

Ingenieursburo Prompt Automating from cash desk to molder

WWW.FRITEC.NL

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Disclaimer

Ingenieursburo Prompt strives to make the manual compatible with the software as it is described in the manual. It is however possible that the functionalities in the manual are not yet available or are not available anymore. The user of the software cannot derive any rights from this.

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Intro

Ingenieursburo Prompt has developed multiple products in the last decades for the small and medium-sized company, in particular for bakeries there is a total solution.

The up scaling in bakeries has caused the need for bakers to automate the processes in the bakery. One of these processes is the dough production.

The system that controls this process is called FRI-DEEG by Ingenieursburo Prompt. In this manual will be discussed how this systems has to be used. First a quick tour through the program FRI-DEEG will follow.

FRIDEEG

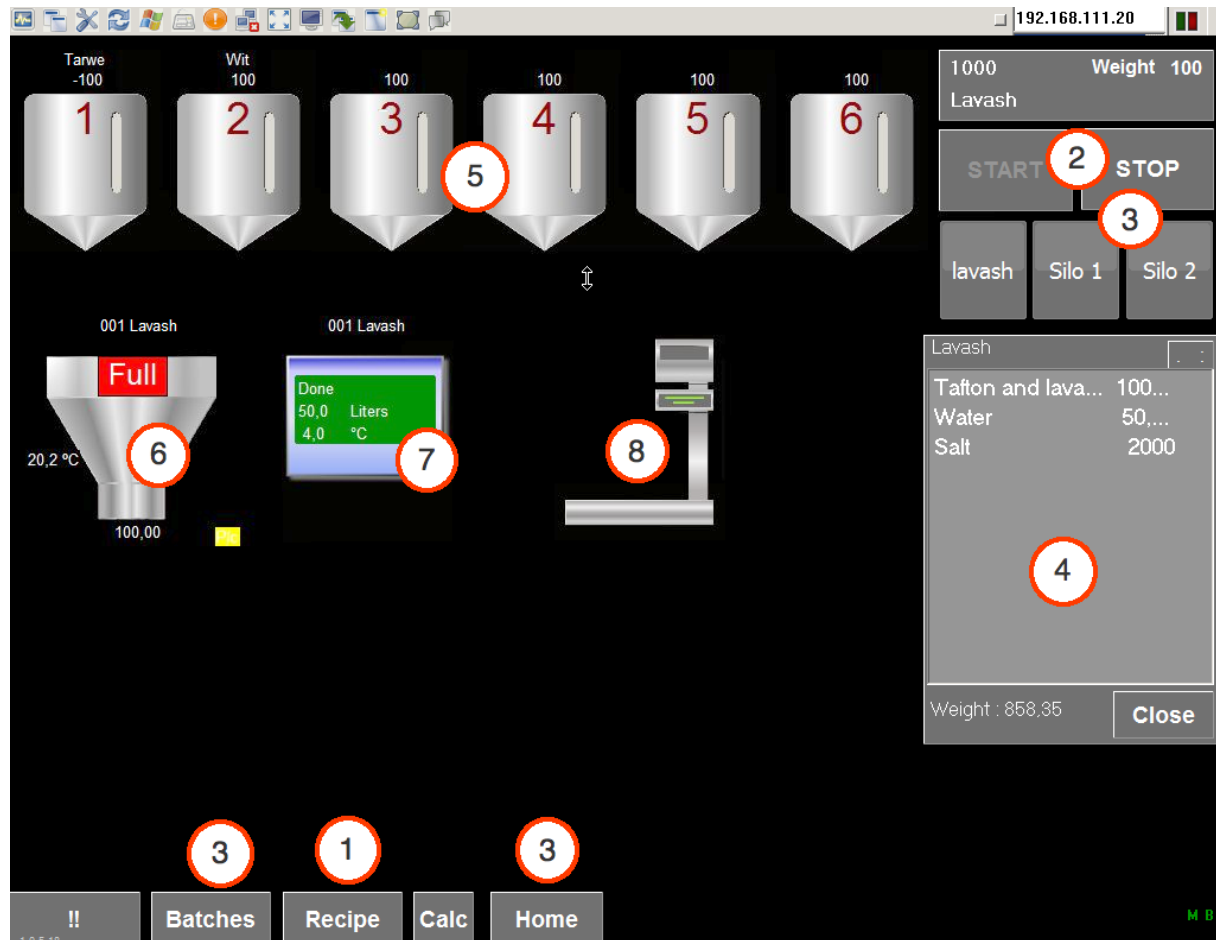
FRIDEEG consists of an industrial panel PC with a touchscreen. As operating system Windows XP Embedded is used. For remote support the PC will be connected to the service network of Ingenieursburo Prompt which makes use of the internet. FRIDEEG is the software that automates the process. FRIDEEG supports several types of molders, silo's and control. This means every installation uses the newest software, whatever hardware is being used.

The list of hardware supported by FRIDEEG is available by calling Ingenieursburo Prompt in Harlingen, the Netherlands.

In the meantime Ingenieursburo Prompt has developed a new control line for machines in the bakery like a watermixer, yeast, molders. Go to www.fritec.nl for the complete line.

Startup

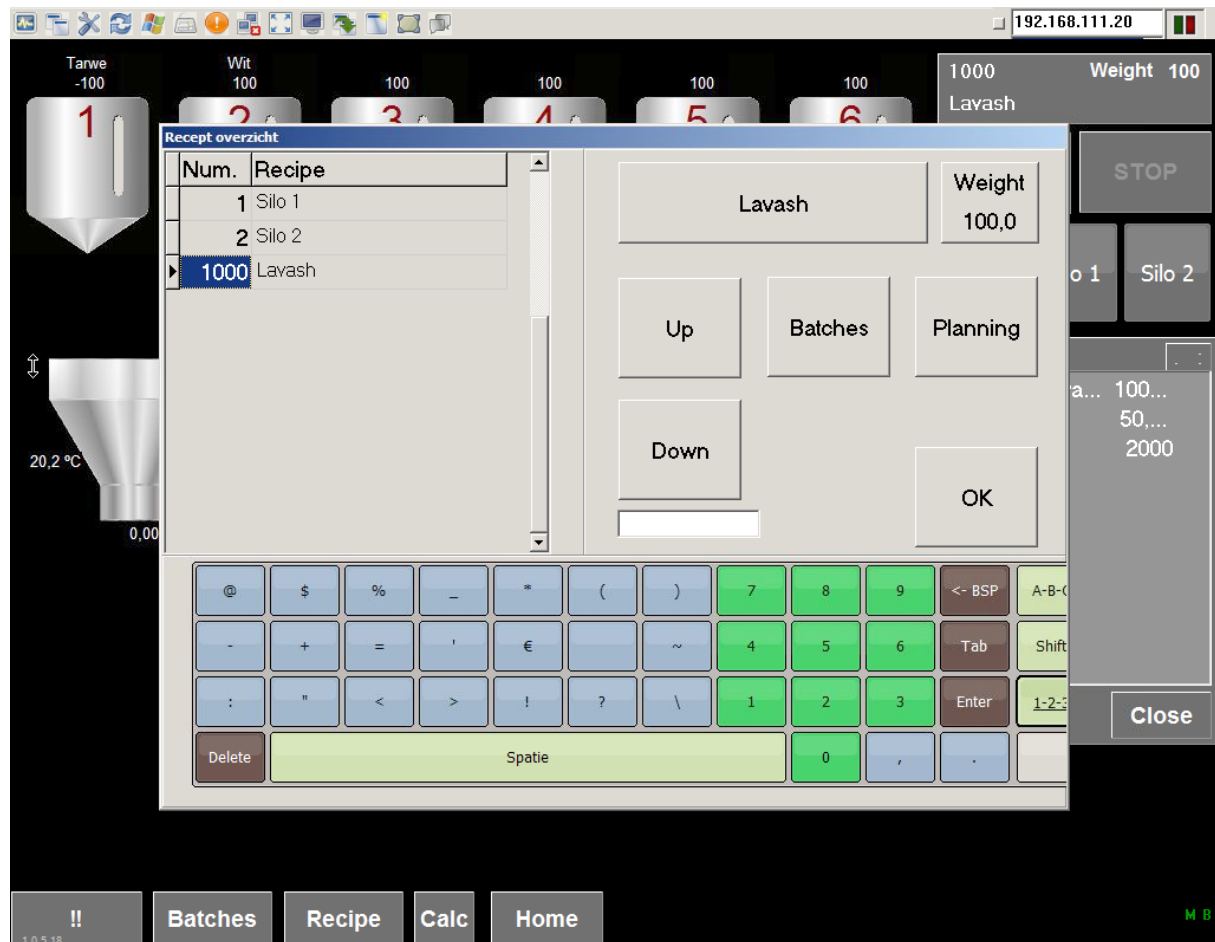
When turning on the FRI-DEEG system by turning on the main switch the startup procedure is put in motion. After a few moments the system is started and the following screen is shown:



The screen is built up by a black background with a number of objects, machines, buttons, data, notifications and questions. Almost all machines are interactive. This means you can press on a part. When pressing a machine the data and status is shown. When pressing a button a new screen will be shown.

1 Recipe

When you push the button 'recipe' you get an overview of all recipes. Here you can make a new start assignment which is called a batch.



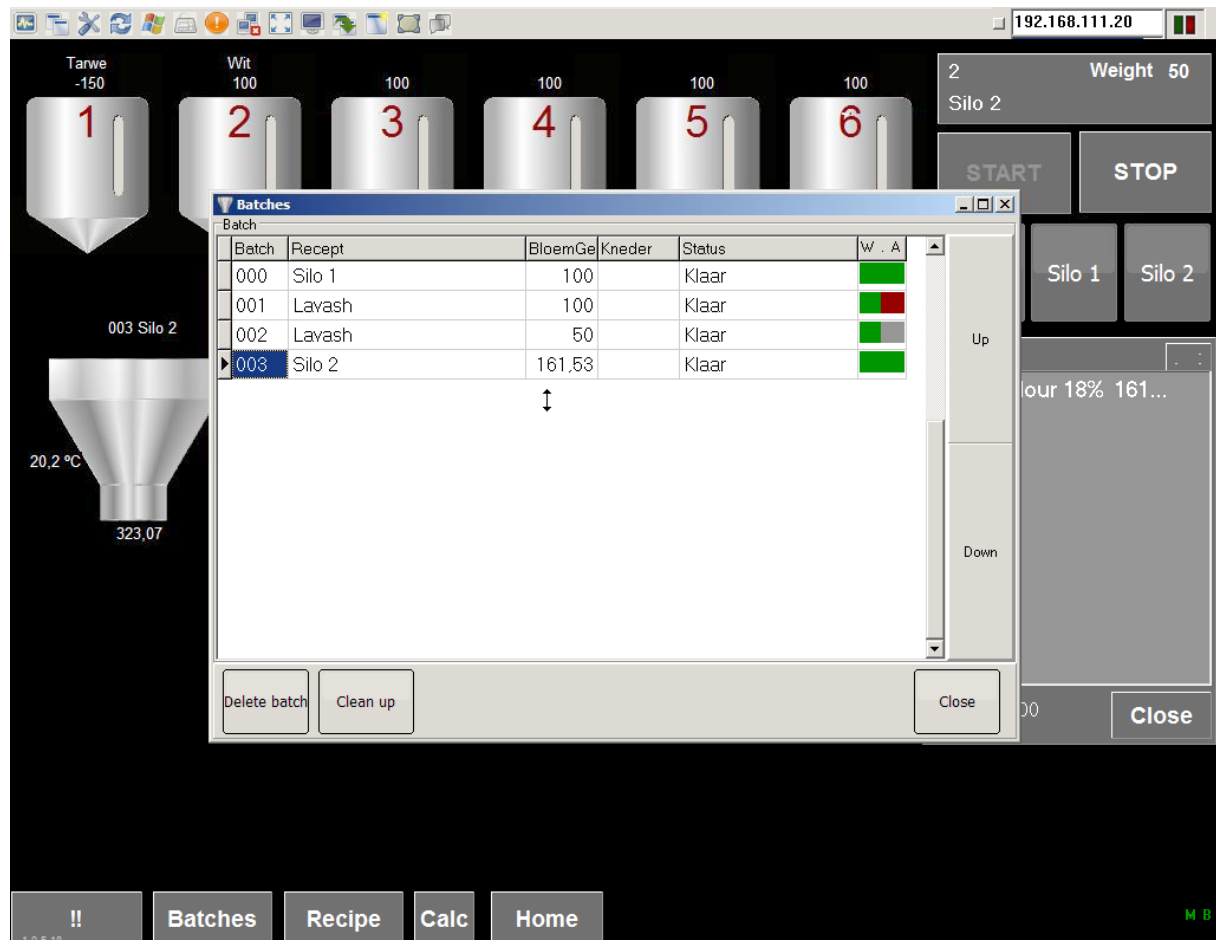
On the left the recipes are showed with the corresponding numbers. By pressing the top left button you can enter a recipe number directly. By pressing the 'up' and 'down' buttons you can search the list of recipes with large steps. When pressing the 'weight' a screen will be shown where the amounts can be entered. This can be the total weight of flour or the number of products that have to be made. When a recipe is chosen and the amounts are put in you can leave the screen by pushing on 'OK'. When you do not want the recipe to start yet you can put it in the planning by pushing the 'planning' button. Also now the recipe screen will disappear. The 'batches' button gives an overview of the batches that are put in until now, more on this later.

2 Starting to dose

Choose a recipe in the recipe screen and choose the desired amounts. Then press OK. The recipe screen will disappear and the main screen will be shown. By pressing "start" the batch will be started. On the screen the whole process is visualized. All batches are collected in an overview. This overview can be viewed by pushing the "batches" button on the bottom of the screen.

3 Batch overview

The batch overview gives the status of each batch. The system can be set up to remove any batches that are finished from the screen. This batches can still be viewed in the history at service.



It is also possible from the order processing to have the batch list filled automatically. For this you need the module Charge verdeel and FRIBAK.

Status batches

The status of a batch for raw material weighing and water is displayed by colors. Brown means there has not been any dosing yet. Yellow means this is active and green means the dosing is complete.

Main screen / Silo 1 / Silo 2 / Silo 3

The 'home' button shows the main screen again. From here you can go to the service page or close FRIDEEG. The buttons Silo 1 and 2 are used for fast choice. On these buttons 3 recipes with a fixed amount can be programmed. The text on the button can be changed to the recipe that is programmed to the button. This is done in the service screen. By pushing one of these buttons and then on start (2) the batch will be started.

Historie | Instellingen

Batch: Silo 1
Levash;
Levash;
Silo 2;
Levash;

Details | Temperatuur

Batch: 000
Tijdstip: Batch: 000 Recept: Silo 1: Gewicht: 100 Kg

1024332:47	Vrijgave:	Meelgewicht:	100	Kg	
1024332:47	Batch gestart	Tarra:	0	Kg	
1024332:48	Doseren klaar	Gewicht:	100	Kg	Naloop: . Kg

Watermenger:

.	Water	Meeltemperatuur:	.	°C	
.	Start water	Hoeveelheid:	.	L	Temperatuur: . °C
.	Water klaar	Gedoseerd	.	L	Temperatuur: . °C

Kneder: .

.	Vrijgave	Deegtemperatuur:	.	°C	
.	Start mengen		.	°C	
.	Start kneden	Laagste temperatuur:	.	°C	Kneedtijd . Min
0:00:00	Kneden klaar		.	°C	

Tarwe VGL raantjes bloe
0 804

4 X 5

Prompt inbellen service Snelkeuze Herstart bestuur en meet Edit recipes Importeer recepten backup Sluit

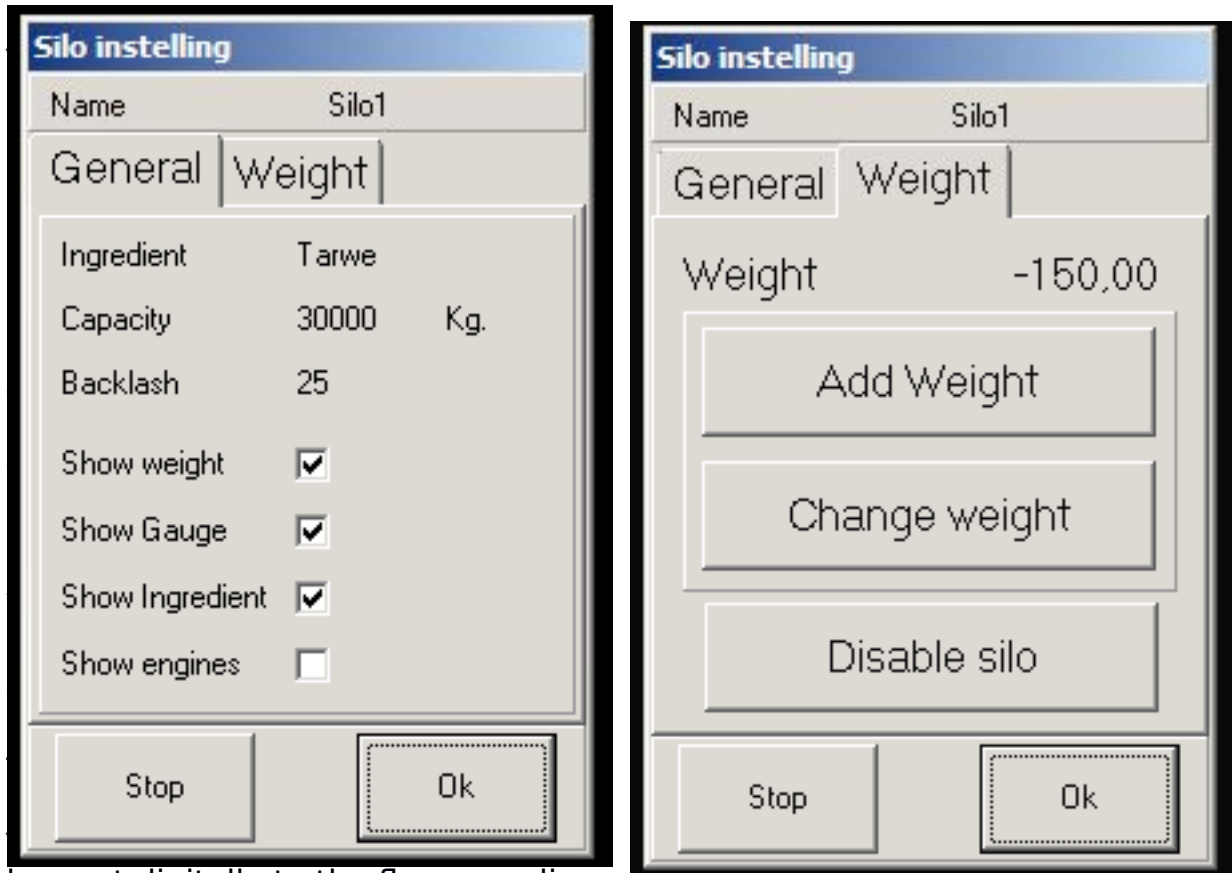
4 Recipe overview

In this screen the weights of all the raw materials of a recipe are shown. Which recipe is shown here depends on the last act.

As soon as the weighing bunker is full the recipe will be calculated again and the values of the recipe will be shown here. When you push in the batch overview on another batch then the data of that recipe will be shown.

5 Silo's

All silo's that are controlled by FRIDEEG are showed here. By pressing a silo the values of this silo are shown.



be sent digitally to the flour supplier.

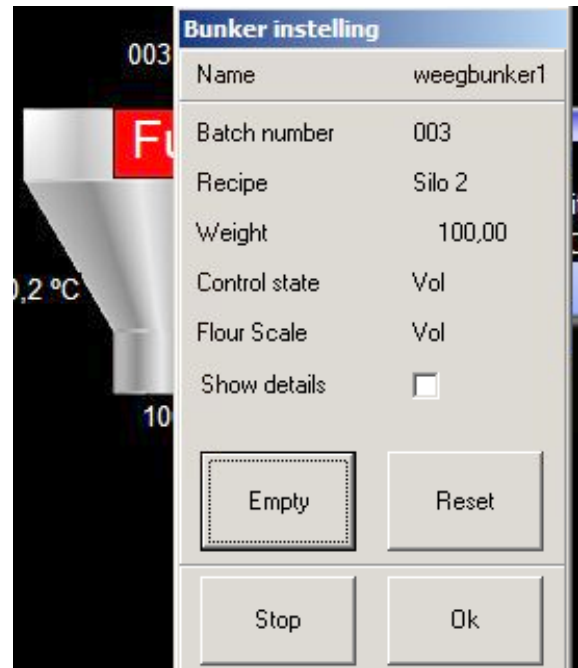
The 'weight' tab:

Here the amount of stock can be changed when new flour has been delivered. You can put in the new weight or the amount that was delivered. When a silo is empty this can also be reported with the 'disable silo' button. After this FRIDEEG will automatically search for another silo with the same product.

6 Weighing bunker

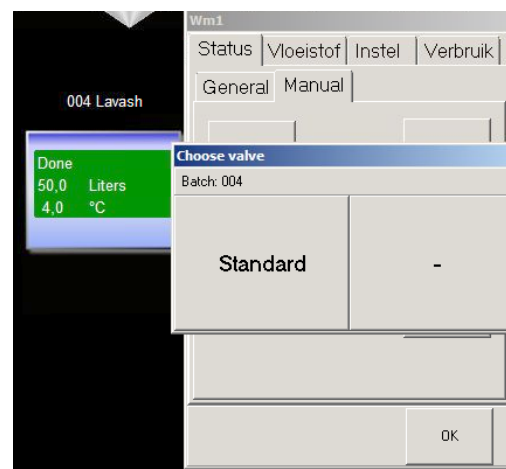
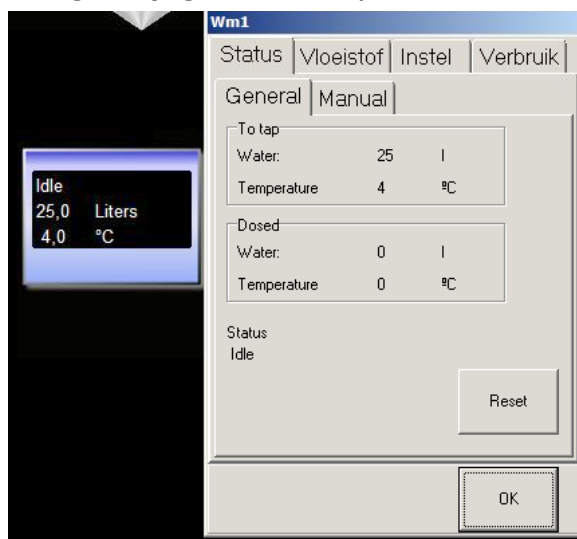
The weighing bunker is available in several configurations. The weighing bunker now discussed has a pneumatic control to empty the bunker. This means on the weighing bunker there is only a button and not a handle to empty the bunker. The bunker can also be emptied from the screen.

By pressing the weighing bunker the characteristics of the are shown. You can see which batch is in the bunker, what the actual weight is and whether the active components have to be shown. There are also four buttons. Empty, reset, stop and OK. By pressing empty the weighing bunker is opened and the contents can be put in the tub. By pressing OK the screen with settings disappears. The advanced settings of the weighing bunker can also be reset. Also the bunker can be stopped from performing the procedure.



7 Water mixer

Completely in the colors of the often-used water mixer, the Macombi water mixer, the water mixer is shown with the status. When starting the water mixer the place the water has to be dosed using a choice of valves is asked. The amount of valves that will be shown depends on the number of valves/molders that is controlled in the bakery. After a choice is made the water mixer will draw a waterpipe to one of the chosen molders or an imaginary goal. The option none is meant to stop the started dosing while a batch is running.



By pressing on the water mixer now the ongoing dosing can be cancelled or a single dose can be started separate from a batch.

8 The raw material weighing station

Scale with recipe display

This raw material weighing station consists of a scale and a display. On the display the status of the weighing station is shown like set to zero, tare end batch or too high / too low depending on the weighing error. During the weighing the raw materials are shown on the first line and the goal weight / pieces on the bottom line. After raw materials are weighted a button needs to be pressed. This differs for each scale. The Shoenle or Dini Alegro has a print button. After this the next raw material will be shown with the required amount. As soon as the last raw material is weighed end batch will be shown with the batch number.



Microdosing

Since the version of april 2011 Frideeg supports microdosing next to two scales. This is a collection of smaller silo's for raw materials. A driving scale will automatically process all raw materials in an order. Together with fluid yeast dosing the manual weighing of raw materials can be brought close to zero.

Starting

The starting of the raw material weighing station can be done in several ways. The next is the most obvious one:

1. After the flour is weighed in the weighing bunker the batch is started in the raw material weighing station, or
2. All batches that have to be made tomorrow are already entered and can be started from the batch screen by pressing the button start weighing, or
3. By pressing on the screen on the raw material weighing station you get an overview of the batches that have to be weighed. You choose a batch and press start weighing. In this list only the batches that are not yet weighed or are already molded are shown.

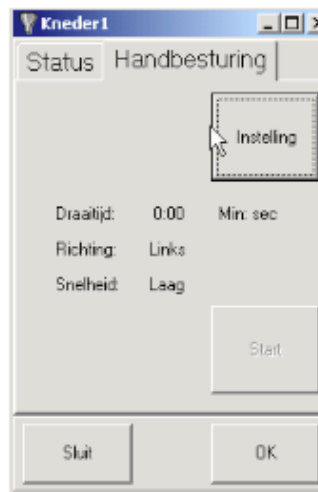
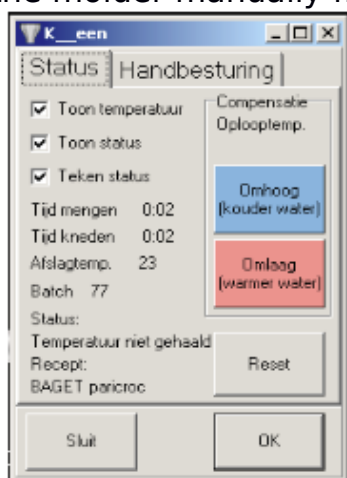
Which method is best depends on the way of working. Method 1 is the most accurate. The flour/water ratio is exactly according to the recipe. If you have an accurate weighing bunker then method 2 and 3 can result in time savings.

In the recipe is pointed out what the deviation can be when weighing. If you want to weigh a raw material in another way than through the raw material weighing station then this raw material can be skipped. By pressing the screen now on the raw material weighing station 2 buttons will be shown: skip and abort. By pressing skip now the scale is tarred again and the next raw material is shown on the display. By pressing abort the whole batch is aborted and the raw material weighing station is available for the next batch.

9 Molders

For the molder the next things are shown: the batch number of the batch the molder is working on and the temperature.

The temperature at the top side is the temperature of the flour and the temperature at the bottom side the temperature of the dough. There are also configurations possible with a sensor for both tasks. The top sensor is used for the calculation of the water. The bottom temperature is used for the molding of the dough to the right temperature. By pressing on the molder the settings of the molder are shown. It is also possible to control the molder manually from this screen.



At the tab 'status' it is possible to stop the molder. With this the batch that the molder is working on is stopped and can not be resumed.

The tab 'manual' offers the possibility to set the number of seconds, the speed and the direction. By pressing start the molder will run according to the settings.

Change temperature

Since the version of april 2011 it is possible to change the temperature of a molder for all batches using an offset. This can be changed with the warmer and colder buttons. This action can later be found in the history.

10 Reading orders automatically

When you have the order processing system FRIBAK of Ingenieursburo Prompt it is possible to have FRIBAK divide the bread that has to be produced. This is done by the module named FRICHAR.

After printing the bread list a production proposal is shown on the screen. In this table changes can still be made. After this it is sent to the FRIDEEG. FRIDEEG will give notification of a new production list. The present list is deleted and the new list is read.

