

# cows-webhelp

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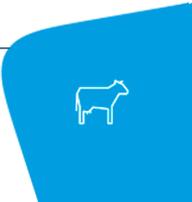


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## Dashboard

The dashboard shows an overview of your daily user tasks and answers 2 questions:

- How are my animals doing today?
- Which tasks do I have to perform today?

You can see at a glance which actions you have to take that day. Your daily routine can roughly be split up in 4 tasks:

- Check your herd for animals in heat.
- Check your herd for health issues.
- Check your herd for management issues.
- Check the location of your animals.

 *It is recommended to integrate the health attentions into the daily health routine at the farm. Check the attentions at least 1 time per day.*

### Check your herd for animals in heat

Follow the next steps to check your herd for animals in heat:

1. Check your dashboard at least once a day for heat attentions in the **Heat detection** widget.

 *The animals with a suspicious attention are not counted in the total number in the circle*

2. Click on **Show attentions** when there are heat attentions.
3. Click on the arrow icon  to check the activity pattern of the animal, and to see more detailed information to determine which action should be taken with the animal.
4. Click on **Actions** next to the green colored bar to enter the action you have taken. For example: checked the cow or inseminated the cow.

 *When you inseminated an animal, see [Enter an insemination \(page 14\)](#) for more information about entering an insemination in Velos or your management software.*

### Check your herd for health issues

#### Check for urgent health issues

Check your dashboard at least once a day for the **Urgent attentions**. An urgent attention appears when an animal shows abnormal behavior for too long, which can indicate a serious health issue. Immediate action is necessary. Follow the instructions in the chart below when you receive an urgent attention.



Urgent attention

Same attention for multiple animals in the same group?

Yes

Attention caused by group disturbance or attention settings too sensitive.

1. Check the animals in the farm.
2. Check the attention settings in Settings > Health and management > Attentions.

No

Tag problem indicated by icon?

Yes

Attention may be caused by incorrect attached Tag. Check the Tag and if necessary, adjust.

No

Collar too tight, too loose etc?

Yes

Attention may be caused by incorrect attached collar. Check the collar and if necessary, adjust.

No



Besides checking the dashboard, make sure you receive the urgent attentions in your email.

1. Go to **Settings > Contacts > Email notification**.
2. Click on **Urgent attention**.
3. In the field **Email notification**, select your user name.
4. Click on **Save**.



*Make sure you entered a valid email address for the user name you select:*

1. Go to **Settings > Contacts > Contacts/users**.
2. Click on the username.
3. Check the field **E-mail** for the email address.

### **Check for other health issues**

Check your dashboard at least twice a day for the **Animals to check**. The **Animals to check** list shows animals to check for health issues. All animals with unusual behavior are listed here, including animals with an urgent attention. Click on **Show attentions** to see the complete list. Follow the steps in the flow chart below when receiving a health attention.

On the **Animals to check** page, click on the  icon to check the activity pattern of the animal, and to see more detailed information. Click on **Add** to add a calendar event. When there is a Cow Positioning license, click on **Actions > View on map** to see where the animal is.



Animal to check attention

Same attention for multiple animals in the same group?

Yes

Attention caused by group disturbance or attention settings too sensitive.

1. Check the animals in the farm.
2. Check the attention settings in Settings > Health and management > Attentions.

No

Group change in the past 3 days?

Yes

Group change probably leads to unusual behavior. Observe the cow the next days, she may be at risk.

No

Smarttag problem indicated by icon?

Yes

Attention may be caused by incorrect attached Smarttag. Check the Smarttag and if necessary, adjust.

No

Has the cow recently been in heat?

Yes

The cow is probably in heat. Treat the cow according to the farm protocol.

No

Collar too tight, too loose etc?

Yes

Attention may be caused by



## Check your herd for management issues

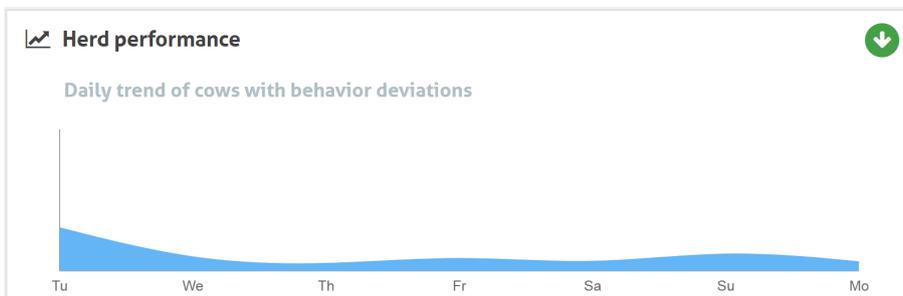
### Check the herd performance trend

The system monitors the group performance and shows it in a graph on your dashboard. The herd performance graph shows trends and insights on the behavior of groups or your entire dairy herd. It visualizes how external factors and your management strategies influence the behavior of your groups and herd, such as the impact of housing conditions, feeding strategies and milking procedures on your herds performance.

The graph shows how many animals of the complete herd (in %) show unusual behavior. All animals with unusual behavior are included, even when they do not have a health attention yet. The performance trend is indicated by an icon in the upper right corner.

Use the herd performance trend to respond to behavior changes and make improvements in your farm management. Aim for as much stability in cow behavior as possible, since stability and regularity are important contributions to the success of a dairy farm. Cows are creatures of habit and perform at their best if every day follows the same format. Any type of change in a cows daily routine causes stress, and stress has a negative effect on milk production, reproduction and health of dairy cows.

The graph should be as flat as possible, and indicate as less behavior deviations as possible. See the picture below for an example of a farm with a stable and good herd performance, with less behavior deviations.



Besides the graph, the system alerts you if a certain percentage of the cows in a group are showing abnormal behavior compared to their previous behavior. This indicates external factors might be affecting cows, posing a risk to their health, milk production and reproduction. Follow the instructions in the chart below when you receive a group alert.



Group alert

Check the group graphs. Is there a sudden behavior change?

Yes

The sudden change might be caused by a one-time problem (disease, problem affecting the whole group, big management changes). Try to keep the management changes with a big impact on group behavior to a minimum.

No

Irregular behavior over a longer period could indicate irregular management (irregular feeding times, feed amounts, ration day to day). Try to find the root of the problem and make sure the group behavior stabilizes. This may impact the farm protocol.



## Check the location of your animals

The location of the animals in Velos should correspond to the actual location of the cow in the barn. Velos checks if this is the case. If not, the **Animals at unexpected group / pen** widget on the Dashboard then shows for which animals a difference in locations is detected.

Click on **Show attentions** in the widget to see the complete list with animals:

- Is the animal in the correct pen, but is the location in Velos wrong? Change it in Velos with the **Actions** button, or, if applicable, in your farm management software.
- Is the location in Velos correct, but is the animal in the wrong pen? Move the animal to the correct pen in the barn.

## Set up Animals at unexpected group / pen

To check if the animals are in the correct group / pen, some settings must be done first. You can make use of:

- the Cow Locating system (if applicable).
- the VP4102 V-packs with antennas.
- other tag identification, for example a feed station.

After setting up one or more methods described above, the system is ready to use.



*The system combines the different methods to detect where the animals are present.*

### Use the Cow Locating system

When using the Cow Locating system, the locations of the map in VPaint are necessary. When the locations were already drawn during installation of the Cow Locating system, no further actions are required. When the locations are not yet added to the map, follow the next steps:

1. Go to **Settings > Positioning > VPaint**.
2. On the tab **Location** draw the different locations:
  - a. Put the cursor in the upper corner of a drawn element, and click and hold for about 1 second on the left mouse button until the element appears in the grid.
  - b. Move the cursor to enlarge the element.
  - c. Put the cursor on the element and click on the left mouse button to fill in the details (for example the name).
  - d. Repeat these steps for all locations that must be drawn.
3. Click on **Submit** to save the locations.

### Use the V-packs with antennas

When using one or more VP4102's for checking the correct group / pen, an extra Behaviour component (BC) UHF Animal Location Detector must be added.



*Make sure the antennas are positioned in such a way that it is clear where the animals are:*

- *The animals should come close to the antenna a few times a day.*
- *The antenna should not be too close to other spaces in the barn.*



*For each VP4102 a BC must be added.*

1. Go to **Settings > System > Behavior components**.
2. Click on **Add behavior component**.
3. In the field **Type**, select **UHF Animal Location Detector**.
4. In the field **Name** enter a description for the BC.
5. Click on **Next**.
6. In the field **V-pack** select the V-pack that you want to use for checking the correct group / pen.



7. In the field **Location** select where the VP4102 is.
8. Click on **Submit**.
9. Repeat these steps for all VP4102s that you want to use for checking the correct group / pen.

#### *Use other tag identification*

When using another identification point in the farm, add the Behaviour component (BC) ISO Animal Location Detector.



*For each identification point a BC must be added.*

1. Go to **Settings > System > Behavior components**.
2. Click on **Add behavior component**.
3. In the field **Type**, select **ISO Animal Location Detector**.
4. In the field **Name** enter a description for the BC.
5. Click on **Next**.
6. In the field **V-pack** select the identification point that you want to use for checking the correct group / pen.
7. In the field **Location** select where the identification point is.
8. Click on **Submit**.
9. Repeat these steps for all identification points that you want to use for checking the correct group / pen.

## Heat detection

### What can I do on the Heat detection page?

On this page all animals with a heat attention are listed. You can plan actions based on this information, for example inseminating an animal, and maintain the administration for these actions. See the explanation below for more information about which actions you can take.

#### *Attentions*

On this tab you see a list of animals in heat. With the **Actions** button in the left upper corner you can do the following things for multiple animals at the same time:

- **Seen:** mark the animals as seen when you plan to inseminate the cows and you are going to enter the insemination dates in your management software.
- **No heat:** mark the animals when they are not in heat.
- **Quick entry:** select this option when you want to enter the same data with the quick entry for multiple animals.
- **View on map** (only available with Cow Positioning license): view the selected animals on the map to see where they are in the barn.

After an action is taken, the heat attentions move to the tab *Handled*.

Click on the individual **Actions** button behind an animal to do the following tasks for that animal only:

- **Seen:** mark the animal as seen when you plan to inseminate the cow and you are going to enter the insemination date in your management software.
- **No heat:** mark the animal when she is not in heat.
- **In heat.** Mark the animal when she is in heat and you are not going to inseminate her.
- **Ins date.** Select this option when you inseminated the cow and you don't use other management software to enter the insemination date. Velos automatically enters today's date as insemination date.
- **Keep open.** Mark the animal as "keep open". when she shouldn't be inseminated anymore.
- **View on map** (only available with Cow Positioning license): view the animal on the map to see where she is in the barn.



To include or exclude animals in the voluntary waiting period and pregnant animals for heat attentions, click on the filter icon  and (un)check the animals that you (don't) want to see in the heat attention list.

### *Handled*

On this tab you see heat attentions that are handled. With the **Actions** button in the left upper corner you can do the following things for multiple animals at the same time:

- **Move to Attentions** . When you moved the animals to the *Handled* tab by accident, you can move them back to the *Attentions* tab.
- **Quick entry**: select this option when you want to enter the same data with the quick entry for multiple animals.
- **View on map** (only available with Cow Positioning license): view the selected animals on the map to see where they are in the barn.

Click on the individual **Actions** button behind an animal to do the following tasks for that animal only:

- **Move to Attentions** . When you moved the animal to the *Handled* tab by accident, you can move it back to the *Attentions* tab.
- **View on map** (only available with Cow Positioning license): view the animal on the map to see where she is in the barn.

### *Suspicious*

On this tab you see animals that are suspicious to become in heat. With the **Actions** button in the left upper corner you can do the following things for multiple animals at the same time:

- **Quick entry**: select this option when you want to enter the same data with the quick entry for multiple animals.
- **View on map** (only available with Cow Positioning license): view the selected animals on the map to see where they are in the barn.

Click on the individual **Actions** button behind an animal to do the following task for that animal only:

- **View on map** (only available with Cow Positioning license): view the animal on the map to see where she is in the barn.

## **How can I check my heat attentions?**

On your dashboard, check in the **Heat detection** widget if there are animals with an attention. When there are animals with an attention, click on the **Show attentions** link to see which animals you should check, and their detailed behavior information.

## **Where can I see more information about a cow on the heat attention list?**

1. On your dashboard, click on the **Show attentions** link in the **Heat detection widget**.
2. Click on the arrow icon  to check the current activity pattern of the animal, and to see the heat cycle of the animal to determine which action should be taken with the animal.

## **Why do I see pregnant animals and/or animals within the voluntary waiting period with a heat attention?**

Velos shows all animals with a heat attention, including pregnant animals and animals in the voluntary waiting period. If you don't want to see these animals, follow the next steps:

1. In the heat detection block on the dashboard, click **Show attentions**.
2. Click on the filter icon .
3. Uncheck the box(es) **Show animals within voluntary waiting period** and/or **Show pregnant animals**.
4. Click **Close**.

Velos now only shows the number of animals in heat in the insemination period.



## What does the color of the circle on the Dashboard mean?

The color of the circle indicates the work progress. A green circle indicates that you do not have to check the attention list because there are no animals in heat. When the circle is orange/red, the attention list has to be checked.

See the instruction video Heat Detection for more information.

## I want to receive more or less heat attentions. How can I change this?

Click on the settings icon  to change the attention settings. Move the slider to receive more or less attentions.

 Note that making the system more sensitive also means the amount of false attentions could raise. Making the system less sensitive could result in missed cows in heat.

 By default the attention light on the V-box blinks slowly when there are heat detection attentions. When this is not necessary, turn off the status light for heat detection attentions as follows:

1. Go to **Settings > System > Behavior components**.
2. Click on **Attention light**.
3. Uncheck the box **Use for heat detection attentions**.

## When should I inseminate a cow?

To see the progress of the heat of an animal, a green colored bar is shown in Velos for animals with a heat detection attention. The bar is based on the figure below and shows the probability of conception during the entire heat. The darker the green color, the higher the chance of conception is when inseminating.

 The figure below applies to the average situation as proven in scientific research. Specific cases such as the use of sexed semen may have different optimal insemination moments. Take this into account in your business.

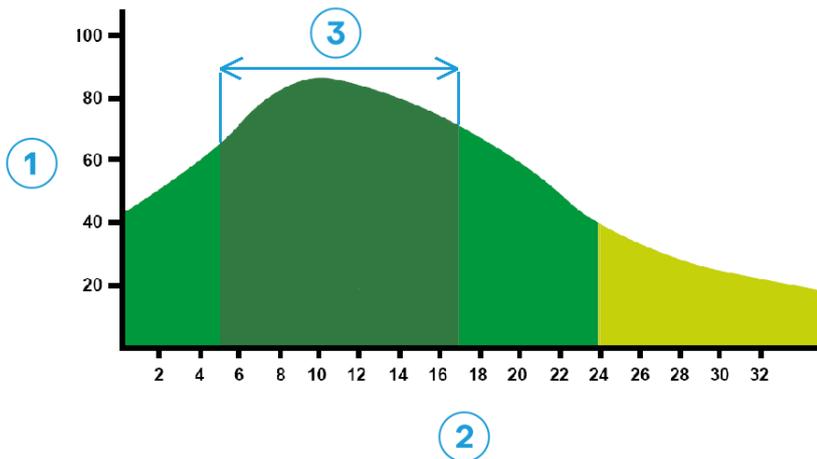


Figure 1: Optimum insemination moment (Roelofs et al. 2005 (Theriogenology))

1. Probability of conception in %
2. Duration of heat in hours
3. Optimum insemination moment

The progress bar in Velos shows the same information:



Figure 2: Example of optimum insemination moment in Velos

It depends on the starting point of the heat when the animal should be inseminated. It is possible to switch to the column **Start of heat** indicating the starting point. To see whether the animal is already in the optimum insemination moment (the dark green color of the bar), the current date and time is indicated by the 📍. In this example, the animal is in the optimum insemination moment and can be inseminated. The dark green area of the optimal insemination moment has a duration of 5 hours after the start of heat, until 17 hours after the start of heat. Try to inseminate the animal within this time frame to increase the chances of conception. Inseminating after this time frame still has a reasonable change of conception. Therefore, if the optimal time frame is missed, it is still in many cases better to inseminate than not to.

## Enter an insemination

When inseminating an animal, follow the next steps to correctly register the insemination date in your management software or Velos:

*Enter an insemination when using management software*

1. In the heat attention list, select all animals that are inseminated.
2. Click on **Actions** in the left upper corner and select **Seen**. All selected heat attentions move to the tab *Handled*.
3. Fill in the insemination date in the management software.

*Enter an insemination when not using management software*

1. In the heat attention list, click on **Actions** right next to the green colored bar.
2. Select **Ins date**. Velos automatically registers the date as the insemination date, and the attention moves to the tab *Handled*.

## Enter an action in Velos

When a heat attention is generated for a cow, several actions in Velos can be taken from the heat attention list. You can use this to update your administration. See below for more information about which actions you can take.



*When you use other management software, enter new animal data in your management software instead of Velos.*

### *Actions for multiple animals at the same time*

Click on **Actions** in the left upper corner to take an action for multiple animals at the same time:

- **Seen**: mark the animals as seen when you plan to inseminate the cows and you are going to enter the insemination dates in your management software.
- **No heat**: mark the animals when they are not in heat.
- **Quick entry**: select this option when you want to enter the same data with the quick entry for multiple animals.
- **View on map** (only available with Cow Positioning license): view the selected animals on the map to see where they are in the barn.

### *Actions for individual animals*

Click on **Actions** next to the green colored bar to take an action for an individual animal. :

- **Seen**: mark the animal as seen when you plan to inseminate the cow and you are going to enter the insemination date in your management software.
- **No heat**: mark the animal when she is not in heat.
- **In heat**. Mark the animal when she is in heat and you are not going to inseminate her.
- **Ins date**. Select this option when you inseminated the cow and you don't use other management software to enter the insemination date. Velos automatically enters today's date as insemination date.
- **Keep open**. Mark the animal as "keep open" when she shouldn't be inseminated anymore.
- **View on map** (only available with Cow Positioning license): view the animal on the map to see where she is in the barn.

To include or exclude animals in the voluntary waiting period and pregnant animals for heat attentions, click on the filter icon  and (un)check the animals that you (don't) want to see in the heat attention list.



## Where is the cow?

 Only available with a Cow Locating license.

When there is a heat or health attention for a cow and you want to check her, you can see in Velos where she is in the barn:

1. Go to the heat attention list.
2. Click on **Actions** behind the green colored bar, or select all animals you want to check and click on **Actions** in the left upper corner.
3. Select **View on map**. Velos now shows where all selected animals are.

## What should I do with a handled attention?

No action is required. The actions for all animals are already executed. When an attention is moved to the **Handled** list by mistake, click on **Actions** to move it back to the **Attentions** list.

## What should I do when I receive a suspicious attention?

Animals with a suspicious heat attention are suspected to become in heat. The suspicious attention is generated at an early stage when it is less certain that the attention is true. It can be used to include cows in the daily fertility protocol that just became in heat.

Click on the arrow icon  to check the activity pattern of the animal, and to see more detailed information. When there is a Cow Positioning license, click on **Actions > View on map** to see where the animal is.

## Urgent attention

### What should I do when I receive an urgent attention?

When you receive an urgent attention, check the attention and solve the problem as soon as possible. It is recommended you prioritize solving these attentions as they are only shown when there is urgent need of help. Follow the steps in the flow chart below when receiving an urgent attention.

Click on the  icon to check the activity pattern of the animal, and to see more detailed information. When there is a Cow Positioning license, click on **Actions** and **View on map** to see where the animal is.

When you checked the animal in the barn, click on **Actions** and **Seen**. The urgent attention moves to the tab *Seen*. The status light on the V-box automatically stops blinking fast.

 *Marking the attention as **Seen** does not mean the attention disappears from the Velos Dashboard. As long as the system detects unusual behavior, the urgent attention is visible on the Dashboard.*



Urgent attention

Same attention for multiple animals in the same group?

Yes

Attention caused by group disturbance or attention settings too sensitive.

1. Check the animals in the farm.
2. Check the attention settings in Settings > Health and management > Attentions.

No

Tag problem indicated by icon?

Yes

Attention may be caused by incorrect attached Tag. Check the Tag and if necessary, adjust.

No

Collar too tight, too loose etc?

Yes

Attention may be caused by incorrect attached collar. Check the collar and if necessary, adjust.

No



See the instruction video Health Monitoring for more information.

### When do I receive an urgent attention?

An urgent attention appears when an animal shows abnormal behavior for too long, which can indicate a serious health issue. It depends on the type of Tag when an urgent attention is generated:

- Tag Neck IFER(P): cow is inactive longer than 6 hours.
- Tag Neck IFE: cow has not eaten since last 12 hours.
- Tag Leg: cow is lying more than 8 hours.

To change the time period for the urgent attentions, click on the settings icon  on the attentions page and move the slider.



*Urgent attentions should be received as push notification. Set up your email notification for this purpose. See How can I receive urgent attentions in my mailbox? (page 17) for the instruction.*



*Use the attention light on the V-box to see whether there are urgent attentions.*

1. Go to **Settings > System > Behavior components**.
2. Click on **Attention light**.
3. Check the box **Use for urgent health attentions**.

*From now on the attention light blinks fast when an urgent attention appears. It stops blinking when the attention is marked as Seen in the urgent attention list.*

### How can I receive urgent attentions in my mailbox?

1. Go to **Settings > Contacts > Email notification**.
2. Click on the notification that you want to receive in your mailbox.
3. In the field **Email notification**, select your user name.
4. Click on **Save**.



*Make sure you entered a valid email address for the user name you select:*

1. Go to **Settings > Contacts > Contacts/users**.
2. Click on the username.
3. Check the field **E-mail** for the email address.

### When does an urgent attention disappear?

When you solve the problem that is associated with the attention, the attention disappears. This means:

- For the Tag (I)FE: as soon as the cow starts eating again.
- For the Tag (I)FER(P): as soon as the cow starts eating, ruminating or showing other active behavior again.
- For the Tag Leg: as soon as the cow starts standing again.

Also, when you select the cow and click on **Action > Seen**, the urgent attention disappears.

### I want to receive more or less urgent attentions. How can I change this?

Click on the settings icon  in the upper right corner of the screen to change the attention settings. Move the slider to change the time period. This results in receiving urgent attentions earlier or later.



*Making the time period shorter also means the amount of false attentions could raise. Making the time period longer could result in missed opportunities for quick intervention at urgent health issues.*



## Animals to check

### What should I do when I receive an Animals to check attention?

 *It is recommended to integrate the health attentions into the daily health routine at the farm. Check the attentions at least 2 times per day.*

Follow the steps in the flow chart below when receiving a health attention.

Click on the  icon to check the behavior pattern of the animal, and to see more detailed information. To enter the diagnosis, click on **Add** to add a calendar event. When there is a Cow Positioning license, click on **Actions > View on map** to see where the animal is.



Animal to check attention

Same attention for multiple animals in the same group?

Yes

Attention caused by group disturbance or attention settings too sensitive.

1. Check the animals in the farm.
2. Check the attention settings in Settings > Health and management > Attentions.

No

Group change in the past 3 days?

Yes

Group change probably leads to unusual behavior. Observe the cow the next days, she may be at risk.

No

Smarttag problem indicated by icon?

Yes

Attention may be caused by incorrect attached Smarttag. Check the Smarttag and if necessary, adjust.

No

Has the cow recently been in heat?

Yes

The cow is probably in heat. Treat the cow according to the farm protocol.

No

Collar too tight, too loose etc?

Yes

Attention may be caused by



See the instruction video [Health Monitoring](#) for more information.

### How can I check my Animals to check attentions?

On you dashboard, check if there are **Animals to check**. When there are animals with an attention, click on the **Show attentions** link to see which animals you should check, and their detailed behavior information.

### What does the color of the circle on the Dashboard mean?

The color indicates if the animals to check are in a critical period (transition period) or not. The orange part indicates the animals in the transition period, the yellow part shows the number of animals in other periods. The number in the circle indicates the total number of animals on the *Animals to check* list.

See the instruction video [Health Monitoring](#) for more information.

### When do I receive an Animals to check attention?

The system generates an Animals to check attention in 2 situations:

- When a cow shows extreme unusual behavior on a day.
- When a cow shows unusual behavior that is different from her normal behavior on previous days.

Unusual behavior can indicate possible illness or a risk of illness, so it is important to check the cows that day. Depending on the type of Tag, the neck or leg movements are measured.

Tag Neck (I)FER(P)	Tag Neck (I)FE	Tag Leg
Animal has an increased inactive time.	Animal has a decreased eating time.	Animal has: <ul style="list-style-type: none"><li>• a decreased step count (optional, see the Animal to check settings), or</li><li>• a decreased lying time, or</li><li>• an increased lying time</li></ul>

For the Tag Neck (I)FER(P) the Animals to check list is updated continuously through the day. The Animals to check list for the Tag Neck (I)FE and Tag Leg is updated once a day at midnight.

To change the settings for the Animals to check attentions, click on the settings icon  on the attentions page and move the slider.

### I want to receive more or less Animals to check attentions. How can I change this?

1. On your dashboard, click on **Show attentions** in the **Animals to check** widget.
2. Click on the settings icon  in the upper right corner of the screen.
3. Move the slider to receive more or less attentions.



*Note that making the system more sensitive also means the amount of false attentions could raise. Making the system less sensitive also means the amount of missed possible health issues could raise.*



*When the animal behavior is variable, for example during grazing season, uncheck the boxes **Show decreased activity** for the Tag Leg to prevent unnecessary Animals to check attentions.*

## Herd performance

### What does the herd performance indicator show?

The herd performance graph shows trends and insights on the behavior of groups or your entire dairy herd. It visualizes how external factors and your management strategies influence the behavior of your groups and herd, such as the impact of housing conditions, feeding strategies and milking procedures on your herds performance.



The graph shows how many animals of the complete herd (in %) show unusual behavior. All animals with unusual behavior are included, even when they do not have a health attention yet. The performance trend is indicated by an icon in the upper right corner.

	Positive trend	Yesterday's number of animals with unusual behavior is less than the average of the previous days.
	Neutral trend	Yesterday's number of animals with unusual behavior is equal to the average of the previous days.
	Negative trend	Yesterday's number of animals with unusual behavior is more than the average of the previous days.

Besides the graph, the system alerts you if a certain percentage of the cows in a group are showing abnormal behavior compared to their previous behavior. This indicates external factors might be affecting cows, posing a risk to their health, milk production and reproduction.

### How should I use the herd performance trend?

You can use the herd performance trend to respond to behavior changes and make improvements in your farm management. Aim for as much stability in cow behavior as possible, since stability and regularity are important contributions to the success of a dairy farm. Cows are creatures of habit and perform at their best if every day follows the same format. Any type of change in a cows daily routine causes stress, and stress has a negative effect on milk production, reproduction and health of dairy cows.

The graph should be as flat as possible, and indicate as less behavior deviations as possible. See the picture below for an example of a farm with a stable and good herd performance, with less behavior deviations.



See the instruction video Herd Performance Trends for more information.

### When do I receive a group alert?

Group alerts inform you that the behavior of multiple animals in the same group/pen is deviating from normal. The cause is mostly management related. For example a changed farm protocol or climate, which can result in cows that did not eat enough food, cows receiving bad food, the cows not getting enough water, or an environment that is too hot.

Tag Neck (I)FER(P)	Tag Neck (I)FE	Tag Leg
Multiple animals in the same group/pen have: <ul style="list-style-type: none"> <li>• a decreased eating time, and/or</li> <li>• a decreased rumination time, and/or</li> <li>• an increased inactive time</li> </ul>	Multiple animals in the same group/pen have a decreased eating time.	Multiple animals in the same group/pen have: <ul style="list-style-type: none"> <li>• a decreased step count (optional, see the Animal to check settings), or</li> <li>• a decreased lying time, or</li> <li>• an increased lying time</li> </ul>

### What should I do when I receive a group alert?

When receiving a group alert check the alert and read the description by clicking on the arrow icon . Follow the steps in the flow chart below when receiving a group alert.



Group alert

Check the group graphs. Is there a sudden behavior change?

Yes

The sudden change might be caused by a one-time problem (disease, problem affecting the whole group, big management changes). Try to keep the management changes with a big impact on group behavior to a minimum.

No

Irregular behavior over a longer period could indicate irregular management (irregular feeding times, feed amounts, ration day to day). Try to find the root of the problem and make sure the group behavior stabilizes. This may impact the farm protocol.



In general find the cause of the problem and make sure to remove the cause.

### Where can I change the settings of the group alerts?

1. Go to **Settings > Health and management > Attentions**, or click on the settings icon  in the upper right corner of the group alerts list.
2. Click on the tab *Group alerts*.
3. Move the slider to receive an alert earlier or later.

 *Receiving an alert earlier also means the amount of false group alerts could raise. Receiving an alert later could result in missed possible management issues.*

### When does a group alert disappear?

When you solve the problem that is associated with the attention, the attention disappears. This means:

- For the Tag (I)FE: as soon as the group of cows starts eating again.
- For the Tag (I)FER(P): as soon as the group of cows cow starts eating, ruminating or showing other active behavior again.
- For the Tag Leg: as soon as the group of cows starts standing again.

### I want more or less group alerts. How can I change this?

Click on the settings icon  in the upper right corner of the screen to change the group alert settings. Move the slider to receive an alert earlier or later.

 *Receiving an alert earlier also means the amount of false group alerts could raise. Receiving an alert later could result in missed possible management issues.*

## Calendar

### What is the calendar widget?

The calendar shows lists of animals for which an event is planned or calculated to happen, for example a pregnancy check or an attention when an animal is not inseminated after the voluntary waiting period. The list contains 2 different types of calendar attentions:

- General calendar attentions, such as attentions for animals that are not in heat, animals that are not yet inseminated, animals to dry off, animals expected to calve soon etc. To change the settings for the general calendar attentions go to **Settings > Calendar > General**.
- Custom calendar attentions (optional), for all calendar actions that are not already available in the general calendar attentions. For example attentions for animals that should be tested for ketosis or animals that recently calved. To add custom calendar attentions go to **Settings > Calendar > Custom attentions**.

### What is a custom event?

A custom event is a self defined note that you can add to the timeline of an animal. For instance when an animal is treated for a disease. Velos already has some predefined events that are based on production, and on reproduction (for example 'Inseminate', 'Dry off'). Besides these events, custom events can be added. See How can I add a custom event? (page 24) for more information about adding a custom event.

### What is the difference between a calendar event and a calendar attention?

#### Calendar event

A calendar event is a (self defined) note that you can add to the timeline of an animal. For instance when an animal is treated for a disease. Velos already has some predefined events that are based on production (for example 'in lactation'), and on reproduction (for example 'dry off'). Besides these events, custom events can be added. See How can I add a custom event? (page 24) for more information about adding a custom event.



### Calendar attention

A calendar attention is an alert that is generated when a calendar event is planned or calculated, for example a pregnancy check or an attention when an animal is not inseminated after the voluntary waiting period. The calendar attentions can be used as a checklist or a to do list. See [Which calendar attentions are available to me? \(page 24\)](#) for more information about the types of calendar attentions, and how to change these attentions.

### How can I add a custom event?

1. Go to **Settings > Calendar > Custom events**.
2. Click **Add** and fill in a name for the event.
3. Click **Ok**.

### How can I add a custom calendar attention?

1. Go to **Settings > Calendar > Custom attentions**.
2. Click **Add attention**.
3. Select a general or custom event for which an attention should be generated.
4. Fill in the name of the attention and when it should be generated.
5. Click **Ok** to save the new attention.

### Which calendar attentions are available to me?

Calendar attentions are divided in two types: general attentions and custom attentions. The calendar attention list can be used as a checklist or action list.

#### General calendar attentions

General attentions are predefined attentions for:

- No heat
- No insemination
- In heat
- Pregnancy check
- Dry off
- Calving

It is possible to use all, none or a selection of the predefined general calendar attentions. The settings for calendar attentions can be changed.

1. Go to **Settings > Calendar > General**.
2. Click on the tab *Attentions*.
3. (Un)check a box to (de)activate the calendar attention.
4. If necessary, change the number of days after which the calendar attention should be generated.
5. Click on **Submit** to save the attentions.

Table 1: Default calendar attention values

Event	Value
First pregnancy check	32 Days after insemination.
Second pregnancy check	190 Days after insemination (when activated).
Expected dry-off	240 Days after insemination.
Expected calving	280 Days after insemination.



### Custom calendar attentions

When the general calendar attentions are not sufficient, custom calendar attentions can be made. For example attentions for animals that should be tested for ketosis, animals that should be vaccinated, or animals that recently calved. To add custom calendar attentions, follow the next steps:

1. Go to **Settings > Calendar > Custom attentions**.
2. Click **Add attention** and fill in a name for the event.
3. Select a general or custom event for which an attention should be generated and the lactation.
4. Fill in the name of the attention and when it should be generated.
5. Click **Ok** to save the new calendar attention.

## Tags

### What should I do when I receive a Tag attention?

*No data in last 24 hours*

There can be several causes for this attention:

- The cow is out of the antenna range, for example when she is grazing. In this case, check the box **Out of range**. The attention will no longer appear as long as the box is checked. Uncheck the box when the animal is in the antenna range again.
- Check the Tag number. In case the Tag number in Velos is not correct, click on **Edit Smarttag number** and enter the correct number.
- The Tag is taken off but still sending some data (sleep mode). Click on **Remove Smarttag** to remove the Tag from Velos as an active Tag.
- The Tag may be broken. Click on **Remove Smarttag** and attach a new Tag to the cow.

*Incorrect position*

Depending on the type of Tag, the attention indicates what is wrong with the position of the Tag:

- Tag is attached back to front. The Tag Neck is attached backwards. Attach the Tag with the groove (and the arrow on the back of the Tag) pointing towards the cows head.
- Position of the Tag. The Tag Neck is turned sideways on the neck or twisted on the collar.
- Tag Leg upside down. Attach the Tag with the Tag number at the top of the Tag.

Check the instruction videos for more information about attaching the Tags:

- Tag Neck
- Tag Leg

*Not enough measurements*

- The Tag is taken off but still sending some data (sleep mode). Click on **Remove Smarttag** to delete the Tag as an active Tag.
- The Tag may be broken. Attach a new Tag to the cow and click on **Replace Smarttag** to enter the number of the new Tag.

### List with Tag attentions

- No data in last 24 hours
- Incorrect position
- Not enough measurements
- Tag has wrong position
- Tag is attached back to front



## Farm

### What can I do on the Farm page?

On this page you can see an overview of your farm. You can see detailed information about your complete herd, animals within a group/pen, or individual animals. Depending on the available modules you can see additional information (for example information about milking or separation).

### What should I do with unknown animals?

The list of unknown animals shows the Tag numbers which are actively sending data and for which the animal is not known in Velos. To add the Tag numbers to the system:

1. Enter the animal number, life number, birth date, calving date and lactation (if applicable).
2. Click **Save**.

The Tag numbers are now added to the system.

When one or more Tags are not in use:

1. Select the Tag numbers that are not in use.
2. Click on **Actions**.
3. Select **Delete**.
4. Click **Ok**.



*When using other management software, do not fill in the animal data in Velos. In that case, enter the animal data in your management software.*

### What is a production group in Velos?

To retrieve the correct and most valuable information out of the system, and to generate proper group attentions and group correction, it is important that the animals that are always housed together in a group on the farm, are grouped in Velos the same way. Animals that are housed together, are managed in the same way, and their behavior is influenced by the same external factors (e.g. grazing, the same eating times etc.). By grouping all animals the correct way on this page, the system is able to detect unusual behavior of all animals in one group properly, which can indicate real management issues.



*At least 1 group/pen must be defined in Nedap Velos. If this is not defined, a red exclamation mark appears in front of the **Production groups** link in the service checklist.*

### System with a Farm management program

1. Run the Farm management program and check on this page if the production groups are exactly how the animals are housed.
  - a. Are the groups exactly the same as they are housed? No further action is needed. The group/pen will automatically update in Velos when an animal moves to another group/pen.
  - b. Are the groups not how the animals are housed (for example, multiple production groups are housed together), go to step 2.
2. Merge the production groups into bigger groups of animals that are housed together. Click on the production group that should be merged with one or more other production groups.
3. If necessary, change the name of the production group.
4. In the field **Group / pen**, select one of the locations where this group of animals is housed and click on **Submit**.
5. Repeat for all production groups that should be merged with other production groups.
6. Go to **Settings > Farm > Farm layout** and remove the group / pens that are not in use. If necessary, rename the groups/pens that are used.

The group/pen will automatically update in Velos when an animal moves to another group/pen.



### System without a Farm management program

1. Click on **Add group**.
2. Choose a name for the group, for example "In lactation", "Dried off" or "Youngstock".
3. In the field **Group / pen**, select **Create new location**.
4. Click on **Submit**.
5. Repeat the steps for all necessary groups in which animals are housed together.

When the groups/pens are added, the animals must be added to Velos and coupled to the correct group/pen:

1. On the Dashboard, click on **Unknown animals**.
2. Fill in all animal data. In the column **Group / pen**, select one of the groups/pens that you just added to Velos.



*Make sure the group/pen of an animal is always up to date, otherwise the system isn't able to work correctly. This can be done manually or automatically:*

- *Manually. Select the correct group/pen on the animal page when an animal moves to another group/pen, or change the group/pen for multiple animals at the same time via the Quick Entry.*
- *Automatically. Use the production based housing (**Settings > Calendar > Production based housing**) to automatically move animals to a different group/pen when the production state of the animal changes.*

### When do I have to "Update group/pen of animals"?

When using a Farm management program and you changed the groups/pens of the animals (manually) by accident, you can reset the group/pen for all animals at the same time with the **Update group/pen of animals** button. Velos then changes the group/pen to the production group of the animal (the situation as it was before changing the group/pen by accident (**Animal page > Edit > Field Group/pen** changes to **Link to production group**)).



*This option is not applicable for systems without a Farm management system. When the group/pen of an animal must be corrected, change it manually.*

### How do I see the data of one group / pen?

Select a group in the drop down menu **Farm overview** to see the data of one group / pen.

### How do I see the data of one animal?

1. Go to **Farm**.
2. Click **View animals**.
3. Select **Show on list** to see a list of all animals that belong to the selected group / pen.
4. Click on the **Animal number** in the list to see the animal page with all Heat detection and Health and management information about the animal. It is also possible to enter an animal number in the search bar in the upper right corner of the screen, and click on the search icon .

### I want to delete a group / pen, but I cannot select it.

The group / pen is in use by another part of Velos. A group / pen can only be removed if it is:

- not in use as a home group / pen for animals.
- not in use as a home group / pen for groups.
- not linked to any production state.
- not in use by a behavior component.

See the icon  to see if the group / pen is in use.



## An animal moves to another group / pen. What should I do?

### System with a Farm management program

When a Farm management program is used, the group / pen updates automatically when an animal moves to another group / pen. No further action is needed.

### System without a Farm management program

When you have a stand alone system without a Farm management program, the group / pen can be changed manually or automatically:

- Manually. Select the correct group / pen on the animal page when an animal moves to another group / pen, or change the group / pen for multiple animals at the same time via the Quick Entry.
- Automatically. Use the production based housing (**Settings > Calendar > Production based housing**) to automatically move animals to a different group / pen when the production state of the animal changes.

## Feeding

### How do I create a feed plan?

With Electronic Concentrate Feeding, a group of cows is being fed according to a feed plan. Several feed plans with their own feed curves can be set up: based on birth date, lactation cycle or fixed amounts. When milking is in the license, it is also possible to feed based on the milk yield, and/or to feed in the milking parlor.

It depends on having a Farm Management Program or not how to set up the feed plans:

- When using a Farm Management Program, Nedap Velos uses the settings of the feed plans from the Farm Management Program. In addition some extra settings must be done in Nedap Velos. Follow the instructions in Create feed plans when using a Farm Management Program (page 28) to set up the Nedap Velos part when you use a Farm Management Program.
- When using only Velos, the feed plans must be set in Nedap Velos. Follow the instructions in Create feed plans without using a Farm Management Program (page 32) to set up the feed plans in Nedap Velos when you don't use a Farm Management Program.

### Create feed plans when using a Farm Management Program

*Before creating the feed plans*

1. Make sure all necessary requirements are met:
  - The cow feed station is mounted
  - The VPU is installed and configured
  - The readers are installed and configured
  - One of the following Behavior Components is in your license:
    - Feed station without backgate
    - Feed station with backgate
    - In parlour feeding herringbone
  - The Behavior Component 'Cow feeder' is installed and configured
  - The Behavior Component 'Parlour feeding' is installed and configured when feeding in the milk parlor is also necessary.
2. Make sure all cows are in Nedap Velos, and coupled to a Tag.

*Create the feed plans*

1. Set the feed types. Make sure the number of feed types in Nedap Velos is equal to the number of feed types in your Farm Management Program. 1 Feed type is already set up in Nedap Velos. To add feed types, follow the instructions in Add feed types (page 29).
2. Set the silos. Make sure the number of silos in Nedap Velos is equal to the number of silos in your Farm Management Program. 1 Silo is already set up in Nedap Velos. To add silos, follow the instructions in Add silos (page 29).



3. Set the feed plans. At least 1 feed plan must be set up in Nedap Velos. Use the default feed plan in Nedap Velos to do this. The only necessary data to setup are:
  - a. The spreading of the feed distribution, see [Define the spreading \(page 30\)](#).
  - b. The limits of the feed distribution, see [Define the limits \(page 31\)](#). Always define them manually in Nedap Velos, even when they are already set in your Farm Management Program.

If desired, more feed plans can be added manually, see [Add a new feed plan \(page 30\)](#). This can be necessary when for example:

- – You feed based on the age of the cows.
- You feed based on the health of the cows.
- The feed speed for the feed types are different.
- The limits for the feed types are different.



*When you make changes in the feed plans in your Farm Management Program, do not forget to change the same settings in Nedap Velos. Changes take effect after the next feed start.*

#### *After creating the feed plans*

After the feed plan is set up, follow the next steps:

1. Run the Farm Management Program.
2. Set the feed start ([page 38](#)).
3. Activate feed balance attentions ([page 39](#)).
4. If applicable, activate feeding the milk parlor, see [How do I activate feeding in the milk parlor? \(page 39\)](#).

#### *Add feed types*

In the default feed plan 1 feed type is already available. When you use more feed types, add them in Nedap Velos.

1. Go to **Settings > Feeding > Feed types**.
2. Click **Add feed type**.
3. Fill in the following data:
  - **Number**: Number of the feed type.
  - **Name**: Name of the feed type.
  - **Color**: Color used to represent the feed type in the graphical display of the feed curves.
4. Click **Ok**.



*Make sure the number of feed types in Nedap Velos is equal to the number of feed types in your Farm Management Program.*

#### *Add silos*

Default 1 silo is already available. When you use more silos, add them in Nedap Velos.

1. Go to **Settings > Feeding > Silos**.
2. Click **Add silo**.
3. Fill in the following data:
  - **Number**: Number of the feed type.
  - **Name**: Name of the feed type.
  - **Feed type**: Select the feed type of the silo.
4. Click **Submit**.

If desired, the silo stock can be controlled:

1. In the column **Stock**, click on 0 kg.



2. Fill in the stock:
  - a. **Attention stock.** An attention appears when a specified amount of the stock has been achieved. Fill in this amount (kg) in the field Attention stock.
  - b. **Stock.** Velos automatically calculates the total stock. This amount can always be changed manually. In that case, fill in the amount of the total stock (kg) in this field.
  - c. **New delivery.** After a new delivery, fill in the total amount (kg) of the delivery in this field. Velos automatically calculates the total stock.
3. Click **OK**.

Add a new feed plan

1. Go to **Settings > Feeding > Feed plans**.
2. Select **Add feed plan**.
3. Fill in a unique number and the name of the feed plan, for example "Calves up to 1 year".
4. Click **Add**.

Complete the feed plan as described in Create feed plans in Nedap Velos.

### Define the spreading

The feed amounts that are defined in the feed plans indicate 1 total feed amount for 24 hours. To make sure that the cows can be fed small portions at frequent periods, periods need to be defined in Nedap Velos. The number of periods determines the amount of feed that is distributed every release period.



When you use a Farm Management Program, the spreading must also be defined in Nedap Velos.

1. Go to **Settings > Feeding > Feed plans**.
2. Click on the feed plan for which you want to define the spreading.
3. Go to the tab *Spreading*.
4. Fill in the following data:
  - **Cycle time:** The cycle time determines the spreading of the daily feed total by selecting the total hours per day where upon the number of periods is based. A short cycle time causes that cows have to come more often to the feed station.
  - **Number of periods:** The cycle time is divided into a number of periods, each period gets a new feed balance.
  - **Release period:** This number determines the amount of feed each release period contains. It must be the same number of periods, or lower. So the total daily feed amount will be divided by the number filled in at the release period.
  - **Take over feed balance:** By activating this option the feed balance (today's rest) is taken to the next daily feed amount (after next feed start).

Common spreading examples are:

- When cows remaining in the buildings:
  - Cycle time: 24 hour
  - Number of periods: 6
  - Release periods: 5

Table 2: Example A with 1 cycle, 8,0 kg

Period	1	2	3	4	5	6
Time	10:00	14:00	18:00	22:00	02:00	06:00
Feed 1 (8 kg)	1,6 kg	Rest				

- When cows remaining in the buildings:
  - Cycle time: 12 hour
  - Number of periods: 3



- Release periods: 2

Table 3: Example B with 2 cycles, 8,0 kg

Cycle	1			2		
Period	1	2	3	1	2	3
Time	10:00	14:00	18:00	22:00	02:00	06:00
Feed 1 (8 kg)	2,0 kg	2,0 kg	Rest	2,0 kg	2,0 kg	Rest

- When cows also go outside:
  - Cycle time: 24 hour
  - Number of periods: 4
  - Release periods: 3

Table 4: Example A with 1 cycle, 8,0 kg

Period	1	2	3	4
Time	10:00	16:00	22:00	04:00
Feed 1 (8 kg)	2,7 kg	2,7 kg	2,6 kg	Rest
Feed 2 (3 kg)	1,0 kg	1,0 kg	1,0 kg	Rest



#### Caution

The default value of Max. period amount is 2,5 kg. In example C this should be changed to at least 3,7 kg. Otherwise not all feed will be dispensed. See Define the limits (page 31).



#### Caution

When too much feed is transferred from one cycle to the other, the risk of overfeeding arises. This can be prevented by setting up a maximum take over, see Define the limits (page 31).

### Define the limits

With the option **Limits** it is possible to control the way how cows are being fed. The cow can be prevented from consuming too much or not enough feed in one period. Limits are set per feed type.

1. Go to **Settings > Feeding > Feed plans**.
2. Click on the feed plan for which you want to define the limits.
3. In the feed plan, select the tab *Limits*.
4. Fill in the following data:
  - **Feed speed:** Determines the interval between two portions dosed in the concentrate feeder. The default feed speed is 300 g/min.
  - **Max. take over:** Prevents a too high amount of feed taken to the next daily feed amount (after next feed start), when this option is turned on. The default max. take over is 0.
  - **Max. increase/decrease per day:** Prevents sudden high changes in the calculated daily feed amount. The default max. increase/decrease is 1 kg.
  - **Min. period amount:** Avoids several visits caused by spreading feed for cows with a low daily feed amount. The default min. period amount is 1 kg.
  - **Max. period amount:** Protects a cow from consuming too much feed in one period. The default max. period amount is 2,5 kg.



#### Caution

Max. increase/decrease per day and Max. period amount are very important to avoid a too quick increase and danger of overfeeding the cow. The Max. increase/decrease per day setting overrules big increases or decreases of a feed amount in a feed plan!



## Create feed plans without using a Farm Management Program

### *Before creating the feed plans*

1. Make sure all necessary requirements are met:
  - The cow feed station is mounted
  - The VPU is installed and configured
  - The readers are installed and configured
  - One of the following Behavior Components is in your license:
    - Feed station without backgate
    - Feed station with backgate
    - In parlour feeding herringbone
  - The Behavior Component 'Cow feeder' is installed and configured
  - The Behavior Component 'Parlour feeding' is installed and configured when feeding in the milk parlor is also necessary.
2. Make sure all cows are in Nedap Velos, and coupled to a Tag.

### *Create the feed plans*

1. Set the feed types. 1 Feed type is already set up in Nedap Velos. To add feed types, follow the instructions in Add feed types (page 29).
2. Set the silos. 1 Silo is already set up in Nedap Velos. To add silos, follow the instructions in Add silos (page 29).
3. Set the feed plans:
  - Select feed types (page 33)
  - Define feed amounts (page 33)
  - Define corrections (page 36)
  - Define the spreading (page 37)
  - Define the limits (page 38)
  - Add more feed plans, see Add a new feed plan (page 30)

### *After creating the feed plans*

After the feed plan is set up, follow the next steps:

1. Set the feed start (page 38).
2. Activate feed balance attentions (page 39).
3. If applicable, activate feeding the milk parlor, see How do I activate feeding in the milk parlor? (page 39).

### *Add feed types*

In the default feed plan 1 feed type is already available. When you use more feed types, add them in Nedap Velos.

1. Go to **Settings > Feeding > Feed types**.
2. Click **Add feed type**.
3. Fill in the following data:
  - **Number**: Number of the feed type.
  - **Name**: Name of the feed type.
  - **Color**: Color used to represent the feed type in the graphical display of the feed curves.
4. Click **Ok**.

### *Add silos*

Default 1 silo is already available. When you use more silos, add them in Nedap Velos.

1. Go to **Settings > Feeding > Silos**.
2. Click **Add silo**.
3. Fill in the following data:



- **Number:** Number of the feed type.
  - **Name:** Name of the feed type.
  - **Feed type:** Select the feed type of the silo.
4. Click **Submit**.

If desired, the silo stock can be controlled:

1. In the column **Stock**, click on 0 kg.
2. Fill in the stock:
  - a. **Attention stock.** An attention appears when a specified amount of the stock has been achieved. Fill in this amount (kg) in the field Attention stock.
  - b. **Stock.** Velos automatically calculates the total stock. This amount can always be changed manually. In that case, fill in the amount of the total stock (kg) in this field.
  - c. **New delivery.** After a new delivery, fill in the total amount (kg) of the delivery in this field. Velos automatically calculates the total stock.
3. Click **OK**.

#### Add feed plans

One default feed plan is already available in Nedap Velos. Follow the next steps to add more feed plans.

1. Go to **Settings > Feeding > Feed plans**.
2. Select **Add feed plan**.
3. Fill in a unique number and the name of the feed plan, for example "Youngstock".
4. Click **Add**.
5. Complete the feed plan with the following settings:
  - Feed types (Add feed types (page 32))
  - Feed amounts (Define feed amounts (page 33))
  - Corrections (Define corrections (page 36))
  - Spreading (Define the spreading (page 37))
  - Limits (Define the limits (page 38))
6. Repeat steps 2 - 5 to create multiple feed plans.

#### Select feed types

1. In the feed plan, select the tab **Feed types**.
2. Select one or more feed types by moving the switch from **Off** to **On**.
3. Click **Ok**.

#### Define feed amounts

To calculate the correct feed amounts for the animals, Nedap Velos must know the total feed amount for 24 hours. This must be defined per feed type in the tab **Feed amounts** of the feed plan. There are 3 options to define the feed amount:

- **Fixed amount.** Feeding a group of cows according to a static plan. See Fixed amount (page 33)
- Based on **birth date.** Feeding a group of cows based on their birth dates. This can be used for calves and gives the opportunity to slowly steam up the feed amount. See Birth date (page 34).
- Based on the **lactation.** Feeding a group of cows based on the lactation makes it possible to manage the feed amounts for the complete lactation cycle of a cow. When milking is in the license, it is also possible to adjust the feed amount based on the milk yield of the cows. See Lactation (page 34).

Only one feed amount (fixed amount, birth date or lactation) can be defined per feed plan. When more feed amounts are necessary, add a new feed plan. See Add a new feed plan (page 30).

#### Fixed amount

The fixed amount consists of a static plan, and it is the only feed amount that doesn't require any cow calendar data. It can be used when for example a cow is ill, or when you always want to feed the cows the same way. The amount will be built up slowly, based on the limits of the feed plan, see Define the limits (page 31).



1. In the feed plan, select the tab **Feed amounts**.
2. In the field **Type**, select **Fixed amounts**.
3. Fill in the total feed amount per feed type in kg. that must be fed.
4. Click **Ok**.

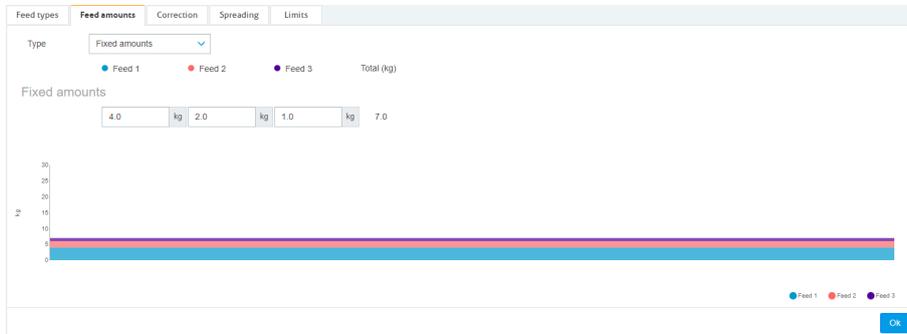


Figure 3: Example of a feed plan based on fixed amounts

### Birth date

The feed amount based on the birth date uses the birth date of the cows to calculate the feed amount. It is useful for calves and heifers to gradually increase the feed amount. The start of the feed curve, day 0, is the birth date of the cow. The feed curve uses the actual date of birth from the calendar of the cow, so make sure this is filled in.

1. In the feed plan, select the tab **Feed amounts**.
2. In the field **Type**, select **Birth date**.
3. Fill in the days of the curve and the corresponding feed amount in kg. Each day on the curve is a checkpoint to increase or decrease the feed amount.
4. Click **Add** to add more rows. You can use as many rows as you want.



*Always use a minimum of 2 rows to make sure the feed amounts can be calculated correctly.*

5. Click **Ok**.

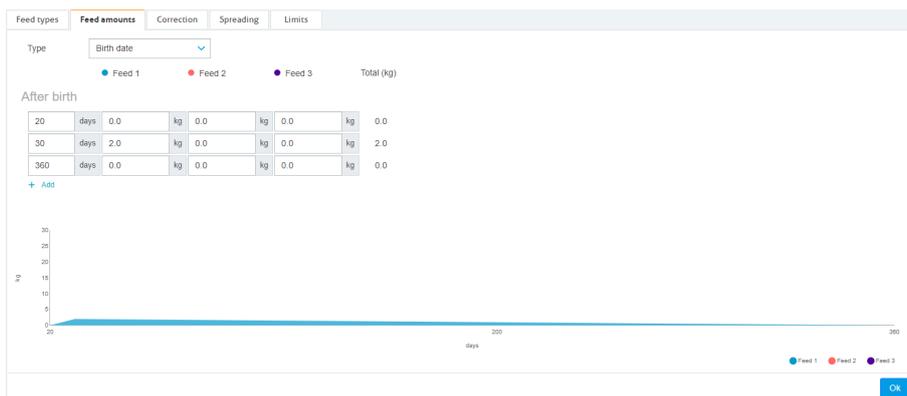


Figure 4: Example of a feed plan based on the birth date

### Lactation

The feed amount based on the lactation cycle uses multiple moments in the lactation cycle of the cows to calculate the feed amounts. Nedap Velos defines 3 periods:

- **Before calving.** Before calving can be defined in order to feed the cow another feed type than during the rest of the cycle. Day 0 is the expected calving date, based on the insemination date.
- **After calving.** After calving starts as soon as the actual calving date is filled in to the calendar. Day 0 is the actual calving date.



- **Before dryoff.** Before dry off is calculated with the expected dry off date based on the insemination date, and the pregnancy check.

When there is also milking in the Nedap Velos license, an additional milk feed table can be used to adjust the feed amounts based on the milk yield.

### Before calving

1. In the field **Type**, select **Lactation**.
2. Click **Add** to add the row **Before calving**.
3. Fill in the feed amount per feed type that you want to feed **from** the expected calving date (= day 0).
4. If you want to define a feed amount for a certain number of days **before** the expected calving date (= day -1 until day -x), click **Add** to add a row.
5. Fill in the number of days of this period, and the feed amount per feed type. The graph starts to show the course of the feed curve.
6. Add as many rows as you like to define the Before calving period.

### After calving

1. Click **Add** to add the row '0'. Day 0 is the actual calving date.
2. Fill in the same feed amount as the **Till calving** day.
3. Click **Add** to add more rows to the After calving period. You can add as many rows as you like. After filling in each row the graph changes and calculates the feed amount.

### Before dryoff

1. Click **Add** to add the row **as previous days**.
2. Fill in until how many days before dryoff you want to feed the same feed amount. This means the cow gets the feed amount of the last day of the After calving period until this day.
3. Click **Add** to add rows to define the feed amounts for the period before dry off. Add as many rows as you like.



*The last row should always be a row where the feed amount will be reduced. Fill in the day that the cows should not be fed anymore, and the feed amount 0.0 kg. The graph gradually decreases the feed amount.*

4. When there is no milking in the license, click **Ok** to save the feed plan.

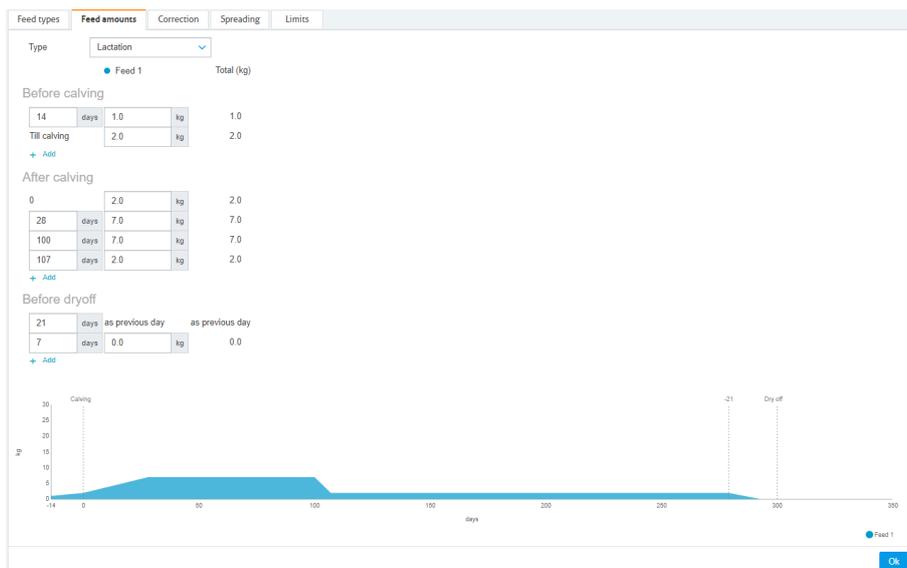


Figure 5: Example of a feed plan based on the lactation cycle

### Milk feed table



When there is milking in the Nedap Velos license and you use electronic milk meters, the feed amount can be adjusted based on the milk yield. To make this possible, a milk feed table must be defined. The milk feed table automatically adjusts the feed amount of a cow according to the milk yield. Velos uses the past 10 day average milk yield of a cow to calculate the correction.

1. In the field **Start**, select a start moment for the milk feed table. This is one of the days of the After calving period.
2. Click **Add** to add a row to the table.
3. In the first column **Milk**, fill in the milk yield (kg) for which the feed amount must be corrected.
4. In the second column, fill in the feed amount (kg) per feed type that should be fed when the corresponding milk yield is achieved.



Normally, the cows will be fed according to the feed amounts of the lactation curve. Only when the feed amount of the milk feed table is **higher** than the lactation curve, the feed amount will be corrected. The feed amount will never be higher than the defined limits of the feed plan, see *Define the limits* (page 31).

5. Add as many rows as you like to define the milk feed table.
6. Click **Ok** to save the feed plan.

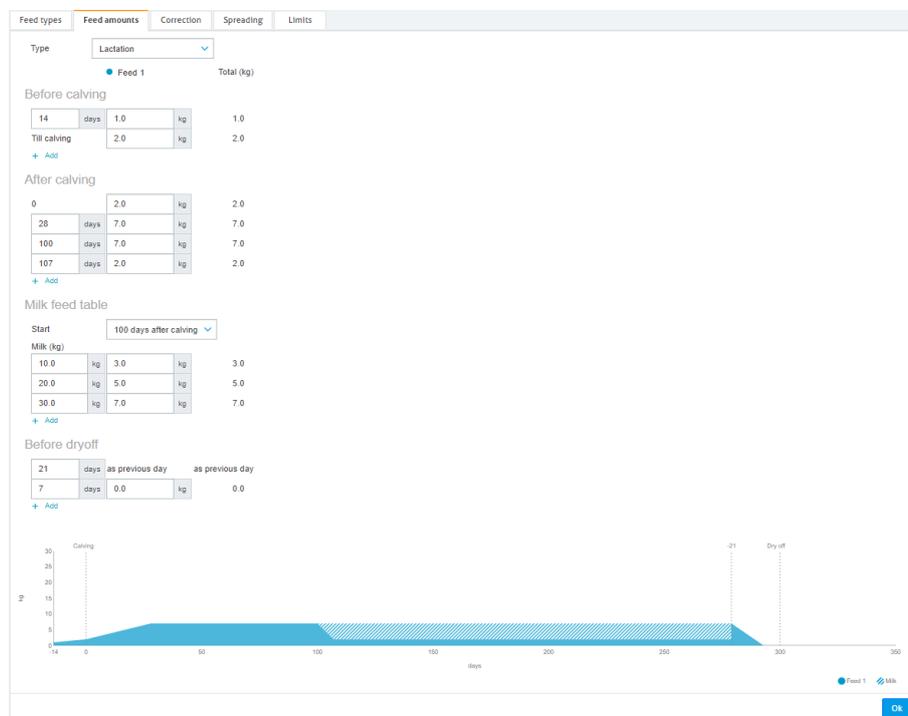


Figure 6: Example of a feed plan based on the lactation cycle with milk feed table

### Define corrections

If necessary, define corrections for a specific feed plan. This can be useful when, for example, the weather suddenly changes and as a result the cows eat more or less. When correcting the feed plan it will affect all cows that are fed according to that feed plan.

1. Go to **Settings > Feeding > Feed plans**.
2. Click on the feed plan for which you want to define the spreading.
3. Go to the tab *Correction*.
4. Fill in the correction:
5. Select the type of correction:
  - a. **Absolute:** Fill in the amount of feed (kg) that must be subtracted from or added to the daily feed amount (per feed type). If less feed is needed, fill in the minus sign (-) followed by the amount. E.g. current daily feed amount is 4 kg and should be corrected to 3 kg: fill in -1 kg.



- b. **Percentage:** Fill in the percentage of feed (%) that must be subtracted from or added to the daily feed amount (per feed type). If less feed is needed, fill in the minus sign (-) followed by the percentage. E.g. current daily feed amount is 4 kg and should be corrected to 3 kg: fill in -25%.

6. Click **OK**.

 *The corrections will be effective after the next feed start.*

### Define the spreading

The feed amounts that are defined in the feed plans indicate 1 total feed amount for 24 hours. To make sure that the cows can be fed small portions at frequent periods, periods need to be defined in Nedap Velos. The number of periods determines the amount of feed that is distributed every release period.

 *When you use a Farm Management Program, the spreading must also be defined in Nedap Velos.*

1. Go to **Settings > Feeding > Feed plans**.
2. Click on the feed plan for which you want to define the spreading.
3. Go to the tab *Spreading*.
4. Fill in the following data:
  - **Cycle time:** The cycle time determines the spreading of the daily feed total by selecting the total hours per day where upon the number of periods is based. A short cycle time causes that cows have to come more often to the feed station.
  - **Number of periods:** The cycle time is divided into a number of periods, each period gets a new feed balance.
  - **Release period:** This number determines the amount of feed each release period contains. It must be the same number of periods, or lower. So the total daily feed amount will be divided by the number filled in at the release period.
  - **Take over feed balance:** By activating this option the feed balance (today's rest) is taken to the next daily feed amount (after next feed start).

Common spreading examples are:

- When cows remaining in the buildings:
  - Cycle time: 24 hour
  - Number of periods: 6
  - Release periods: 5

Table 5: Example A with 1 cycle, 8,0 kg

Period	1	2	3	4	5	6
Time	10:00	14:00	18:00	22:00	02:00	06:00
Feed 1 (8 kg)	1,6 kg	Rest				

- When cows remaining in the buildings:
  - Cycle time: 12 hour
  - Number of periods: 3
  - Release periods: 2

Table 6: Example B with 2 cycles, 8,0 kg

Cycle	1			2		
Period	1	2	3	1	2	3
Time	10:00	14:00	18:00	22:00	02:00	06:00
Feed 1 (8 kg)	2,0 kg	2,0 kg	Rest	2,0 kg	2,0 kg	Rest

- When cows also go outside:



- Cycle time: 24 hour
- Number of periods: 4
- Release periods: 3

Table 7: Example A with 1 cycle, 8,0 kg

Period	1	2	3	4
Time	10:00	16:00	22:00	04:00
Feed 1 (8 kg)	2,7 kg	2,7 kg	2,6 kg	Rest
Feed 2 (3 kg)	1,0 kg	1,0 kg	1,0 kg	Rest



#### Caution

The default value of Max. period amount is 2,5 kg. In example C this should be changed to at least 3,7 kg. Otherwise not all feed will be dispensed. See Define the limits (page 31).



#### Caution

When too much feed is transferred from one cycle to the other, the risk of overfeeding arises. This can be prevented by setting up a maximum take over, see Define the limits (page 31).

### Define the limits

With the option **Limits** it is possible to control the way how cows are being fed. The cow can be prevented from consuming too much or not enough feed in one period. Limits are set per feed type.

1. Go to **Settings > Feeding > Feed plans**.
2. Click on the feed plan for which you want to define the limits.
3. In the feed plan, select the tab *Limits*.
4. Fill in the following data:
  - **Feed speed**: Determines the interval between two portions dosed in the concentrate feeder. The default feed speed is 300 g/min.
  - **Max. take over**: Prevents a too high amount of feed taken to the next daily feed amount (after next feed start), when this option is turned on. The default max. take over is 0.
  - **Max. increase/decrease per day**: Prevents sudden high changes in the calculated daily feed amount. The default max. increase/decrease is 1 kg.
  - **Min. period amount**: Avoids several visits caused by spreading feed for cows with a low daily feed amount. The default min. period amount is 1 kg.
  - **Max. period amount**: Protects a cow from consuming too much feed in one period. The default max. period amount is 2,5 kg.



#### Caution

Max. increase/decrease per day and Max. period amount are very important to avoid a too quick increase and danger of overfeeding the cow. The Max. increase/decrease per day setting overrules big increases or decreases of a feed amount in a feed plan!

### Set the feed start

Once a day Nedap Velos calculates the amount of feed that must be distributed. This is the feed start. You can set the feed start in Nedap Velos at any time of the day. When you use a Farm Management Program, take into account the feed start in your Farm Management Program.



Changes in the feed settings take effect after the next feed start in Nedap Velos.

1. Go to **Settings > Feeding > Feed settings**.



2. Click on the clock icon, or type the desired time in the field **Feed start** to set the time for the feed start.
3. Click **Submit**.

### Activate feed balance attentions

To check if all cows have eaten their feed amounts, it is possible to generate Feed balance lists in Velos. When this option is activated, automatic attentions appear when an animal has not eaten all of the feed.

1. Go to **Settings > Feeding > Attentions**.
2. Fill in both values (absolute and percentage) for getting an attention.
3. Click **Submit**.

An attention is only generated when both values are reached. For example, with the values set a 0.5 kg and 10%:

- Total feed amount of 5 kg: feed balance is 500 g or higher
- Total feed amount of 8 kg: feed balance is 800 g or higher

#### Example

The attention limits are set at 0.5 kg (absolute) and 10% (relative):

- An animal gets a total feed amount of 8 kg/day > attention limit is 500 g absolute and 800 g relative (10% of 8 kg) > Feed balance attention is given if 800 g or more of the feed is not eaten.

To view the feed balance attention:

1. Go to **Dashboard > Feeding > Feed balance**.
2. Click on the blue graphic sign to see the feed history per animal.

#### Reports

To view the reports of the feed balance attentions:

1. Go to **Reports > Feeding**. Several reports are available up to the last seven days.
2. Select one of the report options.

## Feeding in the milk parlor

### How do I activate feeding in the milk parlor?

When parts of the daily feed amount must be fed during milking, the option **Feeding in milk parlor** can be used.

Make sure the following equipment is in place when feeding in the milk parlor:

- Identification in the milk parlor
- Reader motor control (V-pack)
- Behavior Component "In parlor feeding"

#### Activate feeding in the milk parlor

Activate feeding in the milk parlor in Nedap Velos:

1. Go to **Settings > Feeding > Feed settings**.
2. Check the box **Feeding in milk parlor**.
3. Click **Submit**.

#### Define the amount of feed for the milk parlor

A specific feed amount can be defined that must be fed during milking. The defined feed amount is a total amount, and will be divided into all milk sessions per day. Define the feed amount in Nedap Velos.

1. Go to **Settings > Feeding > Feed plans**.



2. Click on the feed plan for which you want to define the feed amount. The tab **Feed amounts** automatically opens.
3. Click on the drop down menu behind the field **Enabled** and select % or kg to define the feed amount.
4. In the field **Of which in parlour**, fill in how much of the total daily feed amount ( % or kg) must be fed in the milk parlor. When using multiple feed types, define the feed amount per feed type.
5. Click **Ok**.

### How should I calibrate the feed stations?

In order to get the correct feed amount for each feed station and feed type, the feed portion weight must be calibrated during the startup of the system. Furthermore, calibration is recommended after each new feed delivery and a change of the feed composition.

- During the startup of the system, all feed stations need to be calibrated individually. This needs to be done only once to make sure all auger jacks of all feed stations are calibrated.
- After each new feed delivery and a change of the feed composition, the feed must be calibrated. Because all augers are already calibrated during the startup of the system, this calibration can be done quickly. After filling in the dosed weight of one feed station, Velos automatically calculates the correct portion weight for all other feed stations in the same location.

### Startup calibration

1. Click **Calibration responders**.
2. Click **Add**.
3. Fill in the tag number and the feed type to calibrate, and click **Submit**.

 *Make sure to add a calibration responder for each feed type. As long as this responder is used as calibration responder, it cant be used on a cow.*

4. Take a pen and paper and go to a feed station with an empty feed trough.
5. Put the tag in the antenna field until the feed station starts dispensing feed.

 *The dispensing unit of the specific feed type doses 5 portions. Wait until the dispensing of the feed is finished.*

6. Collect the dispensed feed, weigh the total amount and write the total amount down.
7. Repeat steps 5 and 6 for all feed stations.
8. Go back to the Calibration page in Velos (**Settings > Feeding > Calibration**) and select the location where the feed stations are.
9. Click on the **Actions** button and select **Calibrate**.
10. In the field **Feed type**, select the feed type that you just calibrated.
11. Fill in the total dispensed weight per feed station and click **Ok**.
12. Repeat the procedure for all feed types and all feed stations.

### Calibration after a new feed batch

1. Take a pen and paper and go to a feed station with an empty feed trough. This can be any feed station in the location.
2. Put the tag in the antenna field until the feed station starts dispensing feed.

 *The feed station doses multiple portions. Wait until the dispensing of the feed is finished.*

3. Collect the dispensed feed, weigh the total amount and write the total amount down.
4. Go back to the Calibration page in Velos (**Settings > Feeding > Calibration**) and select the location where the feed stations are.
5. Click on the **Actions** button and select **Relative calibration**.
6. In the field **Feed type**, select the feed type that you just calibrated.
7. Select the feed station that you just calibrated in the field **Feeder**.



- In the field **Dosed weight**, fill in the total dispensed weight and click **Ok**.  
Velos now calculates the calibration weight for all other feed stations in the same location.
- Repeat the procedure for all feed types and all locations.

## Daily use

### What can I see in the Feeding widget?

The **Feeding** widget on the Dashboard shows all feeding attentions. Feed balance attentions are given for cows that did not eat (all of) their feed and cows that are new in the feed station and have no feed plan yet. Feeding attentions are also given when the cows can not be fed due to problems with the feed delivery.

### What should I do when I receive a Feed balance attention?

A Feed balance attention is generated when a cow has not eaten its feed amounts. In the **Feeding** widget on the Dashboard appears a blue link with the number of cows with a Feed balance attention. Click on the link to see which cows haven't eaten their amounts, and to see more information.

In the feed balance list, all cows with a Feed balance attention are listed. The feed balance from today and yesterday are shown. Click on the  icon to see the data in numbers. To see the 2-week history of the cow, click on the  icon. When the cow hasn't eaten well for a longer period, check the cow in the barn.

### When do I receive a Feed balance attention?

A Feed balance attention appears when an animal hasn't eaten the normal feed amount. An attention is generated when both values of the attention settings are reached, see **Settings > Feeding > Attentions**.

### Define corrections

If necessary, define corrections for a specific feed plan. This can be useful when, for example, the weather suddenly changes and as a result the cows eat more or less. When correcting the feed plan it will affect all cows that are fed according to that feed plan.

- Go to **Settings > Feeding > Feed plans**.
- Click on the feed plan for which you want to define the spreading.
- Go to the tab *Correction*.
- Fill in the correction:
- Select the type of correction:
  - Absolute:** Fill in the amount of feed (kg) that must be subtracted from or added to the daily feed amount (per feed type). If less feed is needed, fill in the minus sign (-) followed by the amount. E.g. current daily feed amount is 4 kg and should be corrected to 3 kg: fill in -1 kg.
  - Percentage:** Fill in the percentage of feed (%) that must be subtracted from or added to the daily feed amount (per feed type). If less feed is needed, fill in the minus sign (-) followed by the percentage. E.g. current daily feed amount is 4 kg and should be corrected to 3 kg: fill in -25%.
- Click **OK**.

 *The corrections will be effective after the next feed start.*

### How do I block feeding for a certain period?

Optionally one or more blocking periods can be created for a feed station or a location. This can be useful when for example a group of cows are milked, and the other animals should not eat during milking.

*Blocking feed at feed station:*

- Go to **Settings > Feeding > Blocking**.
- Select **Add block periods for station**.
- Select the Cow Feeder from the dropdown list.
- Fill in the start and end time of the first block period. E.g. from 06:00 till 08:00 AM.



5. Fill in more block periods, if required.
6. Click **Submit**.

*Blocking feed for location:*

1. Go to **Settings > Feeding > Blocking**.
2. Select **Add block periods for location**.
3. Select the location from the dropdown list.
4. Fill in the start and end time of the first block period. E.g. from 06:00 till 08:00 AM.
5. Fill in more block periods, if required.
6. Click **Submit**.

### How do I turn off feeding?

Sometimes it can be necessary to turn the feeding off for an cow, for example when the cow is ill. In that case, turn off feeding on the individual cow page in Nedap Velos:

1. Fill in the cow number in the search dialog and press Enter or click on the magnifying glass.
2. Go to the tab *Feeding*.
3. Click **edit** in the right upper corner of the tab.
4. Click on the slide behind **Feeding** to turn the feeding off for this cow.
5. Click **Submit**.



*This is the only way to stop feeding immediately.*

To view the cows whose feeding is disabled, go to **Dashboard > Feeding > Feeding disabled**.

To resume feeding for the cow:

1. Click on the specific cow on the Feeding disabled list, or fill in the cow number in the search dialog and press Enter or click on the magnifying glass.
2. Go to the tab *Feeding*.
3. Click **edit** in the right upper corner of the tab.
4. Click in the field **Feeding** to turn the feeding on for this cow.
5. Click **Submit**.

### How do I feed unknown cows?

The list of unknown animals shows the Tag numbers which are actively sending data and for which the cow is not known in Velos. These cows are added to the default group 99 and fed by the default feed plan.

To add the cows to the system and assign another feed plan to the cows, enter the cow data in your management software.

### Where can I find feeding overviews?

Feeding information can be found on several overviews:

- **Farm > Farm overview - Feeding.**  
An overview of feed totals (daily feed amounts) and feed balances, from yesterday and today. Divided by group / pen.
- **Farm > Farm overview > Group / pen - Feeding.**  
An overview of feed totals (daily feed amounts) and feed balances, from yesterday and today. Divided by feed plans and option (button) to View animals in this group / pen. This list shows all cows in this group / pen, with their current and next feed amount.
- **Farm > Farm overview > Group / pen > Animal page - Feeding.**  
An overview of feed totals (daily feed amounts) and feed balances, from yesterday and today from one cow.



## How do I assign feed to cows without using a Farm Management Program?

### *Specific cow*

For a specific cow you can feed according to a feed plan or fixed amount. Follow the next steps to do this:

1. Go to the cow page by filling in the cow number in the search dialog in the right upper corner.
2. Press **Enter** to open the cow page.
3. Click on the **Feeding** tab.
4. Click **Edit** in the right upper corner of the tab.
5. Select a feed plan or set a fixed amount in the dropdown menu of the Feed amounts.
6. Fill in the absolute feed amount per feed type in kilograms that the animal should be fed.
7. Click on **Submit**.

The cow will be fed according to its feed setting after the next feed start.

### *Multiple cows or a group of cows*

For multiple cows or a group of cows, you can't assign a fixed amount. Instead, you can change the feed plan. Use the Quick entry option to do this:

1. Go to the Quick Entry page.
2. Select the desired option and enter the specific cow number or one of the other options.
3. Click **Next**.
4. At **Selection** you get an overview of the selected cows or groups and the number of cows.
5. Select one or more Actions you would like to do.
6. Double check your selection when you click **View animals**.
7. Click **Apply**.

The selected cows will be fed according to its feed setting after the next feed start.

### How to do a feed start

Any changes you do in a feed plan or on fixed feed amounts on cow level, will have effect after a feed start. There are 3 ways to do a feed start:

- Automatic at the set feed start time. Go to **Settings > Feeding - Feed settings > Feed start** to see when the automatic feed start is done.
- Manual feed start for all cows. Go to **Settings > Feeding - Feed settings**.
- Manual feed start for one or more specific cows or production groups. Go to **Quick entry > Selection > Next > Action 1 - Feeding - Manual feed start**.



#### **Caution**

*A manual feed start is a deliberate action by a user and it does not take the limits of a feed plan into account. Keep this in mind to prevent cows from suddenly getting too much or too little feed.*

## System attentions

### What are system attentions?

System attentions are system related messages that need immediate attention. The system can be running, but some critical components do not function or need an update.



## Which system attentions are shown in Velos?

System attention	Cause	Solution
ServerCommunication No data exchange[0]: Unstable internet connection	Internet synchronization from data to/from the server failed. This is needed when there is a cloud connection with a farm management program. This can be caused by a problem with the Internet connection or synchronization.	<ul style="list-style-type: none"><li>• Check your Internet connection. Do you have access to the Internet and can the system be accessed through the vpu-online.com domain? If the VP8002 does not have a working Internet connection:<ol style="list-style-type: none"><li>a. Check all network cables and connectors.</li><li>b. Power off the VP8002 and power on.</li><li>c. Power off the router and power on.</li></ol></li><li>• Check if there is a synchronization issue in the farm management program that needs attention.</li><li>• Check the network settings of the VP8002 in Velos: <b>Settings &gt; System &gt; Network</b>.</li><li>• Check the network settings of your router.</li><li>• Check if there is a synchronization issue in Nedap Velos that needs to be solved:<ul style="list-style-type: none"><li>– Check Business Insight (<a href="https://nedap-bi.com">https://nedap-bi.com</a>) for connection errors.</li></ul></li></ul> <p>When all of the above is correct and the system attention still appears, contact your dealer.</p>

## Where can I find system attentions?

System attentions will appear at the top of the **Dashboard** screen and depending on the status, will need action.

## When does a system attention disappear?

When you solve the problem that is associated with the attention, the attention disappears.

## System notifications

### What are system notifications?

System notifications are system related messages that need attention. The system is running, but some -not critical components- do not function or need an update. For example when there is new V-pack firmware, a not registered license or it is time for making a back-up.

### Which system notifications are shown in Velos?

- Update license: the license needs to be updated.
- VPack firmware: there are updates available for VPacks.
- Backup failure: the USB backup failed.
- Online Backup failure: the online backup failed.
- Temporary license: shows the remaining days of your temporary license.
- You need to make a backup: no backups has been made for a couple days.
- The maximum numbers of animals is reached (see license): you reached the maximum allowed animals with your current license.

### When does a system notification disappear?

When you solve the problem that is associated with the notification, the notification disappears.

## Quick entry

### Where can I change animal data? Or how can I change data of multiple animals?

There are different places in Velos where you can change animal data.



### Change data for one animal

1. Enter the animal number or Tag number in the search bar en click on the magnifying glass icon .
2. Click on the edit icon  to change the basic data or calendar data of the cow.
3. Change the data and click on **Save**.

### Change data for multiple animals

1. In the navigation menu, click on **Quick entry**.
2. Select for which animals the animal data must be changed. This can be based on:
  - Number. Enter the animal number(s) you want to include in your selection.
  - Production group. Select the production group for which you want to change the data.
  - Group / pen. Select the group /pen for which you want to change the data.
  - Attention type. Select the attention for which you want to change the data.
3. Check the **Action 1** box and select which animal data must be changed.
4. If necessary, select more actions to change other animal data at the same time.
5. Click on **Next** and follow the instructions on the screen.

### How can I change data of individual animals when multiple animals are selected?

1. Click on the **Quick entry** button.
2. Select the **number, production, group / pen** or **attention type** you want to change.
3. Select the **action** that you want to change and click on the **next** button.
4. On the next screen select the button **View animals**.
5. Now you can change the settings of each individual animal.

## Roles and permissions

When starting up the system there are 2 roles in the software:

- Service. The service role has all viewing and editing permissions, including viewing and editing the service checklist, and editing Vpack settings.
- Manager. The manager role has all viewing and editing permissions **except for** viewing and editing the service checklist and editing Vpack settings.

### I want to use other roles. How can I change this?

#### Add a role

Besides the Manager and Service role, all kinds of other roles can be made:

1. Click on **Add role**.
2. In the field **Name** fill in the name of the new role.
3. Select the permissions for the new role.
4. Click on **Submit**.

#### Delete a role

1. Select the role that you want to delete and click on **Actions**.
2. Click on **Remove**.
3. Confirm with **Ok**.

### What does 'User management' mean?

User management means the possibility to edit the permissions of all roles, and view and edit all contacts and users of the software.



## Farm Management Program

### How do I set up a connection with my Farm Management Program?

1. Link the tag numbers to the animals in the management software.
2. When using a Taurus connection: install the latest version of the Nedap Taurus pc software. You will find this software on the additional software page.
3. Contact the supplier of the management software to configure the management connection.
4. Run the management connection.

### How do I update my Farm Management Program connection?

- When using a Taurus connection: Install the latest version of the Nedap Taurus pc software. You find this software on the additional software page. Run the management connection.
- When not using a Taurus connection (custom connection): Contact the supplier of the management software to update the management connection. Run the management connection.

Check the table below to see if you use a Taurus connection or a custom connection.

Management software	Company	Taurus/Custom connection	More information
Agrovision	Agrovision	Taurus	<a href="http://www.agrovision.com">http://www.agrovision.com</a>
DairyComp305	VAS	Taurus	<a href="http://web.vas.com">http://web.vas.com</a>
DairyPlan C21	GEA	Custom connection	<a href="http://www.gea.com">http://www.gea.com</a>
DHI-PLUS	Amelcor	Taurus	<a href="http://amelcor.com">http://amelcor.com</a>
EasyDairy	EasyDairy	Taurus	<a href="http://www.easydairy.com.au">http://www.easydairy.com.au</a>
Herde	DSP Agrosoft	Taurus	<a href="http://www.herde-net.de">http://www.herde-net.de</a>
Herdmetrix	BouMatic	Custom	<a href="http://www.boumatic.com">http://www.boumatic.com</a>
Jantec	Jantech	Taurus	<a href="http://www.jantecsystems.com.au">http://www.jantecsystems.com.au</a>
PCDart	DRMS Raleigh	Taurus	<a href="http://www.drms.org">http://www.drms.org</a>
Profarm	SAC	Custom / Taurus	<a href="http://sacmilking.com">http://sacmilking.com</a>
Riska	Bosmark	Taurus	<a href="http://www.riska.hu">http://www.riska.hu</a>
Ruma	VSM	Taurus	<a href="http://www.ruma-vsm.nl">http://www.ruma-vsm.nl</a>
Superkuh	Agrocom	Taurus	<a href="http://www.claas.com">http://www.claas.com</a>
T4C	Lely	Custom connection	<a href="http://www.lelyt4c.com">www.lelyt4c.com</a>
TIM	SAC	Custom / Taurus	<a href="http://en.sacmilking.com">http://en.sacmilking.com</a>
Uniform	Uniform Agri	Taurus for feed and milk Custom for heat and health	<a href="https://www.uniform-agri.com">https://www.uniform-agri.com</a>
Veemanager	CRV	Server connection	<a href="https://veemanager.crv4all.nl">https://veemanager.crv4all.nl</a>



## Icons

### What can I do with the icons shown?

1.  Filter icon  
The **filter** icon can be used to show or hide certain types of information on the screen.
2.  Print icon  
The **print** icon can be used to print the current view.
3.  Columns icon  
The **columns** icon can be used to show or hide certain types of columns on the screen.
4.  I icon  
The **I** icon can be used to view the legend.
5.  Arrow icon  
The **V** icon can be clicked to expand the row. More detailed information can be seen or actions can be performed with the expanded row.
6.  Refresh icon  
The **refresh** icon can be used to refresh the data on the current page.
7.  Magnifying glass  
The **magnifying glass** icon can be used to search for animals.
8.  Settings icon  
The **settings** icon can be used to see and change the settings of the current page.
9.  Edit icon  
The **edit** icon can be used to edit the data on the screen.

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