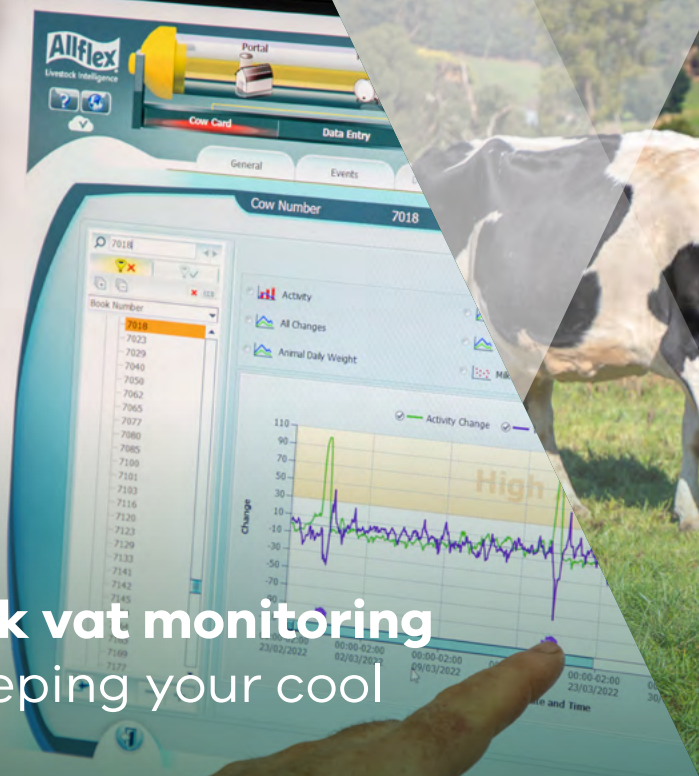




# Milk vat monitoring

## Keeping your cool



### Complexity



### Price



### Scale



Dairy farmers know the importance of keeping milk at the right temperature. Centuries of experiments have given us a greater understanding of how microbes form, and what we can do to prevent it.

Milk vats are only effective if they are able to maintain set temperatures for prolonged periods of time. Fluctuations need to be detected and addressed quickly, or entire batches can spoil.

Milk vat monitoring is one of the most important pieces of technology at the disposal of a dairy farmer.

## How

Milk vat monitoring uses a variety of sensors to provide a holistic image of the milk within the vats.

For volume monitoring, a lidar (light detection and ranging) is installed on top of the vat. It calculates the volume inside the vat and sends these values to the transceiver. Alerts can then be set up to find out when milking has started/ended or when milk has been collected.

The temperature sensors are located in 2 places: 1 on the inlet pipe and 1 in the vat pocket. These temperature sensors are constantly recording values

of the milk entering and sitting inside the vat. It then sends these to the transceiver.

These sensors can also check milk agitation and send alerts if the agitators stop working, as well as finding trends in the deployment of hot washes.

The transceiver is installed close to the milking line so that all sensors can be wired back to it to transmit the data. The transceiver receives data from the milk sensors and then transmits it to a dashboard and sends an alert via text or email.

## Why

- From the time the truck turns up at the farm to pick up the milk, to the time it got to the factory, most farmers have access to information about volume, temperature and other metrics on the milk.
- Previously, the only point of assessing milk quality was the milk sample taken by the tanker driver. That sample goes into an icebox, gets delivered to the processor and gets tested two days later for proteins, fats and bacteria.
- It can be three days before that information is known. By that stage, the milk has already been processed and is potentially ready for shipping to a supermarket.
- This technology removes all of those delays because that information is known at the vat in the dairy. The farmer, the tanker operator and the processor can see all the same information, and problems can be rectified on farm.
- Milk vat monitoring software allows farmers to set up pre-emptive alerts to get notified of potential issues before they become a quality issue, potentially saving their milk and lowering the cost of otherwise extremely urgent vat repairs.

Dairy

Productivity

Efficiency

## Benefits

### Quality assurance

Keep your milk at the right temperature throughout the entire supply chain.

### Rapid response

Integrated SMS alert systems keep you informed about what's happening in the vats.

### Cost effective

Milk vat sensors are inexpensive and easy to set up.

## Getting started

1. Obtain milk vat monitoring sensors and software from reputable suppliers.
2. Install the sensors as directed.
3. Set up SMS alerts and monitor for fluctuations.

Last updated: December 2022

## More Info

For more information on how you can deploy this technology on farm, give us a call or visit our website via the link below or QR code.



136 186

[agriculture.vic.gov.au](https://agriculture.vic.gov.au)