User manual

Poultry Scale: FlexScale

Code Nr. 99 97 0079

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EC Declaration of conformity

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In accordance with EC Directives:

- **Machines 2006/42/EG, Annex II / Part 1 / Chapter A**

Further applicable EC directives:

- Electromagnetic compatibility 2004/108/EC
- Low voltage 2006/95/EC

The product mentioned below was developed, constructed and produced in accordance with the above mentioned EC Directives and under sole responsibility of Big Dutchman.

Description:	System for weighing poultry
Type:	Poultry scale FlexScale
System no. and year of construction:	see customer order no.

The following harmonised standards apply:

- EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
- EN 60204-1:2006/AC:2010: Safety of machinery - Electrical equipment of machines Part 1: General requirements

Authorised person for technical documents: Productmanager "Climate eqipment"
Auf der Lage 2; 49377 Vechta

Vechta	16.01.2010	Managing Director	.....
Place	Date	Signer and information regarding signer	Signature

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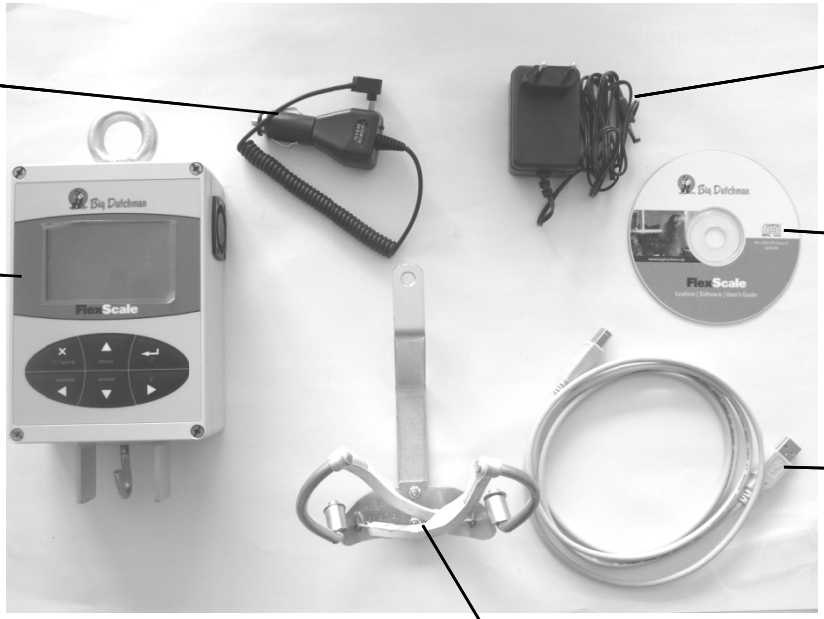
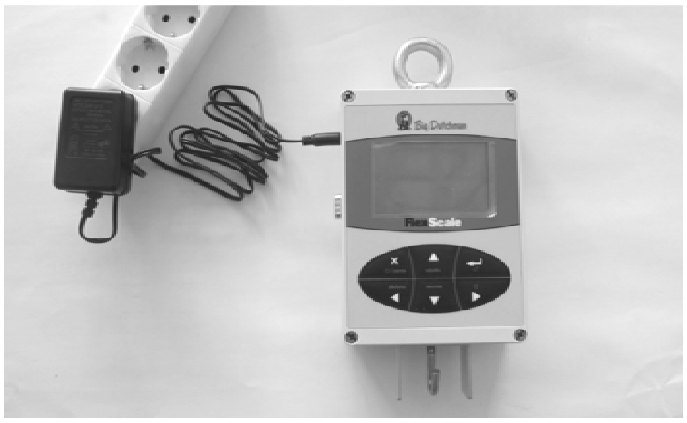
1. Package contents



1. Scale
2. Hook
3. Mains charger
4. Charger from socket in the car
5. USB cable
6. CD with software

2. Charging

2.1. Charging from AC



1. Plug the charger connector into the scale
2. Plug the charger into an AC outlet

Fully discharged batteries will recharge in approximately 3 hours.

2.2. Charging in the car

1. Plug the charger connector into the scale
2. Plug the charger into a 12V socket in the car

Fully discharged batteries will recharge in approximately 3 hours.

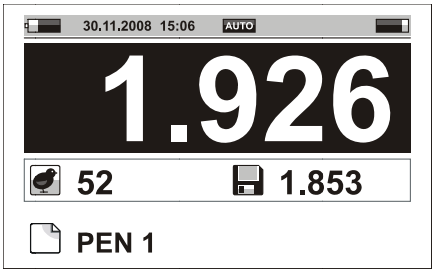
3. Weighing

Suspend the scale using a chain on a firm, non-spring biased structure. Place a hook on the scale and switch the scale on by pressing the ☒ key.

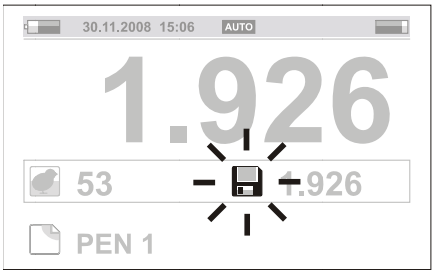
If the scale does not display zero weight, reset it to zero by short holding the ☒ key.

Hang a bird on the hook.

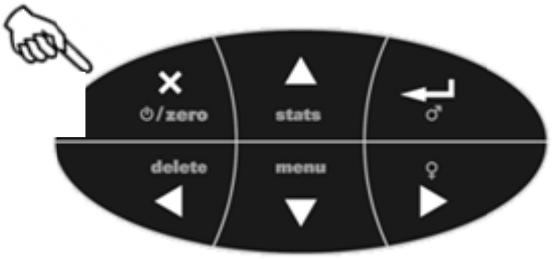
After stabilizing, the weight will automatically be saved which is indicated by an audible beep and visually by highlighting the saved weight.



The memory symbol flashes on the display until the weight is removed and logs the last weight saved on the display beside the memory symbol.



Switch the scale off by holding the ⊠ key for about 2 seconds.



Remove the hook and store the scale for further use.

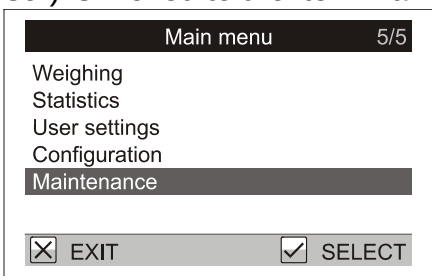
4. Preparation of the scale before use

Several parameters should be set prior use. These settings can customize the FlexScale features and enhance the powerful data analysis of the included PC software. While all of these settings can be viewed and changed directly in the scale, remember that all settings can be done much faster from a PC.

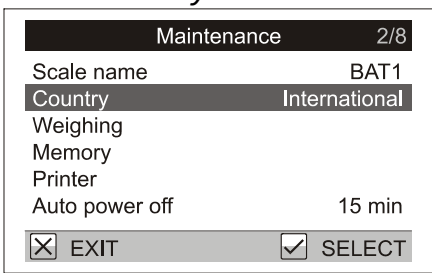
See the instructions for working with a PC.

4.1. Selection of country and language

The FlexScale will display information in the format normally used for the selected country. Language selections can be chosen according to the operator's preference. Press the ↵ key – the main menu of the scale is displayed. Press 4x ↵. The highlighted line of the menu (cursor) is moved to the item *Maintenance*.

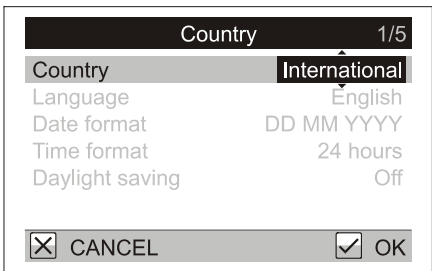


Press the ↵ key. This will select a new menu *Maintenance*. Press the ↵ key. The menu cursor will move to the item *Country*.



Press ↵. This will select the menu *Country* for country and language selection. Press ↵. On the right side of menu the field with the country name is highlighted.

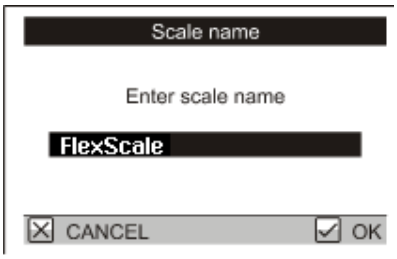
Use keys ▲ and ▼ to select the required country and press ↵. The highlighted field is again displayed normally; the required country is selected. On the next line *Language* the language in which the scale will communicate is displayed. If you want to change the language, move the cursor to the item *Language* and after pressing ↵, select the language that suits you the best. Press 3x the ✕ key.



The scale leaves the menu and is prepared for weighing.

4.2. Naming a scale

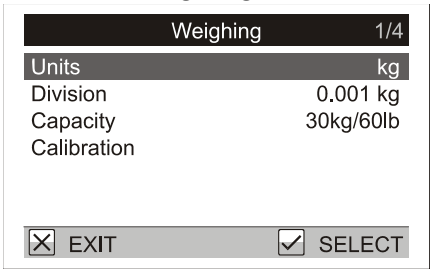
Naming the scale can be important later when uploading data to the PC. If multiple scales are used with the PC, each scale should have a unique name.
Select *Maintenance* / *Scale name* in the menu. A dialog box for entering the name opens.



A flashing cursor is displayed on the first letter of the name. Select the required letter using keys ⌃ and ⌄. Press ⌦ to move to the next letter. Press ⌫ to return to the previous letter.
After the name is entered, press ↵. The display returns to the *Maintenance* menu.

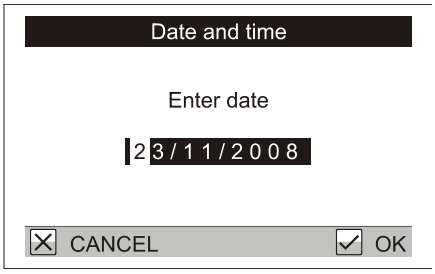
4.3. Weight units

The scale can display weight in grams, kilograms or pounds. Set the required weighing units in the menu *Maintenance* / *Weighing* / *Units*.

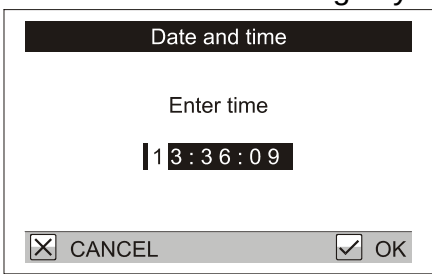


4.4. Date and time

The scale contains an internal clock and calendar. It is important to set the scale clock and the PC clock to the same time and date. Set the time and date in the menu *User settings* / *Date and time*.



Enter the correct date using keys ⌃, ⌄, ⌦ and ⌫. After pressing ☑ the time setting dialog box displays. Enter the correct time using keys ⌃, ⌄, ⌦ and ⌫.



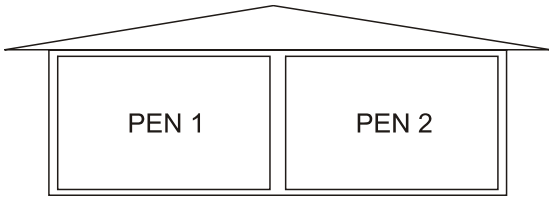
Press the key ↵ to store the date and time.

4.5. Files setup

The FlexScale can store data according to the layout of your farms. There can be up to 199 files containing a total of 11,000 weights. Each file can correspond to an entity as defined by the user (house, pen, cage, etc.) and each file can be part of a larger group (house, farm, company, etc.). A file can have a unique name, which can be used to keep flock data organized on the PC to form a growth graph and record.

Example:

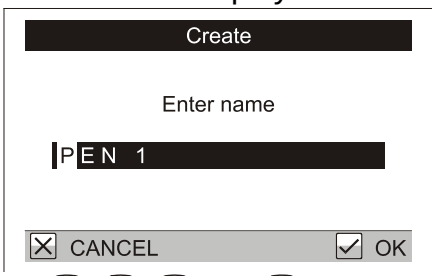
There is one house divided in to two pens (Pen 1 and Pen 2). Create two files named *PEN 1* and *PEN 2*. When Pen 1 is weighed, select file *PEN 1* and the bird weights will be stored in file *PEN 1*. When Pen 2 is weighed, select file *PEN 2* and the bird weights will be stored in file *PEN 2*.



4.5.1. Creating a file

Select menu *Configuration* / *Files* / *Create*.

A dialog box for entering the file name is displayed.

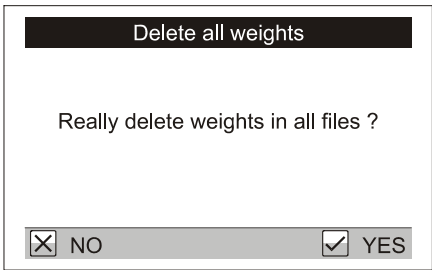


Enter the file name using keys ⌃, ⌄, › and ‹.

After pressing ☑, the file is stored.

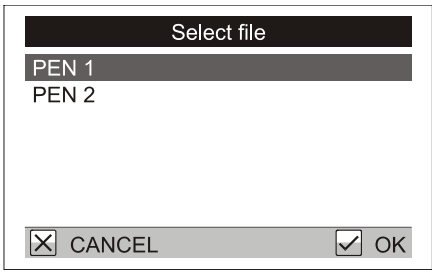
5. Weighing course

Prior to a new weighing session all data should be deleted from the previous weighing. Be sure all data has been viewed, printed or downloaded to a PC before deleting! Select menu *Weighing* / *Delete all weights*. A dialog box is displayed.

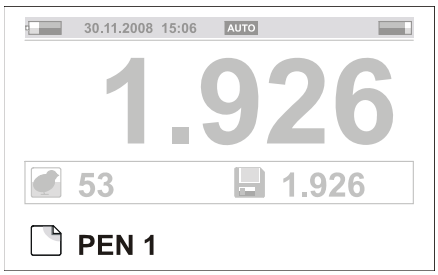


Press ↵. All stored weights will be deleted (not the file names).

To store weights in file *PEN 1* from our example, press ↵ (MENU), *Weighing* / *Active file*. A file list will be displayed.
Using keys ⌄ and ⌃ move the cursor to the desired file and press ↵.

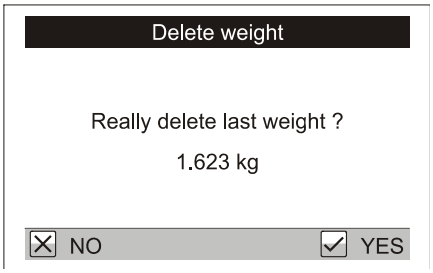


Press 2x ⊠ to return to the weighing display. The file name will be displayed on the weighing screen.



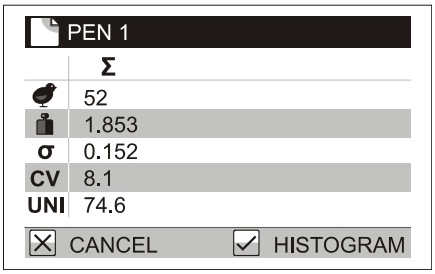
Now you can weigh individual birds from Pen 1, as described in Chapter 3.
An incorrect weight can be deleted by pressing the ⌫ (DELETE) key. A confirmation will be displayed.

Press ↵ to delete the weight. If the bird is still hanging on the hook, the scale will automatically weigh this bird again and save the correct weight.

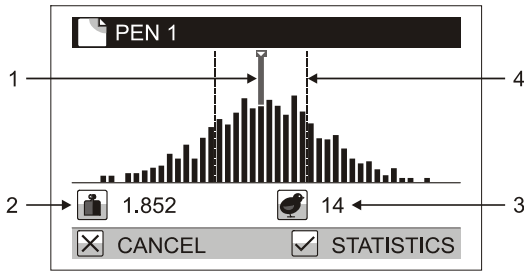


Statistics for the current file can be displayed at any time by pressing the ⌃ (STATS) key.

Press the ↵ key to display a histogram of the file.



1. Weight cursor
2. Weight range of the column
3. Number of birds in the column
4. Uniformity range



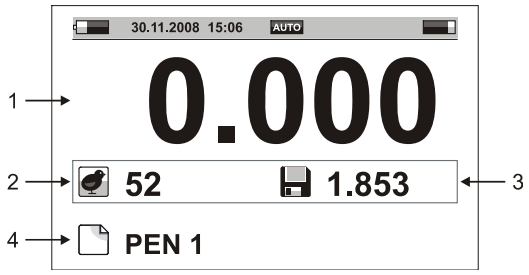
Press ◁ or ▷ to move the cursor to any weight column; the weight and the number of birds represented in this column will be displayed below the graph. Press the ⊠ key to continue weighing.
After the birds from Pen 1 are weighed, move to Pen 2 and select file *PEN 2.* All bird weights from Pen 2 will be stored in file *PEN 2*.
Switch off the scale after the weighing is finished. All saved weighings are stored in the memory even when the scale is switched off.

5.1. Display modes

Several display modes are available depending on the operators needs. The display mode can be changed in the menu *Configuration* / *Display* / *Display mode*.

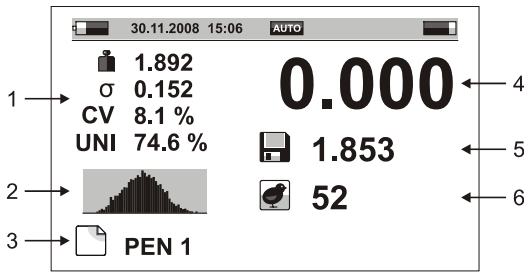
5.1.1. Basic display mode

1. Actual weight on the hook
2. Number of birds weighed
3. Last stored weight
4. Active file



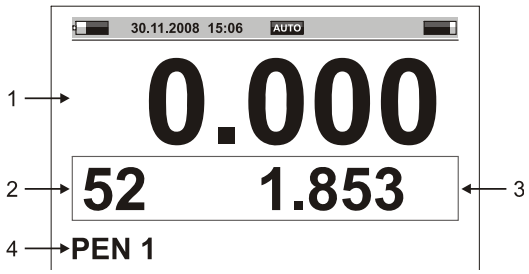
5.1.2. Advanced display mode

1. Statistics of the active file (average weight, standard deviation, coefficient of variation and uniformity)
2. Histogram
3. Active file
4. Actual weight on the hook
5. Last stored weight
6. Number of birds weighed



5.1.3. Large display mode

1. Actual weight on the hook
2. Number of birds weighed
3. Last stored weight
4. Active file



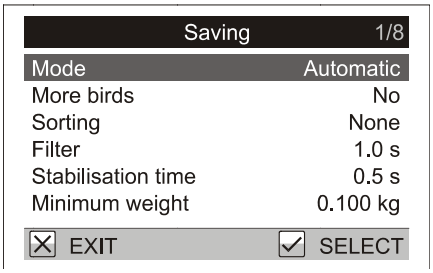
5.2. Weighing modes

To simplify usual activities during weighing, the scale can work in several modes. The basic mode is weighing with automatic saving of the weighed value. This weighing was described in Chapter 3. When weighing very active birds or when weighing during difficult conditions use a manual saving mode. For weighing of cocks and hens in one pen the manual saving mode with sex selection is used.

5.2.1. Automatic weight saving

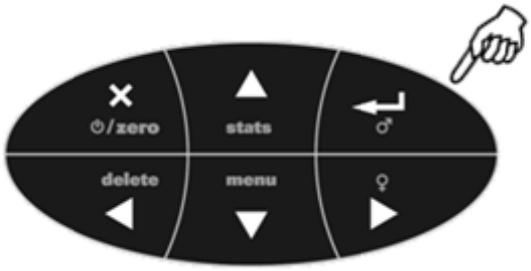
Set menu Configuration / Saving / Mode to Automatic.

After the bird is hung on the hook the scale waits for stabilization. The bird is automatically weighed and its weight is saved into the active file.



5.2.2. Manual weight saving

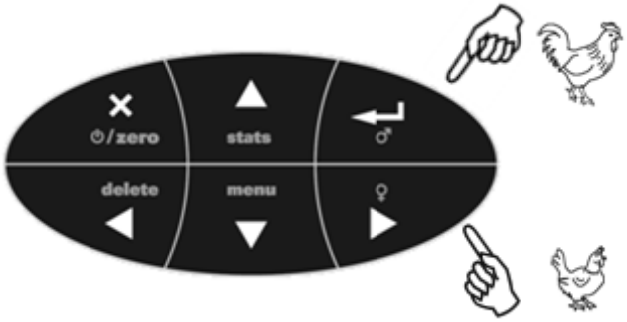
Set menu *Configuration* / *Saving* / *Mode* to *Manual*. After the bird is hung on the hook watch the actual weight on the display and after stabilization press ↵.



The weight displayed at the time of pressing the key is saved into the file. Now remove the bird from the hook and continue with the next bird.

5.2.3. Manual and sex selection saving

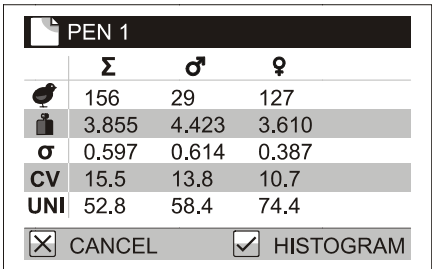
Set menu *Configuration* / *Saving* / *Mode* to *Manual by sex*. After the bird is hung on the hook watch the actual weight on the display and after stabilization press ☑ if you are weighing a cock or ☒ if you are weighing a hen.



The weight displayed at the time of pressing the key is saved into the file, including the selected sex. Now remove the bird from the hook and continue with next bird.

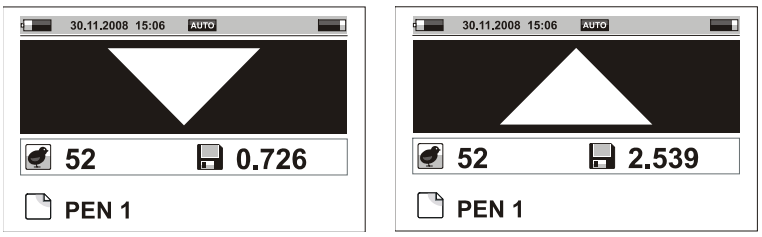
The display of statistics contains three columns – statistics for both cocks and hens, statistics for cocks and statistics for hens.

When displaying histogram, three histograms are available – histogram for both cocks and hens, histogram for cocks and histogram for hens.

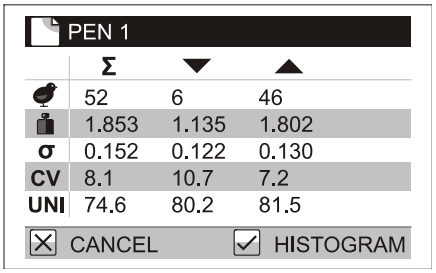


5.2.4. Sorting into two groups: Light / Heavy weights

If you need to sort weighted birds into two groups – light birds and heavy birds, set the scale into the mode of weighing with sorting into two groups.
Set menu *Configuration* / *Saving* / *Sorting* to *Light/Heavy*. In menu *Weighing* / *Limit*, set the weight according to which the sorting will be performed. After a bird is weighed the scale will beep differently for light and heavy birds and a symbol for heavy or light bird is displayed.

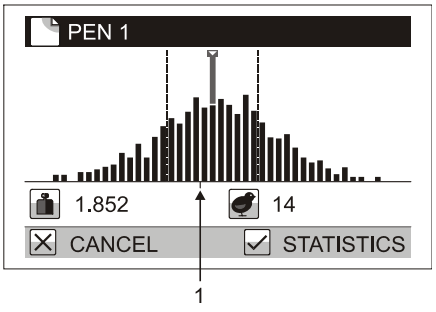


The statistics contains three columns – one for summary, one for light and one for heavy birds.



Histogram is displayed for the sum of weighing; a mark is used for indication of the weight limit.

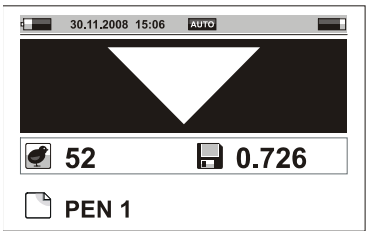
1. Weight limit

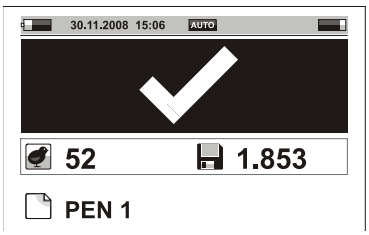


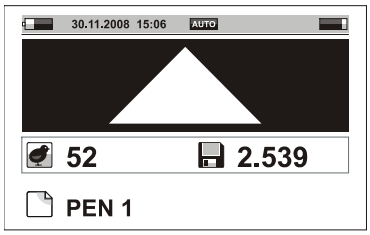
Weighing with sorting can be performed in automatic and manual saving modes. It is not possible when weighing with sex selection.

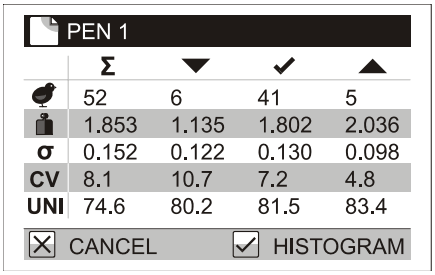
5.2.5. Sorting into three groups: Light, Standard, Heavy

If you need to sort the weighed birds into three groups – too light birds, acceptable birds and too heavy birds, set the scale into the weighing mode of sorting into three groups. Set menu *Configuration* / *Saving* / *Sorting* to *Light/OK/Heavy*. In menu *Weighing* / *Low limit*, set the weight according to which the birds will be marked as too light. In menu *Weighing* / *High limit*, set the weight according to which the birds will be marked as too heavy. After a bird is weighed the scale will beep differently for light, acceptable and heavy birds and a symbol for heavy, acceptable or light bird is displayed.





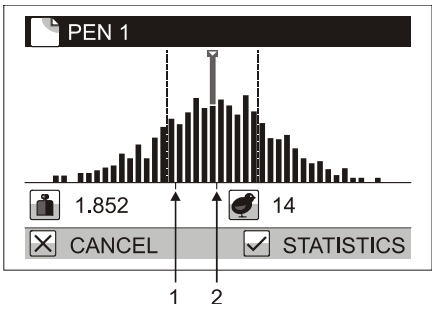




The statistics contains four columns – one for summary, one for light, one for acceptable and one for heavy birds

Histogram is displayed for the sum of weighing; two marks are used for indication of the weight limits.

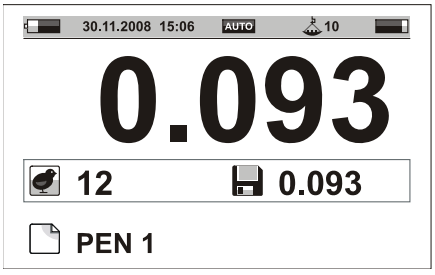
1. Low weight limit
2. High weight limit



Weighing with sorting can be performed in automatic and manual saving modes. It is not possible when weighing with sex selection.

5.2.6. Multiple birds per sample

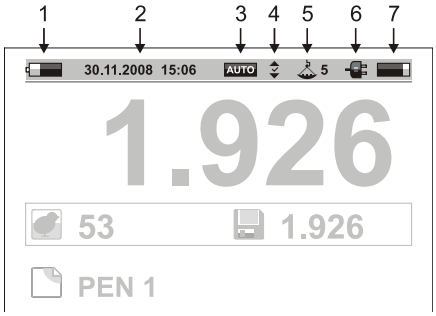
Multiple birds can be weighed in each sample placed on the scale. Set menu *Configuration* / *Saving* / *More birds* to *Yes*. In menu *Weighing* / *Number of birds*, set the number of birds per sample. When a multiple bird sample is hung on the scale, the display shows the average weight of each bird in the sample.



Statistics and histograms are calculated for the weight of one bird.

5.3. Scale status display

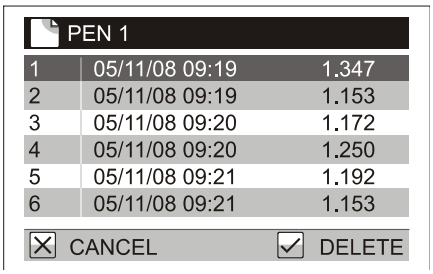
In all display modes there is information about the scale status on the upper line of the display. The weighing mode and other parameters will be conveniently shown at all times.



1. Battery status
2. Date and time
3. Saving mode
4. Sorting mode
5. Number of weighed chickens at once
6. Connection of the charger or PC
7. Free memory

6. Viewing weight data

6.1. Viewing active file



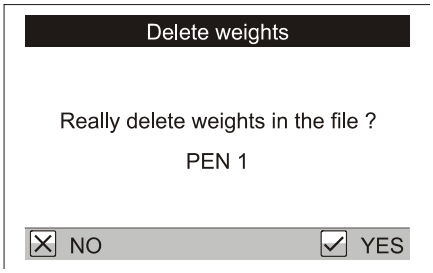
Select menu *Weighing* / *View file*, a table with weights in the active file is displayed.

The individual keys have the following functions:

- Move to next weighing
- Move to previous weighing
- Move to next page
- Move to previous page
- Delete wrong weight

6.2. Deleting data in active file

All weights in the active file can be deleted in menu *Weighing* / *Delete weights*. Confirmation dialog is displayed and after pressing the file is deleted.



6.3. Grouping files

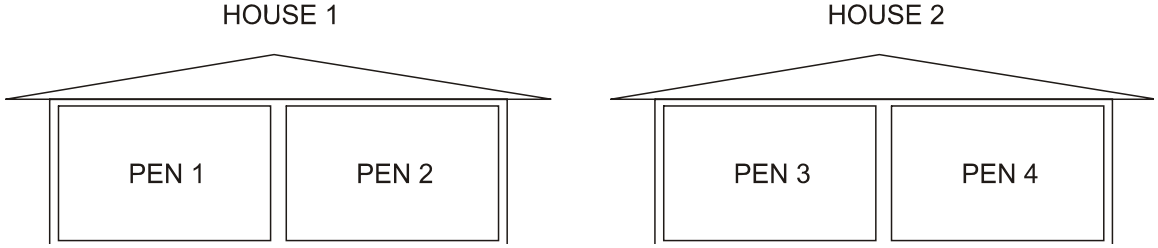
For simple display of summary statistics, histograms and printing, individual files can be grouped into file groups.

Example:

There are two houses on your farm, House 1 and House 2. In House 1 there are two separate pens Pen 1 and Pen 2. In House 2 there are two separate pens Pen 3 and Pen 4.

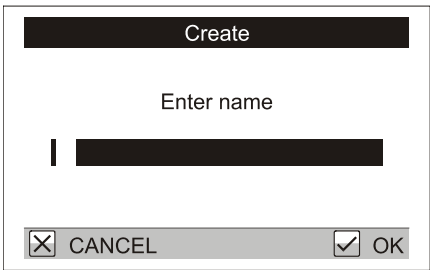
The scale contains four files named *PEN 1*, *PEN 2*, *PEN 3* and *PEN 4*. To be able to calculate the total statistics in the whole House 1, create a file group named *HOUSE 1* which contains files *PEN 1* and *PEN 2*. Similarly, for the House 2 create a file group named *HOUSE 2* which contains files *PEN 3* and *PEN 4*.

If you want to find statistics for the whole farm, create a file group named *FARM* that contains all files *PEN 1*, *PEN 2*, *PEN 3* and *PEN 4*.

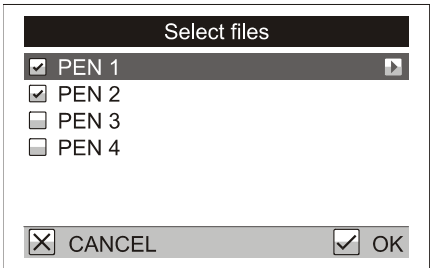


6.3.1. Creating a group

Select the menu *Configuration* / *File groups* / *Create*. A dialog for entering the file group name is displayed.



Using keys ⌃, ⌄, › and ‹ enter the name of the group and press ↵. A list of files is displayed; use the › key to select files that belong to the group.



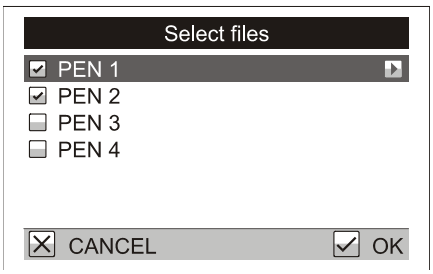
Press ↵ to create the group.

6.4. Total statistics

Select *Statistics* / *Total statistics* in the menu and select files from which you want to calculate the statistics.

The following options are available:

- ***One file*:** displays statistics for one file. In the following dialog select the file for which you want to calculate the statistics.
- ***One group*:** displays the summary statistics for a group of files. In the following dialog select the file group for which you want to calculate the statistics.
- ***More files*:** displays the statistics for several selected files. In the following dialog use the › key to select files you want to include into the calculation.



- ***All files*:** displays the summary statistics for all files stored in the scale.

In Statistics, display a histogram of selected files by pressing the ↵ key.

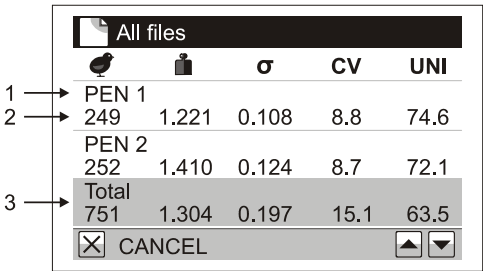
6.5. Comparing files

Select *Statistics* / *Compare files* menu and select which files you want to compare.

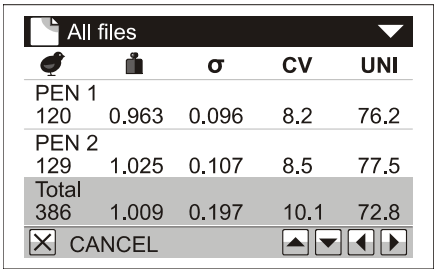
The following options are available:

- ***One group*:** displays a comparison of files in one file group.
- ***More files*:** displays a comparison of several selected files. In the following dialog use the ▶ key to select files you want to compare.
- ***All files*:** a comparison of all files in the scale is displayed.

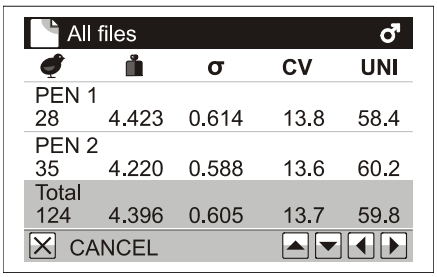
1. File name
2. Statistics of the file
3. Total statistics for all selected files



Use the ↵ key to display the next page. Use the ▲ key to display the previous page. If the mode of weighing with sorting is activated, use keys ▶ and ◀ to display statistics for light, acceptable and heavy birds.



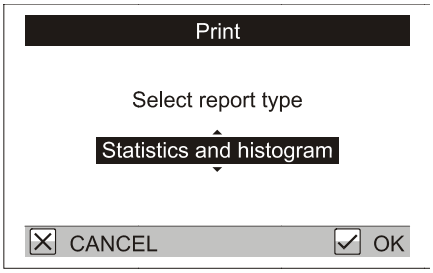
If the mode of weighing with the sex selection is activated, use keys ▶ and ◀ to display the statistics for cocks and hens.



6.6. Printing data

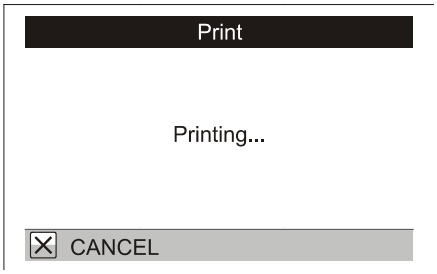
Connect the printer cable into the DB9 serial port on the scale and switch the printer on.

Select *Statistics* / *Print* / *One file* from the menu. Select the file you want to print. Now select the information to be printed in the next dialog box.



Select *Statistics and histogram* and press ↵. Start printing will appear.

Press ↵. The printer will print the selected information and the scale will display the printing status.



The dialog will close when the printing is completed. To stop the printing early, press ☒.

6.6.1. Printed reports

Select the files you want to print. Select in menu *Statistics* / *Print*:

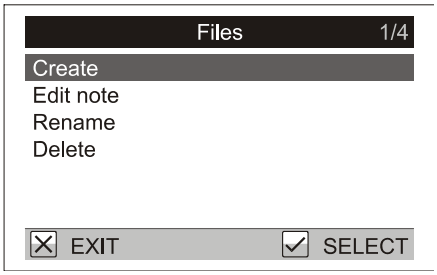
- ***One file*:** prints one file
- ***One group*:** prints a report for the selected file group
- ***More files*:** prints a report for selected files
- ***All files*:** prints a report for all files in the scale

Select the type of information report:

- ***Statistics and histogram*:** prints the statistics and the histogram for all selected files and combines the data for all files in to a single report.
- ***Statistics*:** prints the statistics of all selected files and combines the data for all files in to a single report.
- ***Total statistics*:** prints only summary statistics (without a histogram) for all selected files.
- ***Weights*:** prints each bird weight for all selected files.

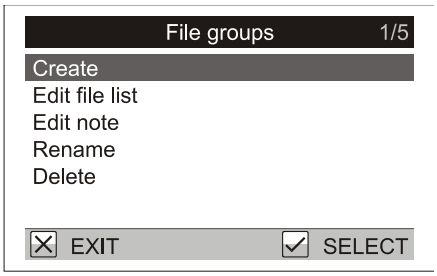
7. Scale management

7.1. File management: Rename, Delete, Edit note



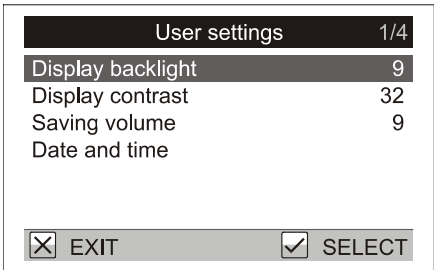
To rename a file go to menu *Configuration* / *Files* / *Rename*. Enter the new name of the file and confirm by pressing ↵.
To permanently remove the file from the scale go to menu *Configuration* / *Files* / *Delete*.
To add a short note to a file go to menu *Configuration* / *Files* / *Edit note*. The note will be displayed with the data when downloaded to a PC.

7.2. File groups



To rename a file group, go to the menu *Configuration* / *File groups* / *Rename*. Enter the new name of the group and confirm by pressing ↵.
To permanently remove a file group from the scale, go to the menu *Configuration* / *File group* / *Delete*.
The list of files in a group can be changed in the menu *Configuration* / *File groups* / *Edit file list*. Correct the list of files in the following dialog using the › key and confirm by pressing ☑.
To add a short note to the file group, go to the menu *Configuration* / *File groups* / *Edit note*. The note will be displayed with the data when downloaded to a PC.

7.3. User settings

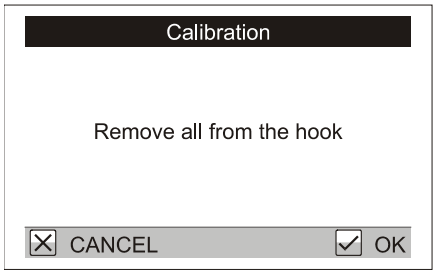


Depending on the environment, the operator may need to change the scale display and sound signals.
To set the light intensity of the display, go to *User settings* / *Display backlight*. Increase or decrease the contrast of the display in the menu *User settings* / *Display contrast*.
To set the “saving the weight” sound volume, go to the menu *User settings* / *Saving volume*.

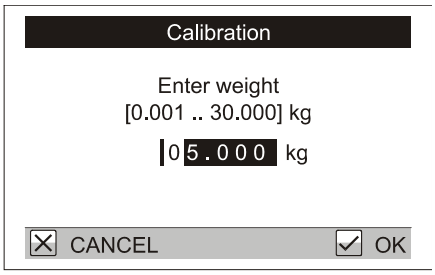
7.4. Calibration

The scale is calibrated from factory. If the calibration needs to be adjusted, go to menu *Maintenance / Weighing / Calibration* and follow the on screen instructions.

Remove all from the hook and press ↵. A dialog for entering the weight is displayed.



Hang a known weight on the scale, enter the weight value and press ↵.



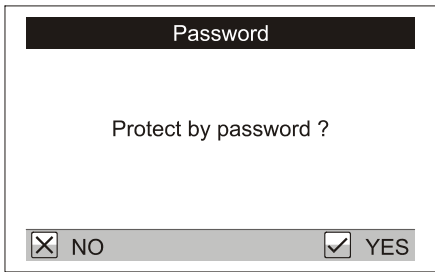
7.5. Password protection

Improper setting of the weighing parameters in the menu *Configuration* and *Maintenance* may cause problems when using the scale.

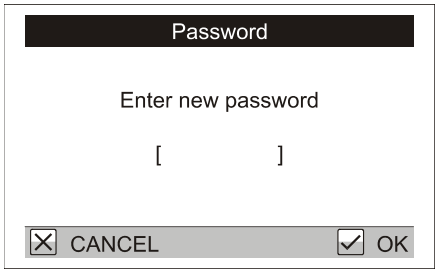
To protect the settings, enter a simple password as follows.

1. Perform the basic setting of the scale as described in this manual.
2. Protect the menu by password against accidental or unwanted overwriting of important parameters.

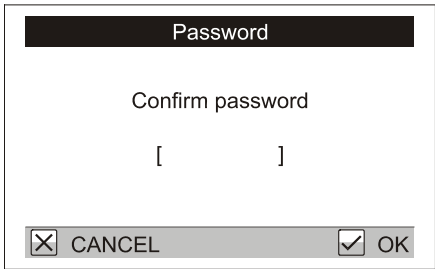
Select the menu *Maintenance* / *Password* and confirm the following dialog by pressing ↵.



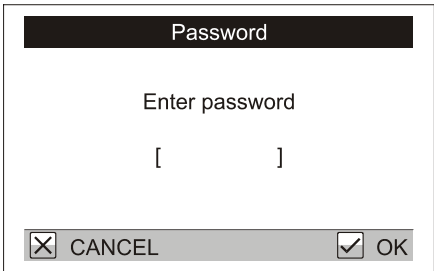
Set the password by using the arrow keys ↑, ↓, → and ← in any combination.



In the next dialog repeat this key combination.



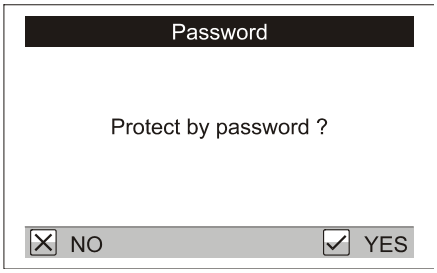
This sets a password, which will be used as protection against access to the menu *Configuration* and *Maintenance*. When these menu items are selected, you will be asked to enter the password.



Press the selected combination of arrow keys in this dialog.

7.5.1. Disabling password protection

To remove the password protection, go to the menu *Maintenance* / *Password*. Close the following dialog by pressing ☒.



If you forgot the password, contact your agent.

8. Data processing on PC

The supplied PC software is designed to store and analyze data acquired from the scale. The weight data from each flock can be plotted by age in the PC, forming a complete growth record and graph for any flock.
In addition all scale settings can be set and stored on the PC, data can be exported to other programs (Excel, etc.) and data can be printed.

8.1. Installation

Install the software and the scale driver on the computer as follows:

1. You must be logged as an administrator to be able to install the software.
2. Insert the installation CD in the computer drive.
3. The installation program starts automatically but if it does not, on the CD run *Setup.exe* in the folder *Software* to begin the installation.
4. After finishing the installation, leave the CD in the computer.
5. Connect the scale into a free USB port on the computer.

6. Windows will detect a new device *FlexScale Poultry Scale* and request its driver. Select Search on the CD and finish the driver installation.
7. Remove the CD from the computer and store in a safe place.

8.2. Charging from PC

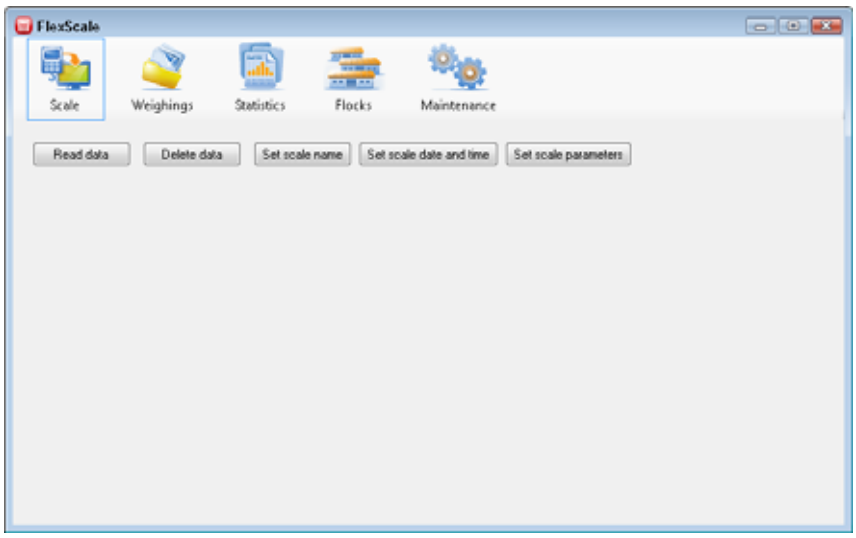
The scale battery will charge via the USB port while connected to a running PC.

8.3. Program start up

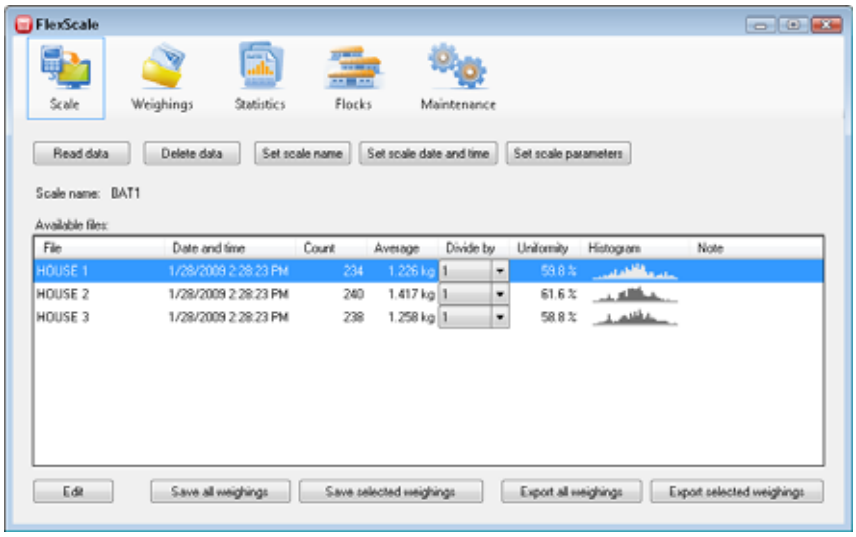
Click on icon *Start* / *Programs* / *FlexScale* / *FlexScale* to start the program.

8.4. Downloading the weighing results into PC

Switch the scale off, connect it to the computer and click the *Scale* icon. The scale communication panel will be displayed.



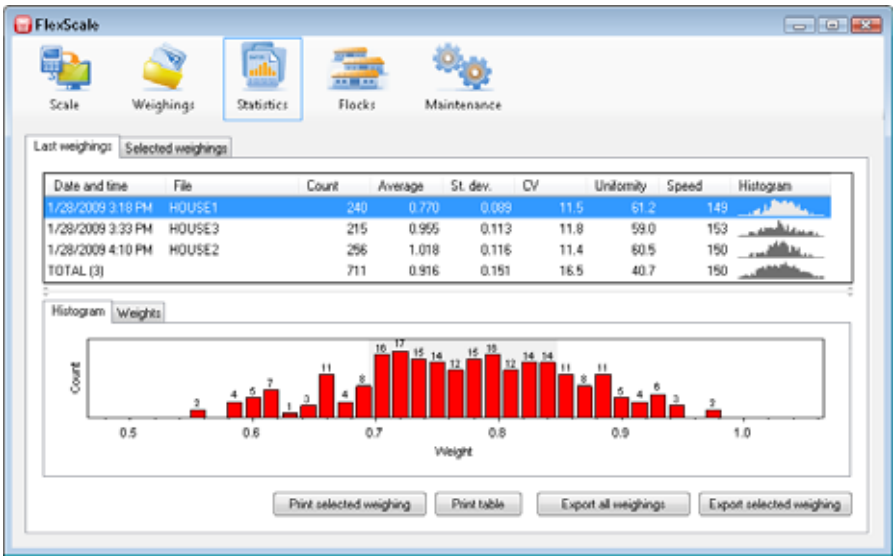
Click the *Read data* button. A dialog will display notifying you to wait and all data will be downloaded from the scale. The communication with the scale may last several minutes depending on the amount of data. When completed, a table with all weight data will be displayed.



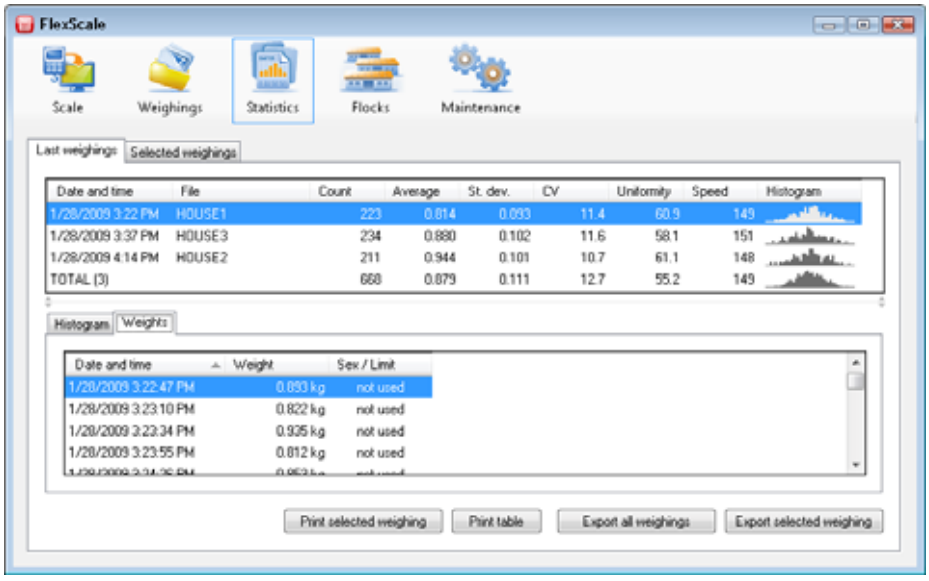
Click the *Save all weighings* button. All displayed files will be saved into the database for further processing.

8.5. Viewing weighing statistics

Click the *Statistics* icon. The statistics panel will be displayed.

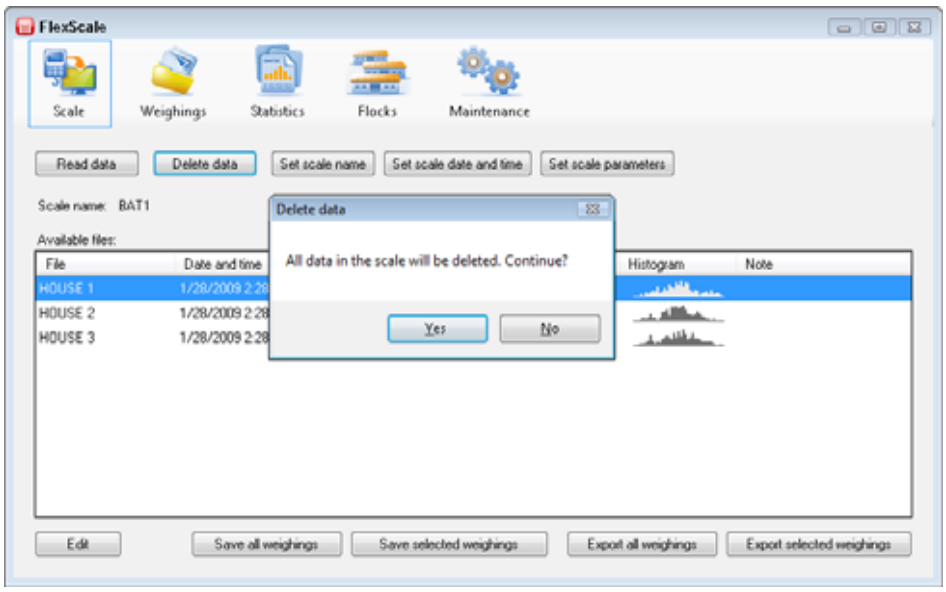


Files that have just been downloaded from the scale will be displayed in the table. The histogram will be displayed in the lower half of the panel for the highlighted file. Individual weights in this file will be displayed after clicking the *Weights* tab.



8.6. Deleting data from the scale

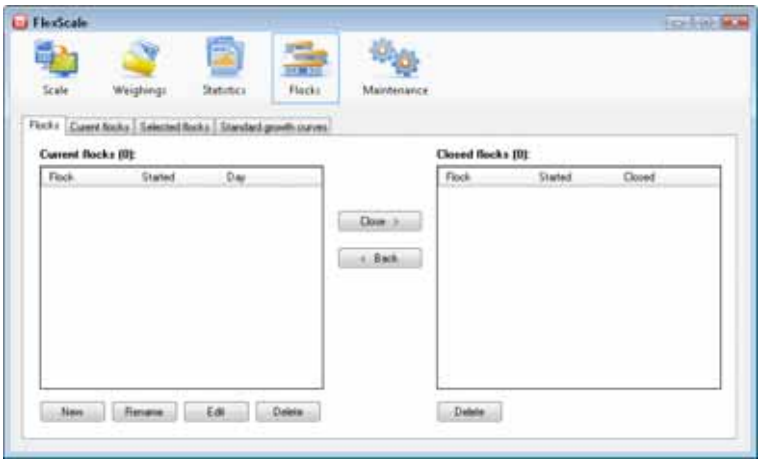
After saving the data on the PC, the data saved in the scale can be deleted. Click the *Scale* icon and then click the *Delete data* button.



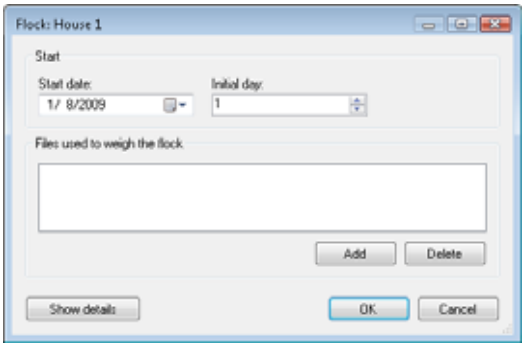
Click *Yes*. The data is deleted from the scale and can be disconnected from the PC.

8.7. Setup flocks

The growth data can be plotted for the entire life of the flock. Click the *Flocks* icon; the flocks setup panel will be displayed.



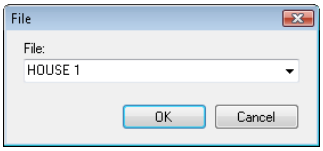
Click the *New* button to create a new flock. When the question *Do you want to use some existing flock as template?* displays, click *No*. Next dialog will ask for the flock name. Enter a name and click *OK*.



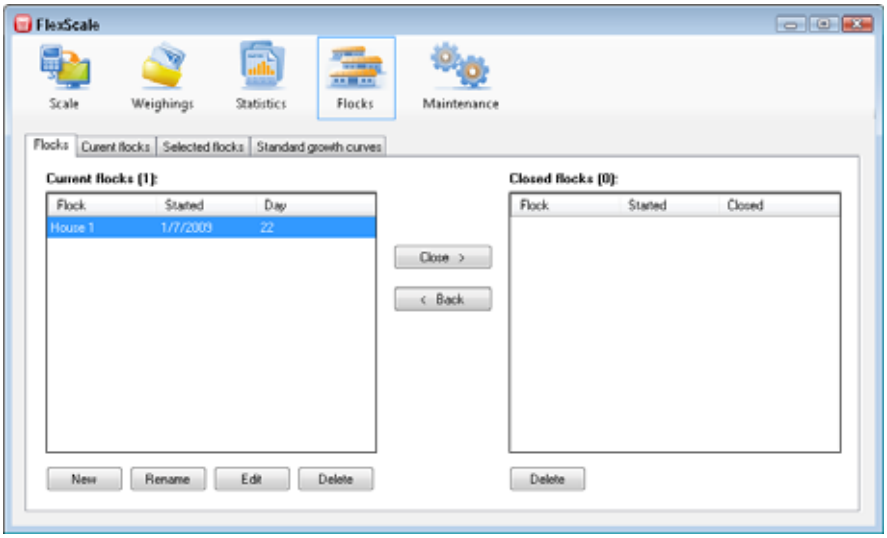
The dialog for entering the flock parameters will be displayed.

Enter the date when the flock was started in the *Start date* field. Enter the flock age on the start date in the *Initial day* field.

Use the *Add* button to add all files that are designated for this flock.



Click *OK* to close the dialog. The flock is created and included among the working flocks and will be displayed in the *Current flocks* table.



All files corresponding to this flock will be used to create the growth record. Any file assigned to this flock will automatically be logged to this flock each time it is downloaded from the scale.

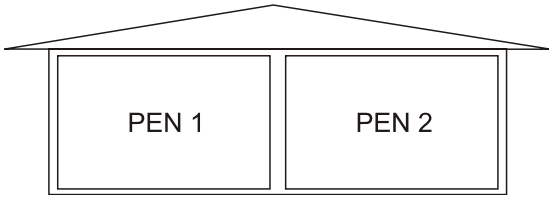
Example:

There is one house on your farm, which contains two pens with birds, Pen 1 and Pen 2. There are two files created in the scale named *PEN 1* and *PEN 2*, which you use for weighing the birds.

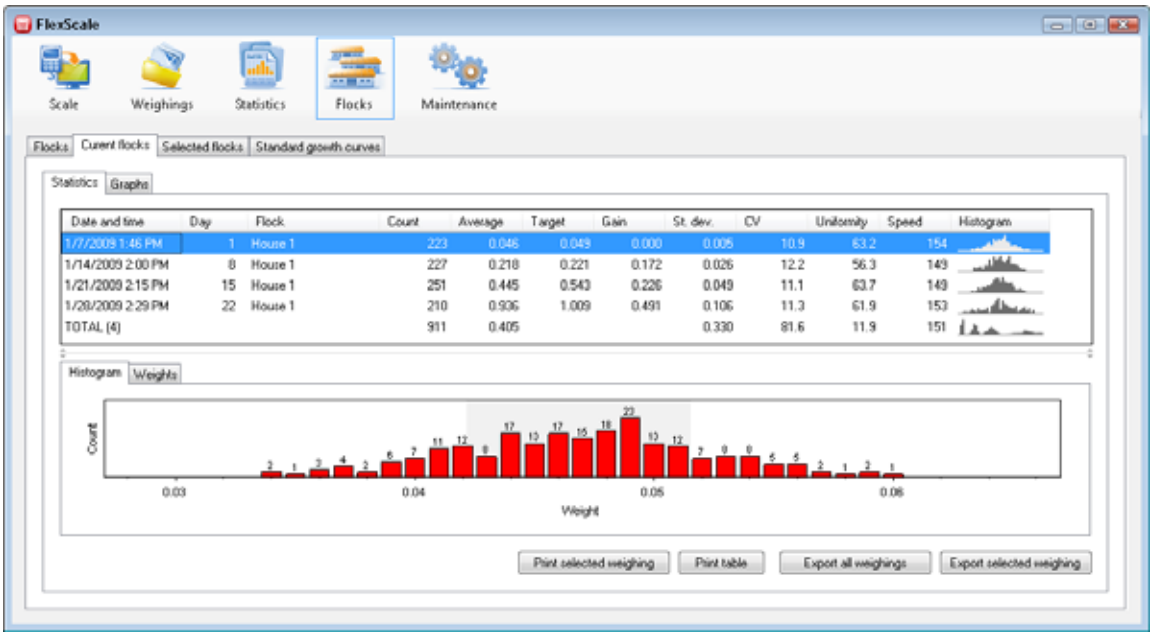
On 01/01/2009, day-old chicks were placed in both pens. Create a new flock in your computer named *Pen 1*. Enter 01/01/2009 in the *Start date* field, enter day 1 in the *Initial day* field, and click *Add* to add file *PEN 1*.

This flock will be used for monitoring birds in Pen 1. Create another flock *Pen 2* in similar way, and add file *PEN 2* to this flock.

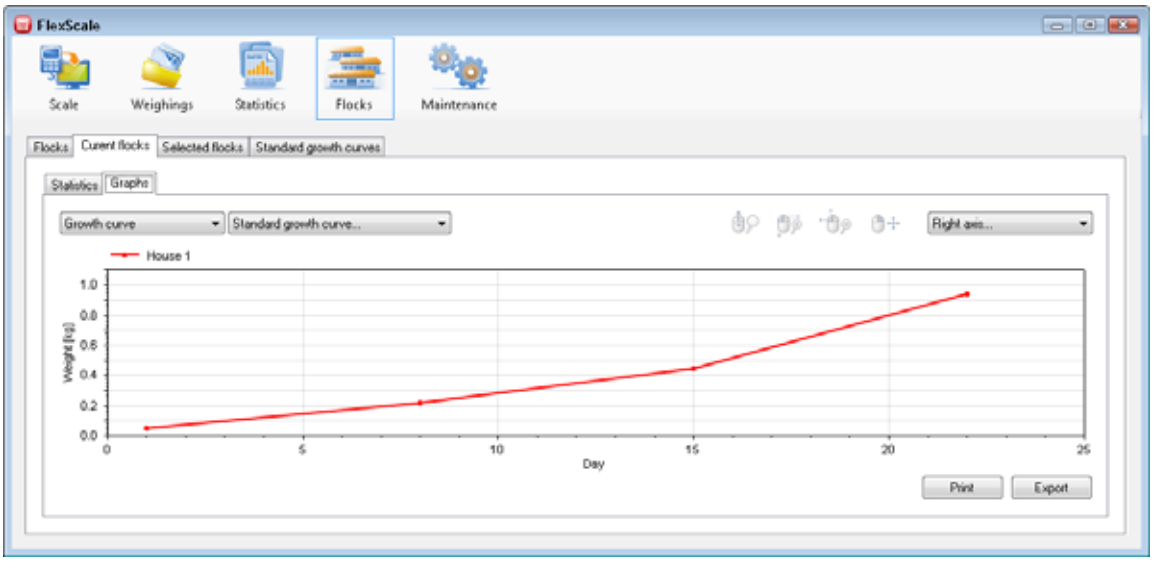
For monitoring birds in the whole house, create a flock *House* and add both files *PEN 1* and *PEN 2*. From 01/01/2009, weighing of both files *PEN 1* and *PEN 2* will automatically fall within the respective flocks.



The progress of growth and other statistics can be monitored in the *Current flocks* tab.



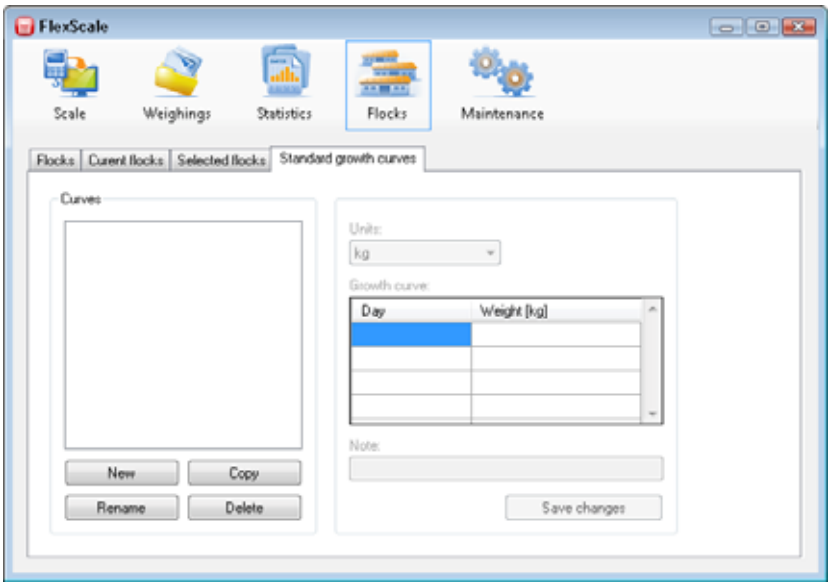
The rows in the table show individual days when the flock was weighed. The histogram for the selected day is displayed in the lower half of the panel for the highlighted row. Individual weights weighed for this day will be displayed after clicking the *Weights* tab. Select the *Graphs* tab to monitor the flock progress in a graphic form.



The horizontal axis specifies the flock age and the vertical axis specifies the average weight of the flock.

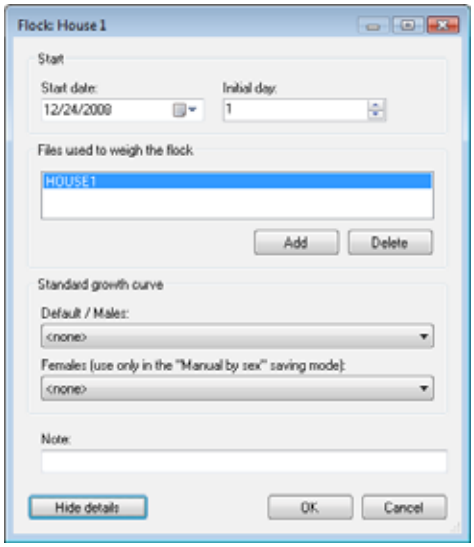
8.7.1. Growth curve comparison

The actual growth curve of the flock can be compared with a standard weight curve. To define the standard growth curve select the *Standard growth curves* tab.



Click the *New* button and enter the name of the growth curve. Select *OK* and the new growth curve will be included in the list of curves. Now fill in the age and weight. After filling the table, save the data by clicking the *Save changes* button.

To add growth curve to the flock: select the *Flocks* tab and choose the required flock in the table *Current flocks* and click the *Edit* button. Click *Show details* button in the dialog with the flock's parameters. The section for entering the growth curves will be displayed.



Use the *Default/Males* field to select a saved growth standard curve and close the dialog by clicking *OK*.

Select the *Current flocks* tab and then the *Statistics* tab. The weight calculated from the entered growth curve will be displayed in the *Target* column. Select the *Graphs* tab. Select the required growth curve in the field with text *Standard growth curve...*. The weight standard curve will be displayed in the graph along with the actual weight curve.

8.7.2. Flock ending

Click the *Flocks* tab. In the *Current flocks* table, select the flock you want to close and click the *Close* button. Enter the flock ending data in the following dialog. The flock will no longer be monitored and it will be moved to the *Closed flocks* table.

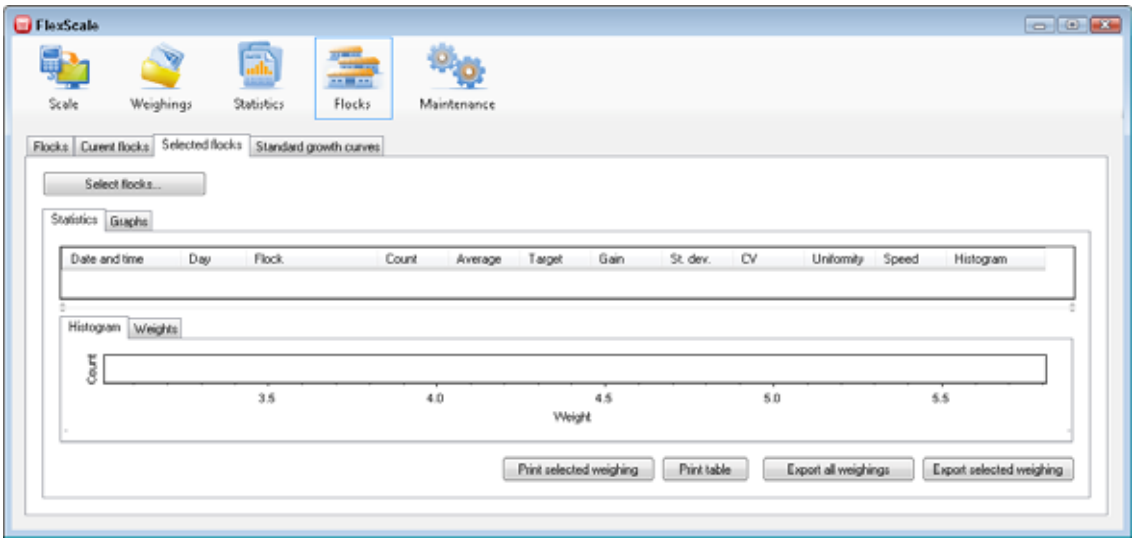
8.7.3. Existing flock template

To start a new flock to replace a finished flock simply use the old flock as a template. Select the *Flocks* tab and click the *New* button. At *Do you want to use some existing flock as template?,* click *Yes*. The list of flocks already existing in the database will be displayed.

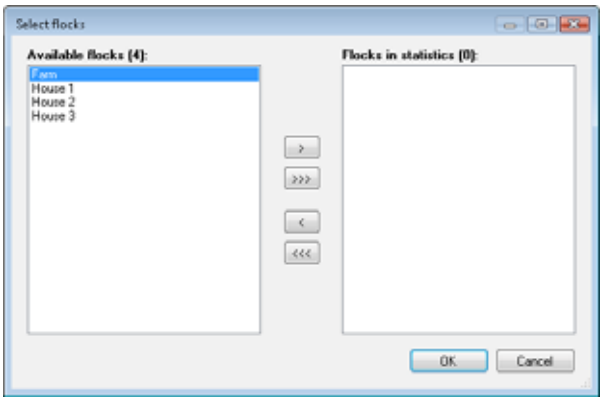
Select a flock, which will be used as a template for the new flock and click *OK*. Next dialog will ask for the flock name. Enter new name of the flock and click *OK*. The dialog for entering the flock parameters will be displayed. Change the date when the flock was started in the *Start date* field. Enter the flock age on the start date in the *Initial day* field. Close the dialog by clicking *OK*.

8.7.4. Comparing flocks

In the *Current flocks* tab it is possible to compare all flocks that are currently present on your farm. The program also allows manual selection of displayed flocks, including the closed flocks. Select the *Selected flocks* tab.



Click the *Select flocks...* button and a dialog for selecting flocks will be displayed.

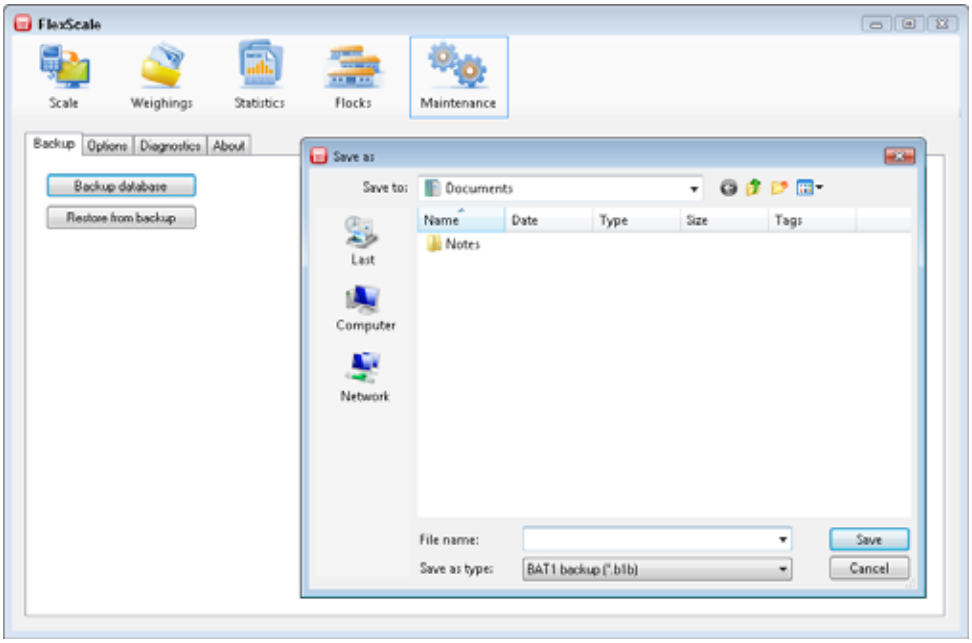


In the *Available flocks* list, select the flock you want to display and click the > button. The selected flock will be moved to the *Flocks in statistics* list. Close the dialog by clicking *OK*.
You can see the data of the selected flock in the tabs *Statistics* and *Graphs*. In order to make comparisons with another flock, click the *Select flocks...* button and select the flock to be compared in the *Available flocks* list. Use the > button to add the flock to the *Flocks in statistics* list. After closing the dialog, both selected flocks will be displayed. The dialog for selecting the flocks allows the following operations:

- Adding a flock – in the *Available flocks* list, select the flock you want to add and click >.
- Removing a flock – in the *Flocks in statistics* list, select the flock you want to remove and click <.
- For clearing the list click <<<.
- For adding all available flocks in the list, click >>>.

8.8. Database backup

A database backup should be done on a regular basis. In case of unexpected complications (computer failure, virus infection), you will still have the database available from the last backup. Click the *Maintenance* icon and select the *Backup* tab. Click the *Backup database* button.

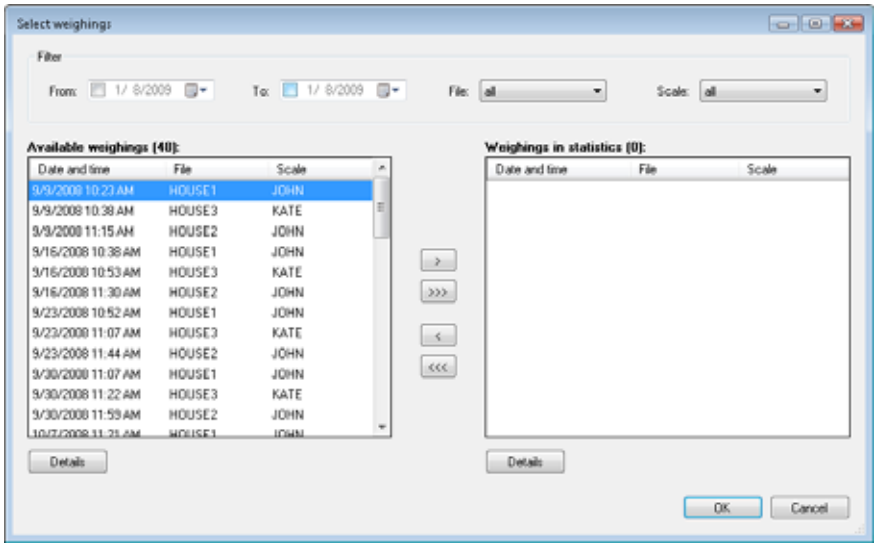


Select the folder and the file name for backing up the database. After clicking the *Save* button, the database backup will be saved in the selected file. You can burn the file on a CD/DVD or save it to your backup server.

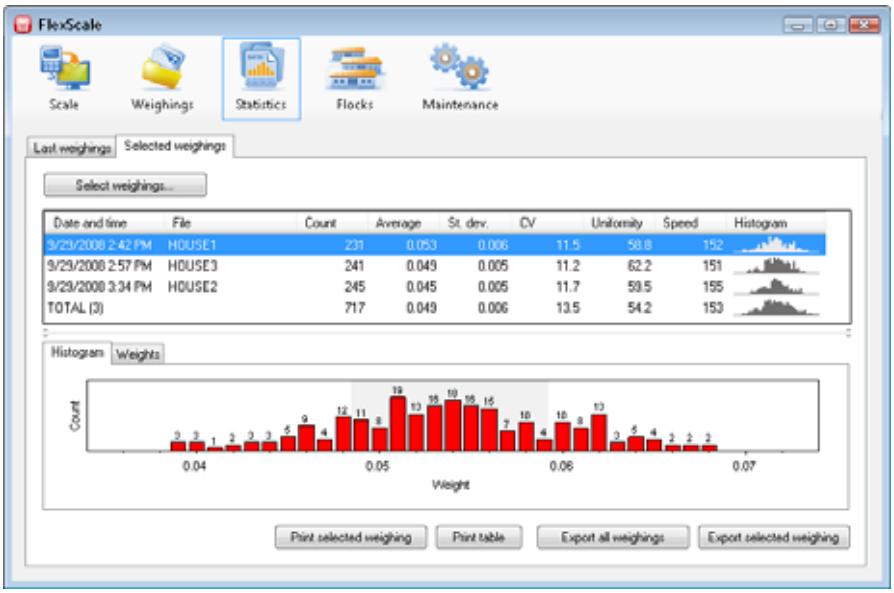
8.9. Advanced procedures

8.9.1. Manual selection of weighings in the statistics

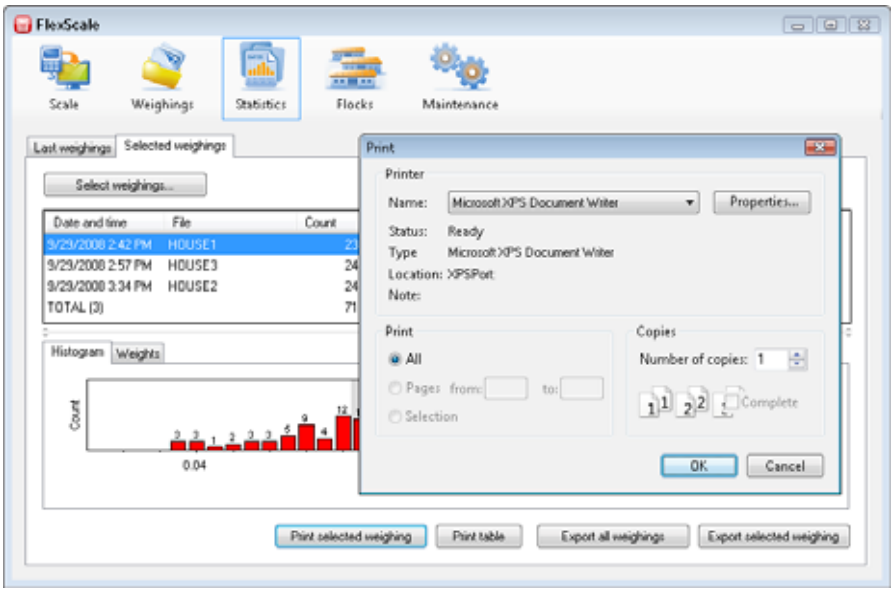
Select the statistics panel by clicking the *Statistics* icon. The *Last weighings* tab is used for checking the last saved data in individual files. If you need to display the statistics of older weighings, select the *Selected weighings* tab. Click the *Select weighings...* button. The dialog for selecting weighings will be displayed.



The left list includes all available weighings sorted by date. The right list includes weighings selected in the statistics. Select a row in the *Available weighings* table and click the > button. You can repeat the procedure several times. Close the dialog by clicking *OK*. Selected weighings will be displayed in the table, where you can see and compare their statistics, histogram, and individual weights.



You can print the selected row of the statistics including the histogram by clicking the *Print selected weighing* button. You can print the statistics table as it is displayed on the screen using the *Print table* button.



Click the *Select weighings...* button again.
The dialog for selecting the weighings allows the following operations:

- **Adding a weighing** – in the *Available weighings* list, select the weighing you want to add and click >. You can perform the same operation by double clicking on the weighing in the *Available weighings* list.
- **Removing a weighing** – in the *Weighings in statistics* list, select the weighing you want to remove and click <. You can perform the same operation by double clicking on the weighing in the *Weighings in statistics* list.
- For clearing the *Weighings in statistics* list - click <<<.
- For moving all weighings from the *Available weighings* list – click >>>.

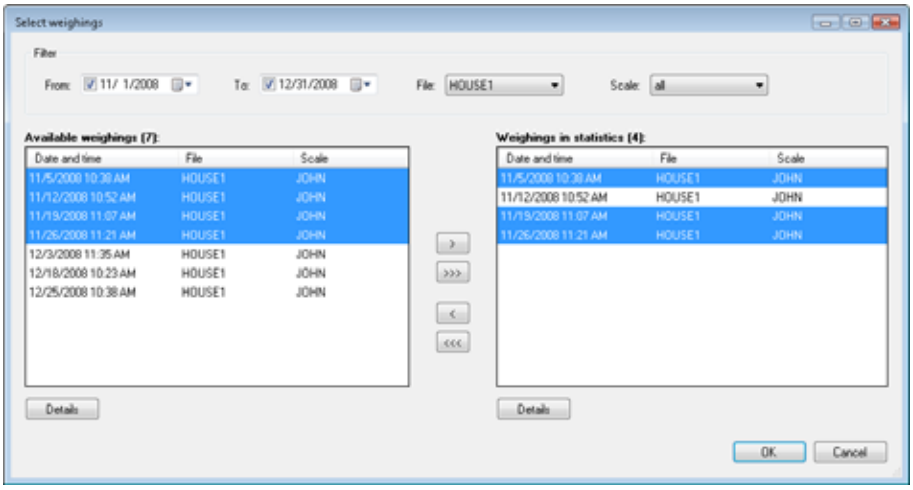
The *Available weighings* list can be very long. In order to simplify the weighings selection, you can filter the list according to the preset criteria:

- After setting a date in the *From* field, only weighings acquired after the entered date will remain in the *Available weighings* list.
- After setting a date in the *To* field, only weighings acquired prior to the entered date will remain in the list.
- After selecting *File*, only weighings of the selected file will remain in the list.
- After selecting *Scale*, only weighings acquired by the scale with the selected name will remain in the list.

You can select more weighings in both lists using procedures common in the Windows operating systems:

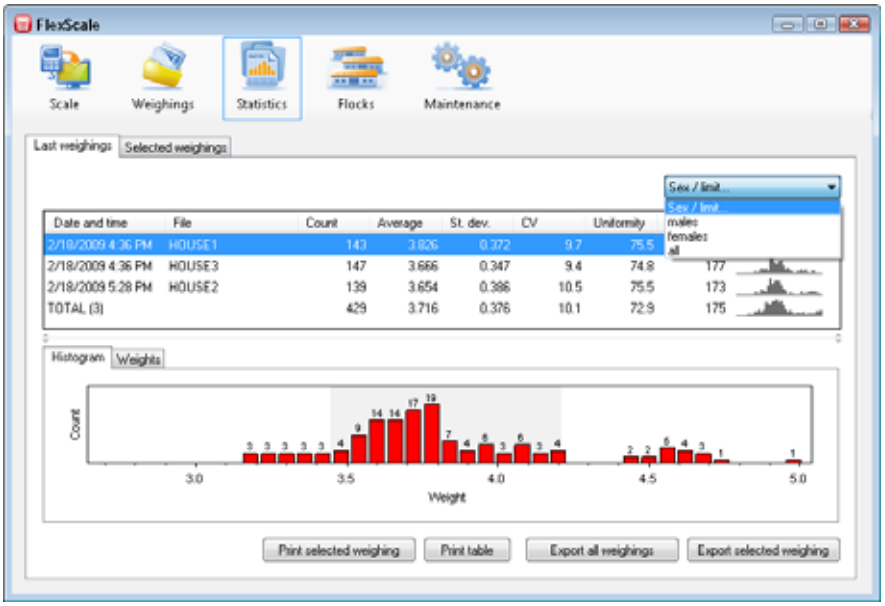
- **Selection of a range of weighings** – click on the first weighing. Hold the *Shift* key and click on the last weighing. All weighings between the first and last will be selected.
- **Selection of individual weighings** – click on the selected weighing. Hold the *Ctrl* key. Click on other required weighings. Release the *Ctrl* key.
- **Select all weighings in the list** – hold the *Ctrl* key and press the *A* key. Release both keys.

Move the selected weighings by clicking < or >.



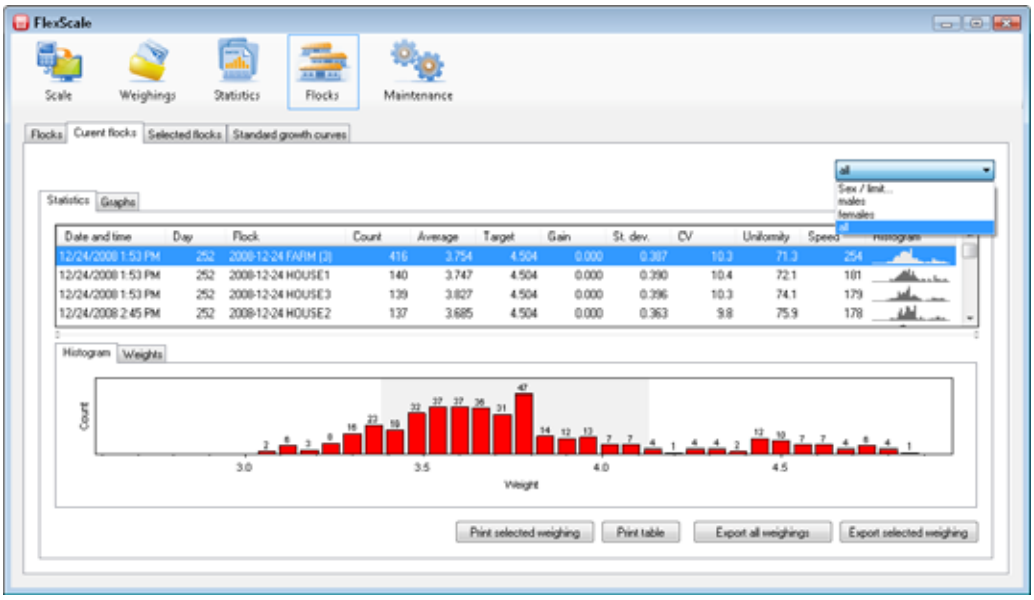
8.9.2. Weighing with sex differentiation

If the scale is set in the manual saving mode with sex differentiation, the program will receive the gender data after downloading data from the scale, and save it in the database for further processing. Click the *Statistics* icon and the *Last weighings* tab.



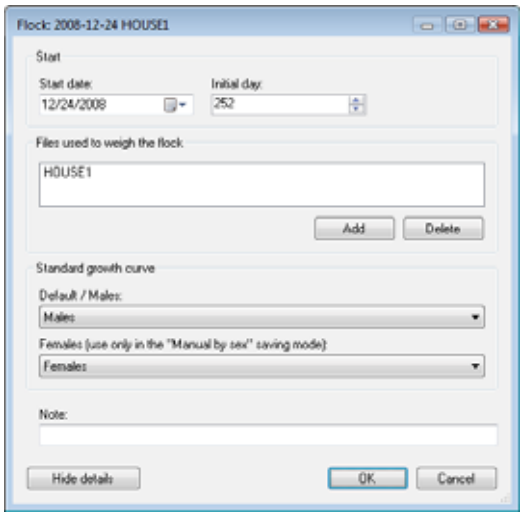
Select for example *males* in the field with text *Sex/limit*. The table of weighings, histogram, and the list of weighed weights will be changed to include only data related to males. In the similar way, by selecting *females* you will display data for females. Selecting *all* will display all weighings without sex differentiation. The same method will display the selected statistics in the *Selected weighings* tab.

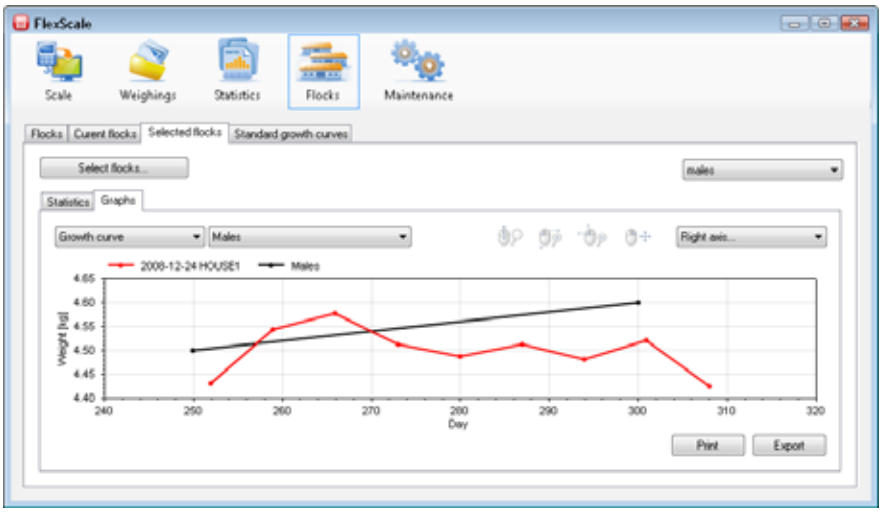
Using a similar method, you can display data in the *Flocks* panel, in tabs *Current flocks* and *Selected flocks*.



In the flocks, it is possible to enter standard growth curves separately for males and females. Select the *Flocks* tab; select the flock in the *Current flocks* table and click *Edit*.

Select the growth curve for males in the *Default/Males* field and select the growth curve for females in the *Females* field. Click *OK*.
Select the *Selected flocks* tab and select the prepared flock. Select *males* in the *Sex/limit* field. The data related to males will be displayed. Select the growth curve for males in the *Graphs* tab, field *Standard growth curves...*.

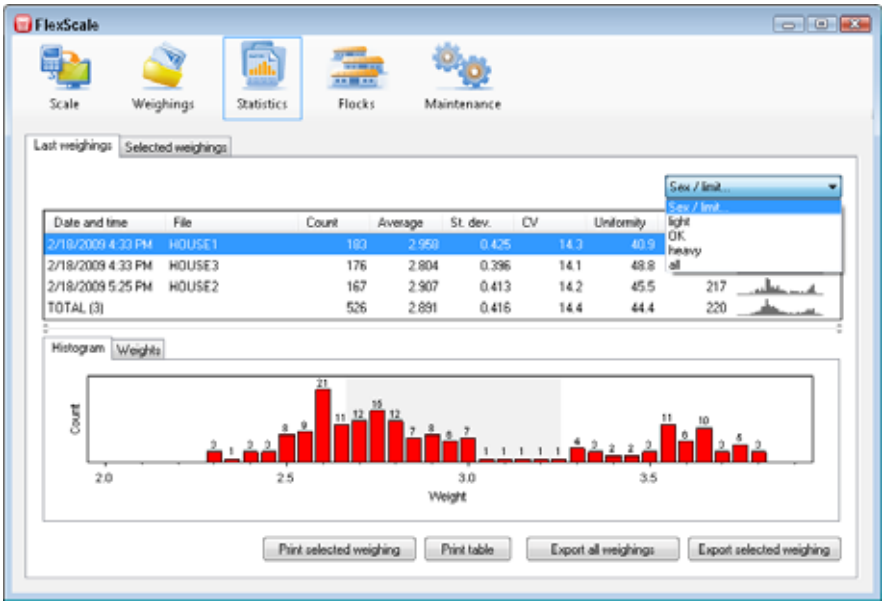




The same method applies to displaying data for females including the growth curve. When *all* is selected, the program will provide the growth curves for both males and females.

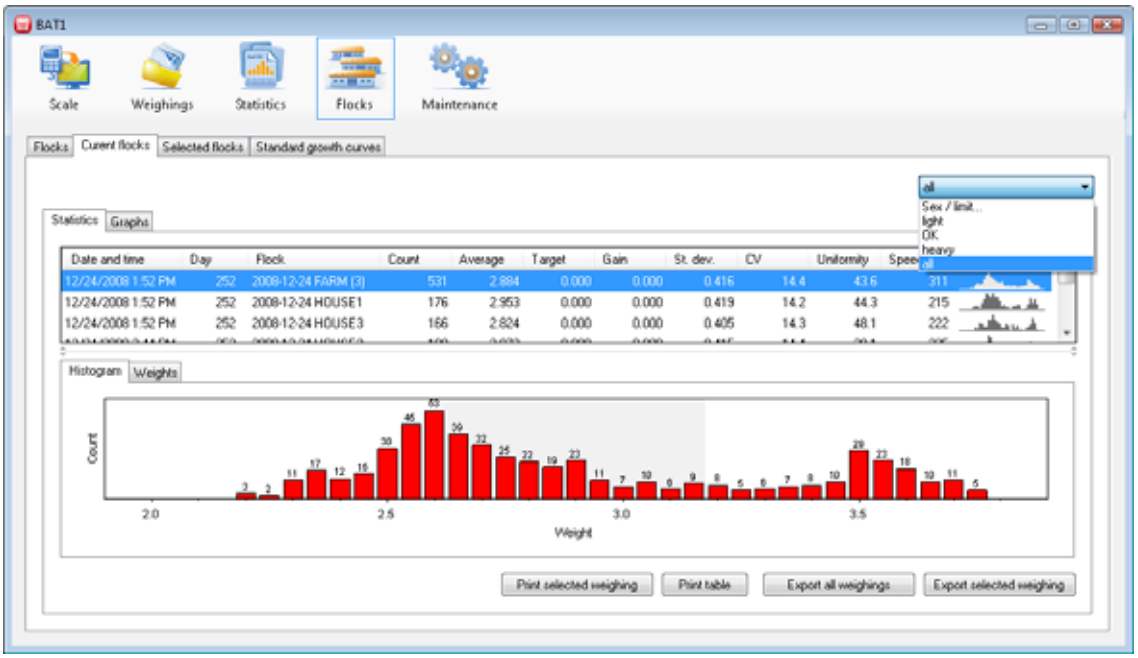
8.9.3. Sorting by weight

When the scale mode is “sorting by weight”, the program will receive the sorting data after downloading data from the scale, and will save it in the database for further processing. Click the *Statistics* icon and the *Last weighings* tab.



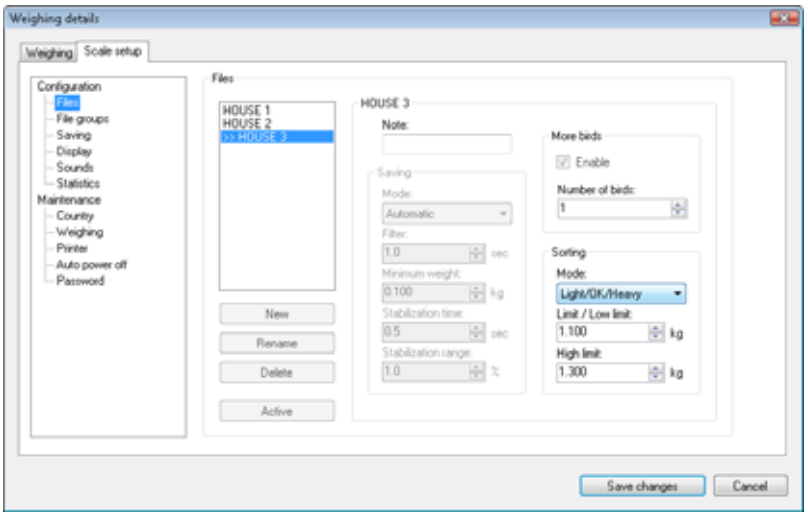
Select for example *light* in the field with text *Sex/limit*. The table of weighings, histogram, and the list of weighed weights will be changed to include only data for weighing under the preset limit. In a similar way, by selecting *OK* you will display data for weighing within the preset limits, and by selecting *heavy* weighings above the preset limit. Selecting *all* will display all weighings regardless the sorting. The same method will display the selected statistics in the *Selected weighings* tab.

Using a similar method, you can display data in the panel *Flocks*, tabs *Current flocks* and *Selected flocks*.



The limits used during the weighing process can be found in the *Weighings* panel. Select a weighing in the *Available weighings* table and click *Edit*.

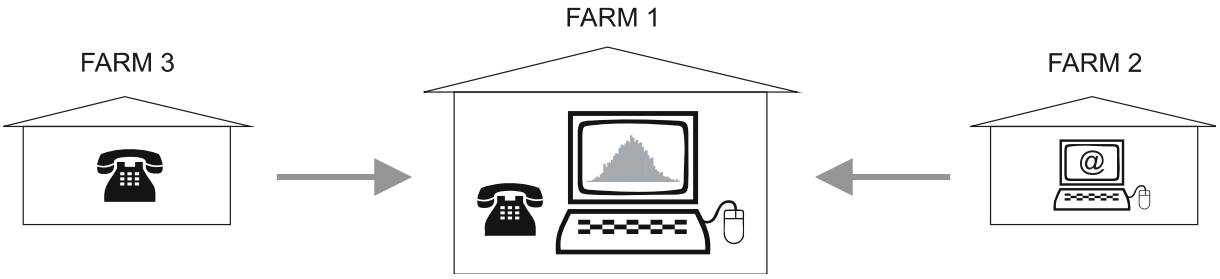
Select the *Scale setup* tab in the *Weighing details* dialog. Select the file in the *Files* list. The *Sorting* panel will display the sorting limits for this file.



8.9.4. Exporting data

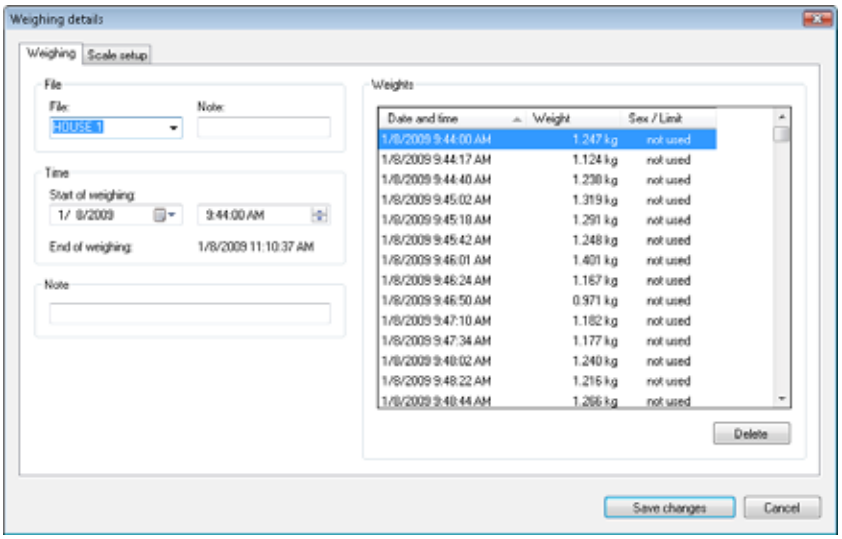
Data can be exported to another computer or location.

Example:
Your company includes three farms. The birds are weighed on each farm.
Weighing results from all three farms are processed centrally at FARM 1.
FARM 2 data is downloaded to a PC and e-mailed to FARM 1.
There is no PC on the third farm, so the weighing results are faxed or reported via telephone to FARM 1.

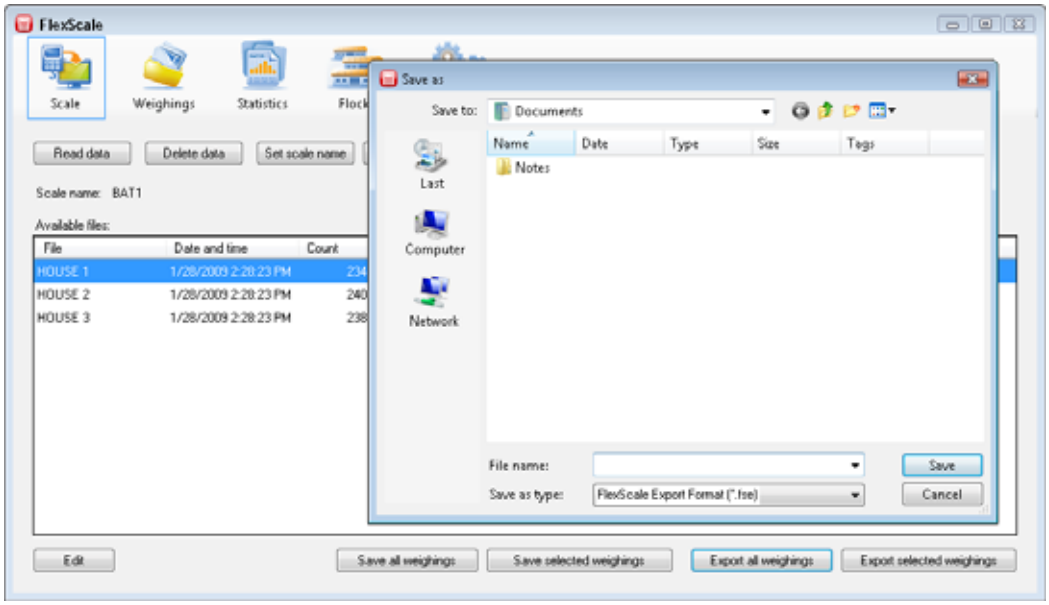


Saving data to a PC
FARM 2 data would be saved as follows. Start the FlexSCale program and select the *Scale* icon. Connect the scale to the computer and click the *Read data* button.

After downloading the data, click the *Save all weighings* button. All displayed files will be saved into the database for further processing. Check the downloaded files by clicking *Edit*.



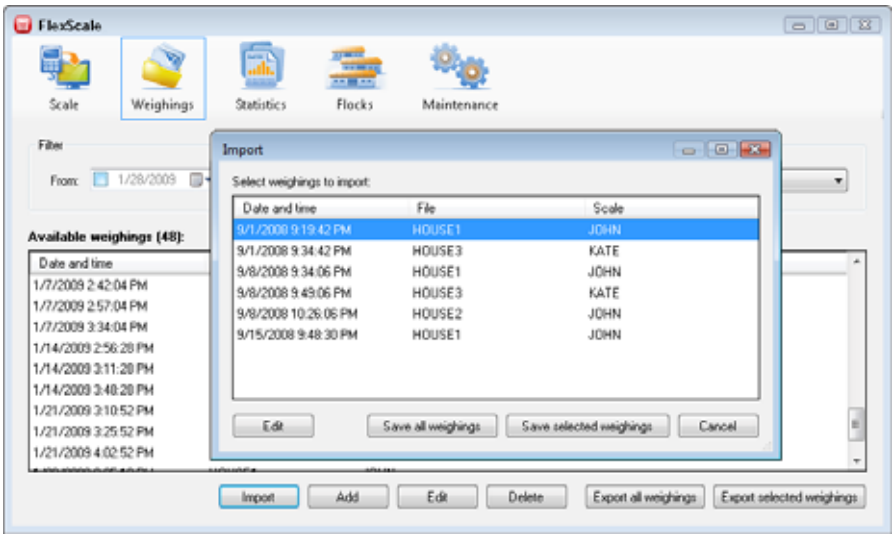
If the downloaded data is ok, click the *Export all weighings* button. In the following dialog, select the *FlexScale export file* format and the file for saving the downloaded data.



Click *Save*. The saved file can be sent as an e-mail attachment to another computer or via a local network or server (FARM 1 for example). Delete the data in the scale by clicking *Delete data*, disconnect the scale, and exit the program.

Importing data

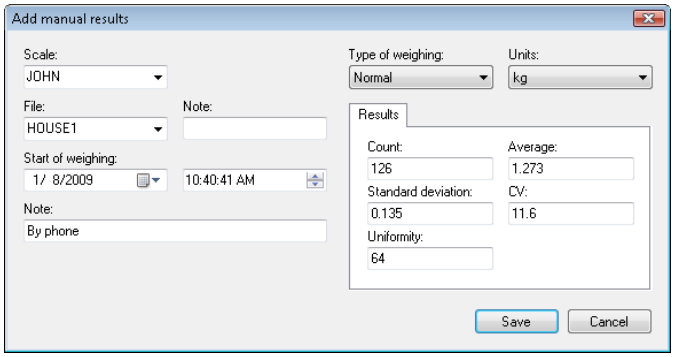
Click the *Import* button and select the file sent from the farm in the dialog box. Click *Open*, and the contents will be displayed.



Click *Save all weighings* and all data will be saved in the database. The imported data can be checked in the *Available weighings* table by clicking the *Edit* button.

Manual data entry

Weighing results can also be manually entered into the database. Click *Add* and the manual entry dialog box will be displayed.



Enter the weighing results and click *Save*. Repeat to enter data from all weighed files. We recommend filling the *Note* field (bottom left) related to the data origin (such as “by phone” etc.). Click *Save.*

9. Troubleshooting

9.1. Scale

1. After suspension of the hook, the scale does not show zero weight
   - shortly hold ☒ for setting zero value
2. The scale shows wrong weight
   - calibrate the scale, see chapter 7.4
3. The scale shows a significantly smaller weight than expected
   - disable the mode of weighing small chickens
4. It is not possible to set weighing with sorting
   - the weighing mode with the saving of sex is selected, select another mode
5. The value of the weight is overwritten on the display after weighing
   - disable the mode of weighing with sorting
6. After the bird is hung, the scale does not save the weight
   - the manual saving mode is enabled, select automatic mode
   - check that the scale is suspended on a firm, not spring-biased construction
   - the bird is moving too much, select the manual saving mode
7. The data on the display is hardly readable
   - change the contrast of the display
   - select display mode *Large*

9.2. PC

1. After downloading data from the scale, some files in the *Scale* panel are missing
   - missing files are empty – they do not include any weighed values
2. After downloading data, the statistics does not show any new files or just one file
   - save data in the panel *Scale* using the *Save all weighings* button
3. After downloading and saving data, the data do not display in the *Statistics* panel in the *Last weighings* tab
   - the downloaded data were weighed several days ago. Check if the data is displayed in the *Weighings* panel and to view the data, use the panel *Statistics*, and the *Selected weighings* tab or panel *Flocks*
4. The *Flocks* panel, tab *Current flocks*, tab *Statistics* is empty
   - check the weighing date and date of the flock start. Weighings with the dates lower than the start date of the flock are not displayed
5. The *Flocks* panel, tab *Selected flocks*, tab *Statistics* is empty
   - check the weighing date and date of start of the selected flocks. Weighings with the dates lower than the start date of the flock are not displayed
6. Graph with just one point is displayed in the *Flocks* panel, tab *Graph*
   - the respective flock was weighed only once. After completing further weighings (in the following days), the graph will be displayed correctly
7. The graph in the *Flocks* panel does not include the option of the growth curves.
   – the selected flocks do not have the growth curve preset. Complete the setting of the growth curve in the *Flocks* tab, see chapter 8.7.1.

10. Spare parts

Code no.	Description
60-45-0466	Charging set f/weighing computer FlexScale, car connection Charger
60-45-0467	Printer portable for FlexScale 30kg/50kg
60-45-0468	Case for weighing computer FlexScale 30kg/50kg
60-45-0469	Charging device f/weighing computer FlexScale spare part
60-45-0470	Weighing hook for weighing computer FlexScale

11. Contact

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