

» **SAMSON** US Universal Spreader



- growing together



Capacity, precision and versatility

- In the well-known SAMSON quality

A manure spreader is no longer a small, single axle machine that only spreads the deep litter produced on the farm. The volume of material and the types of material that can be spread are rising steadily, and this places great demands on modern machinery. As a result, the contractor finds that the requirements for spreader capacity, precision, versatility and quality are only becoming ever greater.

SAMSON has developed a completely new range of universal spreaders, US, that will meet all future requirements. US deliver the capacity, precision and versatility that customers demand. All in the well-known SAMSON quality.

CHOOSE THE US SPREADER FROM SAMSON

The new US spreader offers a wide range of unique features and solutions, making it one of the largest spreaders on the market with a very high capacity, dosing precision and versatility.

- Box, triangle and beaters are made of high strength steel for a low net weight and long lifetime
- Four strong carpet chains with a high tensile strength for uniform distribution of the load
- A wide box gives a low loading height, despite the large volume
- Wide-spreading equipment
- Many configuration options for the perfect spread pattern
- Hydraulic suspension for lifting the front axle
- Large diameter tyres. Can be fitted with wheels up to 1.68 m in diameter
- The SpreadMaster 8500 control system provides full control of the machine and its functions. It ensures even dosing and provides optimal utilization of nutrients in the material
- When the control system is combined with load cells, dosage will be extremely accurate and provide even better utilization of the nutrients in the material
- The SpreadMaster 8500 allows dosing and documentation based on an application map
- Static and dynamic weighing



The wings and rear gate can be set in different ways so the optimal spread pattern can be achieved in many different types of materials.

GOOD COMMINATION

Comminution is an important parameter when it comes to utilization of the spread material. The organic material will enter the soil and benefit the plants more quickly if it is reduced well. comminution is particularly important in materials such as heavy cow or horse manure with a lot of straw. The US provide complete reduction with their three specially developed beaters.

OPTIMAL SPREAD PATTERN

The spread pattern is very important for good utilization of the material. Especially when spreading materials with a high nutrient content, such as poultry manure, compost or lime. Both the overdosing and underdosing of plants results in lower yields and reduced profits. The spreader is therefore equipped with many options for adjusting the spreading equipment, so the optimal spreading pattern can be achieved. US can be equipped with load cells, so you have accurate dosage and documentation of how much and where you have spread the material.

OPTIMAL SPREADING EQUIPMENT

The spreading equipment on US is available with three horizontal beaters. The beater knives are supported on the back as on other SAMSON spreaders, so the risk of knife loss is minimized.

The beaters are pulled by chain gears on the side of the spreading equipment that runs in an enclosed oil bath for minimal maintenance. This is a principle that is well known and has been thoroughly tested on SAMSON spreaders for many years. The side gears are equipped with safety couplings, so the gear boxes are not damaged if large foreign objects enter the beaters.



The actual spreading is done with two spreading discs of 118 cm diameter with six powerful deflector wings. The wings and rear gate can be set in different ways so the optimal spread pattern can be achieved in many different types of materials. The spreading gate at the bottom of the rear gate can be adjusted both up and down and in and out. The rear gate on the spreading equipment can be opened hydraulically if the beaters become blocked.

Wear parts in the spreading table are bolted on so they are easy to change.

COMPLETELY NEW DESIGN

The US spreader has a completely new design that supports the functionality and technology that both current and future users will require in their daily work with a universal wide box spreader.

Box construction offers more benefits

SAMSON AGRO offers the widest box on the market, so it can achieve the greatest possible volume without compromising on loading height and wheel diameter. US offers a volume from 23 to 40 cubic meters. Even with this large volume, the loading height is only 2.95 meters.

The low loading height combined with a wide box makes US incredibly easy to load. The box can be extended with side extensions of 6, 25 and 76 cm in height, which increases the volume up to 40 cubic meters. One of the largest volumes anywhere on the market.

The box is completely smooth on the inside, so the material flows easily, evenly and unrestricted to the beaters. This ensures precise and even dosing. The box is fitted with a large front screen to al-

low a clear view into the box from the cab when spreading.

The US spreader is standard equipped with a strong dosage gate that can be used to precisely regulate the dosage. The height can be read off the SpreadMaster 8500 screen.

US 2 and US 3

The US spreader series is manufactured in a 2- and a 3-axle variant, therefore the model names. The bogie spreader, US 2, is available in 4 volume sizes from approx. 23 to 35 cubic meters. US 3 is available in 4 volume sizes from 28 to 40 cubic meters.

Both US 2 and US 3 are equipped with a hydraulic suspended chassis, three horizontal beaters, universal spreading table, four marine chains, etc.



The US spreader has the widest box on the market



Low loading height.



Basis Construction

1. Four strong marine chains with L-shaped scrapers
2. Widest box on the market
3. Three horizontal beaters
4. Closed chain gear box in oil bath
5. Universal spreading table with 118 cm spreading discs
6. Bolted wear parts in Hardox steel
7. Hydraulic rear gate
8. Multi adjustable back gate
9. Hydraulic dosing gate
10. Spreading limiter
11. Hydraulic suspended chassis
12. Electronic wheel steering
13. Load cells
14. Manhole



Extremely strong carpet chain and scrapers

The US spreader is standard equipped with four 14x50 marine chains. Each chain has a tensile strength of 24,000 kg. The machine is supplied with L-shaped scrapers that have been a part of SAMSON spreaders for many years.

The carpet chain is pulled by two large carpet chain gears; one on each side.

The L-shaped scrapers are distinguished by the fact that they keep the floor of the box clean and weighs less.



Chassis

The machine is equipped with hydraulic suspended axles. The hydraulic suspension is well known from SAMSON slurry tankers. The US spreader can be equipped with a hydraulic triangle suspension, which improves driver comfort. The front axle of US 3 can be equipped with axle lift, so more weight can be placed on the tractor in the field and achieve less tyre wear on the road.

The machine can be fitted with wheels up to 168 cm in diameter. They are the largest possible wheels on the market for universal spreaders. This increases tread surface, reduces rolling resistance, reduces traction demand and minimizes fuel consumption. This also helps to reduce structural damage in the soil.

US 3 is standard equipped with electronic wheel steering on the front and rear axle, so it follows the tractor in the best possible way. US 2 can as option be equipped with electronic wheel steering on the rear axle.

The US spreader can as option be equipped with a hydraulic triangle suspension.

Hydraulic carpet chain tensioner – AGRITECHNICA NEWS 2019

The US spreader is equipped with the new patented SAMSON hydraulic carpet chain tensioner. This provides optimal tension in the carpet chain, thereby reducing wear on the chain and minimizing the risk of breakage.

SELECTED OPTIONS



Camera in the box and rear of the machine provides full overview and increased driver comfort.



As an option, the US spreader can be equipped with hydraulic spreading limiters on the left, right or both sides.



If the US 2 is mounted with hydraulic extension sides, a volume of 34.8 cubic meters is achieved. For US 3 40.8 cubic meters.

Hydraulic extension sides allow a large volume and a large capacity, and the loading time can be minimized. Allows loading with both smaller and larger loaders



The US spreader can be equipped with central lubrication

CENTRAL LUBRICATION: EASY TO MAINTAIN

As far as possible, all 75 lubrication points are located on the spreading equipment, the carpet chain, etc. extended to the side of the spreader at a height where the machine can be lubricated from the ground. The US spreader can be equipped with central lubrication as an optional extra. The chain gears for the beaters run in an oil bath, so maintenance is minimal.



LIGHT PACKAGES

As an option, the US spreader can be equipped with a small or large light package of 9000 or 17000 lumens.

SpreadMaster 8500

- Advanced control and documentation



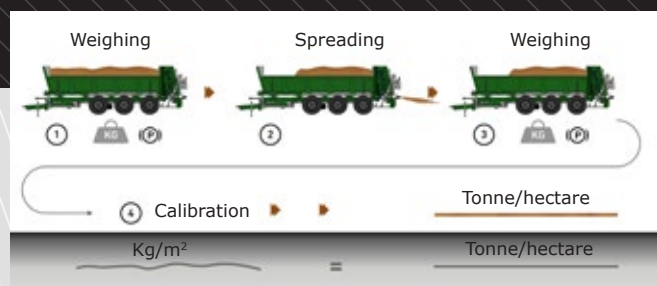
US is equipped with SpreadMaster 8500. The most advanced control system for SAMSON spreaders.

Variable Rate Application (VRA/TC-GEO)

With VRA the dosage can be set and adjusted according to application maps. The system automatic adjusts the carpet speed in relation to the set dosage on the map and the actual

OPTIONAL LOAD CELLS

The machine can be equipped with load cells which permit both static and dynamic weighing.



Static weighing

The SpreadMaster 8500 can control the dosage of the spreader according to the static weight. The control system measures the weight of the spreader in a parked position before and after it has been loaded. The static weighing makes it possible to find the density of the material. When the density is known, it is possible to make a very accurate dosage with the volumetric system. Which again leads to better growth of the crops and hence higher yields. The system counts the weights of the different loads during the day or during a job. So, the total amount of spread material can be found.



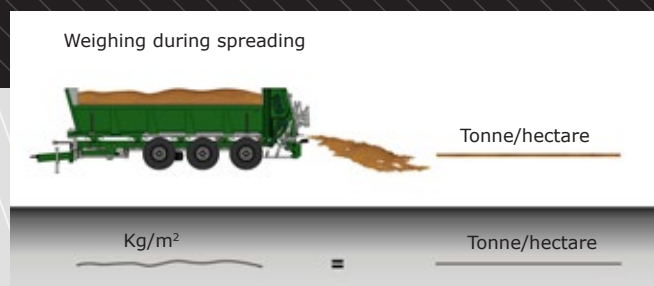
The US spreader can be equipped with load cells on the load-bearing structure, so it can operate both static and dynamic weighing.

SpreadMaster 8500 from SAMSON AGRO is characterized by being a very accurate and advanced control system for the next generation of SAMSON spreaders. The control system contains a wide range of features that full fill all the needs of the professional user like:

- Variable Rate Application (VRA)
- static weighing, dynamic weighing and
- spreading of the material according to application maps (Precision Farming).

The SpreadMaster 8500 is an ISOBUS system, and all functions and adjustments can also be monitored and done via other ISOBUS systems. For example the tractors terminal, if this is ISOBUS compatible.

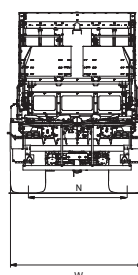
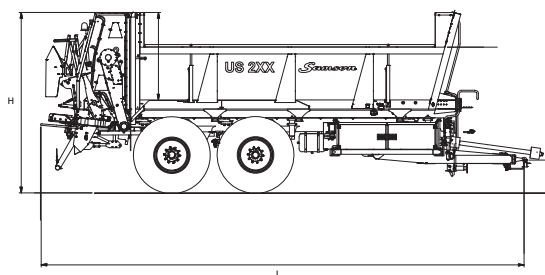
weight of the material in the spreader. The result is a very accurate dosage to provide the optimal growth and yield in the crops. VRA can also be used in relation to a volumetric dosage, static weighing or dynamic weighing.



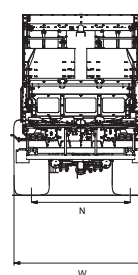
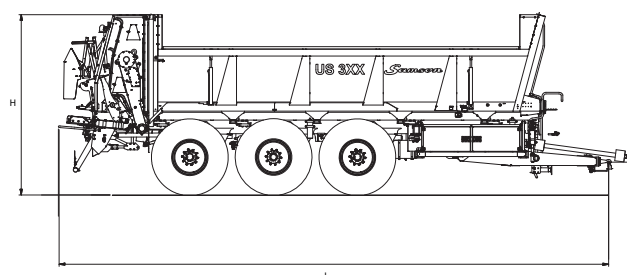
Dynamic weighing

In combination with load cells SpreadMaster 8500 can control the dosing by dynamic weighing. The system is constantly weighing the material in the spreader and continuously adjusting the machine parameters according to the weight and the set values in the terminal, this ensures that the set number of tonnes per hectare is being spread. Even when the material is not homogeneous, the spread dosage will be the same across the field. This helps to utilize the nutrients in an optimally way to get better growth of the crop and higher yields. The SpreadMaster 8500 enable the operator to see the job data after ending the job. SpreadMaster 8500 show how many tonnes has been spread, total area, time and number of loads.

>> TECHNICAL SPECIFICATIONS US 2 & US 3



US 2



US 3

Dimensions in mm		US 223	US 224	US 227	US 235	US 328	US 330	US 333	US 340
Machine dimensions in meter:									
Length	L	10,54				11,99			
Total height	H	3,90				3,90			
Alliance 650/55R26,5 Type 390	W	2,85				2,85			
Nokian 800/50 R34 ELS SB	W	2,98				2,98			
Nav gauge	N	2,15				2,15			
Loading height*		3,00	3,06	3,30	3,11-3,81	3,00	3,06	3,25	3,06-3,76
Box dimensions (on the inside):									
Width		2,34				2,34			
Side height		1,16	1,22	1,41	1,22-1,92	1,16	1,22	1,41	1,22-1,92
Length (center)		6,65	6,65	6,68	6,74	8,11	8,11	8,14	8,20
Volume top, m ³		18,1	19,0	22,1	30,3	22,0	23,2	26,9	36,9
Volume with 50 cm extension sides, m ³		22,6	23,6	26,6	34,8	27,8	28,9	32,6	42,5
Net weight, kg		13,150	13,170	13,270	13,550	15,240	15,270	15,410	15,680
Allowd total weight, kg		24,000				34,000			
Draw bar pull, hk		180-300				250-400			

*with standard wheel mounting



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