

» **SAMSON** SHB4-36m
Drip hose boom

Pre-series



- growing together

INNOVATION AND GROUND BREAKING TECHNOLOGY

Completely new, compact and integrated design

SAMSON AGRO's newest boom, SHB4-36m, as the name suggests, is built with four distributors and has a working width of 36 metres. The SAMSON AGRO engineers have basically emphasised the importance of optimising slurry application and reducing mechanical complexity.

Brand new, simple construction

This is a completely new boom construction, offering plenty of innovation. The four SAMSON AGRO slurry distributors reduce the length of the slurry hoses significantly. The feed hoses to the distributor are routed inside the boom construction. The slurry hoses are secured in the hose guides so they line up neatly in a row without buckling up and down. This ensures that the hoses empty more quickly and that they run completely empty. A new method has been invented to stop dripping from the slurry hoses. The hoses are rotated so they are pointing upwards.

The SHB4-36m boom has a simple central frame with no moving parts. The tanker lift is used to adjust the working height of the boom. This means that there are far less parts in the construction than previously. The boom is thus mounted very close to the rear of the slurry tanker, which optimises weight distribution and pressure on the drawbar eye of the tanker when the boom is in the working position.

Choose the SHB4 drip hose boom from SAMSON

The new SHB4-36m drip hose boom offers a number of unique features and solutions that increase the efficiency and quality of the work being carried out

- Max 3.30 m transport width
- "Dual Pass Application"
- "Field Boundary System"
- Four SAMSON slurry distributors
- Compact and integrated design
- Specially developed control system (SlurryMaster 8000) to operate the boom and slurry tanker
- Sidewing control



The new drip stop rotates the hoses so they point upwards.



There are fewer "hose metres" in the new SHB4-36m drip hose boom.



The boom has a simple central frame with no moving parts.

Adjustment both above and below level

The two large side wings are hinged at the bottom and controlled by a large hydraulic cylinder at the top. Quite uniquely, this means that the boom can be adjusted both above and below level in relation to the central frame. So you can adjust the boom at any time so the slurry hoses follow the terrain and remain in contact with the soil. This reduces volatilisation as much as possible, because the slurry is applied in narrow grooves on the soil surface and with the least possible contact with the air. If the slurry hoses are not

in contact with the soil, the slurry will splash over a larger soil surface, causing increased volatilisation.

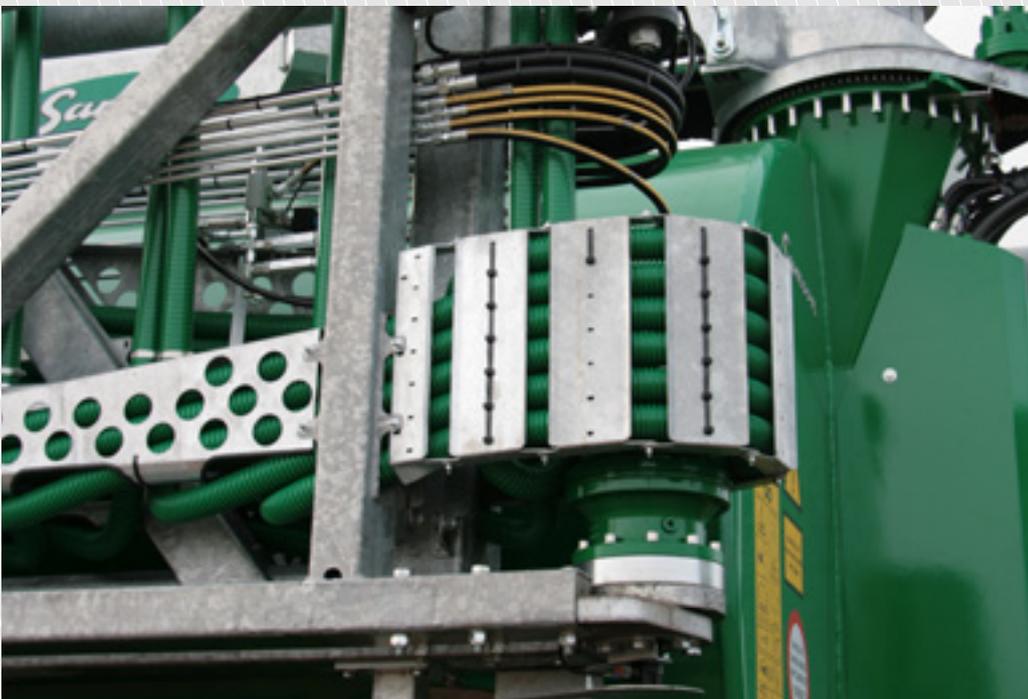
The side wings are folded in two layers using a planetary gear driven by an oil motor. This provides fully controlled and optimised rotation of the pivot joint and minimises the need to lubricate moving parts. A new hydraulic system allows the oil motor to cut out upon impact to avoid damage to the boom.



The side wings of the SHB4-36m boom can be adjusted individually both above and below level in relation to the central frame.



The two large side wings are hinged at the bottom and are controlled by a large hydraulic cylinder at the top.



The side wings are folded in two layers using a planetary gear driven by an oil motor.

» **VERY COMPACT TRANSPORT POSITION**

The boom is less than 3.3 metres wide in the transport position – even on the very large slurry tankers with a 2.2 metre diameter tank – as the slurry hoses are located inside the boom and the boom is folded in only two layers for road transport. It never exceeds 4.0 metres in height. So despite the size, the new boom does not take up much room on the road.

The new boom from SAMSON AGRO is very compact when folded and the transport width never exceeds 3.3 metres.

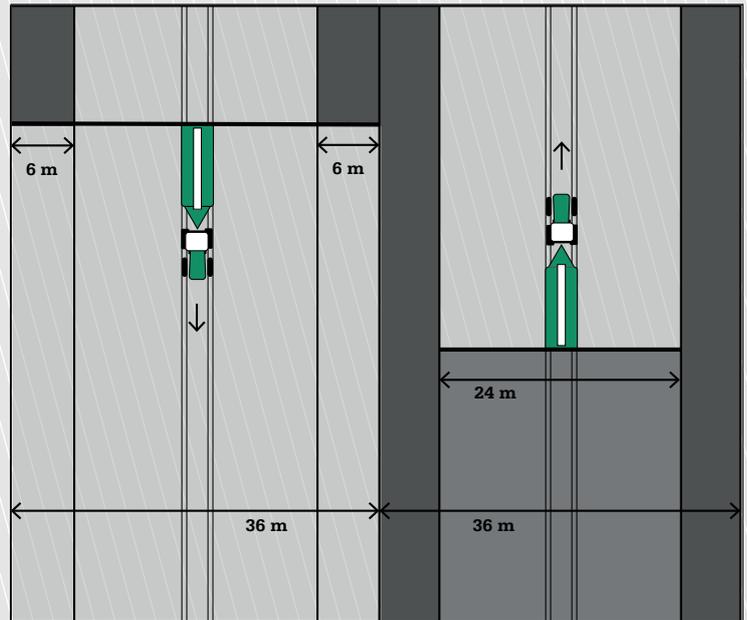




» DUAL PASS APPLICATION

With the new SHB4-36m, SAMSON AGRO is introducing a brand new standard concept for the application of slurry. The so-called Dual Pass Application (DPA) concept. DPA allows the driver to adjust the working width so the boom only applies slurry to the outer 6 metres on each side, for example. This is then topped up with another pass on the remaining 24 metres of the boom, increasing the application range per load. This can be an advantage on very hilly terrain. This method of applying slurry also reduces mess in the tracks.

DPA also allows several slurry tankers to work together to achieve a high application capacity on a 36-metre track. Combining one or two slurry tankers with 24-metre booms together with a slurry tanker with an SHB4-36m will achieve an extremely high capacity on large farms that use 36-metre tracks. This means that many tractor stations will be satisfied with one SHB4-36m boom and still ensure that large quantities of slurry will be applied at exactly the right time. The SHB4-36m boom can apply slurry on the outer 6 metres which can then be topped up by the 24-metre booms.



First pass: Slurry is applied on the outer 6 metres.

Second pass: Slurry is applied on the inner 24 metres.

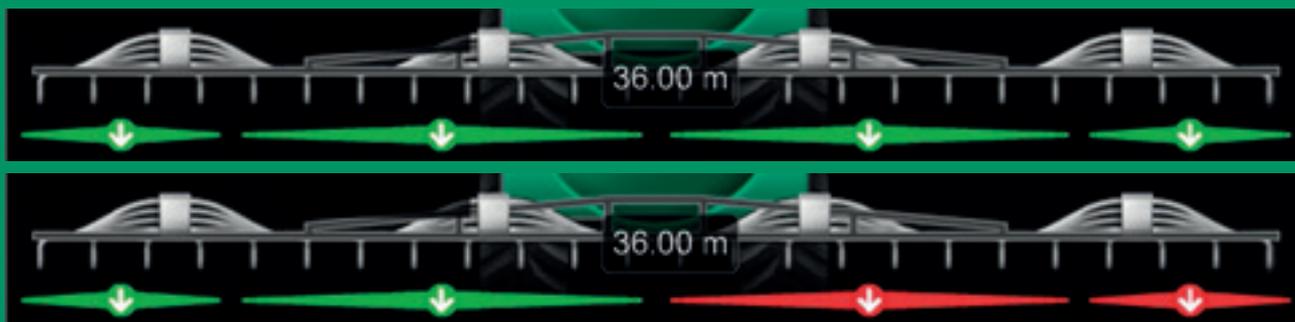
SLURRY DISTRIBUTION AND CLOSING OFF SECTIONS

The slurry is distributed via four vertical SAMSON distributors, covering 6, 12, 12 and 6 metres respectively – corresponding to a total of 36 metres. This gives a rapid response to the start /stop operation, as there are less than 400 metres of slurry hose on a SHB4-36 metre boom.

The SAMSON slurry distributor is known to be extremely efficient with a high capacity, low wear and good lateral distribution.

The four distributors are equipped with their own slide valve, so each of the four 6, 12, 12 and 6 metre sections can be closed off. The control system automatically adjusts the dosing of slurry for the new working width when a section is turned on or off.

The improved opportunity for closing off individual sections reduces the overlap of slurry into wedges on the fields. This also reduces the risk of lodging.



Sections can be closed off for each distributor. When sections are closed off, the amount of slurry is adjusted so dosing remains constant.

» CONTROL AND REGULATION OF SHB4

The fully integrated control system from SAMSON AGRO – SlurryMaster 8000 – allows you to adjust, monitor and control both the slurry tanker and SHB4-36 m down to the smallest detail. With the SlurryMaster 8000, the slurry tanker and boom

appear as a single unit, where the amount of slurry is adjusted according to the driving speed and the working width. The boom is equipped with its own hydraulic system. This means fewer hydraulic hoses between the tanker and the boom.



The boom is equipped with its own hydraulic system.



It is very easy to operate the new boom via the SlurryMaster 8000 control system. You can always see which distributors are in use.

» VARIED FOLDING SPEED INCREASES CAPACITY AND DURABILITY

SHB4-36 is optimised to the smallest detail to ensure increased application capacity and to minimise ineffective time. The folding speed is optimised when folding and unfolding the boom. The dynamic folding is fully automatic and takes place at several speeds. This ensures smooth and quick folding under all conditions. Folding is controlled fully automatically by SlurryMaster 8000, minimizing the risk of manual operating errors which may cause damage.



Angle sensors control the speed of the inner wings during folding. Green: Max. speed, Yellow: Reduced speed and Red: Boom stops.

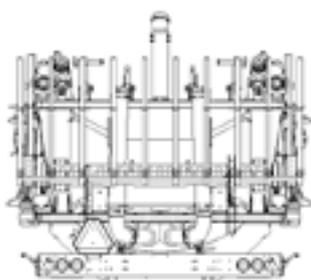
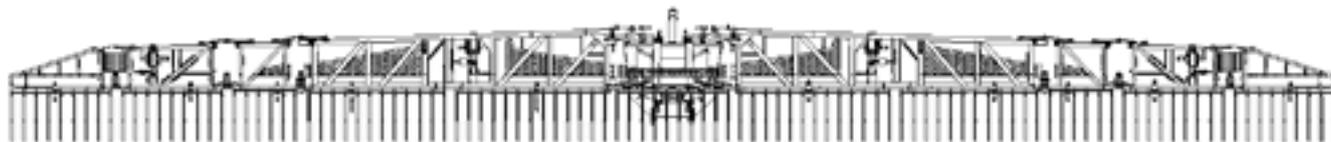
» FIELD BOUNDARY SYSTEM (FBS)

When unfolding near field boundaries and roads, FBS provides an ideal solution that eliminates unfolding over the desired working width. This allows the operator to drive up the first track alongside roads or boundaries to unfold the boom. This minimises unnecessary pressure damage to plants and soil and increases the efficiency of the machine set. FBS is standard on all SHB4-36m versions.



FBS increases both safety and capacity.

» TECHNICAL DATA



| Working width | | 20,24,30,36m | 20,36m | 24,30,36m | 24,36m |
|---|------|--------------|--------|-----------|--------|
| Number of distributors | pcs. | 4 | 4 | 4 | 4 |
| Total width transportation position - folded together | m | <3,3 | <3,3 | <3,3 | <3,3 |
| Transportation height | m | <4 | <4 | <4 | <4 |
| Distance between hoses | cm | 33,3 | 33,3 | 33,3 | 33,3 |
| Number of slurry hoses | pcs. | 108 | 108 | 108 | 18 |
| Total distance of slurry hoses | m | 400 | 400 | 400 | 400 |
| Anti Drip System | | Ja | Ja | Ja | Ja |
| Number of slide valves for emptying the distributors | pcs. | 4 | 4 | 4 | 4 |
| Drip hose diameter | mm | 47 | 47 | 47 | 47 |
| Slurry hose diameter | mm | 43 | 43 | 43 | 43 |
| Number of hydraulic foldable sections | pcs. | 3 | 1 | 2 | 1 |

| Kombinationsmatrix Güllewagen*/Gestänge | 20,24,30,36m | 20,36m | 24,30,36m | 24,36m |
|---|--------------|--------|-----------|--------|
| PG II 28 with pump tower | • | • | - | - |
| PG II 28 with SAP 1 | • | • | - | - |
| PG II 28 with SAP 2 | • | • | - | - |
| PG II 31 with pump tower | • | • | - | - |
| PG II 31 with SAP 1 | • | • | - | - |
| PG II 31 with SAP 2 | • | • | - | - |
| PG II 35 with pump tower | • | • | • | • |
| PG II 35 with SAP 1 | • | • | • | • |
| PG II 35 with SAP 2 | • | • | - | - |

- * Slurry tanker must be SHB4 ready ex-factory.
 • Combination is possible, - Combination is not possible.



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