m, 5,70 m and 6,90 m

- With the proven Fliegl screw distributor
- With the large-dimensioned coulter discs, the subsoil is worked over and the slurry is incorporated in a single operation
- Hydraulic folding (for working widths 4.50 m and 6.00 m)
- Large adjustable support wheels
- Sturdy angular contact roller bearings
- Disc diameter: 510 mm

“GUG” slurry cultivator

Powerful soil cultivation and targeted incorporation of slurry in a single operation



Working widths 3,00 m, 4,50 m and 6,00 m

- For undeveloped farmland
- Robust cultivator tines for the toughest jobs
- Replaceable double-heart coulters
- Can be mounted on almost any slurry tank
- With the proven Fliegl screw distributor
- Frame fully galvanised
- Hydraulic folding
  (for working widths 4.50 m and 6.00 m)
- Maintenance-friendly
- Easy to operate
- Height-adjustable support wheels

Other spreading systems

Follow the national regulations on the use of fertilisers

Wide spreader

Combi-spreader - folding

Hydraulic pendulum spreader with working width from 12 to 18 m.

Impact head, pendulum or nozzle boom spreaders: in addition to ground level injection systems, we also offer classic spreading systems such as impact head/wide area or combi-spreaders.

Pendulum spreader for coarse droplet application

Hydraulic double pendulum spreader

Nozzle boom spreader with maximum working width 21 - 30 m

Fliegl Slurry Tanker

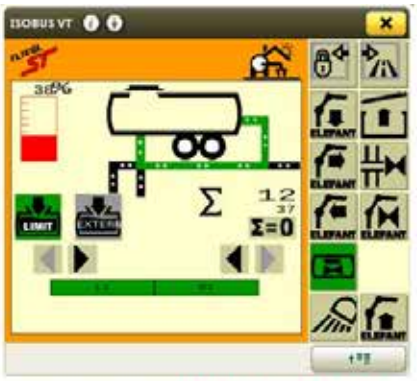
Perfection in slurry spreading

Fliegl Slurry Tanker (FST) is a control system which allows all of the functions of a slurry tanker to be controlled comfortably through an ISOBUS display

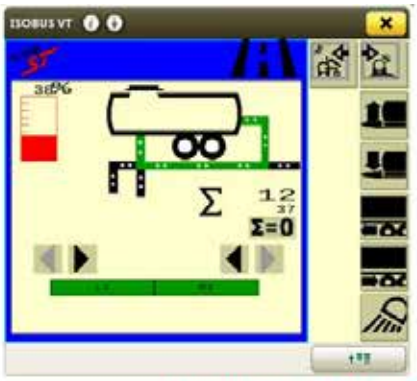
- Makes slurry application easier
- Increases operator comfort and safety when applying fertilisers.
- The control system uses the existing ISOBUS display, so there is no need for an additional control panel in the tractor.
- Compatible with any ISOBUS display (has the AEF certificate).
- Load-sensing-enabled as standard, i.e. hydraulic functions are always supplied only with the quantity of oil actually required; this not only reduces heating of the oil, but also fuel consumption.

It has three different modes:

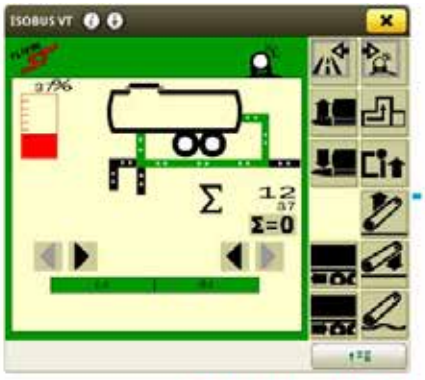
road, farm and field operation. The reason for this is that only certain functions are available in each mode. For example in farm mode, which is intended for filling operations, the three-way gate slider at the rear cannot be operated. This prevents any undesired operator errors. Field mode may have one or more pages, depending on the number of functions the tank has.



Farm operating mode



Road operating mode



Field operating mode

Hydraulic control

ISOBUS

Precision spreading

Flow Control in combination with flow meter

Fliegl Flow Control

FFC without variable speed pump

On the version without variable speed pump, you can easily set the spreading rate in m³/ha. The optimal speed to obtain the desired spreading rate is calculated and displayed. This version is therefore suitable mainly for flatland areas.

FFC with bypass system (for pump tank only)

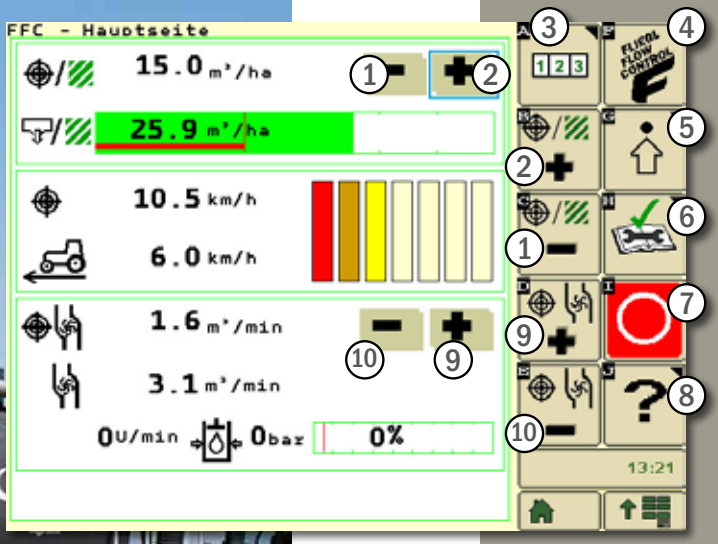
If the engine is operating at full capacity and the recommended speed can no longer be obtained when going uphill, the PTO speed must be reduced to avoid excess application of fertiliser. With the new bypass system from Fliegl, manure is simply re-directed from the feed line back into the tank. This means there is less manure at the dribble bar and excess application is avoided. The bypass is controlled automatically by the system as required.

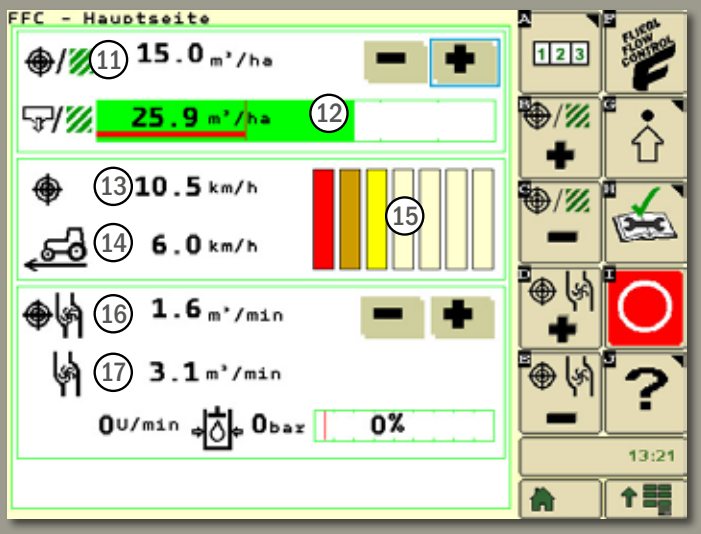
FFC with controlled discharge acceleration (for vacuum tank only)

With this system the tank is emptied by a discharge accelerator. This is operated by a separate oil motor independently of PTO speed. As well as setting the spreading rate in m³/ha, you can also adjust the spreading rate in m³/min. If the diesel engine is running at full capacity when going uphill, then the calculated optimal travel speed can no longer be obtained. So you can reduce the flow rate per minute and the optimal travel speed for this flow rate is recalculated. In this way you can also obtain an even spread pattern when going uphill.

Control by travel speed

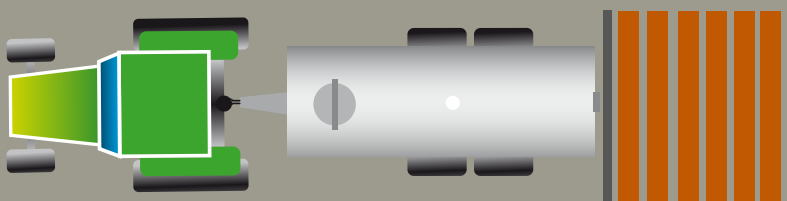
Automatic speed control according to flow rate and selected spreading rate by Isobus Class 3 functionality (only possible with certain tractor manufacturers).



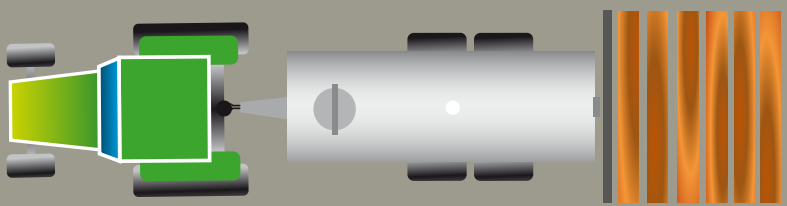


1. Reduce spreading rate
2. Increase spreading rate
3. “Totals”: Information on total amount of slurry spread, duration, etc.
4. Main page
5. Settings
6. Diagnostics
7. Start / Stop
8. Help
9. Increase flow rate
10. Reduce flow rate
11. Enter the desired spreading rate
12. Green: current spreading rate
    Red: desired spreading rate
13. Target speed calculated to maintain desired spreading rate
14. Current travel speed
15. Left elements coloured = drive faster
    Left elements coloured = drive slower
16. Set the desired flow rate
17. Current flow rate

Uniform spreading result with Fliegl Flow Control



Travel speed control with FFC



With conventional rotary vane control

Fliegl Nutrient Measure Station

Active on-the-spot measurement of nutrients in real time

High flexibility

- Available in 6“ or 8“
- Simple-to-use suction nozzle
- With integrated flow meter (records the total amount of nutrients)
- Proven HarvestLab Sensor from John Deere for measuring biogas fermentation residues, cattle and pig manure (extendible for measurements at the shredder)
- Measurement of dry weight total nitrogen (N), ammonium nitrogen (NH4-N), phosphorus (P2O5), potassium (K2O), volume, mass
- Software can be used to set up customers and vehicles, and create measurement reports
- Data transfer by W-LAN router
- Comfortable transport with forklift pockets, three-point or Euro attachment

John Deere HarvestLab 3000

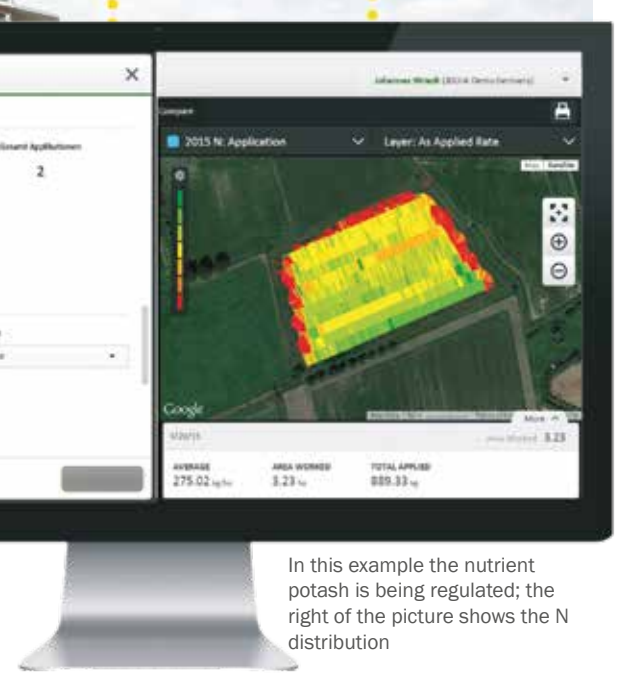
HarvestLab™ 3000 uses Near-InfraRed (NIR) spectroscopy to determine the various constituents present in harvest, silage or slurry materials, in less than a second.
The new HarvestLab™ 3000 hardware is state-of-the-art technology and is based on millions of hours of farmland experience. With its 12% broader wavelength spectrum, it achieves greater accuracy and provides more than 4,000 measurement points per second. You are not just given the result of a random sample check, but statistically reliable data in real time.

It’s the content that counts!

Nutrient-based application with

Manure Sensing

As manure is often very heterogeneous, you never actually know how much nutrients are being spread per hectare at a given time. With Manure Sensing, the amount of nutrients (N, NH4, P, K) in the manure is measured in real time. If you know the nutrient concentration of the manure in the tank, you can adapt the application amount to the amount of nutrients required for the area. In combination with **Fliegl Flow Control**, the application amount can be adjusted in kg N/ha. In this way you optimise the nutrient balance, make the best use of the nutrients in your manure and maximise your potential yield. It is easier to create a nutritional balance as, as with mineral fertilisation, you know exactly how many kg of which nutrient are being spread per hectare. If the manure is used optimally thanks to Manure Sensing, there are also savings to be made with mineral fertilisers in most cases.



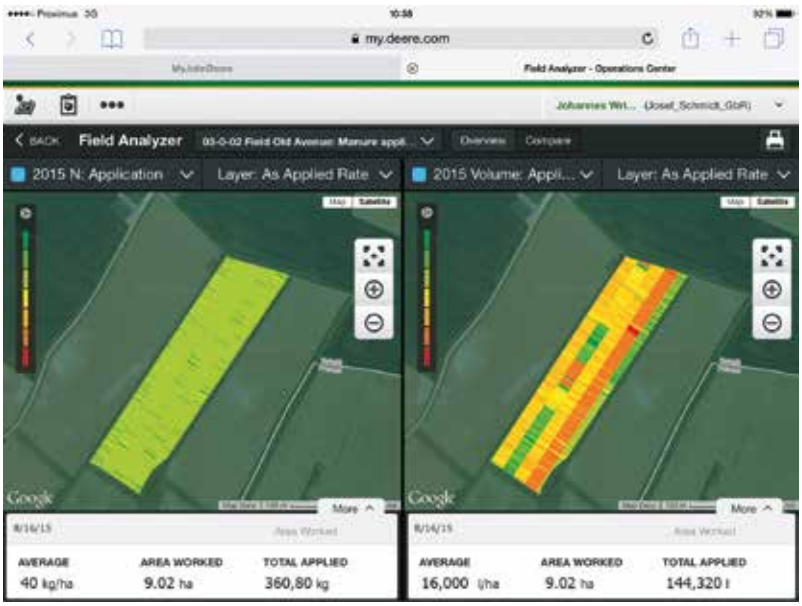
In this example the nutrient potash is being regulated; the right of the picture shows the N distribution

John Deere HarvestLab 3000 uses Near-InfraRed (NIR) spectroscopy to determine the various constituents present in harvest, silage or slurry materials, in less than a second.

Gold medal to John Deere

Product: Connected Nutrient Management

MANURE SENSING



Left: Manure spread by kg N/ha
→ even N-distribution on the field
Right: Manure distribution in litres/ha
→ uneven N-distribution inside a tank

- Real-time measurement of N, P, K, NH4, dry mass and volume, immediately in front of the applicator
- Precise spreading of organic and mineral N and P fertilisers according to requirement
- Automatic tractor speed adaptation (only for John Deere CVT tractors with ISOBUS Class 3)
- Documentation:
  - Volume applied
  - Nutrients applied

  (total per field and specific sub-areas)
- Utilises the entire nutrient potential of the manure while at the same time complying with statutory regulations. The advantages are clear: Yields and product quality are maximised while reducing the costs for mineral fertilisers
- Maximum control range and rapid response by speed variation and – in the second instance – by adjustment of the flow rate by **Fliegl Flow Control**
- Combines the know-how and technologies of all our innovation partners and thus enables nutrient application which complies with German regulations
- Maximised yield potential

Chassis technology

For secure handling, even in extreme driving situations!

The Fliegl swap system

Slurry tank superstructure optional for swap chassis.

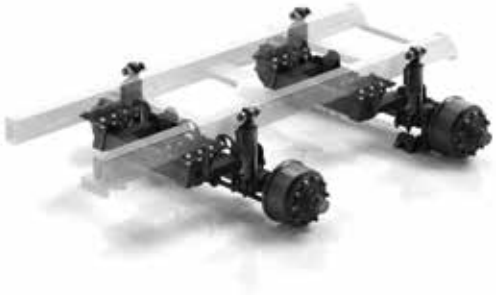
Cylinder for hydraulic lifting gear

Drawbar eye with pivot lug 51mm

Ball head K80

Rotating drawbar eye 50mm

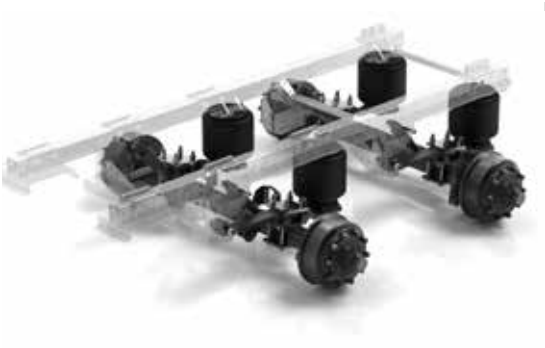
Piton-Fix



Hydraulic axle suspension

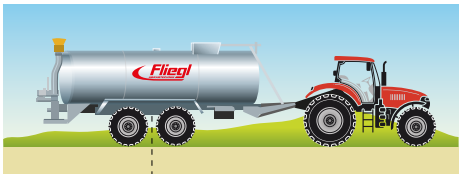
Boogi floating assembly, rigid

Titan tandem assembly for
best ground adaptation

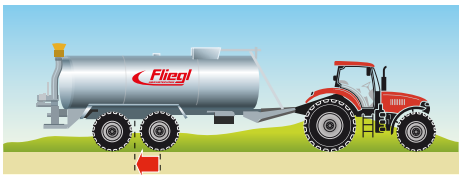


Air suspension

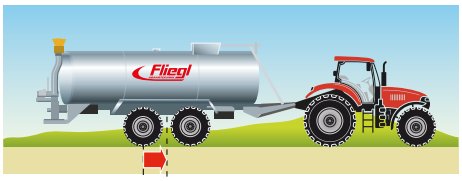
Fliegl axle shift



Optimal adaptation of drawbar load by mechanical axle shift or hydraulic stepless adjustment (optional).
Also for attaching slurry spreaders, such as a drag shoe spreader



Axles are displaced backward for field application
High drawbar load = more traction by the tractor



Axles are displaced forward for road application
Less drawbar load = greater ride comfort and less wear

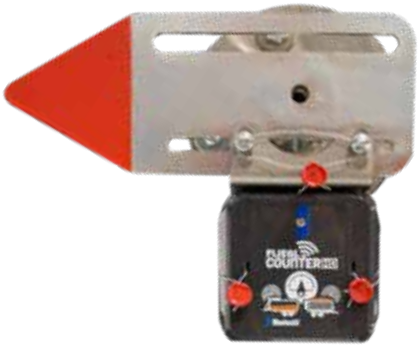
“Gigant”

“Gigant Plus”

Fliegl tank and load counter

»Beacon Counter HD«

Illustration with Fliegl Beacon Counter

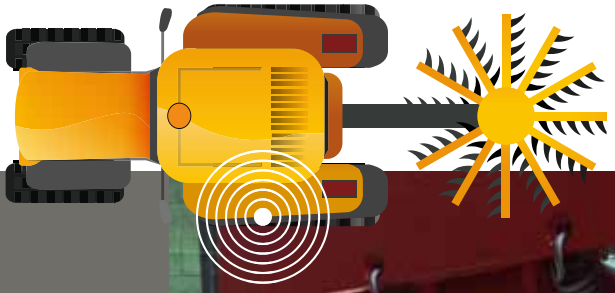


Example with the beacon mounted at the tank fill level indicator

Beacons are paradoxical: They are small, simple and cost-effective, but at the same time they are rather brilliant. The inconspicuous-looking transmitters are based on simple Bluetooth technology and, when used intelligently, open up whole new possibilities for data acquisition. Fliegl set up its new tank counter as a beacon which can count and store in memory - tank metering has never before been so simple, accurate, wireless and maintenance-free.

At the heart of the Fliegl tank counter is a beacon which is mounted at the pivot point of a float in the slurry tank. If the tank is being filled, the beacon registers the filling at an upper measurement point. If the tank is being emptied, the beacon registers the emptying at a lower measurement point. One filling and one emptying is counted as one tank load.

FLIEGL COUNTER



Example with the beacon mounted on a round baler

Example with the beacon mounted on a bale fork

Bluetooth®

Works with

Apps “for BEACON Counter HD”

The beacon monitoring app - the beacon extends the already numerous possible applications of a smartphone. With this app you can read off all the data stored by the beacon.

IOS

Android

Tanks in all sizes and power variants


Fliegl

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