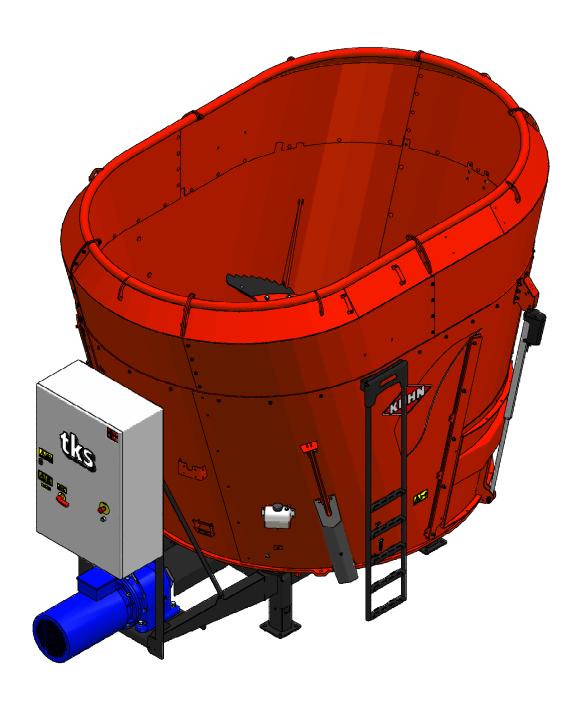




User's manual TKS Controller

Program version: V1.6X



1 General safety instructions 1.1 CE - Declaration of conformity

We,

T. Kverneland & Sønner AS,

Kvernelandsvegen 100 N-4355 Kverneland Norway declare that the product:

TKS Kuhn - CENTRAMIX

has been built in conformity with the Machine Directive 2006/42/EC and meets the relevant fundamental health and safety requirements.

Kverneland, 9 September 2016

Tønnes Helge Kverneland General Manager

Frimes Halze Wundand

Enter the serial number of the machine here:

T. Kverneland & Sønner AS, manufacturer of agricultural products, reserves the right to change the design and/ or specification of its products without prior warning. This does not imply any obligation to modify previously supplied machines.

1.2 Guarantee

This TKS product is guaranteed against manufacturing and material defects for one year.

If the owner wishes a defect to be covered by the product guarantee, he or his representative must inform the dealer of this when ordering parts and/ or repairs. Claims must be reported within the guarantee period.

The dealer must complete a claims form for each case covered by a guarantee and send it to TKS or TKS's distributor/ importer within the 10th of the month following the one in which the defect was reported.

The defective parts shall be marked with the claim number and be kept for up to 6 months so that TKS or TKS's distributor/ importer can inspect them.

Since TKS products are used outside the manufacturer's control, we can only guarantee the product quality, and not that it will perform its function, nor are we liable for any consequential damage.

The guarantee is not valid if:

- a) third party spare parts are used, or the product is repaired or altered without the approval of TKS
- b) the operating and servicing instructions have not been followed.
- c) the machine has been used for other purposes than those for which it is designed.

The guarantee does not cover damage due to normal wear and tear.

Offi cial safety regulations specify requirements that apply to the users/ owners and manufacturers of this machine, relating to the careful review of safety hazards that may arise when this type of machine is used correctly. Therefore, TKS and our importer/ distributor are not responsible for the functioning of components that are not shown in the spare parts catalogue for this product. TKS reserves the right to change the design of the product without this implying any obligations in relation to previously supplied machines.

NB! It must be possible to identify all enquiries relating to this product by the product's serial number; see page 7 on Machine identification.

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1.3 Introduction

Congratulations on buying your new TKS product. You have chosen a functional, high quality product. A network of helpful dealers will be able to advise you on its use, as well as provide servicing and spare parts.

All TKS products are designed, tested and built in close cooperation with farmers and machine workshops to ensure optimal effi ciency and reliability.

Please read this instruction manual carefully and familiarise yourself with the machine's manner of operation before starting to use it. There are many conditions and variables that can affect the machine's functionality and manner of operation. It is therefore vital that you consider all known conditions and adapt usage according to these. A good understanding of the machine's manner of operation and performance, together with a high degree of knowledge with regard to feeding and feed types/consistencies will ensure the best possible result. The machine is a highly advanced feed robot that operates without the need for supervision and must be used in accordance with the applicable instructions from the manufacturer and other regulations in force at any given time. By being thorough and making the necessary adaptations to local conditions, you will ensure the best possible results.

Yours faithfully

T. Kverneland & Sønner AS



T. Kverneland & Sønner AS, Kvernelandsvegen 100 N-4355 Kverneland Norway

www.tks-as.no

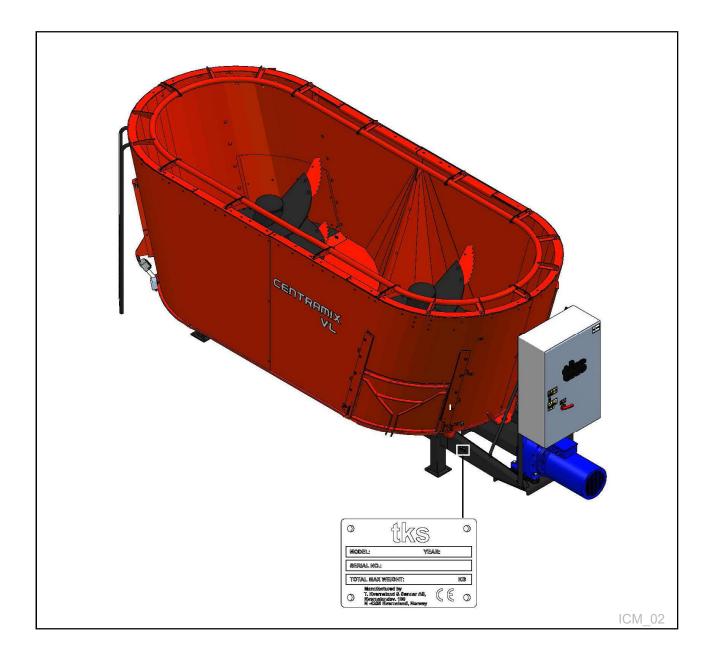
Mail: post@tks-as.no Phone: + 47 51 77 05 00 Fax: + 47 51 48 72 28

1.4 Machine identification

The machine's serial number and the address of the manufacturer are written on the machine. See the illustration on this page.

Please use the information on the name plate when making any enquiries about spare parts or servicing.

This product is CE marked. This mark, along with the associated written EU confirmation, means that the product fulfi Is current health and safety requirements, and complies with the following directives: Machine Directive 2006/42/EC



1.5 Safety



Please pay particular attention to this symbol. It designates a safety risk, and describes precautions that must be taken to avoid accidents.

Before operating, adjusting or repairing the machine, the user, technician or owner should familiarise himself with the safety instructions contained in this installation manual.

Safety at work is your responsibility!

Please read and understand these general safety instructions.

In order to be able to load the bale into the hopper, the machine must be open. This means that people may come into contact with moving parts if they are standing in the immediate vicinity of the machine while it is in use.

Warning! Once the auger is running, never lean over the top edge of CENTRAMIX or enter the hopper when the machine is operating. If the machine is placed in a sunken floor, the distance from the floor to the top of CENTRAMIX must not be less than 1.5 m. It is a conditional requirement of using the machine that no one must be in the immediate vicinity of the machine during use. In addition, in terms of machine type, CENTRAMIX is of conventional agricultural design and, from a safety perspective, the solutions choosen are considered to be on a par with or superior to existing products on the market.

Use of the machine

The machine must only be used for the purpose for which it is designed.

Operating

The machine operator must remain at the end of the machine where the control box and the associated operating panel are mounted.

Supervision

The owner/operator must ensure that the area is sufficiently signposted and that there is no unauthorised access.





1.5.1 General assessment

The machine's method of operation

The operator must familiarise himself with the machine's method of operation and function so that the machine can be used in a safe and appropriate manner.

Keep a safe distance

Humans and animals must be kept away from the machine when it is in operation.
Keep your distance from working, rotating and moving parts.

Think safety at work

Never climb on the machine while it is operating. When performing maintenance, the power supply must be disconnected

Warning – audio and illuminated indicator

The control system (software) has been updated for safe start-up. A built-in buzzer sounds for 30 seconds before start-up of the machine. This audio signal is accompanied by a light signal that flashes during the entire period of operation.

Protective guards

Check that all guards are in place and installed correctly. Do not start the machine until this has been done. Damaged guards must be repaired or replaced immediately.

Spare parts

For safety reasons we recommend that you only use original spare parts. The use of third-party spares invalidates the product guarantee.

Maintenance

Ensure that the machine is properly maintained and is kept in good condition. Never attempt to change the mechanical workings of the machine.

The area in which the machine is operating

Must be physically sealed off or locked to prevent danger to humans or animals.



Control panel

The power supply must be cut off before opening the panel.

1.5.2 Additional safety instructions

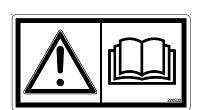


Fig. 1

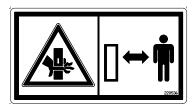


Fig. 2



Fig. 3

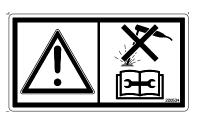


Fig. 4

The machine is marked with a warning signs. If these signs are damaged, they must be replaced. The order number is shown on the illustrations in this section.

Side 17 for their location on the machine.

Warning sign UH220532 (Fig. 1)

Be careful! Ensure that you read and understand the instruction manual before using the machine, and before making any adjustments or performing any maintenance.

Warning sign UH220536 (Fig. 2)

Risk of crushing hand. Keep away from the counter knives.

Warning sign 988346 (Fig. 3)

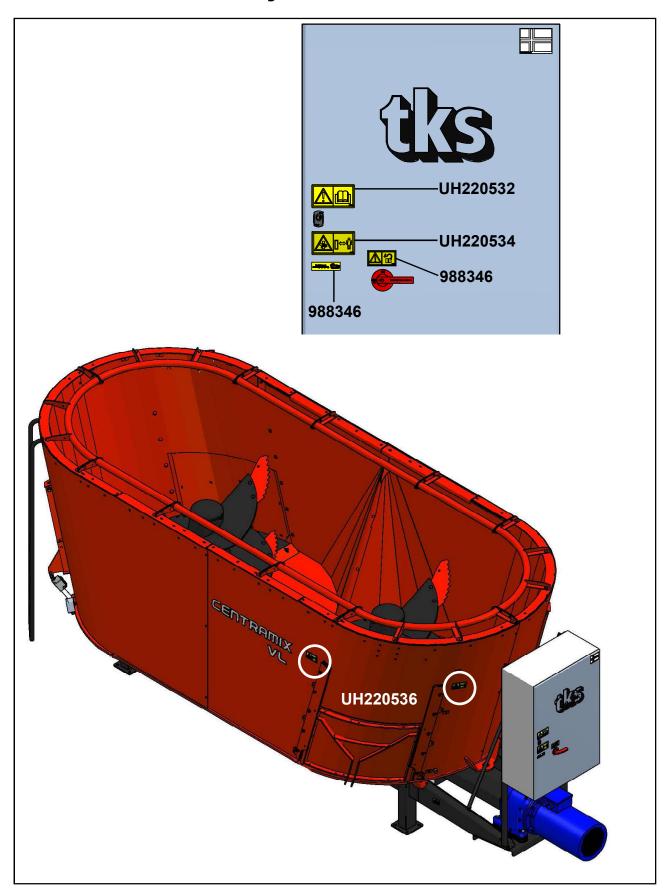
The main power switch must be secured by a padlock.

Work should only be performed by authorised personnel.

Warning sign UH220534 (Fig. 4)

Disconnect all electrical connections before carrying out welding work or maintenance.

1.5.3 Overview of safety risks



2 Using the screen and PLC 2.1 Screen

The control system has a touchscreen, meaning that you can control it by touching the screen directly. Touch the screen with your fingers or use a soft-touch stylus located in the control cabinet.

Do not press too hard, as this can damage the screen.

If the screen has not been active for a few minutes, it will enter screen saver mode.

The screen will be off in this mode. Touch any part of the screen in order to reactivate it.

The menu keys are displayed on the left-hand side of the screen. Close windows by pressing the X in the upper right-hand corner to go to the Home screen.

NB! Clean the screen using a moist cloth.

2.2 Numeric keypad



Picture 1

Values in fields with blue borders can be changed. Touch the number and a numeric keypad will display on the screen. The top of the screen shows the Max/Min value

that can be entered in this field.

Enter a new value using the number keys. If an incorrect value was entered, press the <- key and delete the most recently entered number. Press CLR to delete everything.

To enter a negative value, press - before entering the value.

Once you have selected a value, press the **ENTER** button.

This will save the value and close the keypad window.

To cancel, press **X** in the upper right-hand corner. The old value will continue to be active. To enter times in the feedout schedule window, begin by entering the hours – then press period. Then enter the minutes. Make sure that the time is right. For example, if you enter 12:65, this will be ignored – enter 13:05 instead.

2.3 Selecting a value



Picture 2

2.4 On / off key



Picture 3

Selecting pre-programmed values from a list.

- Open the list Press the value or the down arrow
- Select a value from the list

Enable or disable a function using the on/off key.

- Unchecked means off, disabled
- · A checkmark means on, enabled

3 Operation

3.1 Activate CENTRAMIX

WARNING!

The operator is responsible for the safe operation of the machine. Before using FeedMixer, please read operator's manual. Make sure it is safe to use the FeedMixer. Press and hold ACTIVATE FEEDMIXER button for 3 seconds to activate machine.



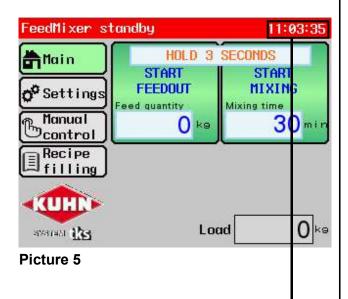
Picture 4

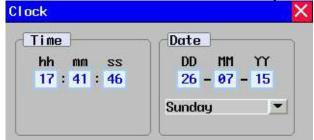
When CENTRAMIX is switched on, or when the emergency stop button is pressed, screen picture will display.

Read the instructions on the screen and make sure that the machine can be used properly. Release the emergency stop button if it has been tripped.

Press "ACTIVATE CENTRAMIX" and hold it down for three seconds before Home screen appears.

3.2 Menus





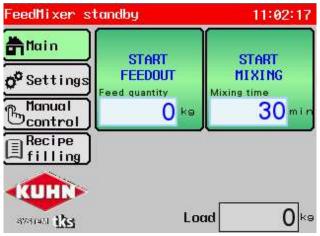
3.2.1 Home

When CENTRAMIX is activated, the Home screen displays. The following displays:

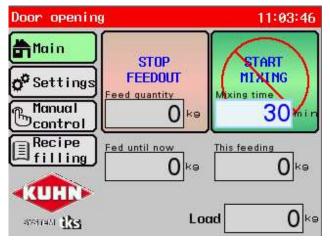
- Menu on the left
- Start keys for mixing and feeding on the right
- The load of the content in the mixer is shown at the bottom
- The current menu selection is indicated by a key highlighted in green
- The red line at the top shows CENTRAMIX activity
- AUTO shows when the Feedout timer is activated.

Clock settings

Hold on the selected area up in the right corner of the screen for 3 seconds for clock settings.



Picture 6



Picture 7

3.2.2 Perform a mixing operation

- · Load CENTRAMIX with feed
- Feed weight shows the number of kg loaded
- Adjust desired mixing time
- · Tap the number on the
- START MIXING key
- Enter the number of minutes and then press Enter
- Press and hold the
- START MIXING key for three seconds
- The motor goes through its start-up sequence and mixing begins

Once mixing has commenced, the **START MIXING** key changes to a red **STOP** key.

Below the keys is a field with a **Mixing time left** It can be changed if desired.

The **START FEEDOUT** key is locked, but the number of kilograms to be dispensed can be changed. Once mixing is complete, CENTRAMIX stops on its own and the screen displays two green start keys.

3.2.3 Perform a feedout operation

After mixing, a feedout operation can be started In the field on the **START FEEDOUT** key, enter the **Feedout quantity** in kg. Press and hold the **START FEEDOUT** key for three seconds, CENTRAMIX begins the feedout sequence. The door opens, the counter knives retreats, the conveyor starts and the feed discharges.

Once the feedout operation has commenced, the **START FEEDOUT** key changes to a red **STOP** key. Two fields display below the keys. The first field shows the quantity discharged so far in kg, and the second shows the quantity for this feedout session in kg.

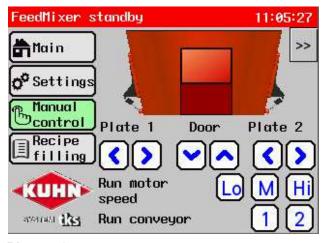
The **START MIXING** key is locked, but the **Mixing time** can be changed.

Once the feedout operation is complete, CENTRAMIX stops on its own and the screen displays two green start keys.

To empty CENTRAMIX completely, enter 0 kg in **Feedout quantity** before commencing the feedout operation.



Picture 8



Picture 9

3.2.4 Settings

Open the settings using Settings in the menu. Eight sub-menus display for CENTRAMIX settings:

- Mixing settings for mixing
- Feedout settings for feedout
- Activation settings for remote control
- Filling sources settings for filling sources
- Options settings for the motor and equipment
- Energy log energy consumption and hour meter
- Feedout timer timetable for automatic feedout
- · Language select display language

The program version of the

PLC is displayed at the bottom: PLC 1.XX and screen: HMI v1.XX

3.2.5 Manual control

Open manual control by touching **Manual** in the menu.

Operation of the door

- · Open the door using the up arrow
- Close the door using the down arrow
- The door is operated when the arrow key is pressed, and stops when the arrow key is released
- The arrow key lights up green on activation
- The door stops once the end position is reached
- The door also moves on the screen

Operation of counter knives (Plate 1 or 2)

- Counter Knife 1 is moved in position using the right arrow key. (Plate 1)
- Counter Knife 1 is retracted using the left arrow key. (Plate 1)
- Counter Knife 2 is moved in position using the left arrow key. (Plate 2)
- Counter Knife 2 is retracted using the right arrow key. (Plate 2)
- The arrow key lights up green on activation
- The counter knives stops once the end position is reached.
- The bedknife also moves on the screen

Operation of motor

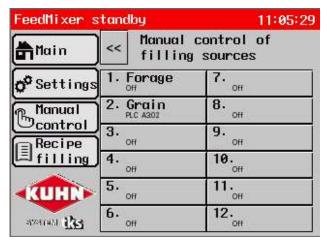
- In manual operation, the motor rotates in the forward direction.
- · Start motor at pre-defined speeds
- Lo = low speed
- **M** = medium speed
- Hi= high speed
- The motor runs for as long as the key is held down, and stops when it is released.
- The key lights up green on activation.

Operation of conveyors

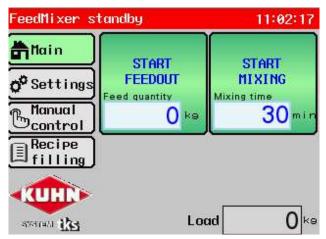
- Two conveyors can be operated individually.
- 1 operates conveyor 1
- **2** operates conveyor 2
- The conveyors run for as long as the key is held down, and stop when it is released.

Control of filling sources

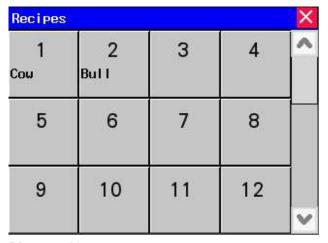
- Open separate window using the double chevrons at the top right.
- Displays filling sources 1–12
- Filling sources indicate whether they are manual or automatic (PLC A3:) (Option)
- Test drive the filling source by holding in the key



Picture 10



Picture 11



Picture 12

3.2.6 Recipe filling

Open Recipe filling in the menu

Recipe filling can be used manually or automatically.

For manual use, this is a guide to help fill in the correct quantity of each feed component based on weight.

For automatic operation, the connected filling sources start and fill the specified quantity in order from a recipe. For automatic filling, electrical equipment must be installed in the electrical cabinet.

Contact your dealer.

The recipes can consist of both manual and automatic filling sources.

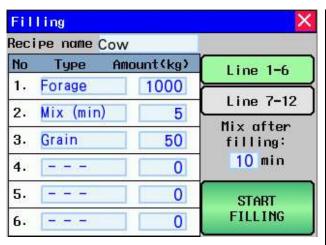
Selection of recipe

This window shows programmed and blank recipes 1–24

Select a recipe.

To create a new recipe, press inside a blank box.

After selection, a new screen will be shown. To exit without changing, press the red cross.



Picture 13



Picture 14

Recipe filling

- Write the name of the recipe.
- Enter the types of feed. Press on the fields.
 Select from the list in the next window.
 (Programming of filling sources must be done in advance in Menu-> Settings->
 Filling sources) To remove a component, select 0 None.
- See chapter 3.2 about filling order.
- Enter the quantity in kg.

All recipes can consist of up to 12 lines. A specific feed component can be repeated several times to add different layers. Switch to the last six feed components using the **Line 7–12** key

- When filling is finished, the mixer can automatically start to mix and cut the feed.
- Enter the appropriate mixing time.

Mixing after filling

- If you do not want automatic mixing, enter 0 min.
- Perform a filling sequence Press START FILLING



Picture 15



Picture 16



Picture 17

Recipe filling in progress

- This window shows the recipe filling in progress.
- The current recipe is shown at the top.
- The status indicator shows in per cent how much of the feed component has been filled.
- The weight of the filling loaded so far/how much to be loaded is shown underneath.
- During filling an audible warning will be given when 80% of the weight of the feed component has been achieved.
- The audible signal becomes more intense up to 100%.
- At 95% the indicator changes colour from yellow to green.
- The filling is complete when the sound stops.
- In the event of overloading, the indicator will turn red from 105%
- When filling from a filling source is complete, the indicator changes to the next component in the recipe within 10 seconds (plus any additional pause time).
- It is important that the mixer does not move unnecessarily after the feed component has been loaded. This will result in a longer waiting time before the next component starts
- When an intermediate mix is in progress, the mixing process is shown in the status window

At the bottom of the screen there are keys to stop the process.

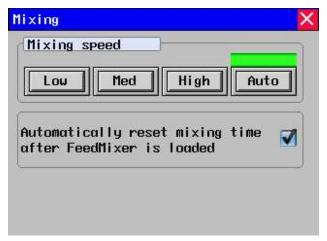
Stop this process

- Stops the ongoing feed component and moves on to the next component in the recipe.
- This key should be used if no more of this component is to be loaded
- The key is used when loading whole bales when the set weight has not been achieved.
- When the last feed component in the recipe stops, the pre-programmed Mix after filling will start.

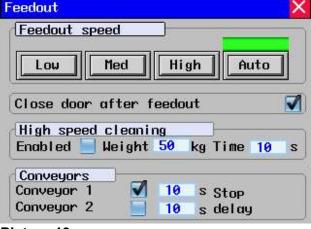
Stop recipe filling

• Stops all filling and returns to the home screen without starting mixing.

3.3 Settings



Picture 18



Picture 19

3.3.1 Settings for mixing

- Choose mixing speed by setting a predefined motor speed.
- Low Low
- Med Medium
- High High
- Auto Automatically adjusts the engine speed between low and high. CENTRAMIX always adjusts to the lowest load.
- When new material is loaded into CENTRAMIX, the load will increase. You can choose to start the mixing process from the beginning. A sound warning is given.
- Enable/disable Automatically reset mixing time after CENTRAMIX is loaded.

3.3.2 Settings for feedout

- Choose a feedout speed by setting a predefined engine speed.
- Low Low
- Med Medium
- High High
- Auto Automatically adjusts the engine speed between low and high.
- CENTRAMIX always adjusts to the lowest load.

When CENTRAMIX is used together with FeedRobot or FeedBelt, the feedout speed must be set to **Medium** or **Low**.

This is important in order to achieve an even feeding process.

If feed is disharged at a small quantity and CENTRAMIX is not fully emptied each time, the door can be left open until the next feedout session. When CENTRAMIX is completely empty, the door closes automatically in order to be ready for the next loading.

 Close door after feedout – Enable/disable.

High-speed cleaning

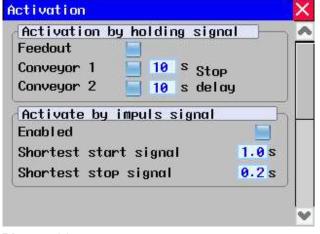
This function causes the motor to operate at a high speed to eject any feed left on the auger. After the set time, the motor speed is reduced, and CENTRAMIX feed out the remaining feed

- Enable/disable.
- Enter remaining load in the CENTRAMIX when cleaning has to start.
- Enter the duration of cleaning: 1–10 seonds.

Conveyor

It is possible to connect up to two conveyors to CENTRAMIX. The conveyors start each time discharging, and stop after the specified length of time when the auger has stopped.

- Enable conveyor.
- Specify stop delay (time for emptying the conveyors)



Picture 20

3.3.3 Settings for activation

Activation by hold signal

CENTRAMIX can start the feedout process in response to external signals given by feeding machines. The start signal must be an active signal the entire time the feedout is in progress. This refers to a hold signal.

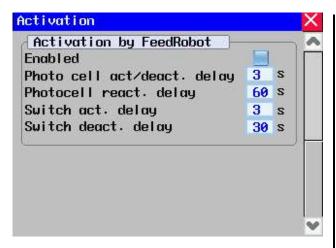
When the signal is interrupted, the feedout process stops.

Feedout and the conveyors can be controlled independently of one another.

- Feedout enable/disable (circuit diagram -X3:1)
- Conveyor 1 enable/disable (circuit diagram -X3:3)
- Conveyor 2 enable/disable (circuit diagram -X3:3)

Conveyors 1 and 2 start at the same time, but may have different stop times configured.

· Adjust stop delay.



Picture 21

Activation by pulse signal

CENTRAMIX can start the feedout process in response to machines with a pulse signal. This means that CENTRAMIX starts with one signal and stops with another.

In order to prevent CENTRAMIX from starting in response to the wrong signal, the signals must have a minimum duration.

- Enable/disable pulse signal
- Shortest start signal adjust signal length (circuit diagram -X3:5)
- Shortest stop signal adjust signal length (circuit diagram -X3:6)

Activation by FeedRobot

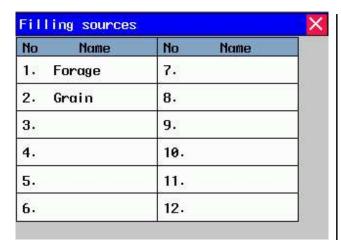
When CENTRAMIX is used together with an external feed cart or wagon, such as a FeedRobot or EasyFeed, CENTRAMIX can be started using a photocell and switch.

- Enable/disable the function
- Photocell act/deact. delay
 Photocell activating/diactivating delay –
 how long the photocell must have a stable signal before CENTRAMIX reacts.
- · Photocell react. delay

Delay until reactivating of photocell

– period of time after the end of the feedout process until the next feed may begin.

- Switch act. delay
 Switch activation delay how long
 Feed Robot must be in the switch position before the feedout process begins.
- Switch deact. delay
 Switch deactivating delay time to elapse before CENTRAMIX stops the feeding process if FeedRobot leaves the position.



Picture 22

3.3.4 Settings for filling sources

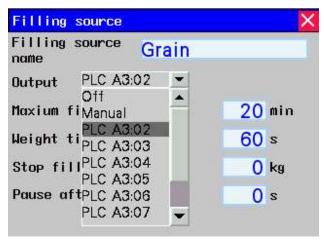
The settings for the filling sources for recipe filling are found here.

This screen shows the programmed and blank feed components/filling sources.

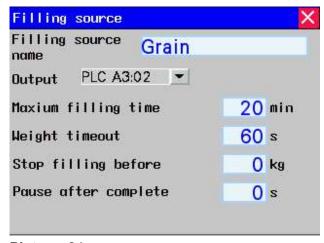
Each feed component/filling source has its own settings.

Select a filling source.

To create a new one, press an empty line. The settings window for this component will open.



Picture 23



Picture 24

Filling source name

Enter the name of the filling source / feed component.

Output

Select whether the filling source will be manual or automatic (PLC A3:).

For automatic, separate electrical equipment must be connected to the electrical cabinet. A3:02 refers to the circuit diagram.

Contact TKS for installation and connection.

Maximum filling time

Specifies how long the filling source will be active before it stops and moves on to the next filling source.

Weight timeout error

When the weight does not increase in this time, the filling source will stop and move on to the next filling source.

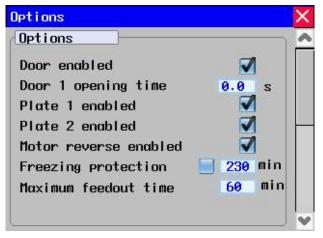
This parameter is only active for automatic filling sources.

Stop filling source before

Stops the filling source before the desired weight in the recipe is achieved. This is useful when manually loading bales. If you do not want overloading according to the recipe, but still want the automatic filling to move on to the next filling source without pressing the screen, set the value to e.g. 400 kg.

Pause after complete

Any additional waiting time can be set here before the next filling source is activated.



Picture 25

3.3.5 Settings options

Other settings and enabling/disabling of various functions can be performed here.

· Door enabled/disabled

 Enable the door to allow CENTRAMIX to automatically open/close the door when feeding. If disabled, the door must be controlled manually.

Door 1 opening time

– Configure the desired opening height for the door during automatic feedout. Enter opening time in seconds it takes to open the door to the level desired. Enter value 0 and door opens completely.

• Plate 1 or 2 enabled (Counter knife 1 or 2)

Enable counter knives to allow
 CENTRAMIX to automatically move counter knives in position when mixing and retract them during the feedout process. When counter knives are disabled, they are stationary, and can be moved manually to the desired position

Motor reverse enabled/disabled

– When mixing and feedout, the auger will rotate in reverse approximately a quarter revolution in order to loosen the feed before rotating in the working direction. This avoids overloading the motor on start-up. This function must be used when CENTRAMIX is loaded to the limit.

Freezing protection enabled/disabled

 During cold times of year, the feed may freeze to the auger and sides, and make it difficult for the auger to turn. You can prevent feed from freezing to surfaces by setting the auger to turn at defined intervals. Configure the desired interval.

Maximum feedout time

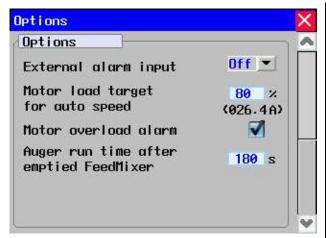
 To avoid overloading, the maximum feedout time is limited to 60 minutes.
 This time can be lowered as desired.

Blockage detection

If the weight of the content is not reduced during feedout, CENTRAMIX will stop after the set amount of time and sound an alarm. It is useful to use this function during automatic feedout when a connected machine may lead to blockages if it stops

- Activate with check box
- Configure the desired time before stop.
 The time should not be less than 60 seconds.

Shift to next screen with arrows to the right



Picture 26



Picture 27

External alarm input Off / NO / NC

 Used when a connected machine may give an error message. This signal causes
 CENTRAMIX to stop. (Connected to -X3:4).

NO - normally open signal

NC - normally closed signal

amperage (A).

 Motor load target for auto speed the motor's specified load is entered here as a percentage. This figure is converted to real

This parameter is used to calculate auto speed during mixing or feedout.

Motor overload alarm – enable / disable
 – Give an audio alarm when the motor has too heavy load. Do not load any feed until the alarm stops sounding.

Auger run time after emptied CENTRAMIX

 When CENTRAMIX is completely empty
 after a feedout, the auger will continue to run for a time. Enter the desired time.

3.3.6 Energi log

Information about energy consumption and the hour meter can be read here..

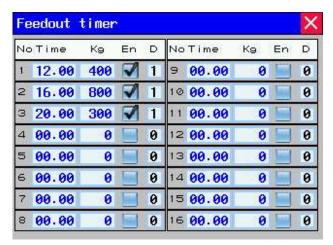
Energy consumtion

CENTRAMIX calculates the energy consumption of the last mix, over the last 24 hours, the last seven days, and total consumption.

Enter the price of energy in EUR/kW.
 CENTRAMIX calculates the cost of consumption.

Timeteller

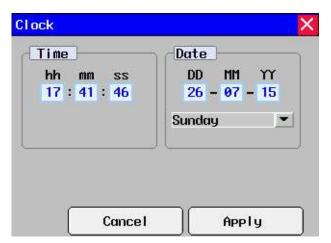
- Motor operating time
- Number of times door is opened
- Number of counter knife (Plate) movements in/out.



Picture 28



Picture 29



Picture 30

3.3.7 Feedout timer

CENTRAMIX can be set to dispense feed automatically according to a feedout timer. Up to 16 different times can be configured individually. It is appropriate to use this function if a feed dispensing machine does not have a separate feedout timer.

Configure the desired feed dispensing time.

Enter the feed quantity and **Kg** for each time Activate this feed dispensing with check box in **Fn**

L – shows the feed door

When at least one feedout session is enabled, a green lamp with the text **AUTO** will be displayed at the top of the Home screen. When automatic feed dispensing is used, the feed must still be mixed manually. Mixing must be performed at a time between two automatic feed dispensing sessions. If CENTRAMIX is empty when dispensing, CENTRAMIX will stop and an alert will appear on the screen.

3.3.8 Language

Select display language

3.3.9 Clock settings

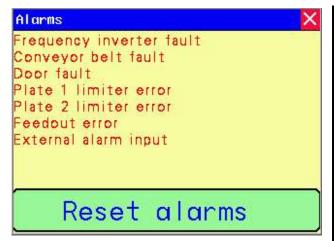
Time

Hours hh, minutes mm, seconds ss, adjusted individually.

Date

- Day DD, month MM, year YY adjusted individually.
- · Day of the week chosen from the list
- Press Apply to save

3.4 Alarms



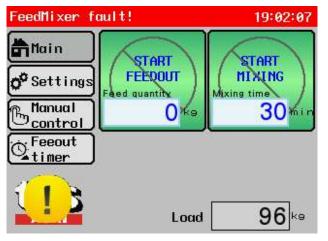
Picture 31

CENTRAMIX stops when an alarm is triggered. The screen shows the alarm window and which alarm was triggered.

The window can be closed by pressing the X in the upper right-hand corner.

A yellow symbol displays on the Home screen. Touch the symbol to open the alarm window again.

- Reset the alarms using the Reset alarm - key
- If the error has not been corrected, the alarm will trigger again shortly



Picture 32

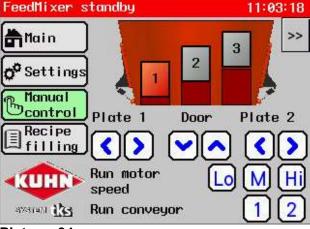
The following error messages may display:

- Frequency inverter fault
- Conveyor fault
- Door fault
- Limit switch fault, counter knife 1 (Plate 1)
- Limit switch fault, counter knife 2 (Plate 2)
- · Feedout process fault
- External alarm input

3.5 Doors 2 and 3 (Option)



Picture 33



Picture 34



Picture 35

CENTRAMIX can be equipped with the operation of up to three doors.

The equipment requires separate electrical wiring and is only delivered from the factory. Dispensing with multiple doors is appropriate where several feed dispensing machines are connected.

All the doors can be controlled automatically from the connected machine or they can be operated manually.

Feedout

Select the desired door before feedout. Press the desired door: 1, 2, 3. Then start the feedout. When feedout to another door is desired, the door that was last activated closes automatically and the desired door opens before the feedout starts.

Manual control

First select the desired door on the screen. The door in red is active.

Open and close the door using the up and down arrow keys.

Setting the door opening

On page 2 in the Options menu, you can set the door opening of door 2 and door 3.

Notes

TKS is a family owned company with a strong brand name.
We are providing our customers with a unique and complete range and high quality products.

www.tks-as.no



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