

McHale Orbital bale wrapper:

# Something familiar

Sometimes ideas just stare you in the face. The McHale Orbital wrapper is a classic example, because it's essentially the back-end of a Fusion combination baler ... plus a rather clever loading mechanism. To be fair, though, the Orbital has a few more clever features up its sleeve

*To reduce the lift height the front roller on the Orbital pivots back as the loading arm is raised. The roller then spins against the bale as the loading arm is lowered and returns to its working position. A bale can be carried on the arm while another is being wrapped.*

## Mervyn Bailey

If the twin satellite wrapper design has an Achilles heel, it's the 'bouncing about' endured by the horizontal orbiting arms as the machine travels over rough fields. This means the tension of the wrap can alter along with the position on the bale. Both problems are effectively overcome with a vertical orbiting wrapper, so it's no wonder that McHale has adopted the wrapping unit from the Fusion to create the Orbital trailed machine.

Just like its predecessor, the HS2000, the Orbital is offset using the drawbar and has a loading arm that swings open 90° when approaching the bale. Once the bale is in place the arm reaches around the base of the bale before lifting it clear of the ground.

To reduce the distance that the loading arm has to lift the bale, the front roller on the

table swings back and down simultaneously. With the bale onboard the arm lowers and the roller reverts to its level position. Another benefit of this loading arrangement is that the rear roller, in effect, becomes a stop and prevents the bale popping straight out the back when working up steep slopes.

**With the bale on, the dispensers can get to work.** Due to the vertical ring offering better stability, the wrapping speed can be increased to around 38-40rpm; the HS2000 is restricted to 25-28rpm. It takes about 18 seconds to apply four layers of film to a 1.25m diameter bale or 24 seconds for six layers.

As on the Fusion, the dispensers slow down when approaching the end of their cycle to reduce stress on the motor. The dispensers

## Data sheet

### McHale Orbital

Machine length	4.35m
Transport width	2.74m
Machine weight	1,850kg
Hydraulic demand	35 litres/min with free flow return
Electrical requirement	12 volt
Loading arm lift capacity	1,800kg
Bale diameter	Up to 1.45m
Number of rotations	Up to 48rpm
Dispensers	Two 750mm, 64% or optional 55%
Tyre equipment	350/55-17 standard 480/45-17 optional
Price	£17,500 plus VAT
Manufacturer's information	





Just like the Fusion the rear roller swings down to lower the bale to the ground. The rear roller position can also be adjusted to cater for bales up to 1.48m in diameter.



The rear gate swings open for loading new rolls of wrap. A safety switch stops the arms from moving with the guard open.

will overshoot their stop position slightly before backing up to reduce the tension on the film.

The hold and cut system is the same as the Fusion's. As you would expect the Orbital comes with film break sensors, so the wrapper will automatically reduce the speed of

the film dispenser to maintain the required overlap.

Once the bale is wrapped, the rear roller lowers to reduce the drop height for the finished bale. It is this rear roller movement that allows the Orbital to handle bales measuring 1.10m to 1.45m in diameter. The user

just selects the bale size on the Expert Plus control box, where it's shown as S, M, L and XL. The rear roller then automatically positions itself so that the film is applied to the middle of the bale.

In the field the Orbital is a doddle to use and when it goes on sale next season will have



The twin film dispensers can spin at up to 40rpm, a significant increase on the HS2000 wrapper's 26-28rpm.



Expert Plus control box allows the user to set the bale diameter and control the loading/wrapping sequence manually or automatically.

a fully automatic sequence – from the bale loading to dropping off the finished product. The test machine was fitted with 380/55-17 tyres, resulting in an overall transport width of 2.7m, but broader 480/45-17 tyres are an option. The latter stretch the wrapper's on-road width to 3.0m.

**Summary:** The Orbital is much more than just the wrapping unit off the Fusion. Having the front roller lower as the loading arm lifts the bale is a simple idea that should reduce loading times, but just as importantly it stops the bale from being fired over the back when working on slopes.

For farmers the Orbital provides some real cost saving potential thanks to its ability to handle bales up to 1.45m diameter. This not only reduces the amount of bales needing to be handled, but could reduce the amount of costly wrap used when compared with working with 1.25m diameter bales.