

Trailing shoe offers whole farm benefits

Case study: Armstrong Farm, United Kingdom



Problem

Splash plate was making inefficient use of slurry

The customer and the problem

Jonathan Armstrong works on his 750-acre family farm near Longtown on the English, Scottish border. "Me and my twin brother Thomas are the fourth generation here and we farm in partnership with our parents Mark and Alison," he explains. The farm has grazing land for the herd and 250 acres of silage land. There is a further 100 acres of maize and 180 acres of wheat and barley which he also applies slurry to.

"We used a splash plate, but we wanted to be more accurate and harness more of the nutrient value from our slurry, so we invested in the new trailing shoe a year ago," he adds.

Lösung

Vogelsang 9m UniSpread trailing shoe places slurry below the canopy



9 m UniSpread trailing shoe system

The solution

The family chose to invest in a 9m UniSpread which is mounted on a 3000-gallon HiSpec tanker. The UniSpread can operate as a dribble bar or trailing shoe and can be attached to a tanker or an umbilical system. It is compact and easy to mount directly behind a tanker using a 3 or 4-point hitch. The plug-and-play system means it comes fully assembled to reduce any tricky or tedious set up requirements. "It is a very simple machine to operate, and it was fitted very quickly to the tanker. It also has the



UniSpread with compact transportation design

benefit of only needing minimal hydraulics, just two double acting spools and one free-flow return," says Mr Armstrong. This design makes it very easy to retrofit to almost any tanker with minimal fabrication.

The right tool for the land

Mr Armstrong could have chosen a 12 metre or larger boom width, but the 9-metre width offers operational benefits. "I believe we have a good match to the tanker which is important to make sure we are working efficiently. The 9-metre boom is also easy to manoeuvre, and I can raise the trailing shoes at the headland or if the conditions are good, I can just turn and follow the curvature," he explains.

More accurate application

The model shares the same trailing shoe design as the brand's BlackBird range. The design was developed by measuring the flow and behaviour of liquid manure in flow simulations. The beak like elongated shape guides the flow of slurry at the outlet to make distribution more accurate and even. The pointed wearing edge cuts into the round without damaging the sward. "The boom is easy to lift, and I can raise it up on undulating land, so it doesn't dig in and damage the grass," he says.

Saving money and better forage

The farm is using fewer inputs since changing to the trailing shoe. After a full year of use Mr Armstrong has been able to reduce his bought in N by 25 kilos per acre. "We were applying 100 kilos before we started using the trailing shoe, but now we have been using it for a year we can see the N values in the soil have risen so we have cut back on our bought in N," he says.

Unlike some trailing shoes, Vogelsang's design anchors the neck of the shoe to the spring steel bars, and uses two bolts, which makes for a sturdier construction that is capable of following the ground contours more accurately. "It is reassuring to know that the design is more resilient, and the build quality will absorb the lumps and bumps of the land," he adds. Resilience is a factor that Vogelsang clearly considered in the design of the shoe. Some may fear that because the shoe is digging into the ground that it is more likely to sustain damage. However, the tip of the UniSpread shoe is longer providing a longer life and protecting the body of the shoe. "The design is good because it parts the grass and creates a very small groove for the slurry to sit in. This means that less slurry is contacting the leaf and is instead being applied directly to the soil where we want it," he says.

Advantages of the Vogelsang UniSpread trailing shoe system

- More flexibility: choice between dribble bar or trailing shoes as spreading element
- Easy installation and retrofitting: plug & play installation
- Small linkage with low overall weight
- Durable UV-resistant hose material
- High-precision distributor

Mentioned Vogelsang products

<u>UniSpread: The linkage for small working widths</u> and more options



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