GROWING TOGETHER

PG II Genesis

Samson

SAMSON PG II Genesis

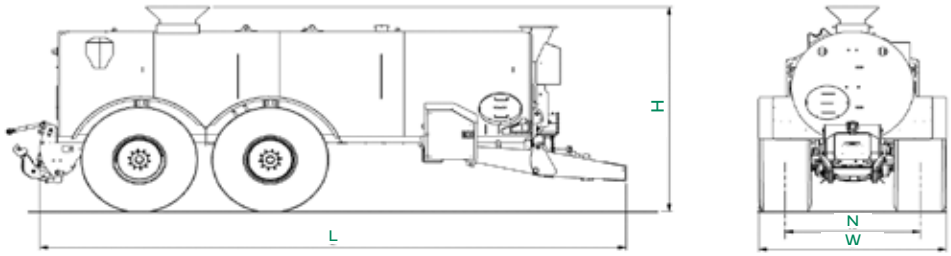
The PG II Genesis is the top choice for professionals. High quality, high capacity and high precision are the hallmarks of this series. The PG II Genesis is available in 2-axle and 3-axle versions.

The ultimate implement carrier

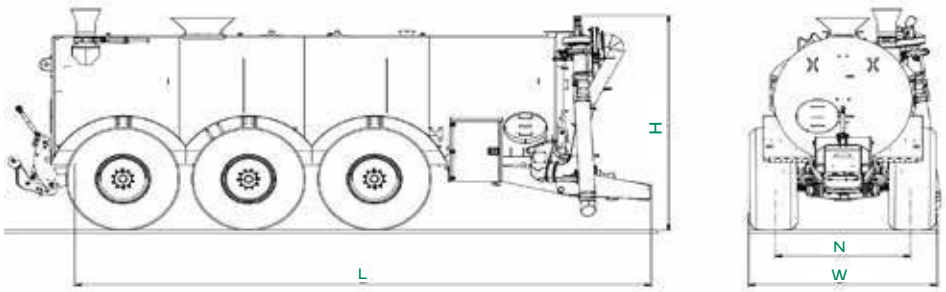
The SAMSON PG II Genesis slurry tanker series are designed for efficient, powerful and accurate slurry application. PG II Genesis have been developed for the professional users, who have rigourous requirements for the capacity, efficiency, durability and reliability of their machines, but also for their ease of use and maintenance.

PG II Genesis are specifically tailored for use with various injectors, incorporators, or booms. The 2-axle versions excel in hilly conditions and low-lying fields, particularly when paired with injectors or incorporators. Likewise, the 3-axle version, when combined with booms, elevates the capacity to a new level.

Basic model



Basic model with SAP 2



High efficiency throughout the season & low cost of operation

The SAMSON PG II Genesis are built on a chassis that is designed to operate implements through all types of soil. High quality components and considered design ensures a low cost of operation and maintenance. The PG II Genesis are modular built, ensuring fast, hassle-free maintenance and repair.

- High loading and unloading capacity
- Carry heavy and wide implements such as booms, grassland disc injectors and black soil incorporators
- Large tyres to protect the crop and soil structure
- High stability – gives increased forward speeds and capacity
- Hydraulically suspended undercarriage and adjustable drawbar
- Less corrosion with high quality epoxy coat inside
- Rapid switches between implements
- Versatile filling options
- Effective ejector pump system
- High capacity centrifugal pump for unloading rapidly
- Safety: state-of-the-art braking systems, electronic wheel steering, hydraulic jacks, LED lights, rotating beacon
- Low power requirement (diesel)
- High resale value

Filling systems

The PG II Genesis can be configured with a variety of different filling systems. Combined with SAMSON AGRO´s unique ejector system, the following solutions can be selected for fast loading of the tank:

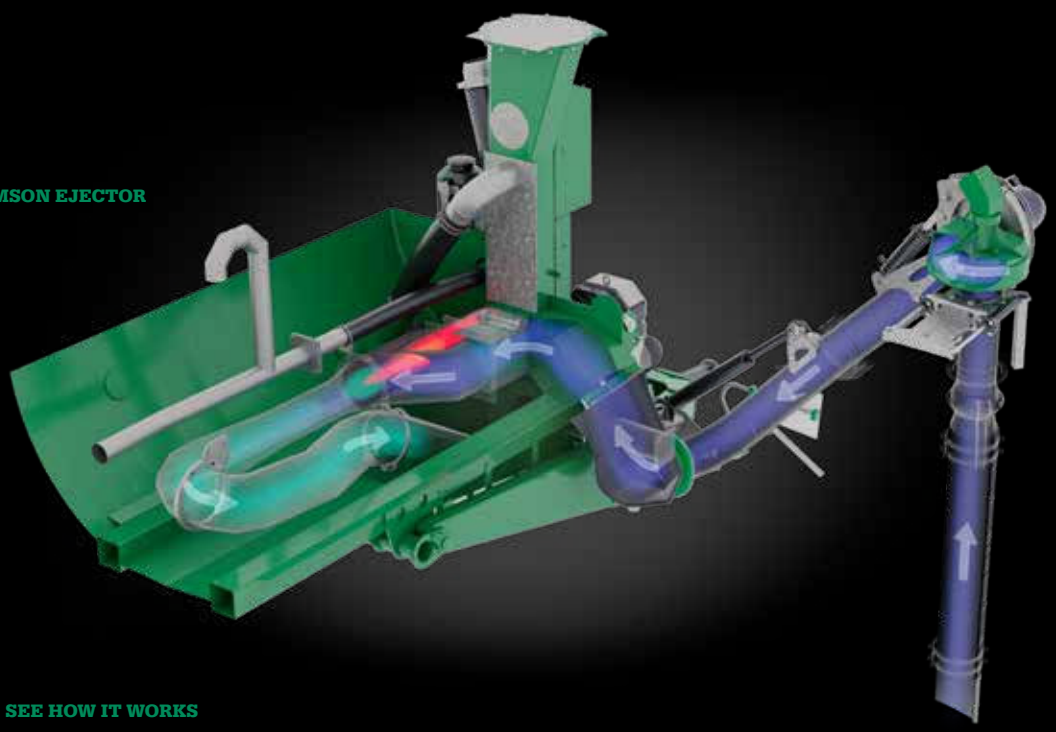
- Rear or front mounted external filling
- The tanker's integrated filling coupling
- Hose with filling pump mounted on the side of the tanker
- SAP 1 (Side-mounted single articulation filling arm)
- SAP 2 (Side-mounted double articulation filling arm)
- FAP and FAP2 (Separate front-mounted pump unit attached on the tractor's front hitch)
- Pump tower

The versatility of the PG II Genesis model filling systems means that it is suitable for pumping different types of slurry from various types of reservoirs, including low-lying or difficult to access slurry storage tanks or via suction connectors in biogas plants, for example.

SAMSON Ejector
Fast and easy filling

SAMSON PG II Genesis are ready for use with the SAMSON Ejector system. A unique and patented ejector vacuum pump system that can pump even the most demanding liquids. The system can achieve a performance of 6,000 liters per minute in a 1-meter water column. The vacuum down to -0.9 bar is created only in the ejector's pipe system and not the entire slurry tank. This keeps the slurry tanker's net weight to a minimum and ensures a fast vacuum response time, enabling filling to start quickly. The system contains no mechanical pump elements, which minimises maintenance costs.

SAMSON EJECTOR



SEE HOW IT WORKS

The SAMSON ejector system uses a small amount of slurry, retained in the reservoir at the front of the tanker. The slurry in the reservoir helps to ensure good weight transfer to the tractor. If the ejector is not being used, the reservoir can remain open so you can use the total volume of the slurry tanker during operation.

SAMSON pump tower
Elevate efficiency

The SAMSON pump tower is an ideal solution for managing filling from open slurry storage and transport tankers. It is compact during transport but can still achieve a long reach when extended. Its capability for unloading into slurry storages also makes it suitable as a transportation solution.

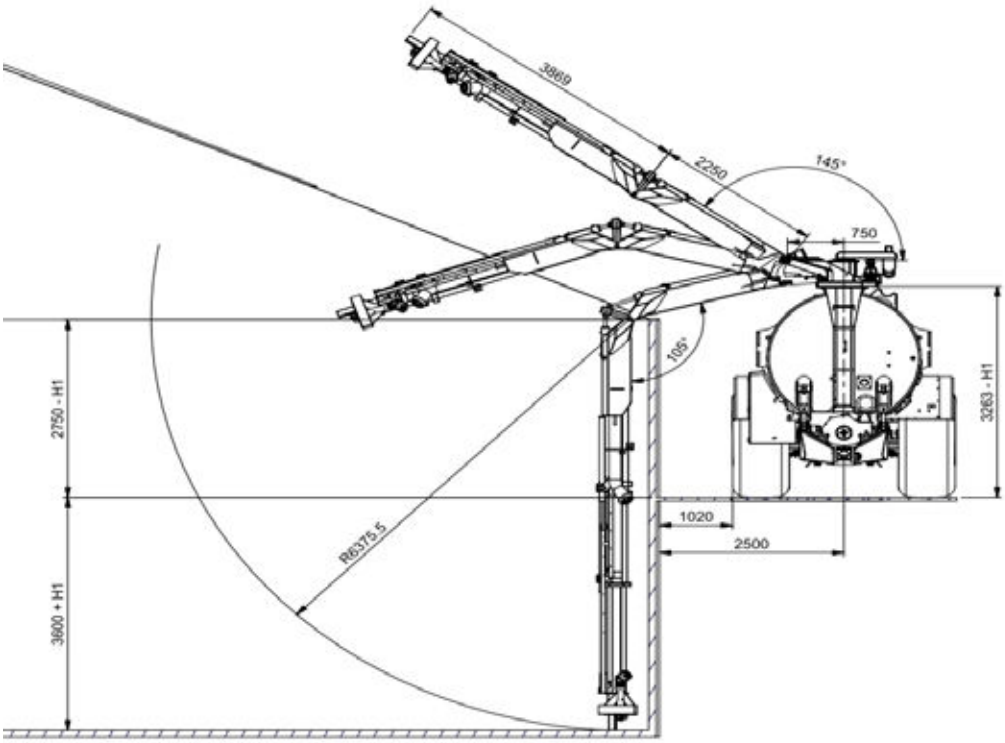
The double telescopic function allows for flexible movement, enhancing the system's efficiency regardless of the storage layout. With a 2500 mm range and 220° rotation, it offers significant range of motion.

The pump tower frequently exceeds a rate of 10 m3/min., making it highly efficient at handling large volumes.

Designed to manage a diverse range of slurry compositions, including fibrous and solid materials, the pump tower prevents blockages and maintains the tanker's optimal efficiency.

An optional feature allows the pump tower to automatically return to its compact transport position. This helps maintain high efficiency throughout the day and letting operators focus on other tasks after filling.

With its compact transport form, high reach, ease of maneuverability, extensive telescopic movement, and easy return function, the SAMSON pump tower provides operators with a powerful tool.



Example
SAMSON PG II 18-20 Genesis


Samson
PG II
Samson
PG II 28 HWD


Samson
Samson
PG II 20
PG II

Improve your results through green thinking and smart farming


PG II

9 tonnes three point linkage capacity

The extended implement carrying capacities of the PG II Genesis give you the possibility to select the implement best suited to the specific task.

SAMSON PG II Genesis can be equipped with a fixed boom bracket or a cat. 3 three-point linkage, which has the power and functionality to give you the possibility to vary the type of implement and to solve a variety of tasks. The linkage has a lifting force of up to 9 tonnes and a pressure force of 5 tonnes. It can be set to either double or single acting operation, which ensures that it can both lift, press so as to hold a stable working depth. Double acting hydraulics close to the linkage make it easy to mount and remove implements.

Choose your suitable implement

Each method of application brings its strengths to different soil types and conditions, from minimising environmental impact with precise application techniques to integrating soil cultivation for enhanced nutrient uptake.

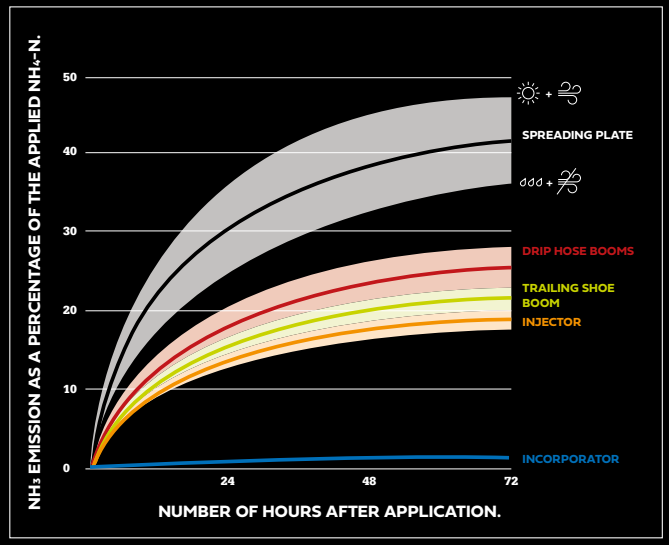
The choice among methods depends on the specific agricultural needs, soil conditions, and environmental considerations, highlighting the importance of selecting the right technique for optimal crop growth and sustainability based on soil type and cultivation needs.

Drip hose booms apply slurry without any soil preparation. The technology enables very large working widths.

Trailing shoe booms apply slurry in slightly opened strips close to the plant root system. The technology enables large working widths.

Injectors provide targeted root-level application with minimal soil disturbance, ideal for grasslands and crop cultivation, focusing on efficiency and nutrient preservation.

Incorporators combine fertilisation with soil preparation, optimising organic fertiliser use in residential proximities and preparing seedbeds for diverse agricultural contexts.

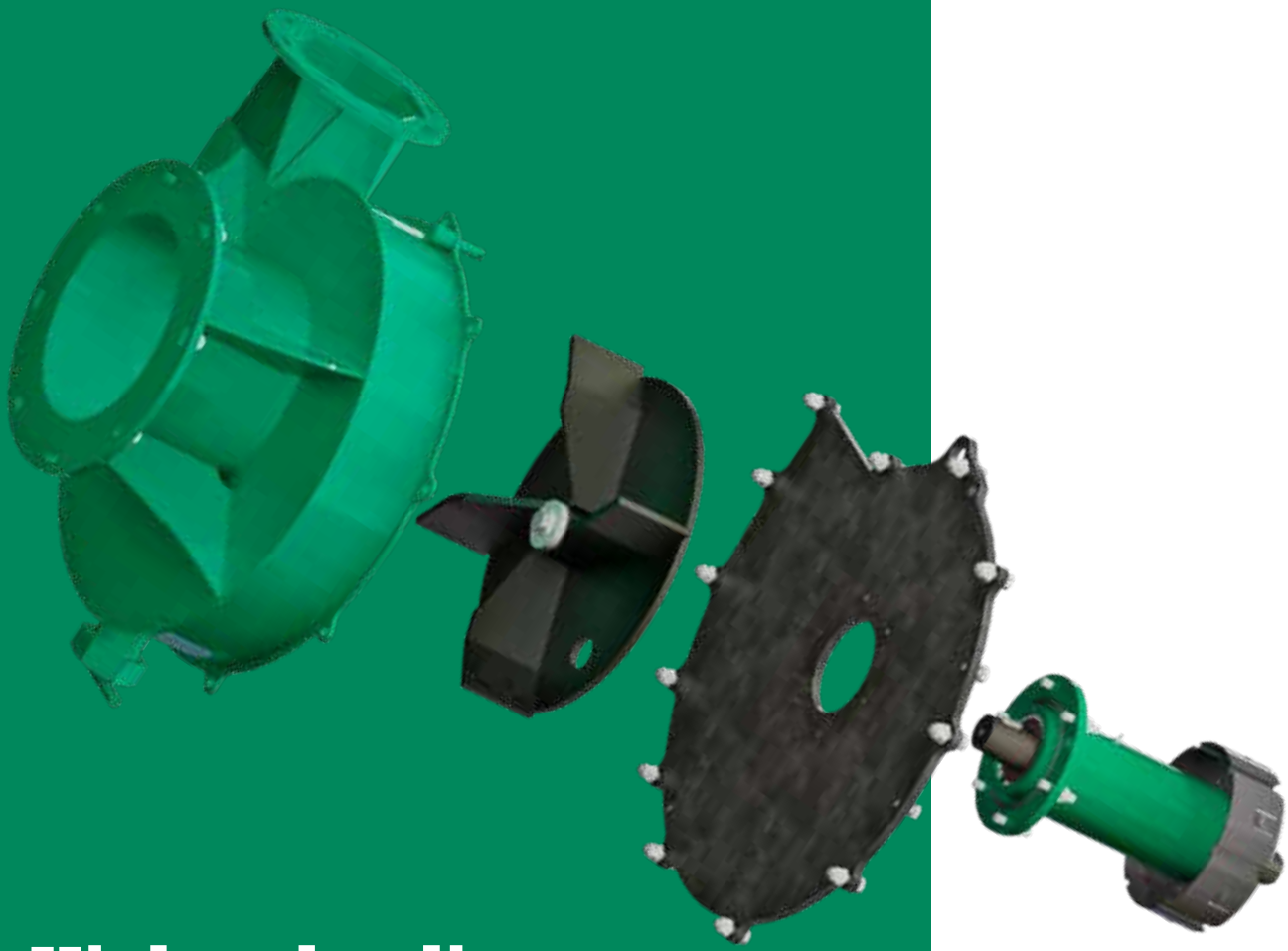


The ALFAM2 Project - Ammonia loss during slurry application in the field.

REDUCING AMMONIA LOSS DUE TO VOLATILISATION

Ideal conditions for applying organic fertiliser:

- Start of spring
- Evening or early morning
- Low wind speed
- Low ambient temperature
- High humidity



High unloading capacity

PG II Genesis are supplied as standard with a specially developed SAMSON unloading pump with a performance of up to 15,500 litres per minute. The solution is designed to fully exploit SAMSON application technology, even at low engine speeds. SAMSON pumps are not vulnerable to foreign objects, including stone and steel, and the simple design and robustness of the pump help to reduce maintenance costs.

Exact dosage & even application

In order to ensure a homogeneous slurry, the PG II Genesis are equipped with a mixing function. The unloading pump directs slurry into a three-way valve. The correct dosage for application is measured here, while the remaining slurry is pumped back into the tank, ensuring continuous stirring avoiding any sediment build-up. Thereby the slurry to be applied in the field has a constant content of nutrients and organic materials, resulting in the uniform fertilisation of crops.
The flow meter is completely maintenance free and has no mechanical moving parts. In the control system, enter the required number of cubic metres of slurry to be applied per hectare. The amount of applied slurry is then regulated based on the flow meter readings. This provides a very exact slurry dosage, whether driving up or down hill.

Control systems

SlurryMaster 8000 is an easily operated system with an intuitive and userfriendly interface that ensures safe operation of the slurry tanker.

- 10" high-resolution colour touchscreen
- Possible for the computer to store settings for up to 10 different implements.
- Operate with ease various filling solutions and implements through a Joystick designed with ergonomy and durability in mind
- The system can save up to 18 different jobs and has one seasonal counter.
- Job export via integrated USB ports

Joystick

- Optimum comfort
- Access to main functions
- Switch easily between filling, road and field mode
- Control sections manually or automatically
- Operate hydraulic wheel drive solutions (if fitted)

Useful functions Smart farming

SAMSON GSC Air

The SAMSON GSC Air offers a customisable section control solution, integrated into the SlurryMaster 8000 for both section control and working width reduction. Operators have the flexibility to control the system either manually from the SlurryMaster 8000 or automatically through SAMSON Section Control (TC-SC). The system also features a tramline shut-off from the cabin and comes as a plug-and-play unit, combining air modules and control box for easy installation. The solution can be mounted for extra flexibility on SAMSON SBX2 drip hose booms, SAMSON TSB2 trailings shoe booms or on your costumised solution.

SAMSON Section Control (TC-SC)

The ISOBUS compatible SAMSON Section Control (TC-SC) makes it possible to do automatic section control of implements based on GPS position.
The function secures that overlapping and overdosing of slurry is avoided in i.e wedges and that plants benefit fully of the nutrients in the slurry. Furthermore, the system is capable of fully operating your application equipment with headland management.

Variable Rate Application (TC-GEO)

With the ISOBUS "Variable Rate Application" functionality the user is able to apply natural fertilisers via an automated process in conjunction with an ISOBUS compatible GPS system.

An assessment of the optimal fertilisation strategy can be carried out easily using yield maps from previous years or by using the NDVI vegetation index, which is usually available via satellite or drone imagery. The result of this is an application map, which controls the application volume via the tractor's GPS system and the SAMSON control system.

ISOBUS AUX-N functionality - lets you program the dedicated AUX on/off buttons in the tractors control interface, for fully integration of the SlurryMaster 8000. This feature heightens the driver comfort and provides ease of use.

GROWING TOGETHER

We aim to play a leading role in developing natural fertiliser machinery and technology for professional agriculture with consideration for people and the environment.

Optimise performance and crop protection in the field

The high and wide tyres of PG II Genesis contribute to less damage to the crops through reduced rolling resistance and minimised soil compaction. The wheels are positioned as far back as possible, making it optimal for handling heavy equipment. The increased drawbar load reduces the sideway movements of the tractor and provides enhanced stability when moving at high speeds.

As an option, the front axle on the PG II Genesis 3-axled models can be raised off the ground, enhancing its capability to easily navigate uphill terrain in the field. This functionality improves maneuverability and significantly reduces tyre wear during road travel. The design accommodates efficient and safe transportation of heavy implements without imposing a negative load on the drawbar. Standard electro-hydraulically operated steering axles allow for a steering angle of up to 15 degrees ensuring no damage to crops during operation.

The PG II Genesis can be supplied with automatic tyre pressure regulation allowing for different settings for road transport or in the field and according to the soil and crop type. This lowers rolling resistance, improves fuel effiency and reduces crop damage.


PG II
Samson

HPD wheel drive
No more uphill wheel slip

The SAMSON HPD wheel drive system makes it easy to get slurry tankers and implements up hills without wheel slip on the tractor and unnecessary field damage.

The wheel drive ensures that power from the tractor is transferred through an intelligent hydraulic system to the wheel axle on the slurry tanker. The slurry tanker thus assists the tractor by pushing the machine and implement gently and steadily forwards despite difficult conditions such as hilly, uneven or wet soil conditions.

A slurry tanker with HPD wheel drive provides extra accessibility in challenging terrain and wet conditions. This increases working capacity, reduces fuel consumption and maintains efficient and accurate application.

1 Power from the tractor is transferred to the HPD transmission mounted at the front of the slurry tanker

2 The HPD system transmits power to one of the slurry tanker's axles, which automatically pushes the machine and implement

3 Integrated automatic oil cooling prevents overheating and creates stable operation even at high power levels

Designed for smooth driving

SAMSON HPD wheel drive is designed to maintain smooth driving in challenging terrain and according to high reliability requirements. The system has fully automatic power control, which makes the wheel drive easy to use. The desired power while driving is entered into the SAMSON SlurryMaster 8000 control system, after which it is maintained automatically.

- Specially developed, simple and robust belt transmission (Power Drive)
- The transmission is mounted together with the unloading pump and is driven by the tractor's PTO
- Quick attachment and removal of tanker to/from tractor
- Compatible with the SAMSON Ejector system
- High wheel drive power of up to 55 kW continuesly and up to 125 kW via a boost function for 30 seconds
- Forward as well as reverse functionality controlled via the SlurryMaster 8000
- Automatic power control and belt slip warning system
- Integrated oil reservoir with an active and self-cleaning cooling unit that prevents overheating
- Cleaning cycle blows out any dust that has accumulated, ensuring the oil cooling system remains unobstructed and operates at peak efficiency.
- SAMSON slurry tankers with HPD wheel drive are officially approved for driving on public roads in all European countries

Efficient fertiliser use: 4 key steps

Selecting suitable application equipment is vital for ensuring optimal fertilisation. But by integrating all four key practices : storage, preparation, planning, and equipment selection, you can achieve more efficient and environmentally friendly fertilisation.

1 **STORAGE**

COVER FERTILISER

This minimises nitrogen loss through emissions.

2 **PREPARATION**

MIX FERTILISER

To achieve a more uniform nutrient distribution.

3 **PLANNING**

CHOOSE THE RIGHT TIME

This ensures a combination of favorable weather conditions.

4 **EQUIPMENT**

SELECT SUITABLE APPLICATION EQUIPMENT

To utilise the best application techniques for optimal fertilisation.

At SAMSON AGRO, great emphasis is placed on product development. The company has a large team of engineers who continuously develop and update the products in order to maintain our position as the leading specialist in natural fertiliser machinery and application technology.

Good details for your SAMSON PG II Genesis

CAMERA SYSTEM

The SAMSON HD NIGHT COLOR 9" camera kit delivers clear, colorful night-time images for enhanced visibility in low-light farm conditions. Durable and versatile, the screen automatically supports the 4 cameras depending on the operating mode of the slurry tanker. The kit includes a multilingual interface and remote control. The system provides two cameras on PG II Genesis with pump tower and one camera on all other PG II Genesis'. The system can manage up to four cameras.

AUTOMATIC CENTRALISED GREASING

With this option, almost all the the PG II Genesis greasing points are covered by one centralised automatic system supplying the right amount at the right intervals while the parts are in mouvement. This greatly simplifies daily maintanence on busy working days and makes sure the parts get the lubrication they need.

GOOD LIGHTING

All PG II Genesis slurry tankers are supplied with mandatory LED lights and rotary beacon that are highly reliable and require a minimum of maintenance. Mudguards are also standard on all slurry tankers to avoid splash on the lights from tyres. Bring night to day with our extra high lumen working light packages.

WEIGHT TRANSFER SYSTEM

This cylinder adjusts tractor weight distribution, adding up to 4000kg on the front axle, reducing front weight necessity, enhancing road payload, and boosting stability when fully loaded. The cylinder can be ordered in a long version if the slurry tanker is equipped with a drawbar extension. Note: The cylinder can also be used to pull instead to increase the drawbar pressure when using large implements.

TOOL BOX AND WATER TANK

The large toolbox is on the left side with easy access, a solid construction, integrated lock, back ventilation to prevent condensation, and ample space for tools, clothing, gloves and boots. An 18L water tank enables hand and tool washing after maintenance, enhancing driver comfort and aiding in maintaining a clean tractor cabin.

NIR SENSING PREPARATION

Topcon NIR sensor preparation, easy-install to hardware, and ISOBUS UT and TC software compatibility. The package includes mounts, extensions, and software access, with full back up service by Topcon dealers. It's suitable for nitrogen or phosphorus-based application and requires no special pipes. John Deere Manure sensing - The NIR sensor on the unloading pipe performs live slurry analysis with 4000 measurements per second, recording N, P, K, NH4-N, and dry matter. It connects with the SlurryMaster 8000 via ISOBUS, thus ensuring synchronised system functionality.

SAMSON service and dealer network

When you choose a SAMSON product, you will benefit from our large and well-established network of dealers, who are available to provide excellent service and specialist knowledge of our machines and equipment.

SAMSON dealers are in close and continuous contact with SAMSON AGRO, who place great importance on individual SAMSON specialists achieving expert knowledge through the SAMSON ACADEMY training program. A smooth and efficient service concept ensures that every customer receives professional service before, during and after a purchase.

SAMSON AGRO maintains a large stock of spare parts to ensure the fast and efficient maintenance and upgrading of all SAMSON machines and products.


Samson

Fertiliser based on natural nutrients

SAMSON AGRO produces slurry tankers, manure and universal spreaders with the aim of achieving maximum application efficiency and optimal usage of the nutrients in natural fertiliser. We supply a wide range of natural fertiliser machines, implements and application technology, where all elements in the fertiliser process are considered. Our goal is to meet the agricultural industry's demand for innovative, environmentally sound, high quality solutions for the application of natural fertilisers.

SAMSON GROUP

SAMSON GROUP comprises the companies SAMSON AGRO A/S, SAMSON AGRO SASU, SAMSON AGRO SP Z.o.o. and Samson Agrolize A/S and Samson Agrolize AB. The group owns the SAMSON and PICHON brands and is a leading European supplier of natural fertiliser machines and associated application technology. SAMSON GROUP has state-of-the-art production units in Denmark, France and Poland and sells its products through a well-established network of dealers.

SAMSON - GROWING TOGETHER

Technical specifications

Dimensions in mm / tanker size		PG II 18 Genesis	PG II 20 Genesis	PG II 28 Genesis	PG II 31 Genesis	PG II 35 Genesis
Length	L	9315	9315	10165	10815	11815
Tanker diameter	ø	1850	1950	2200	2200	2200
Height*	H	3900				
Alliance, 800/60-R32 - Radial type 390	B	2990				
Hub gauge	N	2150				
Max. wheel diameter	[mm]	1980	1980	1850	1850	1850
Number of wheel axles	[pcs]	2	2	3	3	3
Net weight**	kg	9875	10075	12785	12950	13325
Volume***	m^3	18.6	20.7	27.8	30.9	34.5

* With standard wheel mounted
** Net weight for basic tanker with standard equipment
*** Actual volume depends on selected filling equipment etc.