**RFID RUMINAL BOLUS**

Ruminal EID Boluses can be used to electronically identify sheep and cattle. They have a glass microchip encased in ceramic. They are available in two sizes – 74 grams (cattle) and 20 grams (sheep).

**BOLUS IN SHEEP**

Not all breeds are suitable for boluses – we would not recommend inserting boluses in sheep with a muscly throat (such as the Beltex). There is no rule of thumb for the age of the sheep, and we would generally advise that the animal is at least 15 kilos in weight. Retention rates vary in sheep depending upon breeds and diet.

The bolus can be used as an official form of identification under the current UK EID sheep tagging rules. If used as an official device, the sheep will need a matching black tag in England, Scotland and Wales, and a matching blue tag in Northern Ireland. Official boluses are supplied in individual sealed bags with the matching tag and a barcode label.

Sheep boluses are available as either Half Duplex (HDX) or Full Duplex (FDX) – both of these technologies are permissible under the international standards which govern livestock identification (ISO 11784 / 11785) and permissible under the EU Tagging regulations. Most readers will read both technologies, but some systems (especially dairy parlours) will only read one technology or the other.

**ADVANTAGES**

- The sheep only have one tag.
- They can be used as a deterrent for theft (although only a deterrent if the animal is picked up with a run through / race reader as the bolus may not be picked up if the stolen sheep has a new electronic tag and it is read with a handheld reader)
- Many farmers have found the retention rate to be very good – this does appear to depend on the breed

**DISADVANTAGES**

- If the sheep loses the visual tag a reader will be needed to read the bolus and identify the animal
- If the sheep loses the visual tag it will have to be replaced with a ‘like for like’ tag – i.e. the same number as the one that needs replacing as this will bear the same number that is in the microchip.

**APPLICATION**

Boluses are applied orally using a bolus applicator. Shearwell Data requests that a disclaimer is signed before boluses can be despatched to new customers. This disclaimer states that the bolus will be applied correctly and that Shearwell Data will not be responsible for any damage that occurs during the application.
Boluses can be used to electronically identify cattle, however they cannot be used as an official form of identification – all cattle will still require two tags. The microchip in the bolus will not bear the same number as the official cattle tag. The two numbers can be linked on readers, and certain weigh heads linked to readers, to enable the animal to be identified and management information recorded.

Cattle boluses are available in HDX technology. There is no rule of thumb for the minimum age that the cattle can be bolused, and we would generally advise that the animal is at least 2-3 months old – retention is better in cattle that are at least 6 months old.

**ADVANTAGES**

- Boluses are a good method of identifying animals for those cattle that regularly lose ear tags
- Very good retention rates in cattle
- Boluses are excellent when read with a race / panel reader and can be used in dairy parlours for automatic identification

**DISADVANTAGES**

- Handheld readers may not pick up the bolus if the bolus is in the rumen as the read range for a handheld reader is generally between 20cm – 35cm.
- Handheld readers will need to be placed underneath the animal to read the bolus
- Cannot be used as an official identifier

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**SPECIFICATION**

Sheep bolus (20 gram) – bagged with a tag
55mm (Length) x 12mm (Diameter)

Cattle bolus – individual
68mm (Length) x 21mm (Diameter)