

>> SAMSON SPREADERS FLEX



- growing together



» FLEX-SPREADERS FROM SAMSON AGRO

The SAMSON AGRO FLEX spreader series is designed for professional users with high demands for reliability and low machine maintenance costs.

The FLEX spreader is available in versions FLEX16, FLEX19, FLEX20 and FLEX23. The FLEX19 and FLEX 23 correspond to the FLEX16 and FLEX20 respectively, but these models also have an additional side extension. With a rounded, half meter high top, the wagon can offer 16, 19, 20 and 23 m³ of storage capacity respectively. The FLEX16 and FLEX19 are single axle machines. The FLEX20 and 23 are provided with a bogie axle.

Flexibility

The FLEX spreaders can be fitted with two different spreading systems: 12 and 24 meters. The spreaders can handle all spreading tasks from the traditional spreading of solid, wet stable manures to the application of industrial products such as sludge, dry lime or ash. It is easy to shift from one spreading system to the other if the task of the machine requires such a change. The spreading pattern is optimal for both types of spreading systems.

SAMSON spreaders can deliver spreading patterns with a variations coefficient of less than 20, according to tests performed in Denmark. This variations coefficient demonstrates just how evenly the material is distributed. If this coefficient is below 20, this is recognised as a good result. If it is more than 30, the result is considered unacceptable.

The choice of distance between the furrows in the field (working width) has important implications for the overlapping of the material, and therefore on how evenly the material is distributed on the

field. In a Danish study the spreading equipment from SAMSON reaches a good coefficient of variation at a distance of at least 9 m working width.

In addition to the spreading technique and the working width, the type of the material in use has an influence on the spreading pattern. For example, a better spreading pattern can be achieved when the fertiliser material has been well stored.

Pure Power

The spreader is made of extremely high strength steel (Domex S600) that minimises the weight and increases the payload. The FLEX spreader is equipped as standard, with a rubber suspended drawbar.

The floor chain of the FLEX spreader is manufactured by the Austrian company Rübig and has high wear resistance and high tensile strength (12,500 kgs load capacity). The floor chain is fitted with an angled transport element that covers 95% of the ground.



2014 Improvements

The upgraded version of **SAMSON AGRO's** well-known FLEX spreader series now includes several new features. With this upgrade the FLEX spreaders have become even stronger and more efficient and user-friendly. The ambition is for the FLEX spreaders to become the preferred choice of professional users for many years to come. Both improvements to existing equipment have taken place plus there has been an expansion of the already wide range of optional extras.



SOME OF THE NEW IMPROVEMENTS:

- A new and more powerful gearbox for the 24-m spreader. This is equipped with the patented SAMSON AGRO shearing blade that ensures that any twine, lumps or foreign bodies in the material is chopped up before coming into contact with the gearbox
- A more powerful drive shaft (from Ø 40 mm to Ø 50 mm)
- PTO axles increased from 1 3/8" (35 mm) to 1 3/4" (45 mm)
- Floor chain axle increased from Ø 60 mm to Ø 65 mm
- A stronger standard floor chain gearbox with a larger oil pump: 125 ccm on 12-m spreaders, 160 ccm on 24-m spreaders
- The 24-m spreader now has a stronger T-gear (from drive shaft to spreader)
- The backgate has been reinforced
- Backgate can be propped open using an arm with a socket, for example for cleaning operations
- The spreading table has been reinforced for the 24-m spreader, and equipped with a wear plate and fittings for a spreading limitation
- Much stronger track for front floor chain
- New guard covering hydraulics, hoses and cables on the side of the wagon. The guard is bolted on



SOME OF THE NEW OPTIONAL EXTRAS:

- 3 deflector plates for the 24-m spreader
- A new two-speed floor drive gearbox is available
- Hydraulic spreading limitation on 24-m spreader for left or right fitting or for fitting on both sides
- Optional fixed access ladder
- New light guards with optional hydraulic flap function so that rear lights are not soiled during operations

>> 2014 IMPROVEMENTS



The backgate has been reinforced in three places.



The backgate can be propped open during cleaning operations.



Above: The new spreading table on the 24 m spreader with wear plates. It is delivered as standard with 2 deflector plates. **Below:** 3 deflector plates can be delivered as an optional extra.



A new and more powerful gearbox for the 24-m spreader. This is fitted with the patented SAMSON AGRO shearing blade that ensures that any twine, lumps or foreign elements in the slurry are chopped up before coming into contact with the gearbox.

>> 2014 IMPROVEMENTS



The driveline has been strengthened.



The PTO axle has been strengthened.



Stronger floor chain gearbox with a larger oil pump.



A two-speed gearbox can now be selected as an optional extra for the FLEX spreader.

>> 2014 IMPROVEMENTS



Hydraulics, hoses and cables are protected behind a bolted-on guard.



A new hydraulic spreading limitation is an optional extra for the 24 m spreading equipment. Only spreading to the right, left, or to both sides.



New light guards with optional hydraulic flap function so that rear lights are not soiled during operations.



A fixed access ladder can be purchased as an optional extra.

» STANDARD EQUIPMENT



» Extension side

FLEX16 and FLEX20 when fitted with extension sides become models FLEX19 and FLEX23 respectively.



» Bogie-Construction

The unique wheel design of the FLEX-spreader reduces the pressure on the field, thus minimising the required tractive power. The Bogie construction with one large and one smaller wheel also makes steering of the spreader very easy.



» 25-ton Spring Bogie

The FLEX20/23-spreader is equipped with a specially designed 25-ton spring Bogie, which absorbs the impacts to which the spreader is subject while driving.



» 12 meter spreading system

This is a all round spreading system for all types of material. Constructed with two vertical rollers and hinged mallet - mounted deflectors. The 12 meter system can handle quantities from 4 t/ha up to 70 t/ha. The 12 meter spreading system is equipped with a gearbox manufactured by SAMSON, which is known throughout many years for its extreme durability and reliability.



» 24 meter spreading system

This is a wide spreading system with horizontal rollers, and a spreading table with two large rotating deflectors. This spreader is particularly suited to light/pulverized manure and industrial spreadable waste from 3t/ha up to 50t/ha.



» Floor chain

The floor chain is manufactured by Rübig.

» **ACCESSORIES** – EXAMPLES

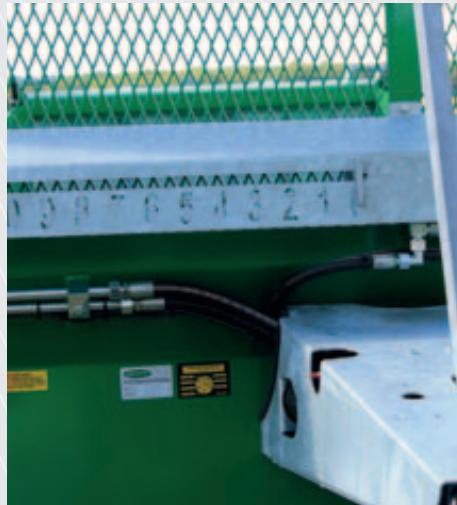


>> ACCESSORIES – EXAMPLES



>> Weight transfer

A double-acting weight transfer cylinder can be attached, so that more weight is applied to the front wheels of the tractor. This is connected with the hydraulic system of the tractor. It is also possible to attach a 20 cm long extension to the drawbar when the tractor e.g. needs to drive with twin wheels.



>> Indicator

FLEX spreaders can be equipped with an indicator for the hydraulic slurrygate. This indicator makes it easier to use the hydraulic slurrygate for dosing.



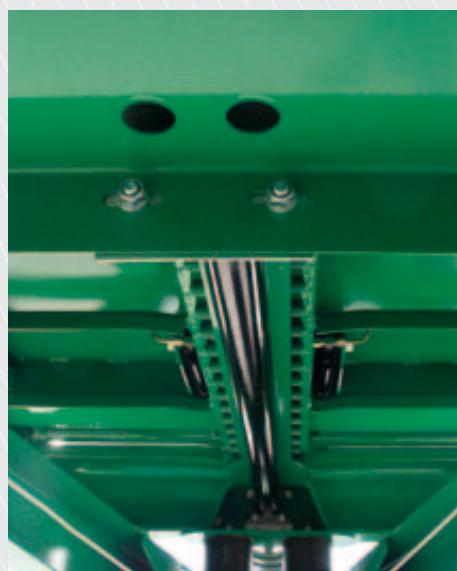
>> Hydraulic galvanized slurrygate

The FLEX spreader can be equipped with a hydraulic galvanized slurrygate to prevent the leakage of fertilizer materials during transport and also to dose the material more accurately at low dosing quantities per hectare.



>> Loadlogger

The loadLogger is a load counter indicating how many loads the individual spreader has made.



>> Hydraulic chain floor tensioner

The FLEX spreader can be fitted with a hydraulic chain floor tensioner for constant optimal chain floor tension



>> Muckmaster

MuckMaster 1000 is a driving speed based dosing unit. The MuckMaster 1000 adjusts automatically the floor chain speed to match the driving speed.



Key Reasons to buy a

» **FLEX spreader**

» **Long Life**

- The case and the rollers are made from Domex S600 steel and have a high tensile strength.
- The roller tines are made from special hardened steel.
- Many SAMSON AGRO spreaders are in use for over 20 years.
- The FLEX spreader is fully welded. Spot welding is not used.
- 4 extremely robust floor chains from Rübig ensures minimal chain wear. The tensile strength of each chain is 12.5 tons.
- The gearbox chain for the 24 meter spreading system is housed in a closed chain cover and coated with lubricant.
- There is a shock absorber between the rollers and gear box.

» **High Efficiency**

- The position and the angle of the spreader rollers, their rotation speed (534 rpm), but also the size of the blades and rotation speed as well as the position of the deflectors on the spreading table ensures an extremely rapid spreading of the materiel. This means that more loads can be made on a daily basis from this spreader.
- The extremely low construction of the machine ensures a low center of gravity and thus high driving stability. This enables faster driving speeds over the field and on the road. Again this leads to the possibility for more loads each day

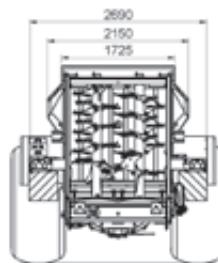
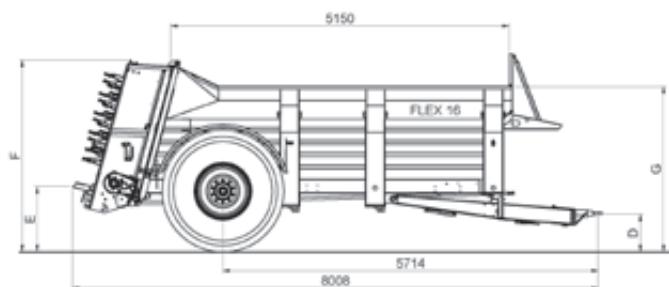
» **Optimal use of nutrients** optimum yield

- The position and the angle of the spreader rollers, their rotation speed, the size of the blades and their rotation speed as well as the position of the deflectors on spreading table ensures that the material becomes pulverised and uniformly spread.
- Depending on which material is to be applied, you can choose between 12 meter and 24 meter spreaders. If it is heavy organic materiel, a 12 meter spreading system is the better option, and for lighter materials such as compost or chicken manure the 24 meter spreading system should be selected.

» **Low Energy Consumption (diesel)**

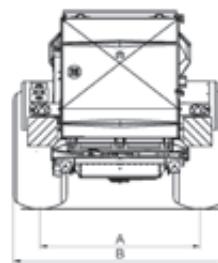
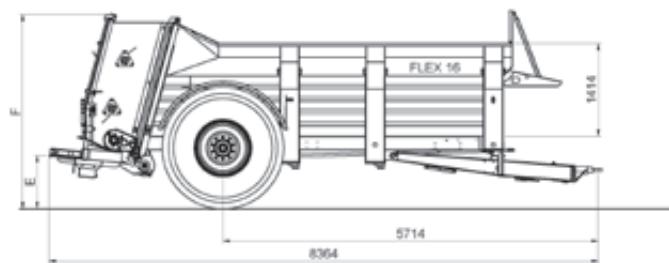
- The case is made of Domex S600 steel, which reduces the overall weight of the spreader, so that the tractor uses less power.
- The wheels of the machine are mounted on the side, which enables the usage of large diameter wheels and thus a lower rolling resistance on the wheels, which means that the tractor requires less horsepower.

>> TECHNICAL SPECIFICATIONS FLEX 16 & FLEX 19

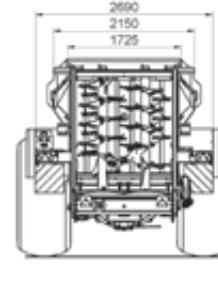
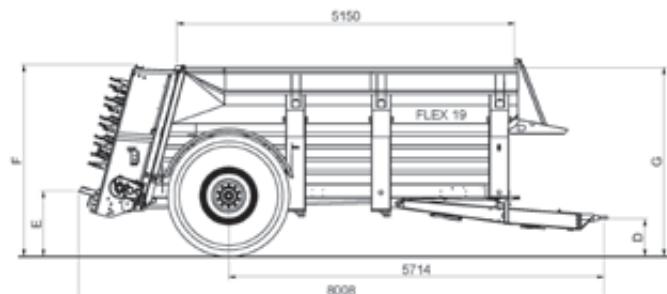


12 m

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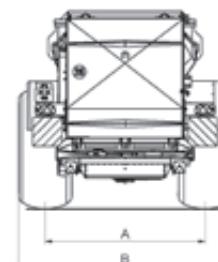
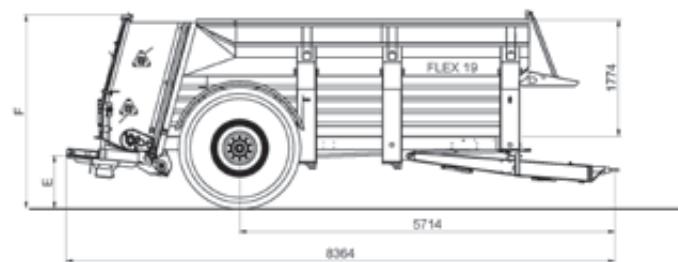


24 m



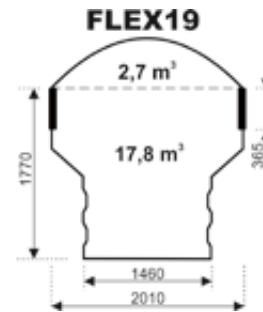
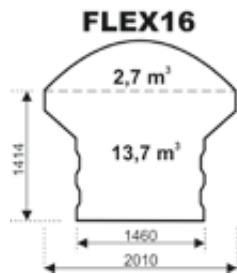
12 m

5000868



24 m

Volume capacities
(including dome)



FLEX19

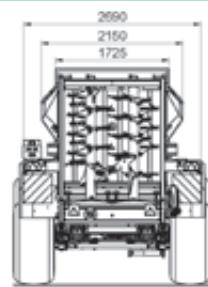
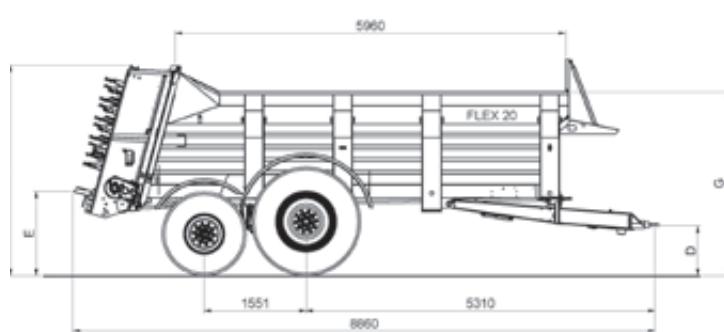
Weight (kg)		
	12m	24m
FLEX16	4815	5800
FLEX19	4950	5935

Measurements in mm

Wheel mounting	Diameter	A	B	D	E		F		G	
					12m	24m	12m	24m	FLEX16	FLEX19
Alliance 620/75 R34 - A375	1820	2332	2952	553	978	795	2903	2938	2503	2863
Alliance 800/65 R32 - A360	1850	2432	3232	570	995	812	2920	2955	2515	2875
Nokian 650/65 R38 - Tri2	1811	2332	2982	550	975	792	2900	2935	2595	2955

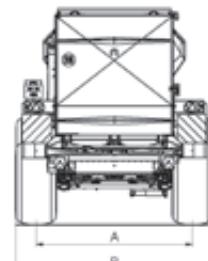
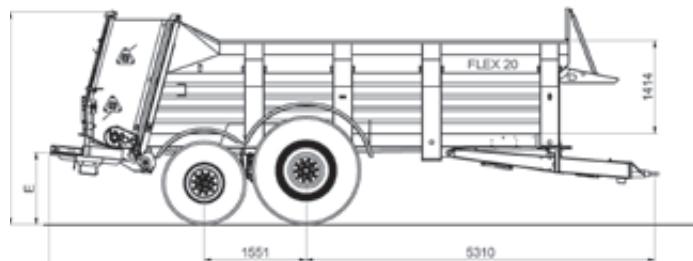
The weight is only indicative. It is dependent on the configuration of the machine.

>> TECHNICAL SPECIFICATIONS FLEX 20 & FLEX 23

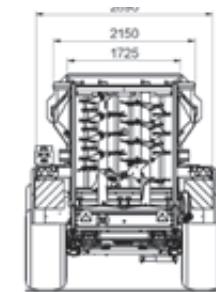
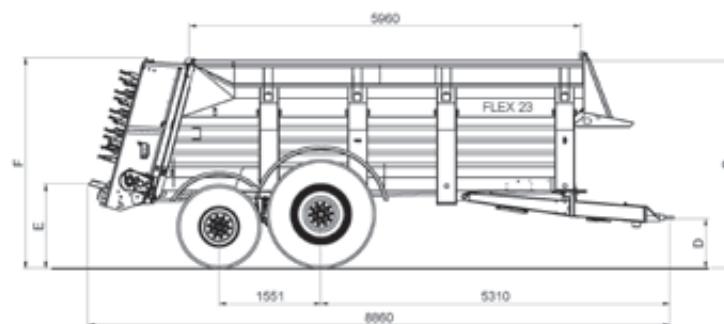


12 m

5000869

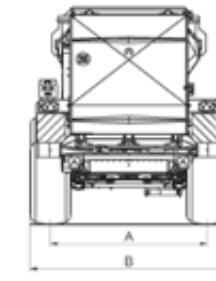
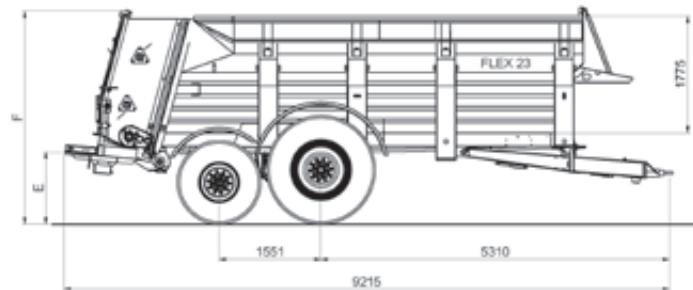


24 m



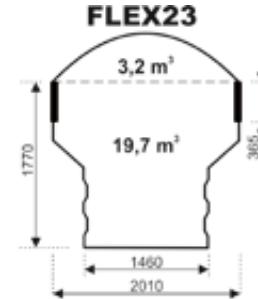
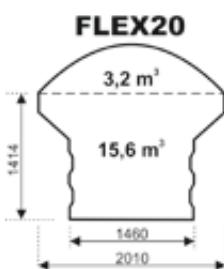
12 m

5000870



24 m

Volume capacities
(including dome)



Weight (kg)

	12m	24m
FLEX20	7275	7800
FLEX23	7435	7960

Measurements in mm

Wheel mounting	Diameter	A	B	D	E		F		G	
					12m	24m	12m	24m	FLEX20	FLEX23
Alliance 600/65 R34 - A388	1670	2201	2801	755	1280	1095	3205	3240	2800	3160
Alliance 600/50 R22,5 - A388	1230	2201	2801	755	1280	1095	3205	3240	2800	3160