

## Newsletter 2026, Q2

May 2026



### Reducing silage clamp slippage

With cows now turned out to grass and some warmer weather, thoughts will turn to making 1<sup>st</sup> cut silage. However there appear to be more and more reports each year of face slippages in the silage clamp – meaning that all of the good work with silage making gets undone during the winter. Very frustrating for all concerned.

Exactly why silage clamp slippage occurs is the subject of much debate. The most common reason proposed was **wet, low Dry Matter (DM) silages** that would reduce the amount of friction needed for the silage clamp to stay stable. Other potential factors included **short chop length** silages, as it is considered that this results in less “binding” of silage particles within the clamp.

Others have proposed that the **move to multicut silages** has resulted in an increase in clamp slippage, which some have put down to more leafy low fibre silages with a higher oil content, that makes the clamp more unstable and reduces friction. However with three or four cuts now being layered in the same silage clamp, this may result in more variation in silage density within the clamp, especially if there is wetter 3<sup>rd</sup> cut silage being put on top of drier 1<sup>st</sup> and 2<sup>nd</sup> cut silages.

There is also more variation in current silage making compared to 20 years ago, with increased use of contractors, and ever faster and larger machinery. Whilst this is not inherently a problem, it means that there is the potential for **greater variation when filling the silage clamp**.

The most recent study on silage clamp slippage was in 2020, when Dave Davies of Silage Solutions Ltd did a survey of UK dairy farms to see what the main factors were in silage clamps that slipped (funded by AHDB Dairy). His work found three main factors involved:

- 1) Density of silage within the clamp, especially **variation in density within the clamp**
- 2) **Filling the clamp too steeply (over 20 degrees)**
- 3) **Silage chop length**

There are of course a number of other structural factors that increase the risk of silage clamp slippage. Higher and wider silage clamps will be at greater risk of slippage as there is more vertical weight pressing on the silage face. Do not overfill silage clamps to reduce this pressure.

The main factor found in half of all silage slips by Dave Davies was variation in the density of silage within the clamp, especially when there is lower density silage beneath higher density, heavier silage. The analogy used is building a house on weak foundations, resulting in inherent weakness. It is then proposed that poor silage fermentation in lower density silages increases the production of acetic acid fermentation, meaning more water and gas production, which results in slippage.

The main messages from Dave Davies’ work to prevent clamp slippage when making silage are:

- **Be consistent when filling the clamp**
  - For 30% DM silages, roll in 15cm layers
  - For wetter silages, roll in 25cm layers
- **Consolidate using the same method for every load when you fill the pit.** The speed of filling the clamp should be determined by the person on the buck rake, not the contractor filling the silage trailers!
- If you are filling the clamp and sealing in a single day, **fill at a 10 – 15 degree angle**
- If taking more than one day to fill the clamp, you can fill at a slightly steeper angle (but no more than 20 degrees)
- **For wet silages (less than 25% DM), increase the chop length to 75mm** to help stabilize the clamp



## Pressure on Bactoscan levels

Some of the milk purchasers are putting the squeeze on milk quality payments, and have reduced their premium band payment thresholds. This has resulted in an increase in investigations into high Bactoscan results.

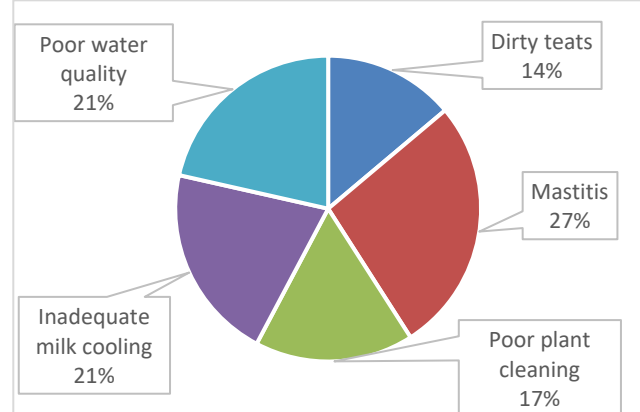
Average Bactoscans in the UK are actually a “good news” story, with the UK average Bactoscan reducing in the last decade to around 26,000 – 28,000 per ml of milk, with a minor seasonal peak in the autumn and early winter period.

Bactoscan is a measure of the number of bacteria in a milk sample, both dead and alive. As such, it is different from the traditional Total Bacterial Counts (TBC), which measure the number of live bacteria in a milk sample. Bactoscan can be measured much more quickly, and hence has become the norm for the assessment of bacterial levels in milk samples.

There are potentially five reasons why bacteria levels in the milk sample may be high:

- **Outside of the cows’ teats.** Bacteria from environmental contamination due to poor teat cleanliness, teat preparation or parlour hygiene.
- **Inside the udder.** Mastitis caused by Streptococcus bacteria in particular (for example *Strep. uberis*) may produce massive amounts of bacteria which may enter the bulk tank if the mastitis is not detected prior to milking.
- **Poor milking plant cleaning and disinfection**
- **Problems with milk cooling and storage**
- **Environmental contamination from water-borne bacteria.**

QMMS published data in 2021 from 675 Bactoscan investigations that they carried out from 2010-2020, and the results are shown in the chart below (from Manning et al. [2021] *Proceedings of the British Mastitis Conference*):



As can be seen, all five of these reasons are seen in their UK investigation samples, including issues with milk cooling (even with today’s modern temperature monitoring of bulk tank milk). 75% of the samples highlighted one problem to fix, although a quarter of the samples had multiple issues causing the high Bactoscan problems. This study also highlighted issues with water-borne bacteria such as *Pseudomonas fluorescens*, that contaminate the milk via hoses used to wash clusters or cows in the parlour. If you are having problems with high Bactoscans, then undertake further investigations with your veterinary surgeon including:

- **Check the milking plant for adequate cleaning.** Is the wash outflow running clear at the end of the wash-up routine? Is there residue left in the inside of the bulk tank or pipework?
- **Take bulk tank samples and send to a specialist laboratory to see which type of bacteria are present.** For example, high levels of thermophilic bacteria often indicate issues with inadequate plant cleaning after milking.
- High levels of coliform bacteria indicate **environmental contamination** due to issues with parlour hygiene and cleanliness.
- **Test all potable water** used in the parlour twice a year, especially if using borehole water.
- If specific bacteria such as *Strep. uberis* are found, **check mastitis detection protocols.**