

TechKISS Topic: Computerised Bail Feeding

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"We run groups of cows including fresh cows and those that are ramping down. Feed costs have gone down significantly without any reduction in milk production."

- MH

Computerised bail feeding technology gives farmers the flexibility to customise the amount and type of supplementary feed given to each cow.

Targeted feeding can help cost-effectively maintain cow health, milk production and reproductive performance – which can be particularly useful in year-round calving herds with cows in different stages of their lactation.

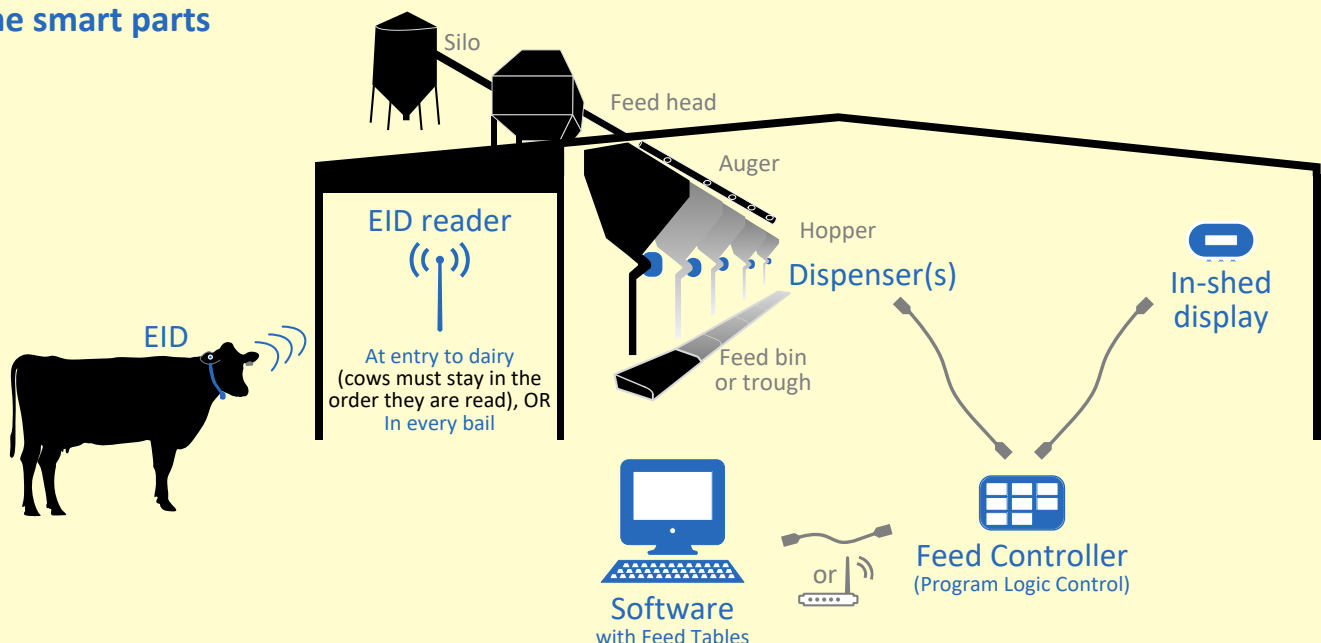
The smart parts of individual bail feeding systems are:

- EID to uniquely identify every cow
- EID readers at the entry to the dairy or in every bail
- Feed tables where you specify the feed each cow gets
- Feed controller that controls the delivery, and
- Dispensers that mechanically deliver the specified amount into each feed bin.

Benefits

- ★ Enables best use of supplementary feeds - as recommended by a farm nutritionist
- ★ Reduces feed wastage (and cost of production)
- ★ Enables feeding to:
 - prepare for drying-off (ramping down)
 - manage cows in transition (lead feeding)
 - manage cows in early lactation (ramping up)
- ★ Allows feeds to be sourced and used more efficiently and cheaply

The smart parts



Making Computerised Bail Feeding Equipment Work

Tips & traps from TechKISS study farmers



Feeding equipment

If getting a new feeding system:

- Choose one that has easy access to the feeders for servicing
- Put in the number of feed heads needed to cater for the feed options required by the herd
- Have feeding controls within easy reach of the staff milking
- Have a set-up that ensures cows stay in their bail location and can't poach from their neighbours' feed troughs



Integration with other tech

- Get a feed controller that integrates with your herd management software



Cow identification

- Put EID tags in the ear on the right
 - So they are consistently placed for the EID reader
 - To avoid EID tags being directly beside each other for in-bail readers
- Check the EID is working on all cows (no missing or faulty transponders)
- For EID readers at the entry to dairy, ensure cows can't back out or pass each other once they have been read
- If there is a sensor on every bail, check they recognise the cow EID
- Position readers in rotaries so they can detect cows that go around the platform twice



Routine feeding system checks

- Check the silos are correctly filled
- Check the augers are working
- Check the computer is working
- Work with a nutritionist to ensure the feed tables are appropriate
- Keep the feed tables up-to-date
- Ensure feed is being correctly dispensed
 - Calibrate feed dispensers for *every* new load of feed
 - In herringbone dairies, check when feed starts and stops dispensing
 - In rotary dairies, check the position of the feed drop in relation to cups on
- Visually check residual feed in bins
- Keep the maintenance on schedule



Fixing issues

- Ensure you can get support on the same day an issue arises (the skill needed will depend on the issue)

Visit [NSW Department of Primary Industries](#) for:

- [Videos on cow management technologies](#)
- [TechMatrix list of computerised bail feeding systems available in Australia.](#)



In 2018, 35% of dairy farms in NSW had computerised bail feeding technology.

TechKISS is a New South Wales Dairy Industry Fund project delivered by the Harris Park Group. Project information is generic and is offered on an 'as is' basis with no guarantees of completeness or accuracy. Please seek advice before acting.