



"The combination of a good sorting gate together with accurate monitoring and identification, accompanied by effective analysis from the management system, creates a situation in which the correct cow reaches the treatment area at exactly the right time, and the team receives the correct information for action. As a result, precious work time is saved, and the cows are not unnecessarily harassed."

Omri Goldhar, Manager, HaEmek Dairy Ltd.

HaEmek Dairy Ltd. With more than 2,000 cows and calves, and milking almost around the clock, HaEmek Dairy Ltd. understands that in order to stay a leader, it needs to be on the cutting edge of technology.

BACKGROUND

HaEmek Dairy Ltd., the largest dairy farm in Israel, is the product of the merger of three dairy farms from Kibbutz Yifat (where the current, shared dairy farm is located), Kibbutz Merhavia and Kibbutz Megiddo. Originally established in 1954, the dairy farm has grown significantly in the past decade following two mergers that took place in 2000 and 2006.

Today, the farm is operated and managed by a 20-person team, has approximately 1,200 cows and 900 calves, and produces 13 million liters of milk annually.

The center of HaEmek Dairy is the milking parlor, which contains 2x32 Parallel milking points. The cows are milked three times a day in groups planned according to the rate of their milking.

CHALLENGES

"Profitable management means being strict about health, feeding, work and maintenance," says Omri Goldhar, HaEmek Dairy's Manager. "The challenge is to maximize profitability, not just for one year, but for the next 20 years."

According to Goldhar, "At the moment, it is very important for us to learn as quickly as possible when a cow is sick or suffering from some sort of problem. In the longer term, it is important for us to receive detailed reports which present a clear picture of the situation and enable wise decision-making".

Another important need is to consolidate all the treatments, checks and inseminations in one treatment area, without having to look for cows in the various groups, to needlessly get them up when they are lying down, or to lead them back and forth from the covered shelter to the treatment area, and then back again.

But solving these challenges is not the only incentive for bringing innovative solutions to HaEmek Dairy. As Goldhar explains, "Like everywhere in the business world, the same is true for the modern dairy farm – it is important to remain on the cutting edge of technology, simply not to get left behind. I see adopting new technologies as a vital way to stay competitive."

AT A GLANCE

Farm: HaEmek Dairy Ltd. – Owned by Kibbutz Yifat, Kibbutz Merhavia and Kibbutz Megiddo
Location: Kibbutz Yifat, Israel
Herd size: 1,200 milking cows and 900 calves

Challenges

- Preserve profitability, efficiency and competitiveness in a dairy farm with thousands of animals
- Obtain essential information for prudent future planning
- Completely and successfully implement the dairy farm's management concept
- Quickly identify and solve problems, to reduce their impact on the cows' milk yield and health
- Move every cow to the right place at the right time, with minimum human intervention

System

- Allflex Heatime® HR System with rumination, heat detection and cow identification functionality
- Allflex Data Flow II System for milking and herd management, with in-pit message display screen
- 64 SCR MC 200 ED milking points in a parallel parlor
- Milk gauge with blood detection
- DF 1010 automatic separation gate
- Calf identification system
- Dryness identification system

Benefits

- Rapid and effective response to every situation – due to receiving quality information on the level of the individual cow, group or herd
- Fewer delays when the cows enter and exit the milking parlor
- Efficient sorting of the cows according to dynamic needs
- High rates of successful insemination

SYSTEM

All of the cows and calves in the HaEmek Dairy have Allflex Heatime® HR tags for activity and rumination monitoring, which indicate each cow's health status and requirements. The data is collected in the Data Flow II management system, and the different parameters are displayed on the level of individual cow, group or herd.

HaEmek Dairy's current milking parlor was established by Allflex a decade ago, and has been expanded twice since then. In the parlor there are 64 Allflex MC 200 ED milking points, along with milk gauges and blood detectors. At the parlor exit, a DF 1010 automatic gate directs individual cows to the treatment area as needed.

In the milking facility there are several places where cow data is displayed: a direct display on the milking point, a large central display, and two portable terminals connected to the management system.

"The delivery of information is very important," says Goldhar. "The dairy worker receives the most important indications at the milking point, such as a decrease in milk yield or the presence of blood in the milk – either of which requires immediate intervention. More general information is shown on the central display, and if detailed information is needed, the worker can go to the portable terminal. This way he always receives all the vital information, without any unnecessary information that could confuse or burden him."

BENEFITS

"The four key things that are important to me in the management system are: the health report – which focuses me directly on the problematic cows; the cows' requirements report – which focuses me directly on the cows whose time has come for insemination; the milk yield report divided into groups – which allows me to identify specific problematic groups; and of course the rumination report," details Goldhar. "A decrease in rumination, a decrease in milk, and a decrease in activity are all parameters that show us the cow is suffering from some kind of problem, and they enable me to check and respond quickly." Fast reaction helps reduce the impact on the cow's milk yield over time. On the other hand, an increase in rumination following a fertility treatment in a sick cow is an indication of the treatment's success and the cow's recovery.

Being updated on the various parameters in different time frames for a group or for the herd makes it easier to identify external factors influencing the cow's activity, health and yield, a change in eating habits, a problem with a specific shelter (for example the penetration of rain), and more.

The cows at HaEmek Dairy are divided into groups of 90-120 cows, and are sorted according to their milking rates – a figure derived from the Allflex Data Flow II management system. The fact that every milking group entering the milking parlor is made up of cows with similar milking rates makes the process more efficient (especially in a parallel parlor), and prevents a situation where one or a few cows delay the entrance of a whole new group.



Furthermore, Allflex planned and installed a parlor in which the locked gates open up in fours (instead of an entire row), so that every four cows that finish their milking can move towards the exit without waiting for all 32 cows in the row, preventing unnecessary overcrowding when exiting

Goldhar also praises the automatic sorting gate in the parlor's exit that separates and directs the cows to the treatment area. Because of the dairy's size, cows are sorted at every milking, the person performing inseminations arrives daily, and the veterinarian comes five times a week.

"Beyond the separation of the cows for insemination and treatment, the automatic gate, along with the cows' identification, assist us in keeping the groups organized. And, in the rare case that a cow wanders into another group, she will be returned to her place in the next milking, without us having to look for her."

The accuracy in locating the required cows and increasing the insemination success rate allows for a better implementation of the dairy farm's management concept. "Every dairy farm worker has his own concept of running the herd," says Goldhar. "The high insemination success rate enables us to implement the concept better."

SUMMARY

"We have been working with Allflex almost since the beginning, and have a great relationship both on the everyday work level and on big projects," sums up Goldhar. "Allflex meets its goals on time, is attentive to us, and demonstrates the desire to solve problems quickly."

The relationship is mutual, as HaEmek Dairy's large herd assists Allflex in gathering information and assessing requirements, which are later translated into technological solutions. "We learn from every mishap, hardship or requirement. This cooperation is truly beneficial for both sides," reiterates Haim Conan, Allflex's Sales Manager in Israel.

As a result of the cooperation, HaEmek Dairy achieves high standards, not only in terms of herd size and the amount of milk produced every year, but also in the broad implementation of advanced solutions as a way to improve efficiency, increase milk yield and quality, and safeguard each cow's welfare.



About Allflex Livestock Intelligence

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Allflex Livestock Intelligence, part of MSD Animal Health, is the world leader in the design, development, manufacturing and delivery of solutions for animal identification, monitoring and traceability. Our solutions empower farmers to act in a timely manner, to safeguard their animals' health, while achieving optimal production outcomes for a healthy food supply.

Through its commitment to the Science of Healthier Animals®, MSD Animal Health offers veterinarians, farmers, pet owners and governments one of the widest ranges of veterinary pharmaceuticals, vaccines and health management solutions and services. Merck Animal Health is dedicated to preserving and improving the health, well-being and performance of animals and the people who care for them.

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