USER GUIDE

WX-010-0043

Radwag

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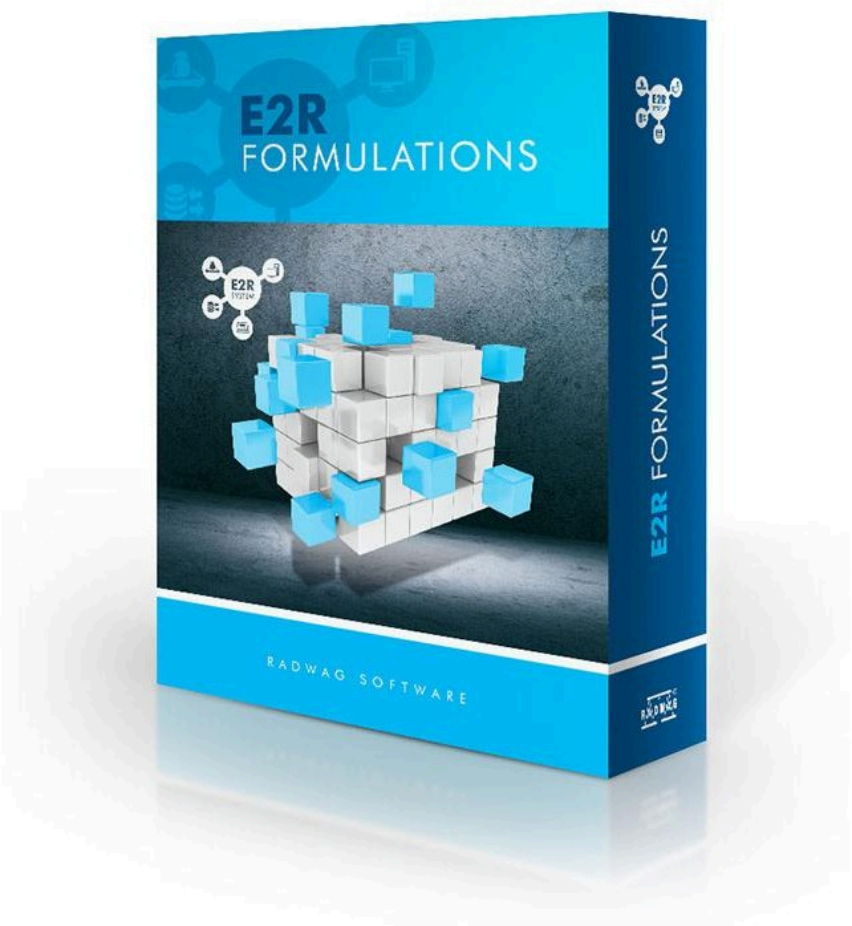

E2R Formulations

Modular Software for Cooperation with Weighing Instruments

USER MANUAL

ITKU-77-01-04-17-EN

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1. GENERAL INFORMATION

1.1. Intended Use

E2R Formulations enables: weighing ingredients of selected formulation on one or few weighing platforms, defining formulations with the ability to declare tolerance for given ingredient, reporting on carried out formulations. Formulations can be carried out directly or through production orders.

The network may contain one or many types of weighing instruments.

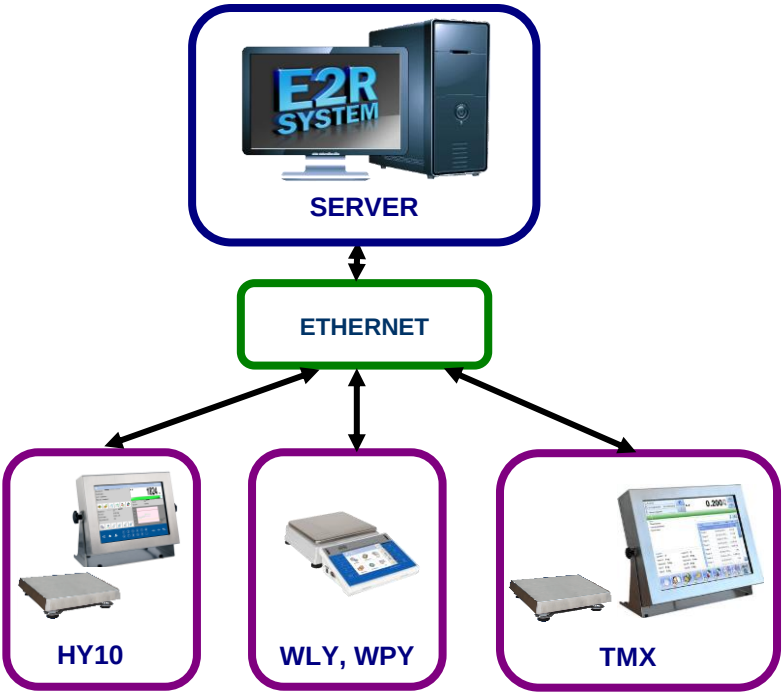


Diagram of E2R FORMULATIONS system in Ethernet network

Caution:

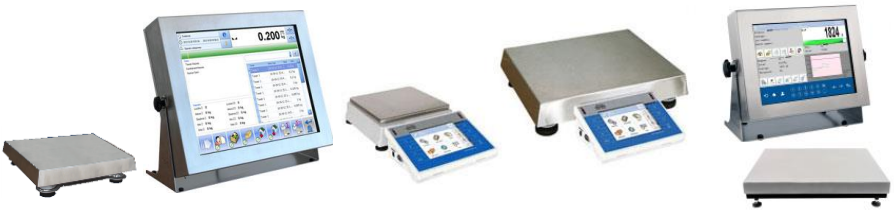
1. *Due to the software update, some discrepancies may occur between this user manual's content and the actual state.*
2. ***RADWAG** does not bear responsibility for:*
   - *potential errors being a result of inappropriate use,*
   - *safety and potential data loss caused by the inappropriate use of*

either software or computer, or lack of backup copy.

3. *Mind that in case of loss of purchased medium, **RADWAG** will not provide you with archive software versions. You will be required to use the latest E2R **SYSTEM** update.*

1.2. Compatible Weighing Instruments

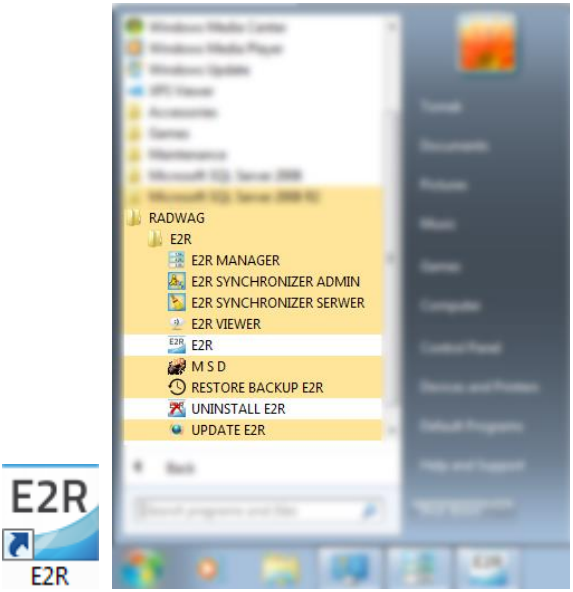
Due to the communication protocol, **E2R Weighing Records** software is compatible only with **RADWAG-manufactured** weighing instruments. Compatible weighing instruments series: **HY10**, **WLY**, **WPY**, **TMX**.



Prior software operation, set appropriate parameters on each of the weighing instruments in the network to ensure required measurement accuracy and correct cooperation. For detailed description of operating parameters refer to the user manual of a weighing instrument.

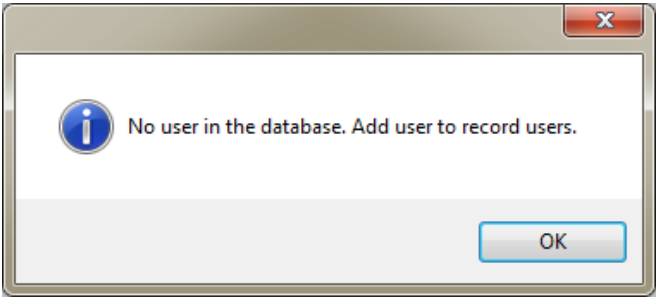
2. START-UP

To run the program press desktop icon or use Start Menu of the operating system: **START/PROGRAMS/RADWAG/E2R/E2R**.

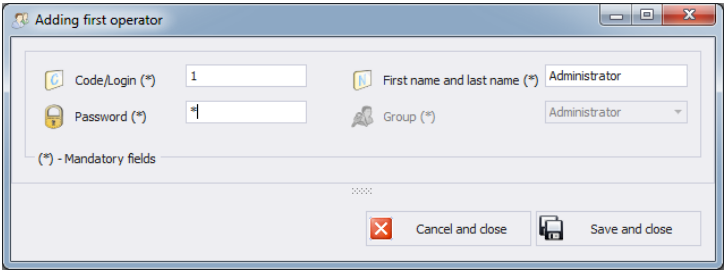


2.1. Adding the First User

When running the program for the first time, message informing on an empty Operator Database is displayed. Press OK button, the program shall guide you through adding procedure.



Fill in the following fields: **Code/Login**, **Password**, **First name and last name**.

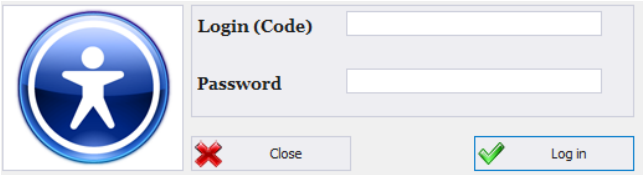


Caution:
The first added user has administrator permissions level.
Fill in all mandatory fields; the code is also a login.

Press **Save and Close** button to confirm introduced modifications.

2.2. Logging in Procedure

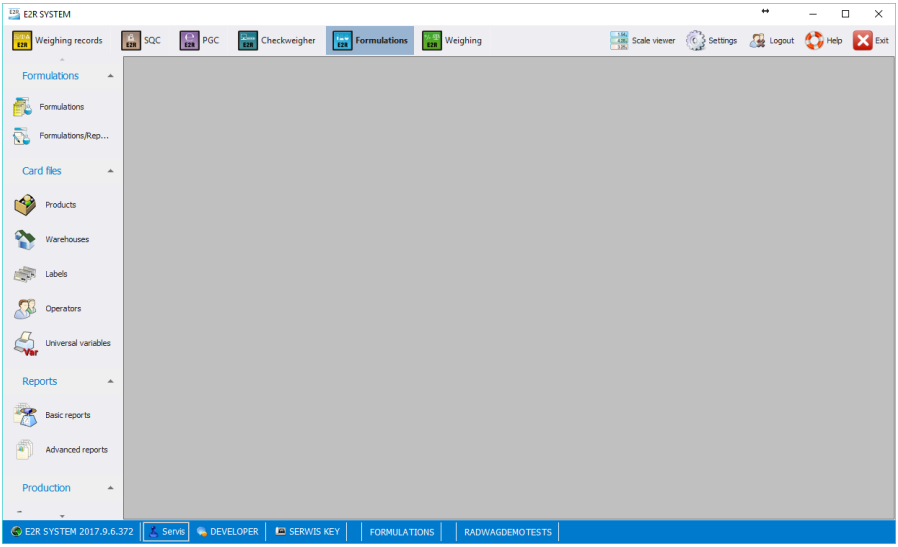
Upon running the program, it is obligatory to perform logging in operation. Enter **Login / Code** and **Password**.



Press **OK** button to confirm the entered values, the program displays Home Screen.

3. HOME SCREEN

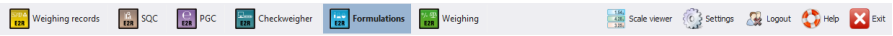
Home Screen of E2R WEIGHING RECORDS software is displayed upon successfully completed logging in operation.



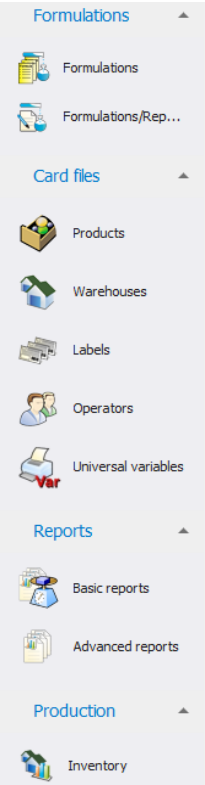
The Home Screen has been divided into 4 sections:

- Top bar – System toolbar,
- Side bar – Navigation pane,
- Bottom bar – Status bar,
- Workpane.

System toolbar features exit button along with pictograms activating operation modes, scales preview, parameters setup and logout operation.



Navigation pane comprises modules featuring buttons for activation program functions.



Status bar displays information on software version, logged in user, user permissions level, current operation mode and license type.

Workpane has been designed to display windows triggered by Navigation Pane buttons. The windows provide all data and information.

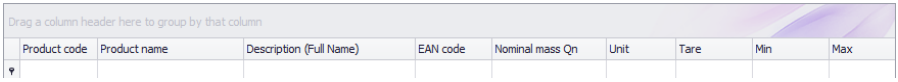
3.1. Workpane

Data displayed in a workpane is taken form database. Measurements carried out using the system can be filtered and sorted. Filter mechanism has been designed to allow searching particular information for specified columns.
Sorting mechanism (grouping) features option of information summary for specified columns.

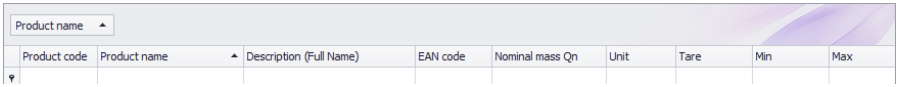
3.1.1. Data Sorting

Data displayed in a workpane of any available module can be freely sorted.

To group displayed data, first select particular column header, next drag it over area marked with red border and drop it.

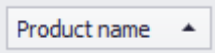


Dropped header turns into a button with a name. Press the button once to enforce list sorting in either ascending or descending order.

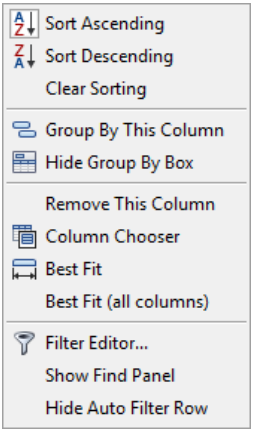


3.1.2. Data Filtering

In order to activate extra filtering options, press right hand top corner of particular column header. List of available options is displayed.

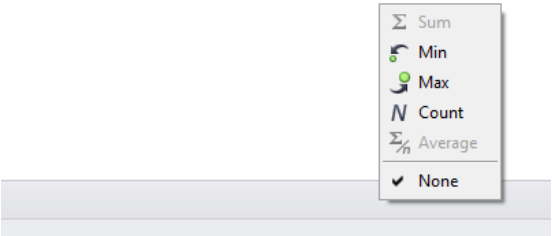


Click right mouse button to operate the following context menu with sorting options.



Where:

Sort Ascending	Click to sort from A to Z
Sort Descending	Click to sort from Z to A
Clear Sorting	Click to delete grouping filter
Group By This Column	Click to group data by selected column
Hide Group By Box	Click to hide quick grouping option
Remove This Column	Click to delete selected column, the column is no longer displayed in a window
Column Chooser	Click to run column view editor
Best Fit	Click to modify column width to get the most optimal view
Best Fit (all columns)	Click to modify all columns widths to get the most optimal view
Filter Editor…	Advanced filter
Show Find Panel	Click to run common filter field allowing search all columns for specified value
Hide Auto Filter Row	Click to hide filter row option



Bottom workpane area features handy data filter allowing to generate 5 basic statistics for a particular column. To select statistics type, move the cursor over the bottom bar of a workpane and press right mouse button.

Basic statistics:

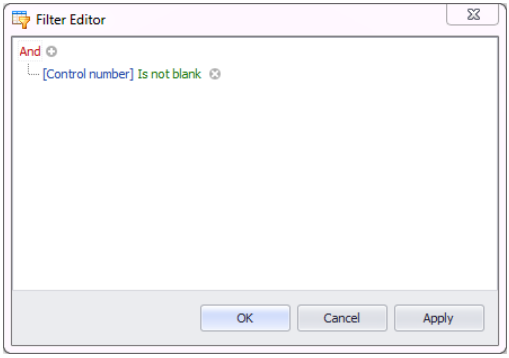
Sum	Click to display sum of all values of particular column
Min	Click to display minimum value of particular column
Max	Click to display maximum value of particular column
Count	Click to display quantity of rows of particular column

Average Click to display average value of particular column

Depending on data type there is a possibility of choosing all 5 options for a given column.

3.1.3. Filter Editor

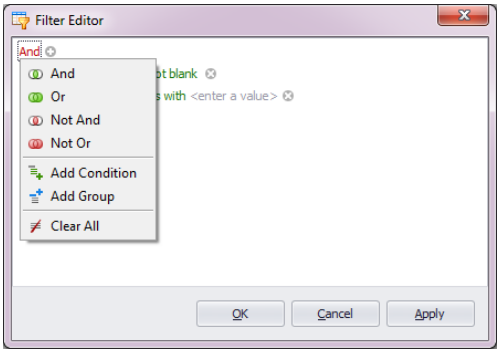
Upon setting a filter, Edit Filter button is displayed in the bottom part of a workpane. By means of this button Filter Editor window is activated where database data can be freely filtered.



Using the editor you can set one or many filtering conditions, this provides detailed filtering. It is possible to generate reports on the filtered data.

Filter Editor window provides the following filtering criteria:

a) Filtering groups (and, or, not and, not or)

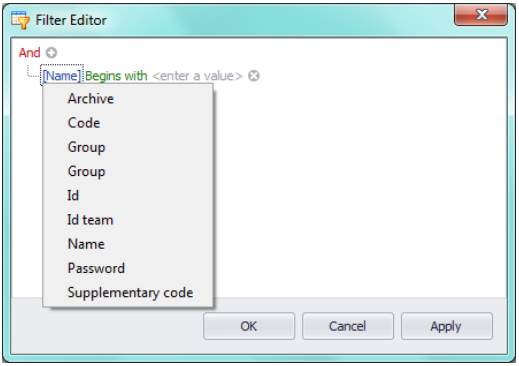


Where:

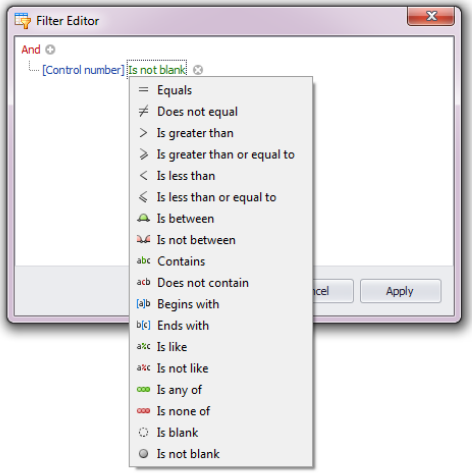
And	all filter criteria are met
Or	one of filter criteria is met
Not And	opposites of all filter criteria are met
Not Or	opposite of one filter criteria is met
Add Condition	adding a new filter criteria
Add Group	adding a new group of filtering criteria
Clear All	deleting all filtering criteria

b) Filtering conditions – outlines the data to be filtered and the methods of filtering:

- selecting a column for filtering



- selecting filtering range and method



Where:

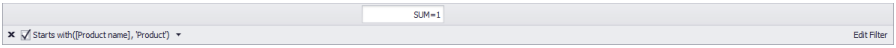
Equals	Displaying all records of the selected column which provide the very entered value
Does not equal	Displaying all records of the selected column which provide different than entered value (opposite to filter „Equal”)
Is greater than	Displaying all records of the selected column which provide values greater than the entered value,
Is greater than or equal to	Displaying all records of the selected column which provide values greater or equal to the entered value,
Is less than	Displaying all records of the selected column which provide values lower than the entered value,
Is less than or equal to	Displaying all records of the selected column which provide values lower or equal to the entered value,
Is between	Displaying all records of the selected column which provide values comprised within range specified by two given values
Is not between	Displaying all records of the selected column which provide values not comprised within range specified by two given values
Contains	Displaying all records of the selected column which include the given string of characters
Does not contain	Displaying all records of the selected column which do not include the given string of characters
Begins with	Displaying all records of the selected column which

	begin with the given string of characters
Ends with	Displaying all records of the selected column which end with the given string of characters
Is like	Displaying all records of the selected column which provide values of particular beginning and end, the filtering criterion has the following format „begin%end”
Is not like	Displaying all records of the selected column which do not provide values of particular beginning and end, the filtering criterion has the following format „begin%end”
Is blank	Displaying all records of the selected column which are empty
Is not blank	Displaying all records of the selected column which are not empty
Is any of	Displaying all records of the selected column which provide values that are the same as one of the given patterns
Is none of	Displaying all records of the selected column which provide values different from all of the given patterns – opposite to „Is any of” filtering

Here you can specify the exact criterion for filtering the selected column, e.g.: if you want to get a result concerning product **„Apple”** choose **„Name - Equals – value: Apple”**. Press **„+”** button, located next to the filtering group, to add another criterion.

Having completed operating Filter Editor, when all necessary filters are set, press **Apply** button, the filter gets activated.

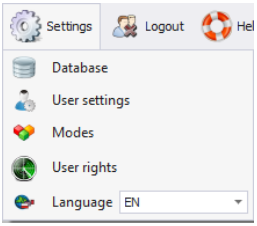
The bottom bar displays selected filter type.



4. PROGRAM SETUP

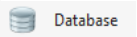
To run program setup, press

button located on the system toolbar.

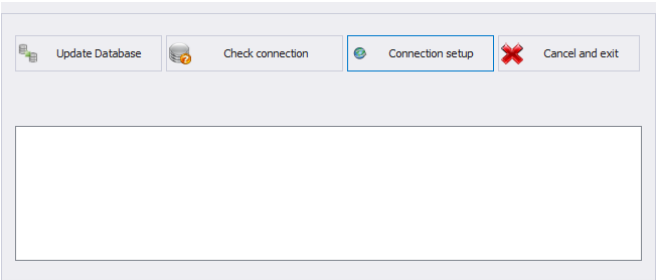


4.1. Database

Database function allows the following: checking connection with the database, database relocation when the program is run by an additional computer, providing backup copy and running server-stored copy.

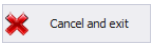
To start database setup go to **Settings** module and press 

button.



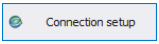
Database setup features the following functions:

Update Database	Press to update database to which E2R program is connected. Use this function upon swapping form one database to another one.
Check connection	Press to check whether connection between E2R and database is correct.
Connection Setup	Press to establish connection with database when the database and E2R program are stored on separate computers.

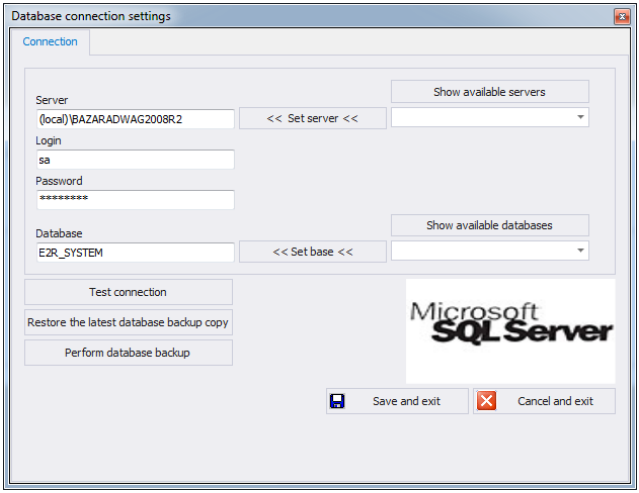
Press 

button to cancel introduced changes.

4.1.1. Setting up Connection

Press 

button to activate window with database settings providing parameters for connection.



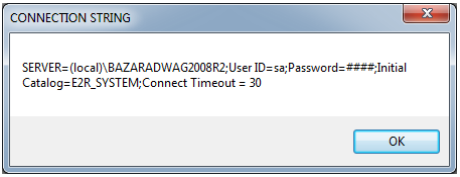
Where:

Show available servers	Press to find available local Ethernet servers.
Set server	Press to set server selected form list of available servers.
Serwer (IP)	IP or name of server with running SQL server (add also server instance if declared). Format: SERVER\INSTANCE By default: **(local)\bazaradwag2012**
Login	Operator's name, by default **sa**
Password	Operator's password, by default **Radwag99** The password is coded, it cannot be discovered by a random person.
Show available databases	Press to search server and find available databases.
Set base	Press to set database selected form list of available databases.

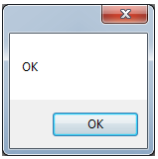
Database SQL database name, by default **E2R**

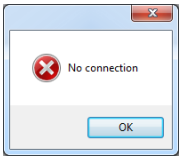
CAUTION!
When mulitiworkstation version has been installed, provide Server (IP) field with IP address or name of server with SQL database.

To check connection with database, press **Test connection** button. **Connection String** window, featuring previously specified data, is displayed.

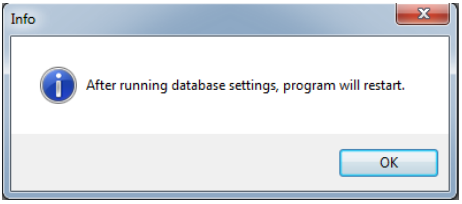


Press **OK** button to confirm, window informing on connection status is displayed.





Close Database Settings window, you shall see message informing you about restart, press **OK** button to confirm.

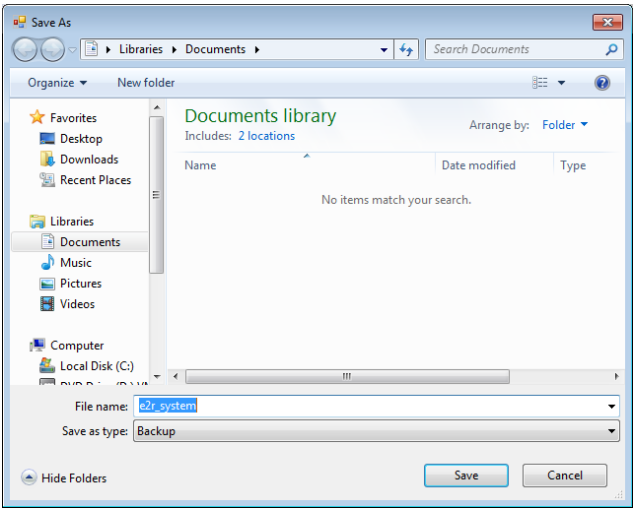


4.1.1.1. Databases backup

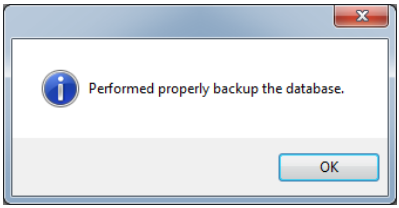
Complete backup copy of SQL database can be carried out by means of a computer with running SQL database engine. To provide backup copy, go to **Database Settings** window and press **Perform Database Backup** button.

Perform database backup

Window allowing you to select backup copy destination folder is displayed. Select the folder and press **Save** button.



Message informing about completed backup copy creation is displayed.

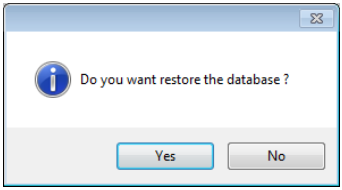


4.1.1.2. Restoring database copy

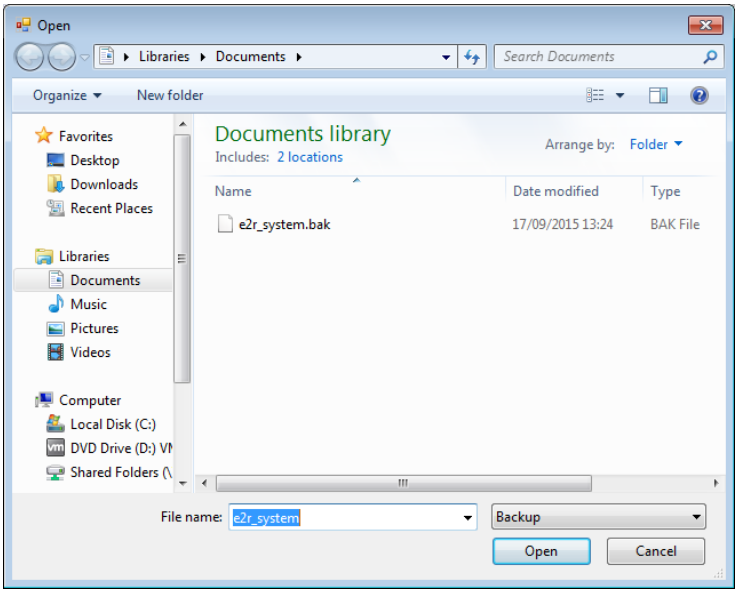
Restoring complete backup copy of SQL database can be carried out by means of a computer with running SQL database engine. To provide backup copy, go to **Database Settings** window and press **Restore the latest database backup copy** button.

Restore the latest database backup copy

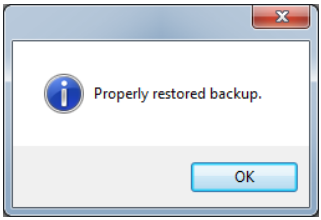
Respective request is displayed, press **Yes** button to confirm that you do want to restore the database.



Window allowing you to select destination folder for restored database is displayed.



Restoring the database takes from few seconds to several tens of seconds which is conditioned by database size. Successfully completed operation is signalled by the following message:

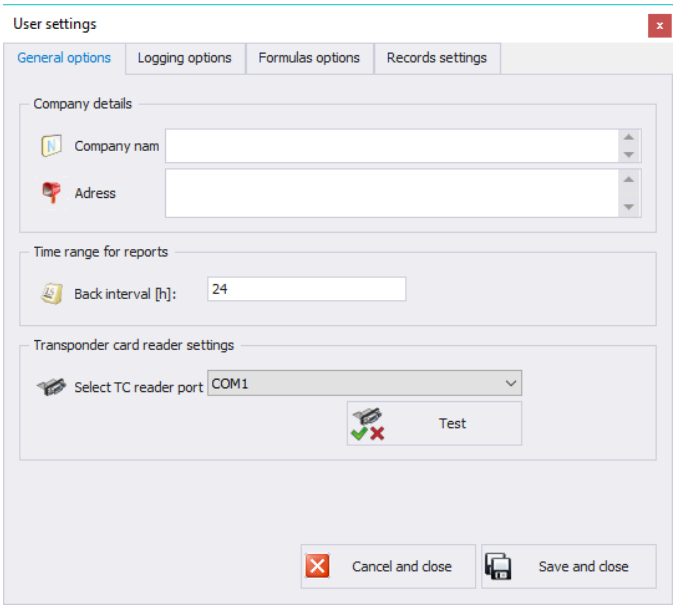


CAUTION!
While restoring database, all current data is substituted with the backup copy data.
If the system operates using HTY, WPY, WLY scales and 3Y balances, and if the data stored by them has not been removed then on connection establishment, supplementary weighings and info is loaded from the devices to the system.

4.2. User Settings

To run **User Settings** go to **Settings** module and press User settings button.

Company Details tab:



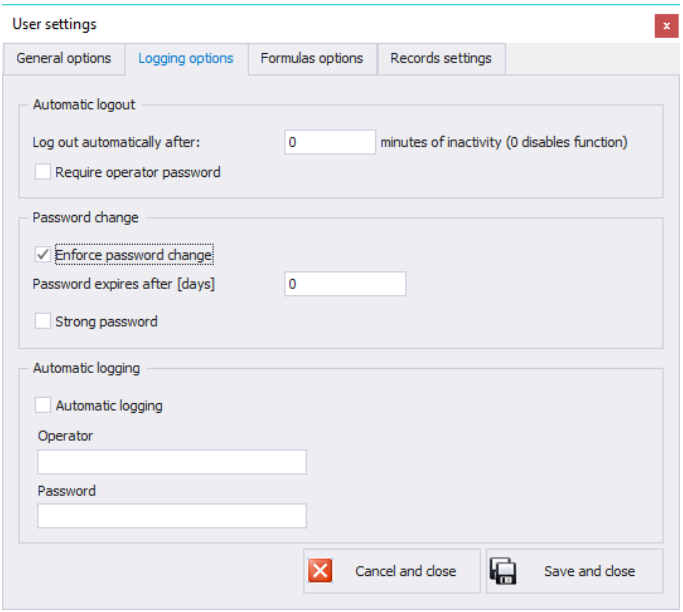
Where:

General options tab:

Company Details	Company name displayed on PGC Reports.
Address	Company address displayed on PGC Reports.
Time interval for report [h]:	Default time interval for displaying windows containing date filter.

Select TC reader port	Parameters for port to which transponder card reader is connected.

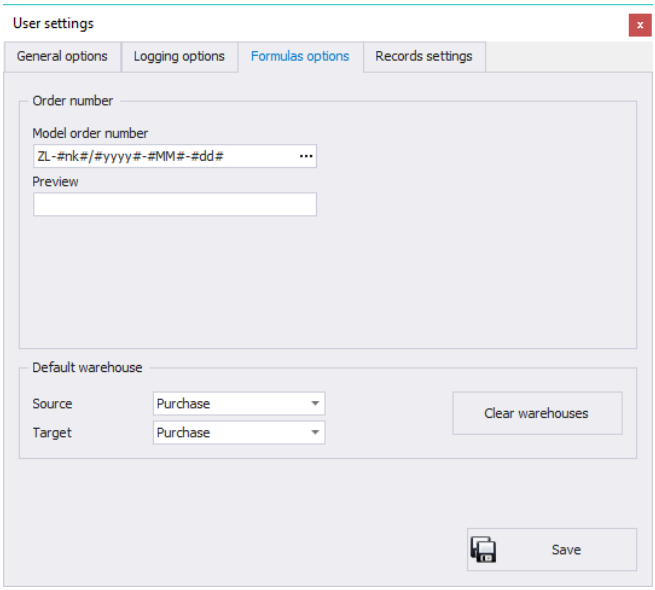
Logging options tab:



Where:

Automatic logout	Option providing auto logout. The operation is performed after passage of specified time interval where time is given in minutes. Countdown starts at the moment of the latest noted activity. Bottom bar displays remaining time. 0 value disables auto logout function.
Password change	Option ordering the operator to change the password.
Password expires after [days]	Option specifying for how many days the password is to be valid.
Strong password	6-character long password with at least one digit and one special sign is required.
Automatic logging	Option providing automatically carried out logging operation.

Formulations options tab:



Order number template

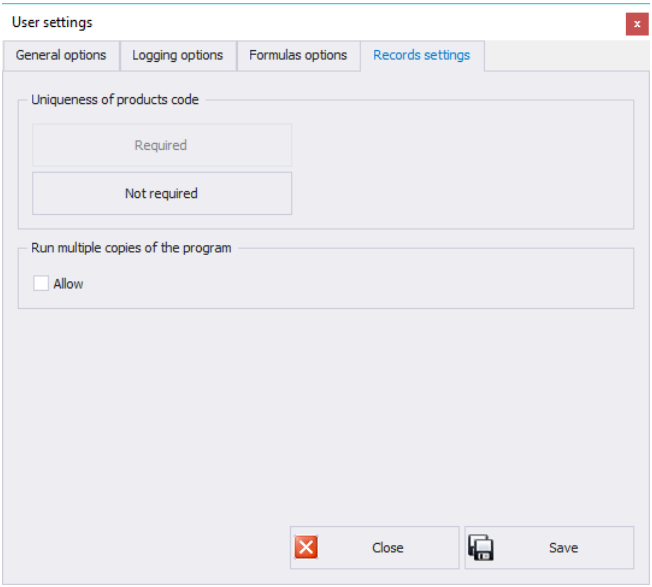
Default order number template inserted when adding new order in the Formulations/Reports tab.

Acceptable formats
#yyyy# - 4-digit year
#yy# - 2-digit year
#MM# - month
#dd# - day
#HH# - 24-hour format
#mm# - minute
#ss# - second
#nk# - next number
#nkd# - next number of a day
#nkm# - next number of a month
#nkr# - next number of a year

Default warehouse

Default source and target warehouses set when adding new formulation.

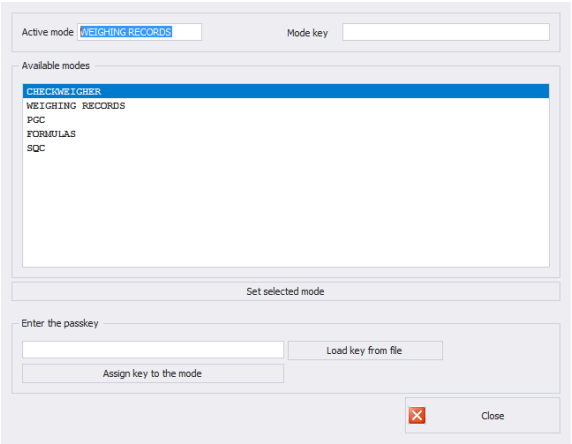
Records settings tab:



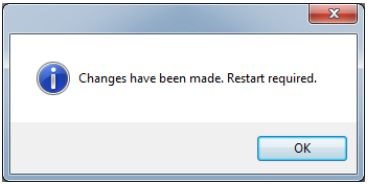
Uniqueness of products code	Enabling or disabling the need for providing unique products codes.
Run multiple copies of the program	Enabling few software copies on one computer..

4.3. Modes

To swap between modes, go to **Settings/Service settings** menu and press Modes button. Window providing list of available modes is displayed, select the mode you need and press **Set the Selected Mode** button.

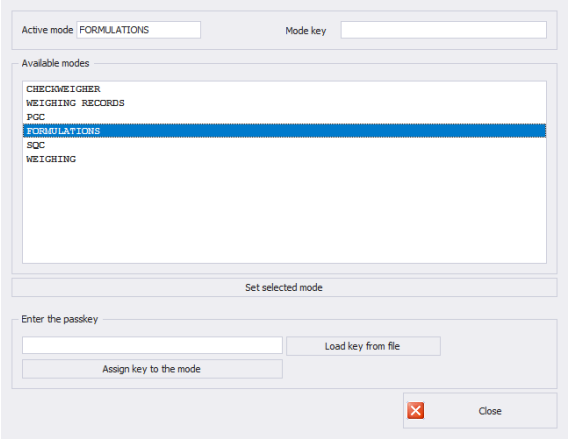


The following message is displayed, press **OK** button for confirmation.

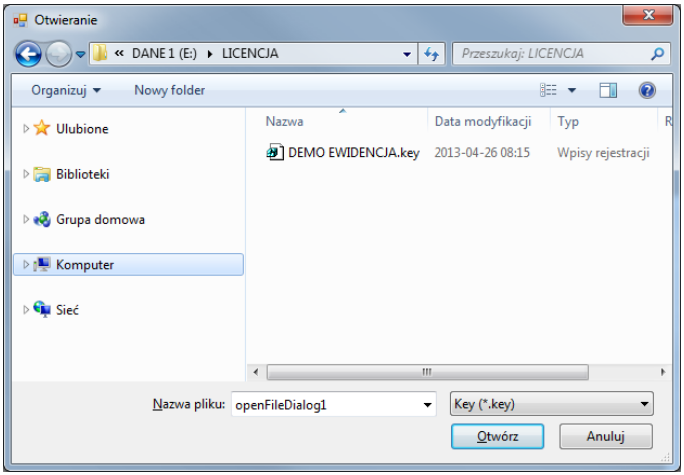


4.3.1. Mode activation

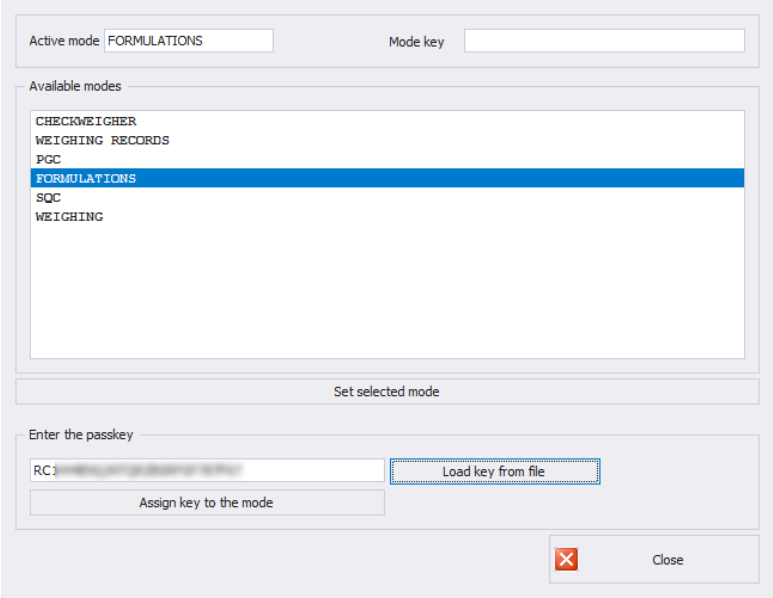
Mode activation is required during first installation of the E2R software and to increase the quantity of weighing instruments connected to the software. In case of the version for multiple workstations, the activation can be carried out on any computer connected to the system.



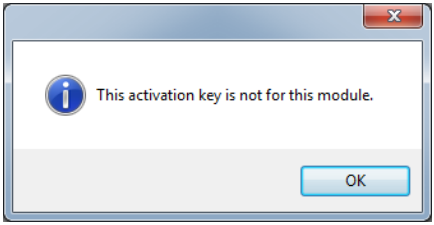
Select the mode out of available modes list, next enter passkey using a keyboard. Press **Assign Key to the Mode** button to activate selected mode.
Another method for mode activation is to load key from file. The licence file is to be found on a CD comprising the software, or it can be acquired by an e-mail.
Press **Load Key From File** button, Windows OS dialog window opens, using it find directory storing file with the key. Select the respective file and press **Open** button.



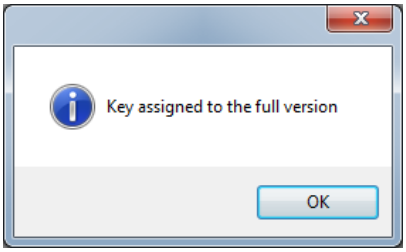
RADWAG licence is displayed in **Enter the Passkey** box.



Select a particular mode, next press **Assign Key to the Mode** button.
If wrong mode has been selected, i.e. mode mismatching the key, you shall see the following message.



Now, modes list features the mode with assigned full program version licence.



Now, modes list features the mode with assigned full program version licence.
Select a particular mode and press **Set the Selected Mode** button, now close the window.

4.4. Users Classes and Permissions Levels

This module has been designed to enable/disable access of each authorization group to particular program functions.

Permissions levels for scales-terminal:

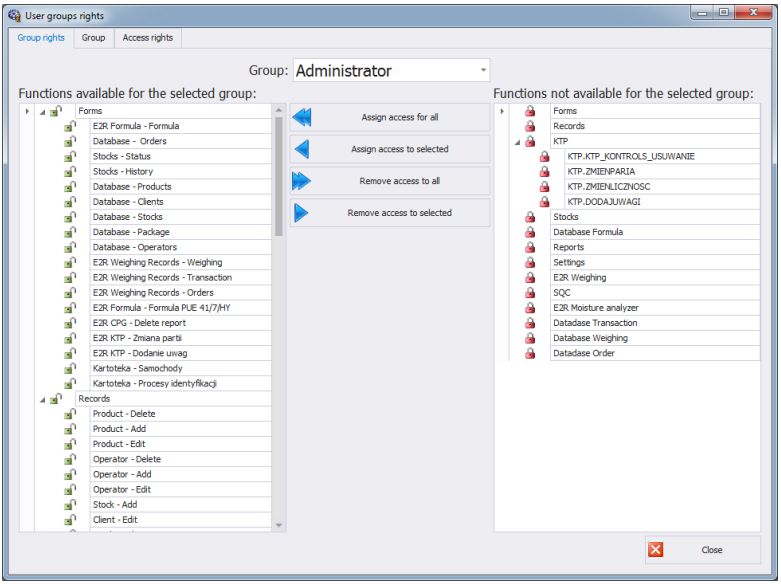
Scales - Terminals	Authorization group			
	Administrator	Advanced	Standard	Basic
WPW - PUEC41H	Administrator	Advanced Operator	Standard Operator	Standard Operator
WLY, WPY - PUE7.1	Administrator	Advanced Operator	Standard Operator	None
HY10	Administrator	Advanced Operator	Standard Operator	None
3Y,4Y	Administrator	Advanced Operator	Standard Operator	None
TMX - PUE5	Administrator	Advanced Operator	Standard Operator	Basic Operator

CAUTION!
It is not recommended to edit or delete already created authorization groups since they are strictly related to authorization groups on a computer and measuring devices.

By custom if any authorization group is modified or deleted the program restores it with a default name after computer restart. Group names can be modified, to do it contact RADWAG.

To start authorization of users and groups click USER GROUPS RIGHTS button located in **Settings/Service settings** menu.

Group Rights tab has been designed to allow setting permission rights with regard to particular program modules.



Select a given group using **Group** drop-down menu, add or remove permission levels for the selected group.

On the left there is a list of functions available for a given authorization group. In order to block access to a particular function, delete it.

On the right there is a list of functions unavailable for a given authorization group. It is possible to add a given function to the list on the left in order to make it accessible.

Buttons for disabling/enabling permissions levels:

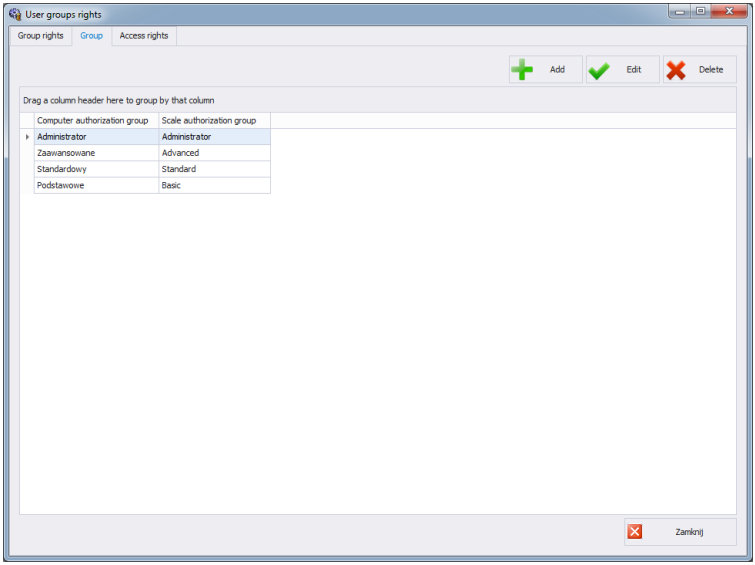
Press to enable access to all functions (for a particular group).

Press to enable access to any function selected from the list on the right (for a particular group).

Press to block access to any function selected from the list on the left (for a particular group).

Press to block access to all functions (for a particular group).

Group tab provides list of defined groups of users.

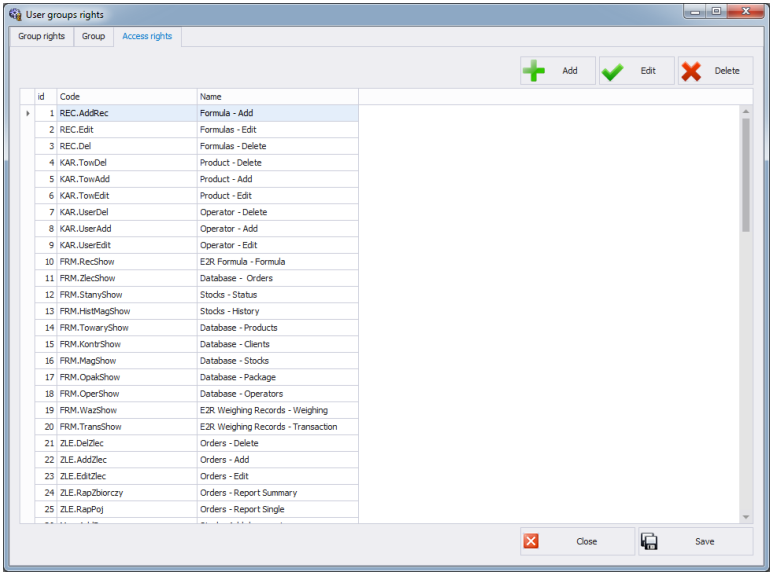


Where:

Add	Press to add group of users
Edit	Press to edit selected group of users
Delete	Press to delete group of users
Save	Press to save settings

When adding a new group of users first name it, next assign it to one of scale authorization groups.

Access Rights tab stores all codes and functions names assigned to the codes, the functions names are displayed on the list in **Group rights** tab.



id	Code	Name
1	REC.AddRec	Formula - Add
2	REC.Edit	Formulas - Edit
3	REC.Del	Formulas - Delete
4	KAR.TowDel	Product - Delete
5	KAR.TowAdd	Product - Add
6	KAR.TowEdit	Product - Edit
7	KAR.UserDel	Operator - Delete
8	KAR.UserAdd	Operator - Add
9	KAR.UserEdit	Operator - Edit
10	FRM.RecShow	E2R Formula - Formula
11	FRM.ZlecShow	Database - Orders
12	FRM.StanyShow	Stocks - Status
13	FRM.HistMagShow	Stocks - History
14	FRM.TowaryShow	Database - Products
15	FRM.KontrShow	Database - Clients
16	FRM.MagShow	Database - Stocks
17	FRM.OpakShow	Database - Package
18	FRM.OperShow	Database - Operators
19	FRM.WazShow	E2R Weighing Records - Weighing
20	FRM.TransShow	E2R Weighing Records - Transaction
21	ZLE.DelZlec	Orders - Delete
22	ZLE.AddZlec	Orders - Add
23	ZLE.EditZlec	Orders - Edit
24	ZLE.RapZbiorczy	Orders - Report Summary
25	ZLE.RapPoj	Orders - Report Single

4.5. Language

To swap between software languages go to **Settings** module and use **Language** combo box providing you with list of available languages.

Where:

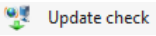
PL	Polish
EN	English

4.6. Update

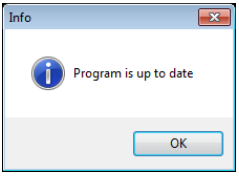
Use this option to either update your software version or to restore old copy.

Caution!
The update is available for customers with the appropriate service package.

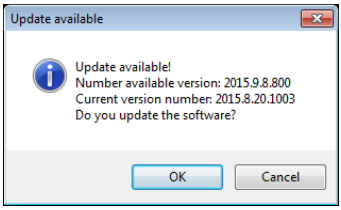
4.6.1. Check Updates

To check updates availability go to **Settings** module and press 

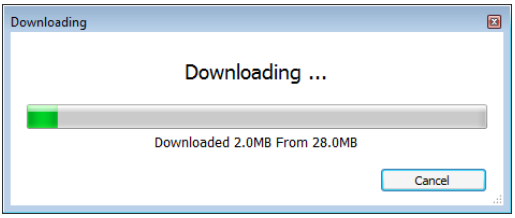
button or use Start Menu of the operating system: **START/PROGRAMS/RADWAG/E2R/UPDATE E2R**.
If you own the latest software version the following message is displayed:



If there are new software versions available the following message is displayed.



Press **OK** button to start updating your software version. Necessary files pack is downloaded from the server.

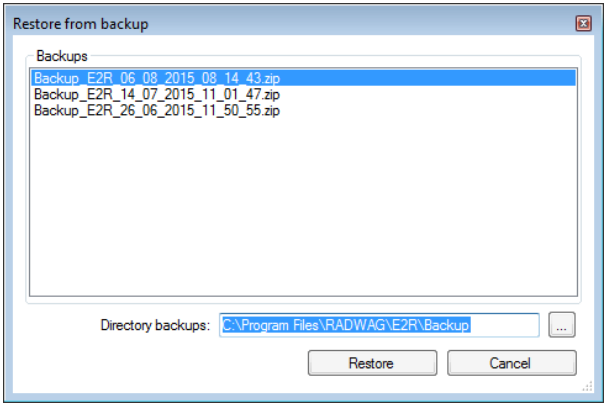


E2R, E2R Manager (scales viewer) and EP (parameters' editor) programs are archived prior to swapping old files with the newly downloaded ones. You can skip this step but remember that it would mean lack of possibility to restore previous software version.

CAUTION!
Internet connection is necessary for update purposes. Backup copy is provided in case you shall need to restore old software version.

4.6.2. Restoring Previous Software Version

To restore previous software version go to **Settings** module and press Restore old version button or use Start Menu of the operating system: **START/PROGRAMS/RADWAG/E2R/UPDATE E2R**.



CAUTION!
Files for previous software versions are stored at a default location: C:\Program Files\Radwag\E2R\Backup. At each update a new backup is created but only three latest copies are saved. Restore Old Version option restores the program only, data stays unchanged. For instruction on how to provide backup and restore backup copy read 4.1. section of this manual.

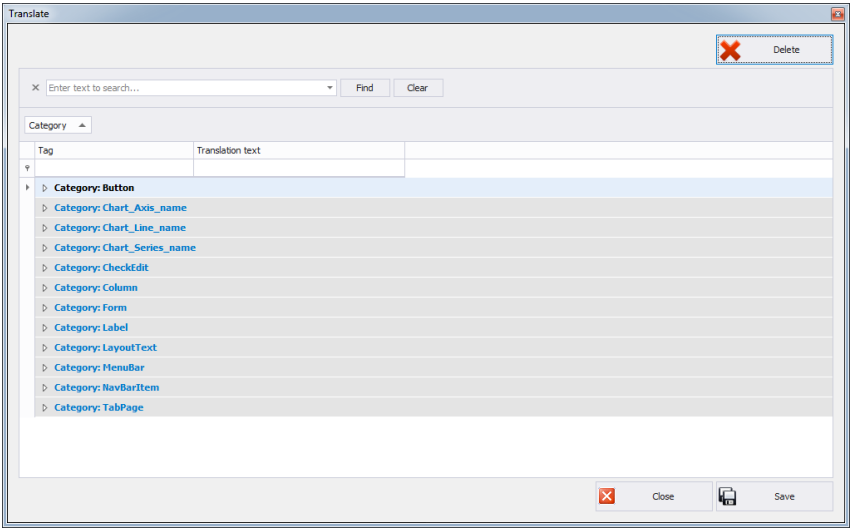
4.7. Service Settings

To run Service Settings go to **Settings** module and press Service settings button.

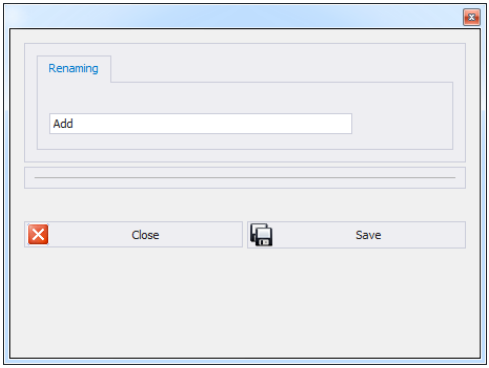
CAUTION!
All service settings are intended for RADWAG employees exclusively.

4.7.1. Translations

To run Translations, go to **Settings/Service Settings** module and press Translations button.

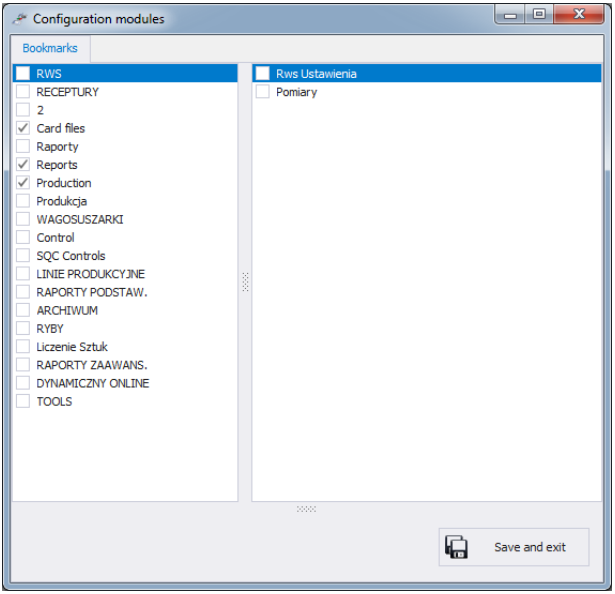


To rename particular word/caption/phrase use **Find** option of **Translate** window, first enter respective word/caption/phrase, next press Find button, finally rename the word writing new name version in Translation text column.
Another method for renaming word/caption/phrase requires pressing Ctrl+Alt buttons and clicking the name that is to be changed, both these operations performed simultaneously. **Renaming** window is displayed, enter the new name version.



4.7.2. Mode Setup #FrmSettingsForDealers#

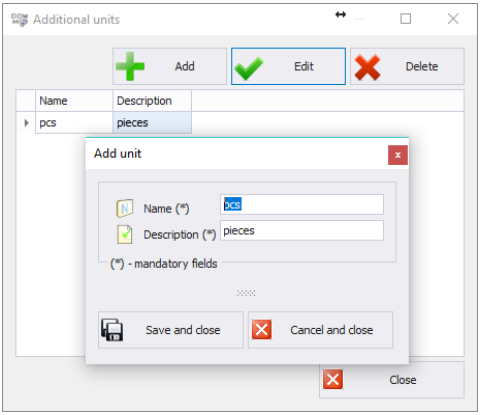
To carry out setup of currently operated mode go to **Settings/Service settings** menu and press **Mode Setup** button.



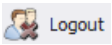
Mode setup consists in editing side toolbar pane, you can decide which modules and program functions are to be hidden, which visible.
Mode setup window features two lists, one on the left - groups of functions, one on the right – functions. Functions list vary depending on selected group of functions.

4.7.3. Additional Units

Additional units are assigned to a product (description in section **Błąd! Nie można odnaleźć źródła odwołania.**.) The value of the additional unit is the product of basic unit value (e.g. 1000g, 1kg) multiplied by the multiplier.
In order to add new additional unit, press **Add** button.

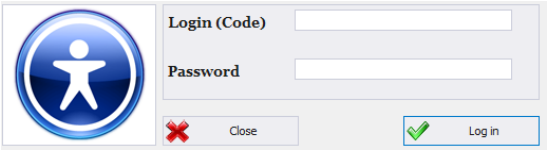


4.8. Logout Procedure

To log out press 

button, next press **Close** button to confirm.

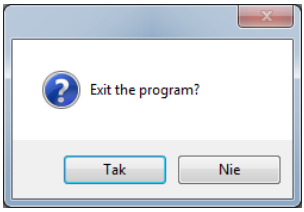
If you do not want to stop operating the software, provide **Login (Code)** and **Password**, next press **Log in** button to confirm.



4.9. Exit Operation

To exit the program press

button, respective window requesting your confirmation is displayed.



Press **Yes** button to exit, press **No** button to display Home Screen of E2R SYSTEM software.

5. DATABASES

E2R Formulations contains the following databases:

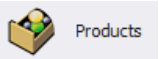
- Products,
- Warehouses,
- Labels,
- Operators,
- Universal Variables,

Card files may be edited on a computer, using scales for card files edition is impossible.

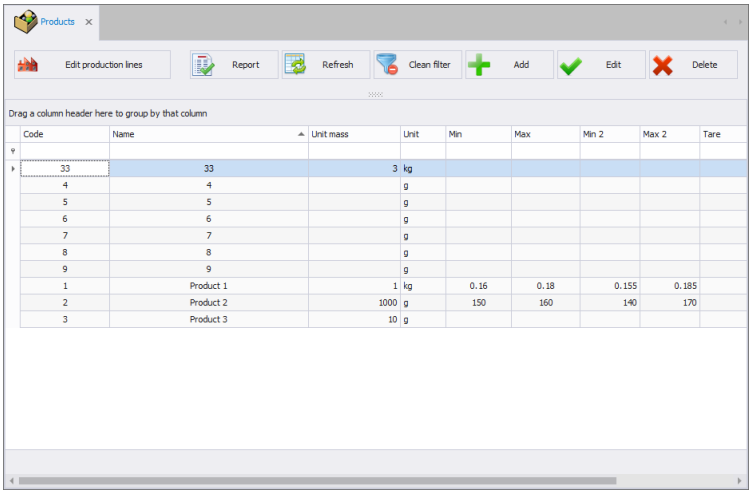
Upon adding new record or editing an existing one (e.g. product, warehouse, label, operator, universal variable) it will be updated in the weighing instrument after 1 minute maximum.

5.1. Products

Product database allows managing records of products weighed using the network-connected scales. To run **Products** module, press **Products** button of the side toolbar.

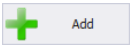


Products window:

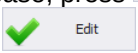


Code	Name	Unit mass	Unit	Min	Max	Min 2	Max 2	Tare
33	33	3	kg					
4	4		g					
5	5		g					
6	6		g					
7	7		g					
8	8		g					
9	9		g					
1	Product 1	1	kg	0.16	0.18	0.155	0.185	
2	Product 2	1000	g	150	160	140	170	
3	Product 3	10	g					

5.1.1. Adding / Editing Product

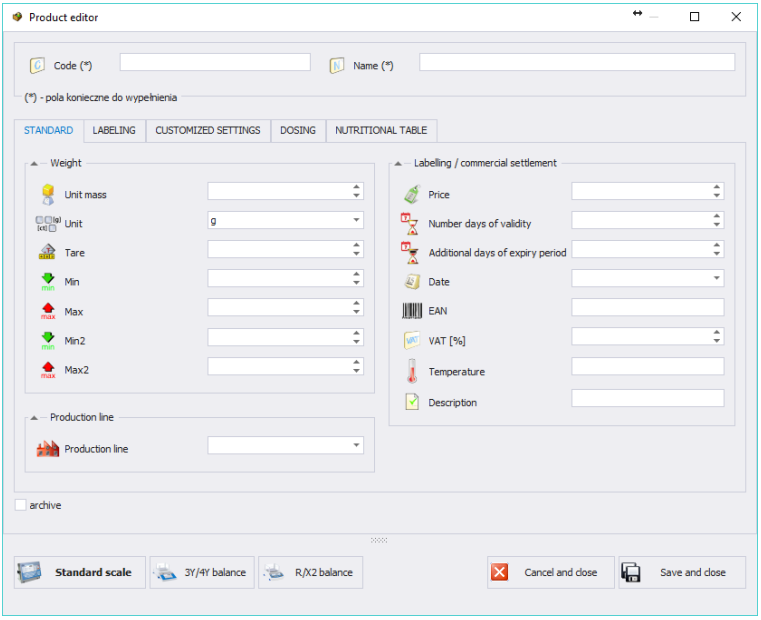
To add a new product to the database, press 

button.

To edit a particular product, press 

button.

Product editor (window for adding and editing product records):



Where:

Code *	Product code
Name *	Product name
Raw material	Marker for WPW scale, when ticked the product is treated as an ingredient
Archive	Marker set upon deletion of a product when weighings for the product still exist in a database. When ticked it prevents products from being sent to scales.
Standard scale **	Press to modify window look. Fields for PUE 7, PUE 5 are displayed, exclusively.
R balance **	Press to modify window look. Fields for R balance are displayed, exclusively.
3Y balance **	Press to modify window look. Fields for 3Y balance are displayed, exclusively.

Standard tab:

Unit mass	Single piece weight
Unit	Weight unit (by default g)

Tare	Tare value for products with constant tare
Max	High weight limit
Min	Low weight limit
Max2	Supplementary high weight limit
Min2	Supplementary low weight limit
Price per unit	Single piece price
Shelf-life in days	Product shelf-life in days.
Additional shelf-life days	Additional days of shelf-life.
Date	Field for entering date.
EAN 13	EAN code
VAT [%]	Value Added Tax
Temperature	Temperature box, printed on a label, option for TMX scale
Overview	Information on product
Production line ***	Production line to which particular product is assigned

(*) – mandatory fields
(**) – button not intended to assign a given product to particular balance/scale type. Product displayed for all balances/scales.
(***) – product assigned to the production line is displayed on scales of the particular line exclusively.

Labelling tab:

Label Field WLY, WPY, HTY, TMX	Editing ingredients lines supported by WLY, WPY, HTY, TMX scales
Label Field WPW	Editing ingredients supported by WPW scale
Label	Individual label name, assigned to a product
C Label (cumulative label)	Cumulative label name, assigned to a product
CC Label (cumulative label for group of cumulative labels)	Name of cumulative label for group of cumulative labels, assigned to a product

Customized settings tab:

Multiplier	The number crucial for calculating the value of additional unit.
Additional unit	Any unit (for detailed description of how to

	add additional unit refer to section **Błąd! Nie można odnaleźć źródła odwołania.**).
Category *	Category to which a product is assigned. To edit category, press **Edit category** button (this applies to WLY, WPY and HY10 weighing instruments).
Basic image	Small graphic displayed near product name in the weighing instrument database.
Extra image	Large graphic – can be displayed on the weighing instrument home screen (this applies to WLY, WPY and HY10 weighing instruments).

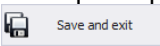
(*) - **Categories** are used to divide products database into folders (categories) in order to optimize grouping of individual records. For detailed description of enabling products categories refer to the user manual of a weighing instrument.

Dosing tab:

Dosing output number*	Enables setting outputs for dosing (precise dosing for 2-threshold dosing).
Fast dosing output number*	Enables setting outputs for fast dosing during 2-threshold dosing.
Threshold [%]**	Threshold for switching the outputs during 2-threshold dosing.
Correction	Numerical value of dosing correction.
Automatic dosing	Outputs are enabled upon selecting an ingredient.
Save formulation modification	The value of dosing correction and automatic dosing option is modified in formulations containing currently edited product.
Mass for fast dosing***	Mass of ingredient for fast dosing (in case of 2-threshold dosing).

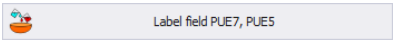
(*) – The outputs are used in dosing and formulations modes.
(**) – The threshold is used in formulations mode.
(***) – Mass for fast dosing is used in dosing mode.

Nutrition facts tab:
The tab contains basic and additional nutrition facts.

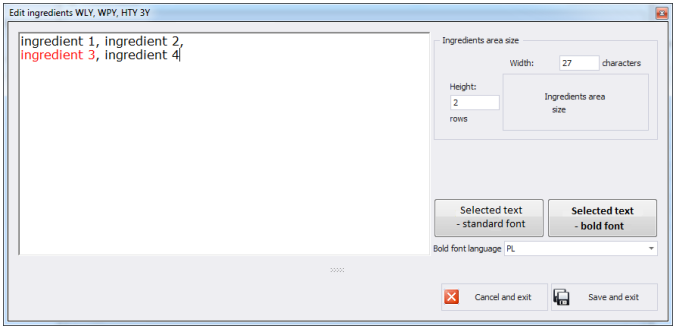
When all required product data has been entered save the settings, to do it press 

button.

5.1.2. Editing Ingredients

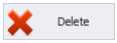
To add and edit the ingredients press 

button.

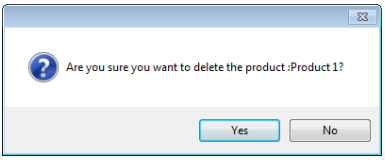


If any of the ingredients is an allergen and it is to be marked out (bold or underlined font) then select it and press "**Selected text – distinguished font**" button.
Ingredients field size box features data necessary for label preparation carried out by means of label creator. While adding ingredients section to a label, it is necessary to specify width and number of columns that is to be comprises within the section. Depending on a selected font, the selected ingredients shall be either bold or underlined.

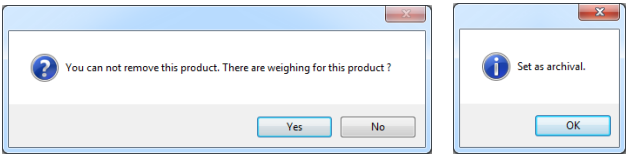
5.1.3. Deleting Product

To delete a particular product from a database press 

button.
The following message is displayed, press **Yes** button to confirm deletion of a selected product.



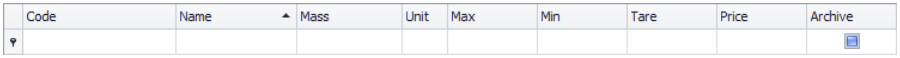
If a database stores weighing records of the selected product, then it cannot be erased, for such a case the record is attributed as an archive one.



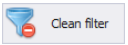
Products attributed as archive ones are not displayed on a balance.

5.1.4. Product Finding and Filtering

Each product registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.



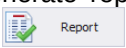
After typing the characters in the selected column, a list of products with the same string of characters is displayed.

To delete a filter for products display, press 

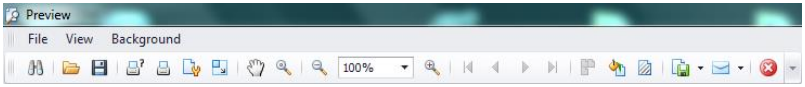
button.

CAUTION!
Information displayed in Products window can be sorted and filtered with use of additional filtering options. For details read section *Błąd! Nie można odnaleźć źródła odwołania.* ***and*** *Błąd! Nie można odnaleźć źródła odwołania.* ***of this manual.***

5.1.5. Reports on Products

To generate report featuring list of products go to Products window and press 

button. The report may be printed on a printer, sent via an e-mail or saved to file.



Quick launch bar is available in a preview window of a generated report.

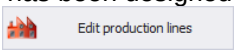
Basic functions accessible directly via quick launch bar:

quick printout with the use of default printer,

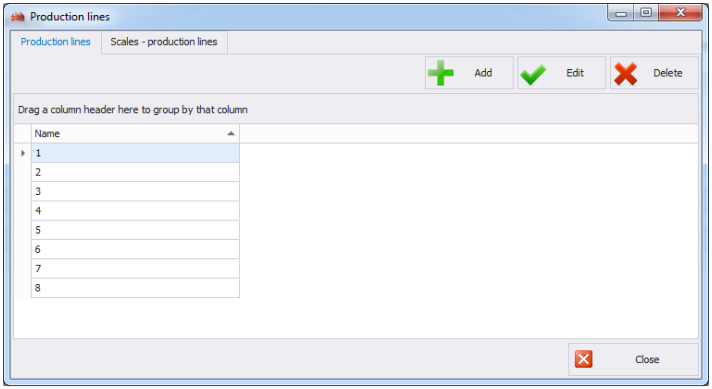
option for saving and reopening of a printout in a dedicated, for this kind of report, file format,

printout export to numerous file formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

5.1.6. Production Line Editor

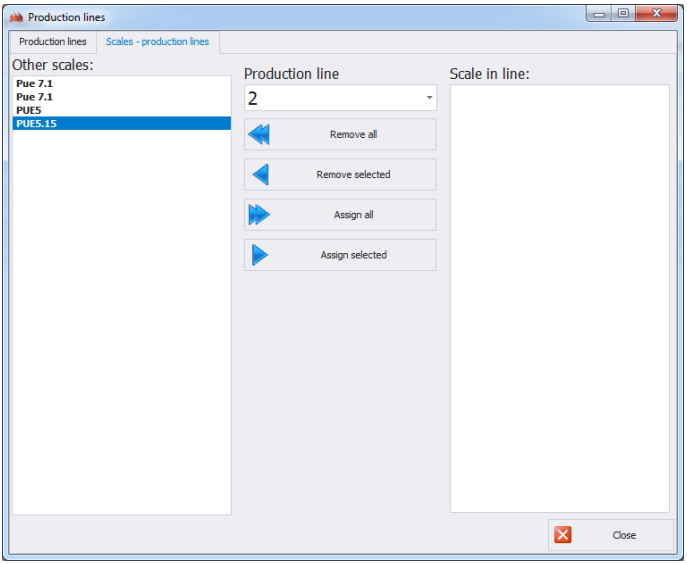
PRODUCTION LINE EDITOR has been designed to provide production line databases managing. Press 

button, production lines window is displayed.



To add a new production line go to **Production Line** tab and press **Add** button, provide line name and press **Save and Close** button.

Now go to **Scales production lines** tab.



Using **Production line** combo box, select newly added production line name. To assign selected scales to the newly added production line use centrally located arrow buttons. With the arrow buttons move selected scales from the left pane to the right pane.

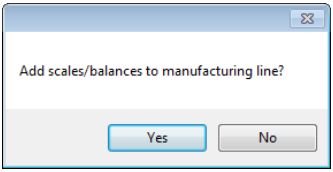
Press to delete all scales form the production line

Press to delete one selected scale form the production line

Press to assign all scales to the production line

Press to assign one selected scale to the production line

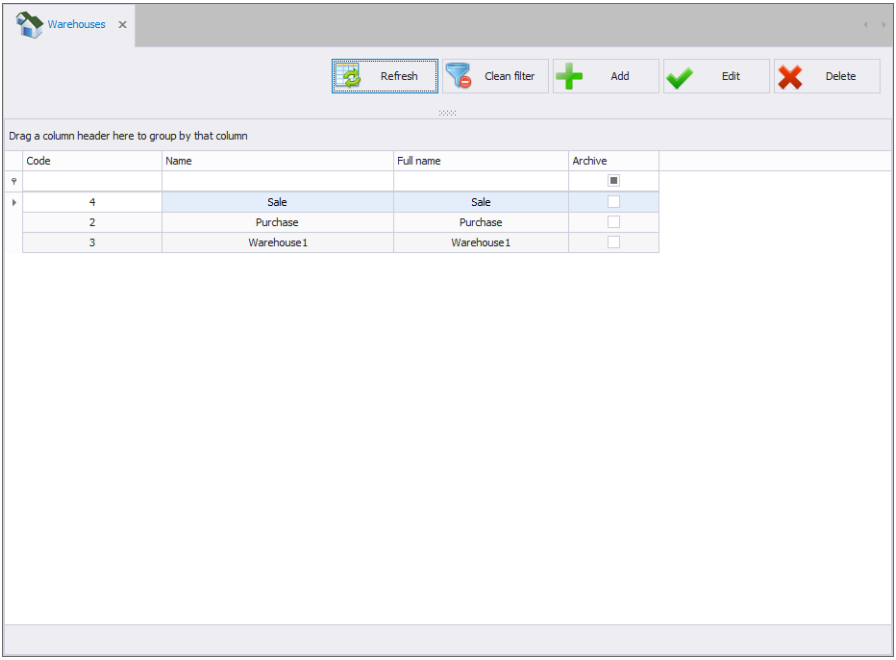
Press **Yes** button to make introduced changes valid.



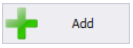
5.2. Warehouse

Warehouses database allows managing records of warehouses. To run **Warehouses** module, press **Warehouses** button of the side toolbar.

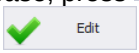
Warehouse window:



5.2.1. Adding / Editing Warehouse

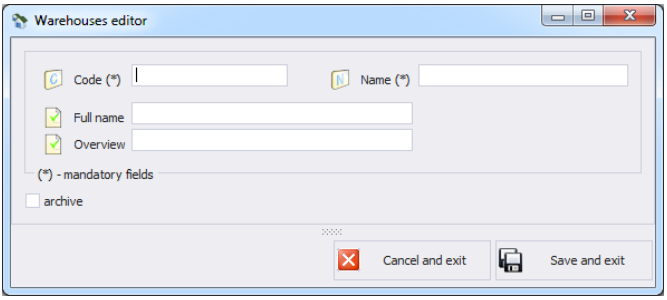
To add a new warehouse to the database, press 

button.

To edit a particular warehouse, press 

button.

Warehouse editor (window for adding and editing warehouse records):

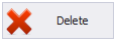


Where:

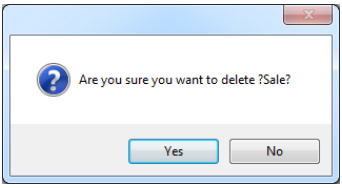
Code *	Warehouse code
Name *	Name – abbreviated form
Full name	Full warehouse name
Overview	Warehouse overview
Archive	This marker, when ticked, prevents warehouses from being sent to scales
Wastes warehouse**	Selection of the warehouse in which loss state is changed during formulations process.

(*) – mandatory fields.
(**) – This applies to TMX weighing instrument.

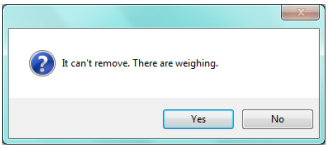
5.2.2. Deleting Warehouse

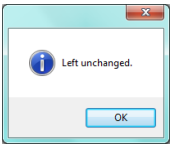
To delete a particular warehouse from a database press 

button. The following message is displayed, press **Yes** button to confirm deletion of a selected warehouse.



If a database stores records of the selected warehouse, then it cannot be erased.





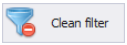
It is necessary to delete all weighings for a particular warehouse first.

5.2.3. Warehouse Finding and Filtering

Each warehouse registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.

	Code	Name	Full name	Archive

After typing the characters in the selected column, a list of warehouses with the same string of characters is displayed.

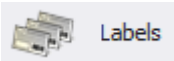
To delete a filter for warehouses display, press 

button.

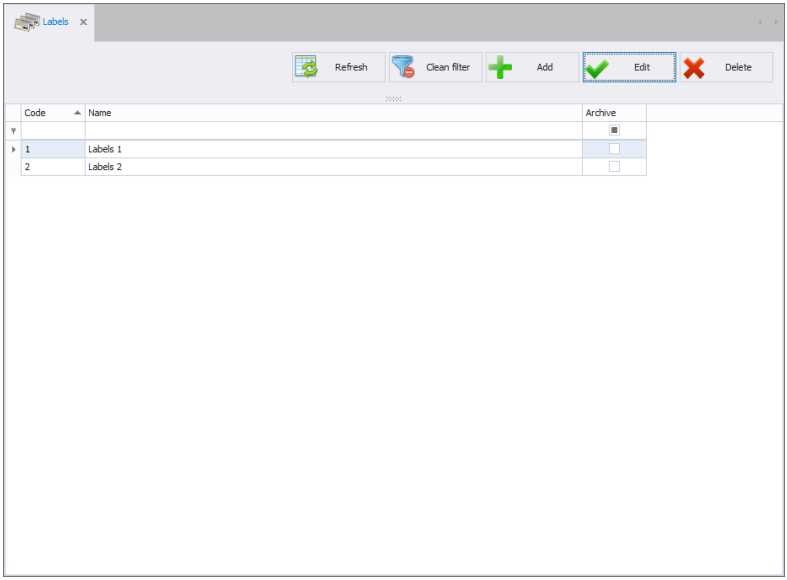
CAUTION!
Information displayed in Warehouses window can be sorted and filtered with use of additional filtering options. For details read section *Błąd! Nie można odnaleźć źródła odwołania.* ***and*** *Błąd! Nie można odnaleźć źródła odwołania.* ***of this manual.***

5.3. Labels

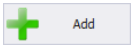
Labels database allows managing records of labels. To run **Labels** module, press **Labels** button of the side toolbar.



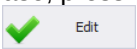
Labels window:



5.3.1. Adding / Editting Labels

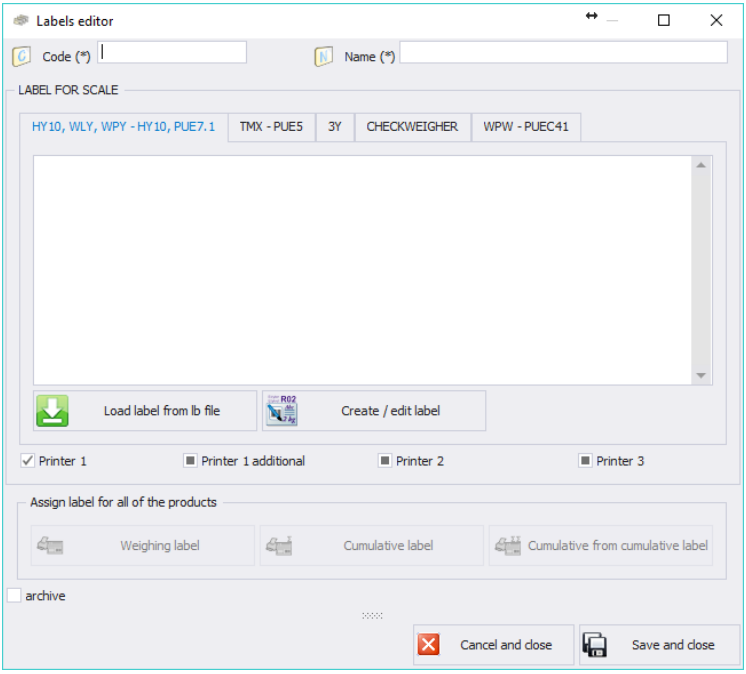
To add a new label to the database, press 

button.

To edit a particular label, press 

button.

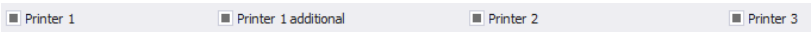
Label editor (window for adding and editing labels records):



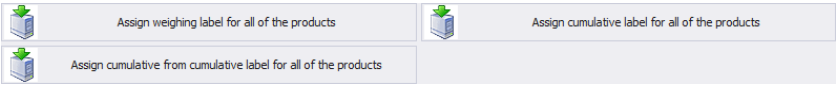
Where:

Code	Label code
Name	Label name
Archive	This marker, when ticked, prevents labels from being sent to scales

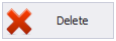
In **Label for scale** field select appropriate tab depending on the weighing instrument on which the label is to be printed. Next press **Load label** and search for a file with lb extension or press **Create/edit label** to start Labels editor.
For HY10, WLY, WPY weighing instruments you can set the printer on which label is to be printed.



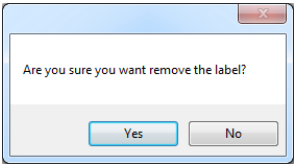
Label can be assigned to all products from a database.



5.3.2. Deleting Label

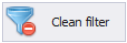
To delete a particular label from a database press 

button.
The following message is displayed, press **Yes** button to confirm deletion of a selected label.



5.3.3. Labels Finding and Filtering

Each label registered by the system can be found by code or name - an appropriate string of characters, entered in a given column.

After typing the characters in the selected column, a list of labels with the same string of characters is displayed.
To delete a filter for labels display, press 

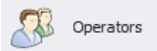
button.

CAUTION!
Information displayed in Labels window can be sorted and filtered with use of additional filtering options. For details read section *Błąd! Nie można odnaleźć źródła odwołania.* ***and*** *Błąd! Nie można odnaleźć źródła odwołania.* ***of this manual.***

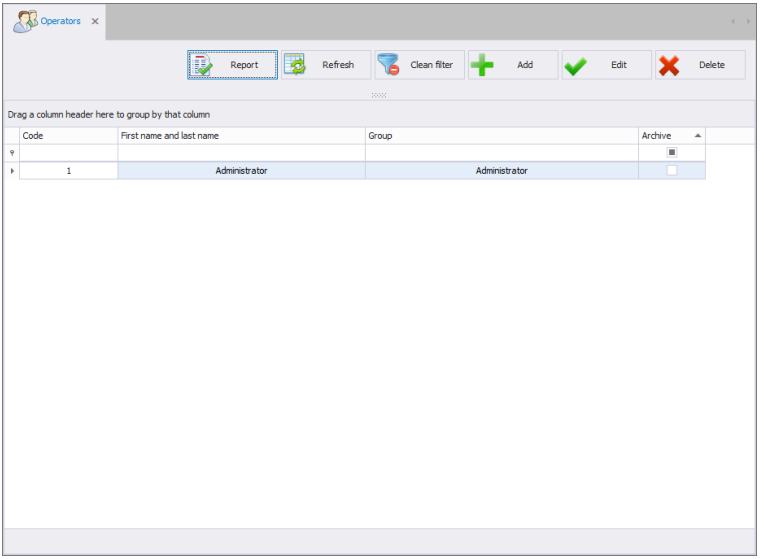
5.4. Operators

Operators database allows managing records of program users.
All database-recorded operators can log in to the software and to the scales.

To run **Operators** module, press **Operators** button of the side toolbar.

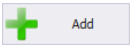


Operators window:

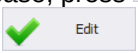


Operators window allows you to add, delete or modify operator's accounts along with permissions levels attributed.

5.4.1. Adding / Editing Operator

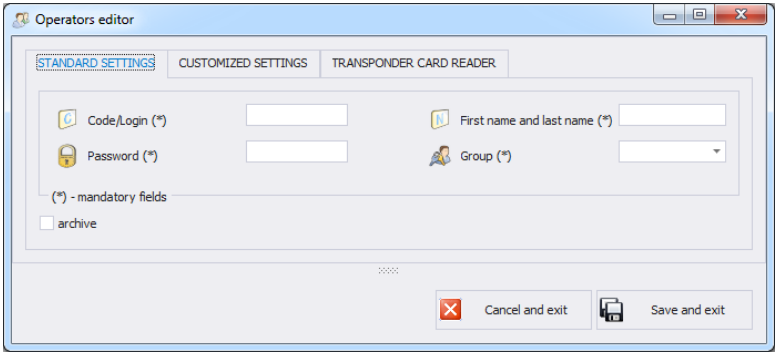
To add a new operator to the database, press 

button.

To edit a particular operator, press 

button.

Operator editor (window for adding and editing operators records):



Where:

Standard settings tab:

Code / Login *	Operator's code, login
Password *	Operator's password (for detailed information on password-related options read section 4.2)
First Name and Last Name *	Operator's name and surname
Group *	Authorization group specifying permissions levels to particular program options. There are four basic groups: Administrator, Advanced, Standard and Basic. To setup permissions for particular group go to software settings.
Archive	This marker, when ticked, makes the particular operator inactive

(*) – mandatory fields

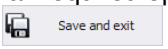
Customized settings tab:

Traceability	Traceability process to which a particular operator is assigned
Product	Product to which a particular operator is assigned
Shift	Shift to which a particular operator is assigned
Language 3Y, R	Language for 3Y, R balance operation, set upon successfully carried out login operation.
MAX deviation [%]	MAX threshold deviation in percent. Enables increasing or decreasing the threshold for

	particular operator.
MIN deviation [%]	MIN threshold deviation in percent. Enables increasing or decreasing the threshold for particular operator.

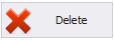
Transponder Card Reader tab:

Card reader settings	Window with transponder card reader settings (refer to section **Błąd! Nie można odnaleźć źródła odwołania.**)
Card code	Card number assigned to an operator,

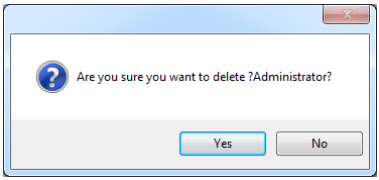
When all required operator data has been entered save the settings, to do it press 

button.

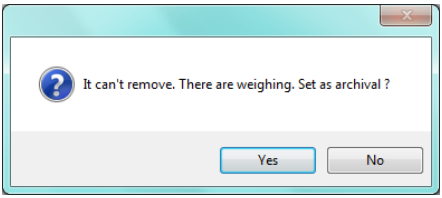
5.4.2. Deleting Operator

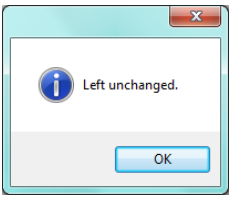
To delete a particular operator from a database press 

button.
The following message is displayed, press **Yes** button to confirm deletion of a selected operator.



If a database stores weighings carried out by the selected operator, then the operator cannot be erased.





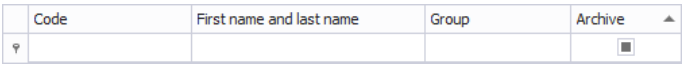
Prior to deleting a particular operator it is necessary to delete all weighings carried out by the operator first.

CAUTION!
It is not possible to generate report on weighings that have been removed.

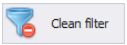
Alternative option is to use archive marker which when ticked prevents operator from being displayed by scales simultaneously allowing to generate reports on all performed weighings.

5.4.3. Operator Finding and Filtering

Each operator registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.



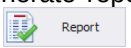
After typing the characters in the selected column, a list of operators with the same string of characters is displayed.

To delete a filter for operators display, press 

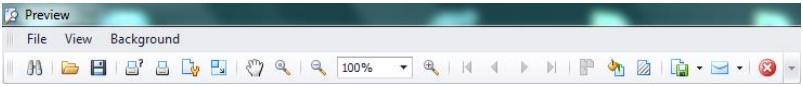
button.

CAUTION!
Information displayed in Operators window can be sorted and filtered with use of additional filtering options. For details read section *Błąd! Nie można odnaleźć źródła odwołania.* ***and*** *Błąd! Nie można odnaleźć źródła odwołania.* ***of this manual.***

5.4.4. Reports on Operators

To generate report featuring list of operators go to Operators window and press 

button. The report may be printed on a printer, sent via an e-mail or saved to file.



Quick launch bar is available in a preview window of a generated report.

Basic functions accessible directly via quick launch bar:

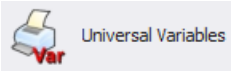
quick printout with the use of default printer,

option for saving and reopening of a printout in a dedicated, for this kind of report, file format,

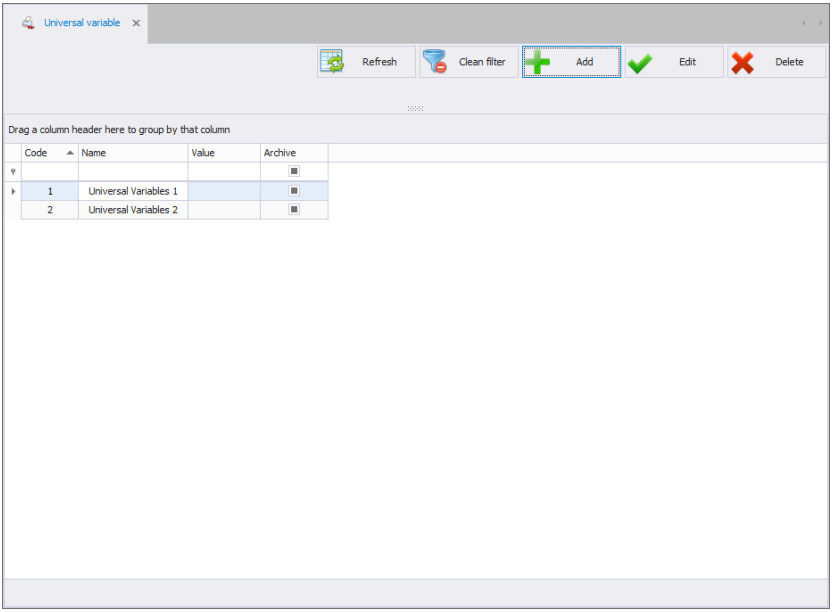
printout export to numerous file formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

5.5. Universal Variables

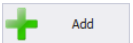
Universal Variables database allows managing records of universal variables. To run **Universal Variables** module, press **Universal Variables** button of the side toolbar.



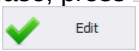
Universal Variables window:



5.5.1. Adding / Editing Universal Variables

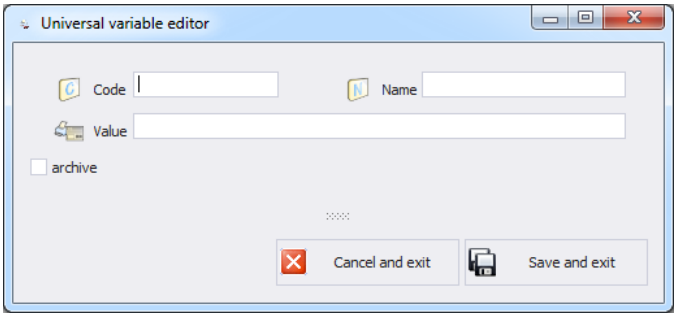
To add a new universal variable to the database, press 

button.

To edit a particular universal variable, press 

button.

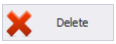
Universal Variable editor (window for adding and editing universal variables records):



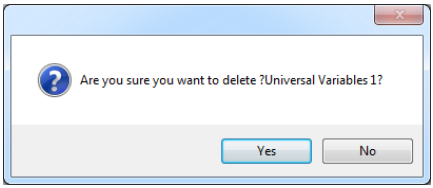
Where:

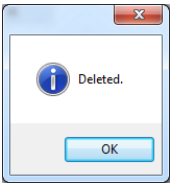
Code	Universal variable code
Name	Universal variable name
Value	Universal variable value
Archive	This marker, when ticked, prevents universal variables from being sent to scales

5.5.2. Deleting Universal Variables

To delete a particular universal variable from a database press 

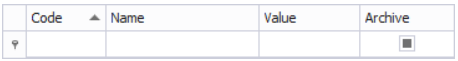
button.
The following message is displayed, press **Yes** button to confirm deletion of a selected universal variable.



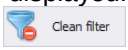


5.5.3. Universal Variables Finding and Filtering

Each universal variable registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.



After typing data on particular universal variable in the selected column, a list of universal variables matching specified criteria is displayed.

To delete a filter for universal variables display, press 

button.

CAUTION!
Information displayed in Universal Variables window can be sorted and filtered with use of additional filtering options. For details read section *Błąd! Nie można odnaleźć źródła odwołania.* ***and*** *Błąd! Nie można odnaleźć źródła odwołania.* ***of this manual.***

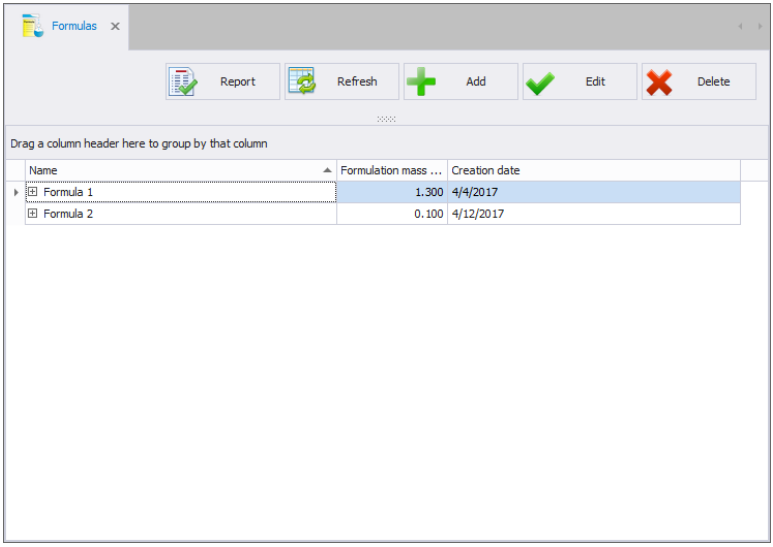
6. FORMULATIONS

FORMULATIONS tab enables access to formulations and orders databases. Prior sending an order to the weighing instrument, determine ingredients of each formulation.
Ingredients must have defined the required mass, thresholds in % and other crucial information.

6.1. Formulations Database

In **FORMULATIONS** window you can manage and report the database.
In order to run the window, select Formulations option from the sidebar.

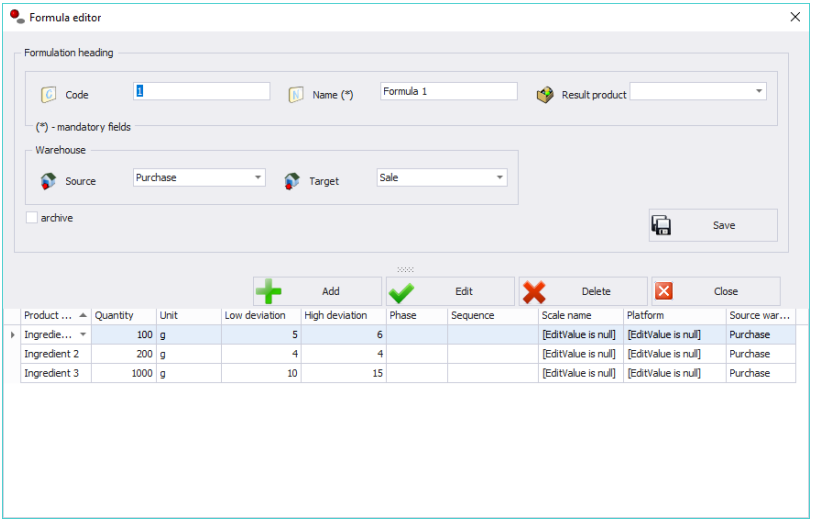
Formulations window



6.1.1. Adding/Editing Formulation

To add new formulation fill in the fields in <Formulation heading> area and press <Save> button to confirm. Next, use <Add> button to add formulation ingredients.

Formulation editor

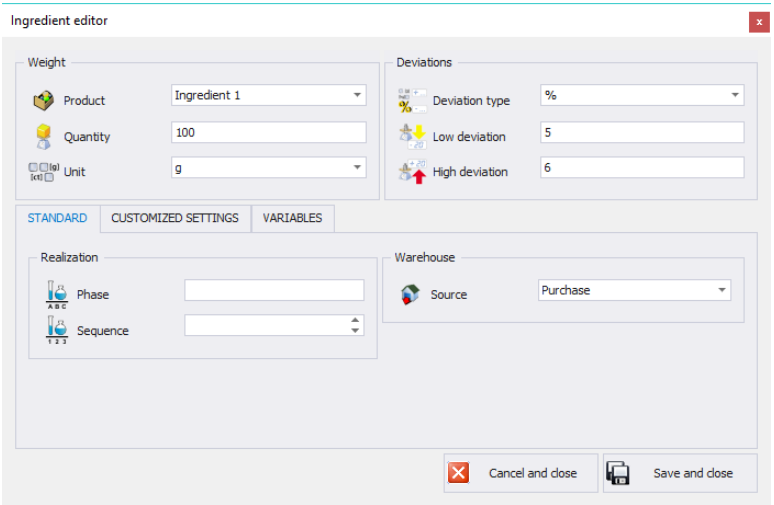


Where:

Code	Formulation code,
Name*	Formulation name,
Result product	The product which inventory is increased after carrying out the formulation,
Source**	Default source warehouse which inventory is decreased by the ingredients,
Target	Target warehouse which inventory is increased by the result product,
archive	The archive formulation is not sent to the weighing instrument.

(*) - mandatory fields required for editing formulation record.
(**) – when adding new ingredient, a default warehouse is set; the warehouse can be changed.

Ingredient editor:



Where:

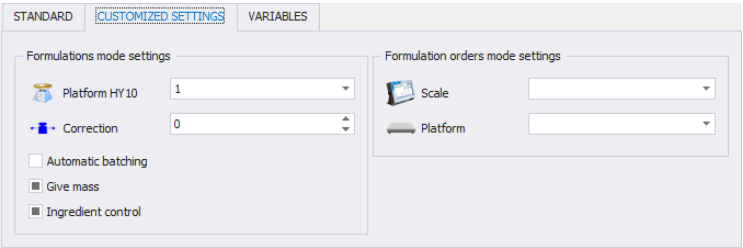
Product*	Formulation ingredient selected from the Products database using name or code,
Quantity*	Mass expected in the formulation,
Unit*	Unit automatically loaded from the Products database,
Deviation type	Deviation of the expected quantity in mass or percent
Low deviation	Low deviation from the expected quantity
High deviation	High deviation from the expected quantity

(*) - mandatory fields required for editing formulation ingredient.

Standard tab:

Phase	Next stage in the formulation process to which many ingredients can be assigned,
Sequence	Number of the next ingredient in the formulation
Source warehouse	Source warehouse which inventory is decreased by the ingredient,

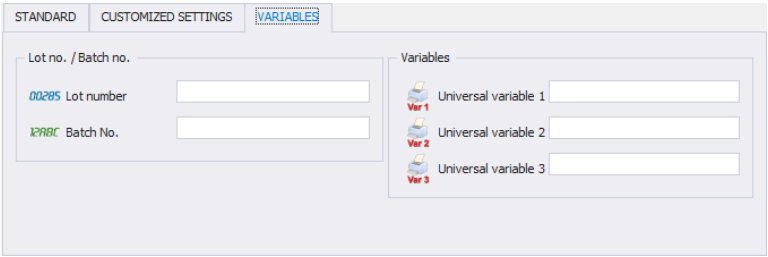
Customized settings tab:



HY10 Terminal*	Number of platform connected to HY10 terminal on which the ingredient is to be weighed. The first platform is set by default.
Correction*	Dosing correction in product unit
Automatic dosing*	During formulation process, after selecting an ingredient the outputs assigned to the product are activated on the weighing instrument (for detailed description of setting outputs for the product refer to section **Błąd! Nie można odnaleźć źródła odwołania.**)
Set mass*	Set mass of the formulation ingredient that is delivered as a pre-packaged product of known mass.
Ingredient control*	Enabling control of formulation ingredient. **Ingredient control** parameter forces entering correct ingredient code before weighing.
Scale**	Ingredient can be weighed using only selected balance or scale.
Platform**	Selected platform is automatically set on the weighing instrument during weighing.

(*) – Settings for Formulations working mode.
(**) - Settings for Formulations/Reports working mode.

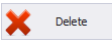
Variables tab:



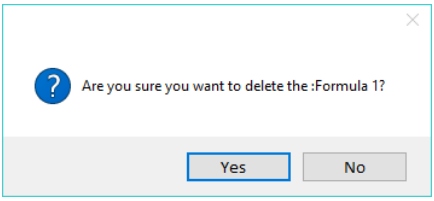
Lot No.*	Lot number
Batch No.*	Batch number
Universal variable 1*	Universal variable 1
Universal variable 2*	Universal variable 2
Universal variable 3*	Universal variable 2

(*) – This applies to PUE 5 terminal.

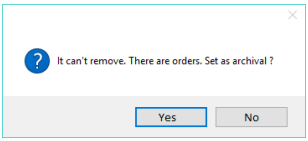
6.1.2. Deleting Formulation

Press 

button to delete formulation from the database.
The following message is displayed to confirm formulation deleting.

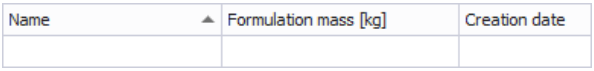


If in the database there are weighings of currently deleted formulations, then the formulation will not be deleted. The following message is displayed:

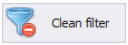


6.1.3. Searching and Filtering Formulations

Each formulation entered into the system can be searched by name, mass or date of its creation.

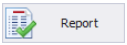


Upon entering the formulation data in the selected column, the list of all formulations that meet the conditions is displayed below.

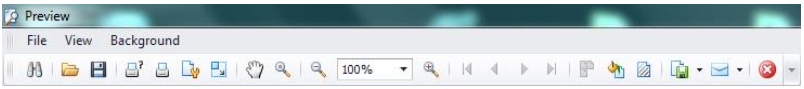
In order to delete the filter, press 

button located in the formulations window.

6.1.4. Formulations Reports

To generate the report of formulations list, press 

button located in the formulations window. The report can be printed on a printer, saved to a file or send by e-mail.



In the window containing generated report preview, a quick access bar is displayed.

The bar contains the following basic functions:

press to activate quick printout on a default printer

press to save and reopen a printout in a format dedicated for such type of reports.

press to export printout to the following document formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

6.2. Formulations/Reports Database

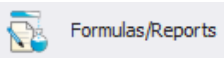
In **FORMULATIONS/REPORTS** window you can manage the database of orders that are sent to weighing instruments and the reports of carried out formulations.

In order to run the window, select Formulations**/Reports** option from the sidebar.

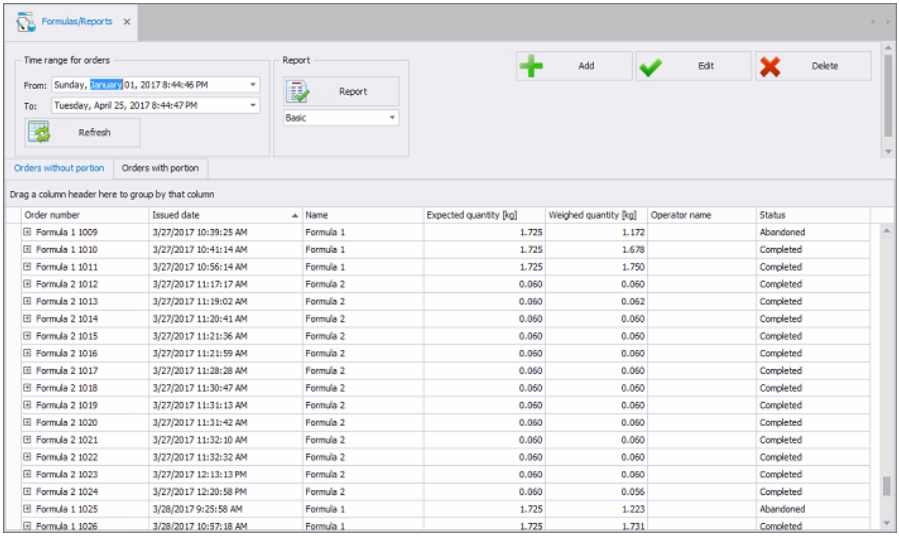
E2R FORMULATIONS software enables creating formulations and production orders for HY10, PUE 7.1 and TMX weighing instruments.

Additional function of the software is the possibility of cooperation with warehouse management module that enables managing and reporting on products inventory.

In prepared production order you can set: the multiplier for a formulation, mass for sum of all formulation products masses and mass of single product with automatic recalculation of the proportions for the rest of the products.
Prepared order is sent to HY10, PUE 7.1 or TMX weighing instrument and assigned to one or all operators.



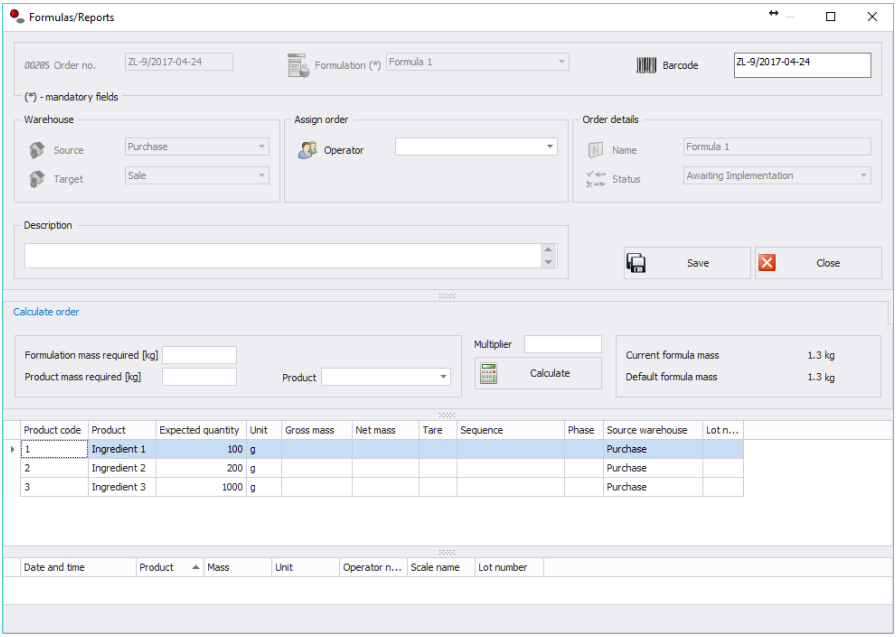
Formulations/Reports window:



Order number	Issued date	Name	Expected quantity [kg]	Weighed quantity [kg]	Operator name	Status
Formula 1 1009	3/27/2017 10:39:25 AM	Formula 1	1.725	1.172		Abandoned
Formula 1 1010	3/27/2017 10:41:14 AM	Formula 1	1.725	1.678		Completed
Formula 1 1011	3/27/2017 10:56:14 AM	Formula 1	1.725	1.750		Completed
Formula 2 1012	3/27/2017 11:17:17 AM	Formula 2	0.060	0.060		Completed
Formula 2 1013	3/27/2017 11:19:02 AM	Formula 2	0.060	0.062		Completed
Formula 2 1014	3/27/2017 11:20:41 AM	Formula 2	0.060	0.060		Completed
Formula 2 1015	3/27/2017 11:21:36 AM	Formula 2	0.060	0.060		Completed
Formula 2 1016	3/27/2017 11:21:59 AM	Formula 2	0.060	0.060		Completed
Formula 2 1017	3/27/2017 11:28:28 AM	Formula 2	0.060	0.060		Completed
Formula 2 1018	3/27/2017 11:30:47 AM	Formula 2	0.060	0.060		Completed
Formula 2 1019	3/27/2017 11:31:13 AM	Formula 2	0.060	0.060		Completed
Formula 2 1020	3/27/2017 11:31:42 AM	Formula 2	0.060	0.060		Completed
Formula 2 1021	3/27/2017 11:32:10 AM	Formula 2	0.060	0.060		Completed
Formula 2 1022	3/27/2017 11:32:32 AM	Formula 2	0.060	0.060		Completed
Formula 2 1023	3/27/2017 12:13:13 PM	Formula 2	0.060	0.060		Completed
Formula 2 1024	3/27/2017 12:20:58 PM	Formula 2	0.060	0.056		Completed
Formula 1 1025	3/28/2017 9:25:58 AM	Formula 1	1.725	1.223		Abandoned
Formula 1 1026	3/28/2017 10:57:18 AM	Formula 1	1.725	1.731		Completed

6.2.1. Adding/Editing Order #frmRecZlecenieSimple#

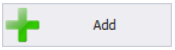
Formulation adding/editing window

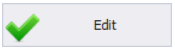


Where:

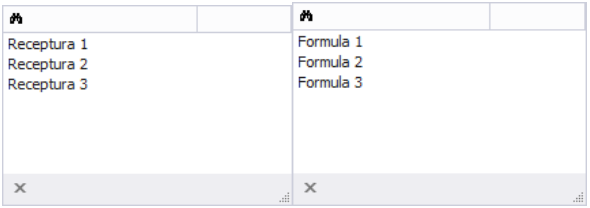
Order No.	Order number set automatically in accordance with the template (order template editing is presented in section **Błąd! Nie można odnaleźć źródła odwołania.**)
Formulation	Selecting formulation out of the database,
Barcode	Order barcode on a report
Operator	Operator that has access to order execution
Source	Possibility to change source warehouse set in a formulation,
Target	Possibility to change target warehouse set in formulation,
Description	Descriptions are part of the order report.

Procedure:

- Upon pressing 

or 

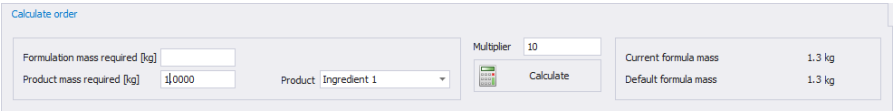
button in orders window, an editing box is displayed for editing formulation order.
- Select formulation from the list, it will be part of the order



- Fill in other crucial order conditions, e.g. operator with access to the order, and press Save button.

6.2.1.1. Change of Order Quantity

In Calculate order parameter in Multiplier field enter the number by which the formulation is multiplied.
In Required formulation mass parameter enter totalised mass of the formulation order that causes automatic calculation of all ingredients masses proportionally to the formulation content.
In Required product mass parameter select the product and enter its mass to be carried out in an order, mass of the rest of the products is calculated proportionally to the formulation.

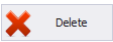


Caution.
In Calculate order window select only one multiplier value. The last value selected and saved to the order is carried out.

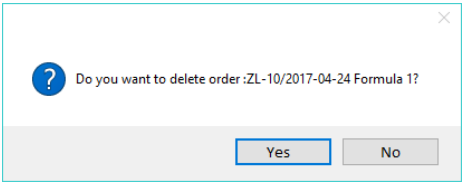
6.2.1.2. Changing Status of the Order

Upon changing the order status to an archive, the order is no longer visible in the weighing terminal. To change status of the order, change its setting to <Awaits further processing>.

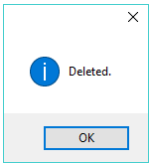
6.2.2. Deleting Order

Press 

button to delete order from the database.
The following message is displayed to confirm order deleting.

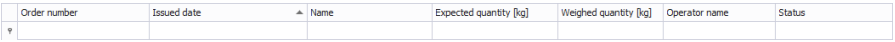


Upon correct formulation deleting, the following message is displayed.

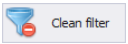


6.2.3. Searching and Filtering Orders

Each order entered into the system can be search by name appropriate for each column of the order.

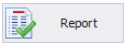


Upon entering order data in the selected column, the list of all orders that meet the conditions is displayed below.

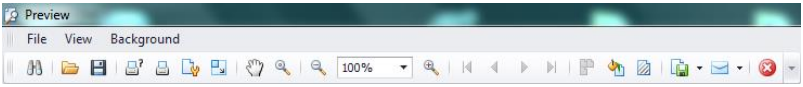
In order to delete the filter, press 

button located in the orders window.

6.2.4. Order Report

To generate a single order report, press 

button located in the orders window. The report can be printed on a printer, saved to a file or send by e-mail.



In the window containing generated report preview, a quick access bar is displayed.

The bar contains the following basic functions:

press to activate quick printout on a default printer

press to save and reopen a printout in a format dedicated for such type of reports

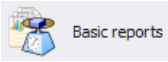
press to export printout to the following document formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

7. REPORTS

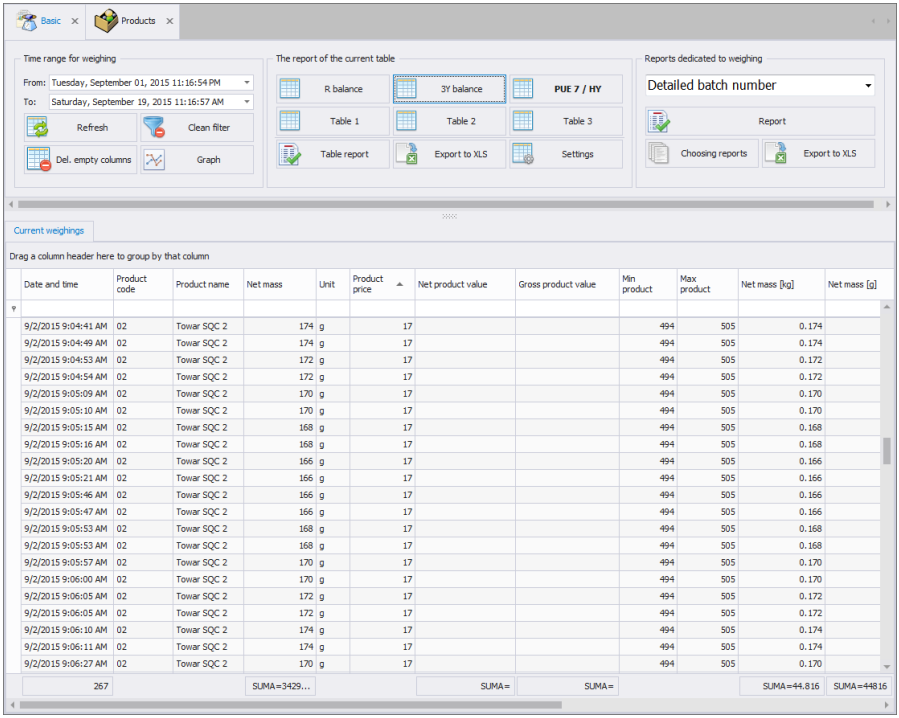
Reports module enables access to all measurements recorded on scales cooperating in E2R WEIGHING RECORDS system.

7.1. Basic Reports

To run **Basic reports** window, press **Basic reports** button of the side toolbar.



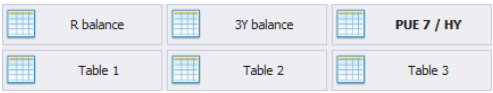
Basic report window:



Standard reports window provides records of all measurements stored by SQL database. The measurements can be selected for display either in a form of basic reports (table report) or detailed reports (Weighing operation reports).

7.1.1. Current Table Reports

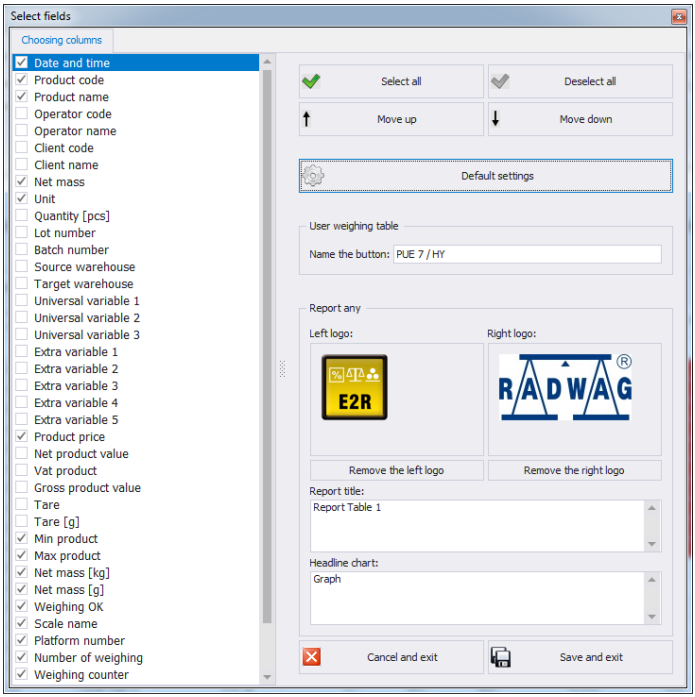
Standard reports window enables preview of weighing records in six different configurable tables. To swap between the tables press one of the below presented buttons.



R, 3Y, PUE 7 / HY tables feature weighing records for one specified balance or scale. Table 1, Table 2, Table 3 tables feature all weighing records.

Each table of weighing records can be sorted, it is possible to sort the records by measurement date or by product name, etc. Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press Report button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with E2R software installed. To generate .xls file, operated by Excel, press Export to XLS button.

To open settings for table of weighing records press Settings button:

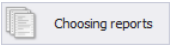


To restore default column arrangement press **Default settings** button.

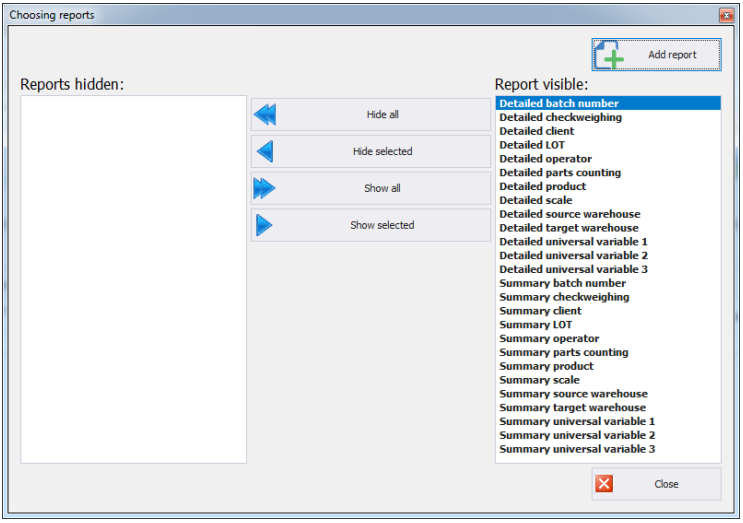
7.1.2. Weighing Operation Reports

There are two reports types designed for weighing operation, detailed reports and cumulative reports grouping data on weighing, customer, parts

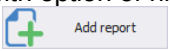
counting, warehouses, operators, batches, lots, product, balance/scale, universal variable.

To view list of reports, either visible or hidden, press 

button:



The window provides you with option of hiding the reports that are not used.

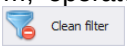
To add a new report, press 

button and find respective file.

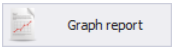
7.1.3. Graph #FrmmagsWazeniaSimpleChart#

Press

button to open window with a graph.

The graph contains weighings carried out within selected time interval.
The top part of the window contains the following filters: product, scale, platform, operator, customer, batch no. and lot no. To delete all filters, press 

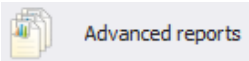
button.

Press 

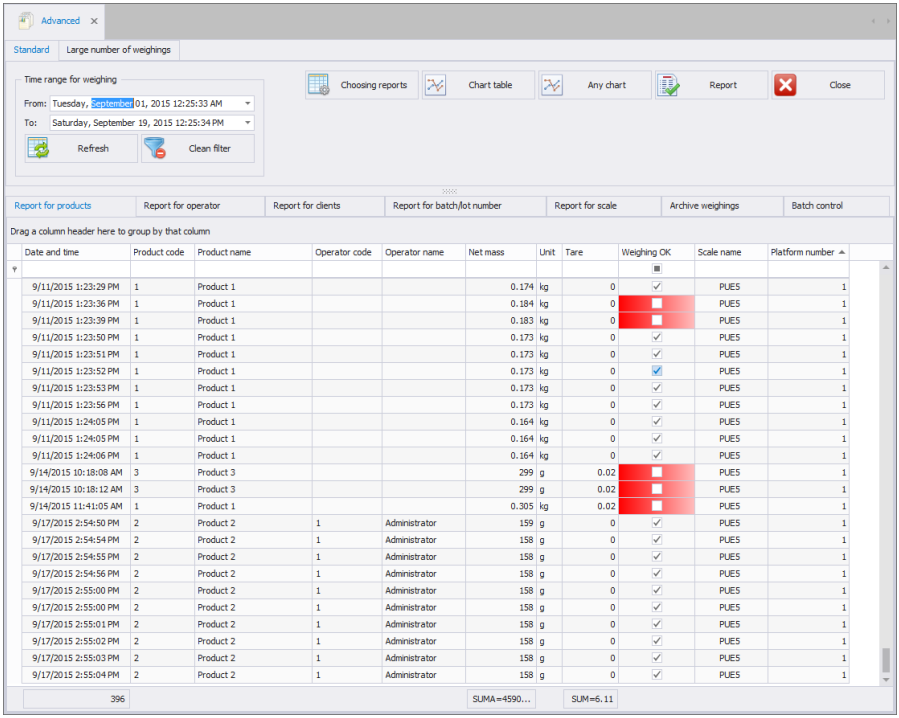
button to generate graph report.

7.2. Advanced Reports

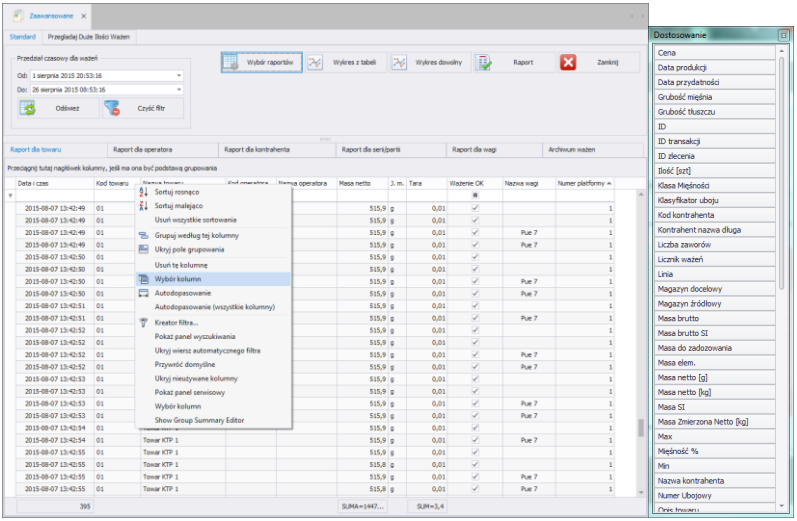
To run **Advanced reports** window, press **Advanced reports** button of the side toolbar.



Advanced report window:



Advanced report window provides you with option of displaying particular set of columns for each report. To do it use “Column Chooser” tool.

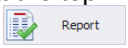


To run the **Column Chooser** tool, place mouse cursor over particular column name and click right mouse button.

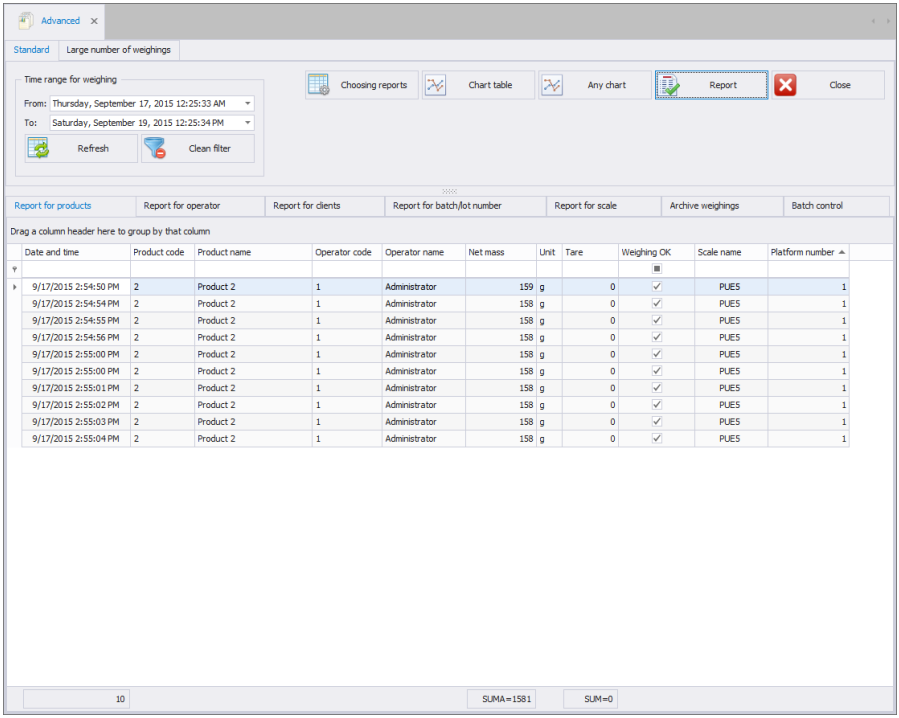
Customization window is displayed. The window features list of columns, each of these can be added/removed to/from the workpane. To add or remove a particular column you need to drag and drop it.

CAUTION!
In order to make introduced modifications valid, it is necessary to press and hold Ctrl button while closing the window.

7.2.1. Report on Product

Report on product tab allows to arrange acquired measurements by measured product name. Each report can be sorted by few columns, e.g.: by measurement date column and by product name column. Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press 

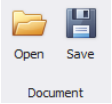
button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with **E2R WEIGHING RECORDS** software installed.



Window intended for generated report preview features quick launch bar.

List of standard functions accessible via quick launch bar:

Printing



Option of saving and reopening of a printout in a format dedicated to a given report type

Option of export of a particular printout to file: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

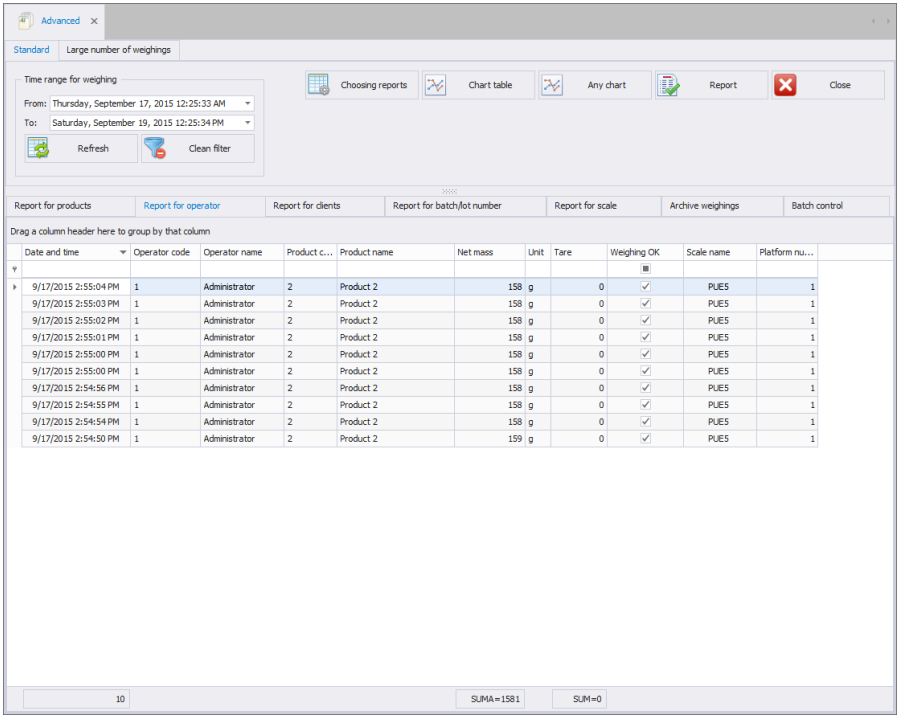
Report example – weighing records

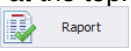
Report for products
9/17/2015 12:25:33 AM 9/19/2015 12:25:34 PM

Date and time	Product	Product name	Operator	Operator	Net mass	Uni	Tare	Weighing	Scale	Platform
9/17/2015 2:54	2	Product 2	1	Administrat	159	g	0	☑	PUE5	1
9/17/2015 2:54	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:54	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:54	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
9/17/2015 2:55	2	Product 2	1	Administrat	158	g	0	☑	PUE5	1
10					JMA=1581		SUM=0			

7.2.2. Report on Operator

Report on Operator tab allows to arrange acquired measurements by operator. Each report can be sorted by few columns, e.g.: by measurement date column and by operator column.

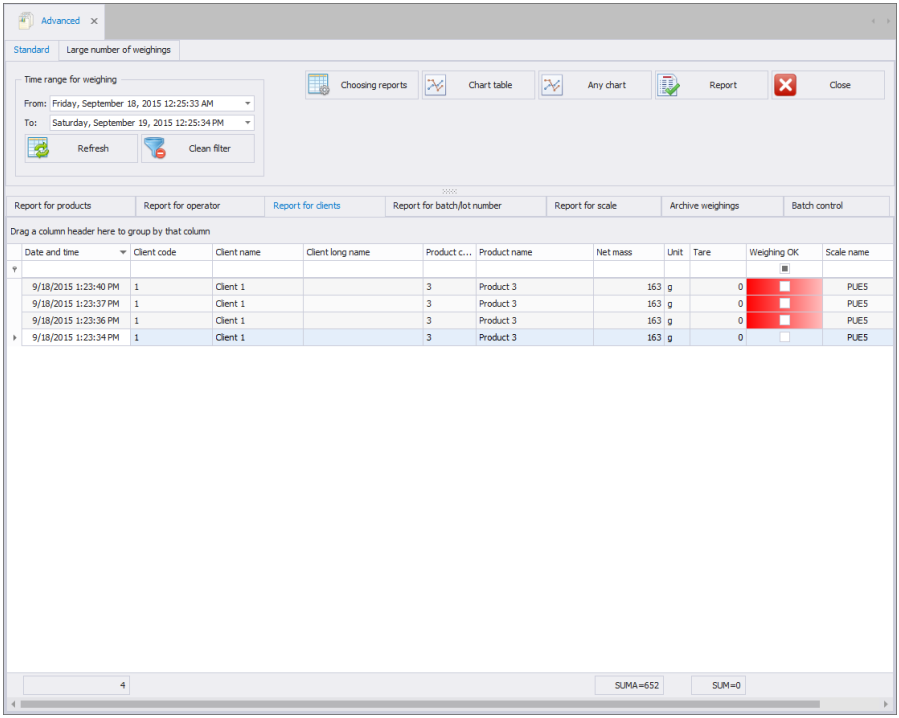


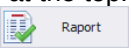
Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press 

button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with **E2R WEIGHING RECORDS** software installed.

7.2.3. Report on Customer

Report on Customer tab allows to arrange acquired measurements by customer assigned to a particular measurement. Each report can be sorted by few columns, e.g.: by measurement date column and by customer column.

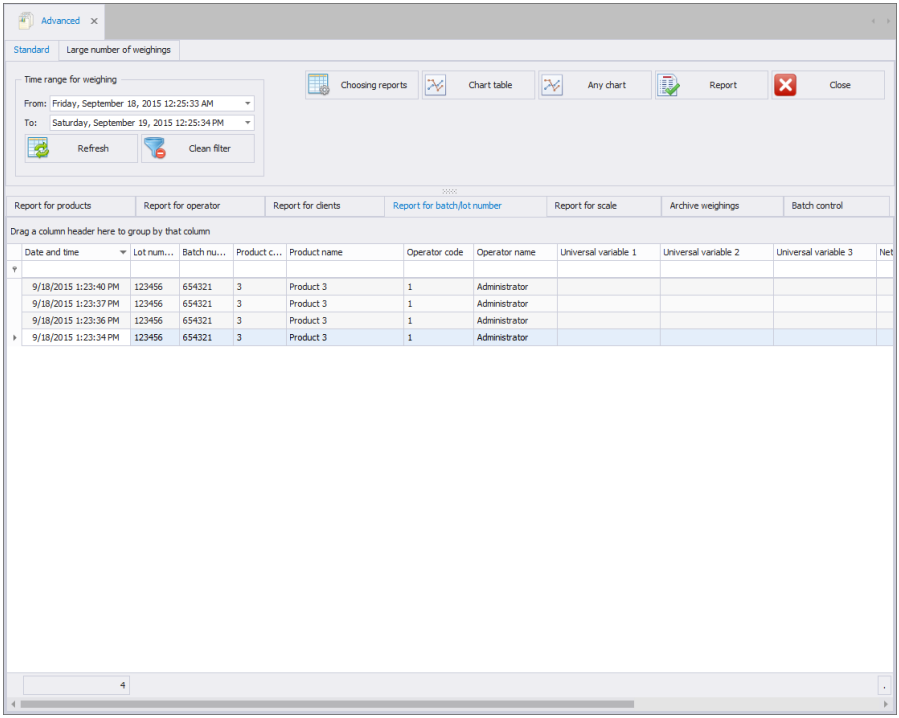


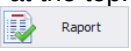
Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press 

button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with **E2R WEIGHING RECORDS** software installed.

7.2.4. Report on Batch/Lot

Report on Batch/Lot tab allows to arrange acquired measurements by lot number. Each report can be sorted by few columns, e.g.: by measurement date column and lot number or batch number column.

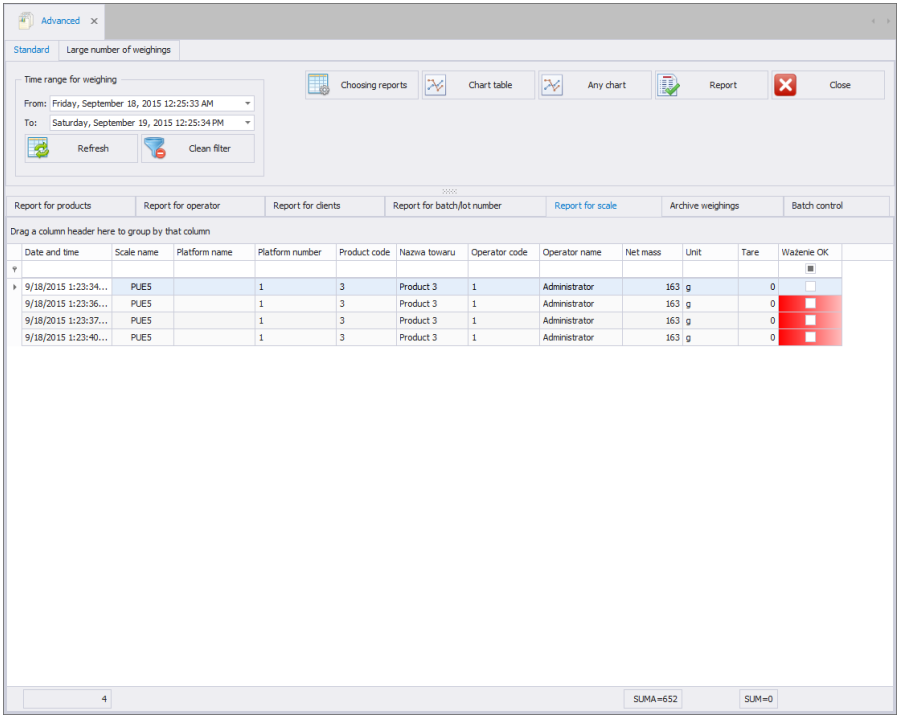


Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press 

button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with **E2R WEIGHING RECORDS** software installed.

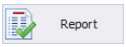
7.2.5. Report on Scale/Balance

Report on Scale tab allows to arrange acquired measurements by scale. Each report can be sorted by few columns, e.g.: by measurement date column and by scale name column.



Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top.

Advanced filtering carried out by means of **Filter Editor** can be used as a supplementary sorting tool for each report (for detailed Filter Editor overview read section 3.1.2).

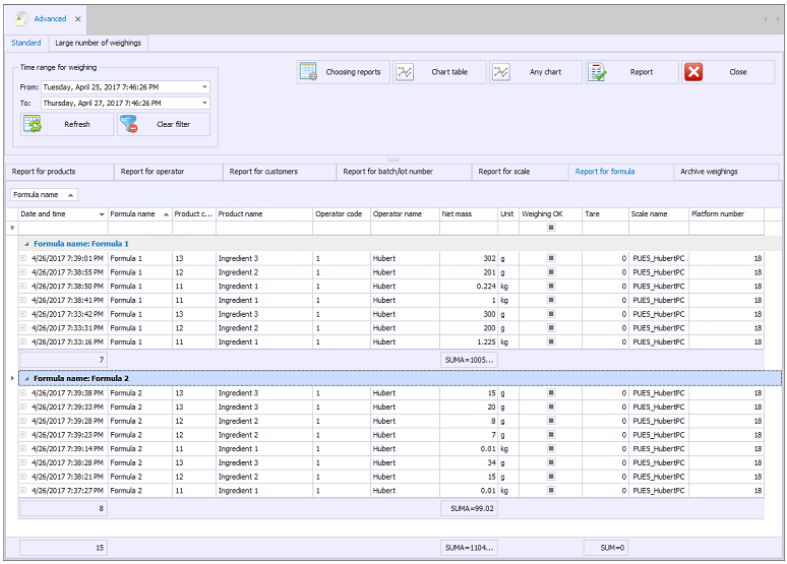
When all the conditions for grouping have been specified, press 

button, the report is generated to PDF file. It can be either saved or printed by means of local printer connected to computer with **E2R WEIGHING RECORDS** software installed.

7.2.6. Report on Formulation

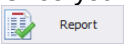
Report on formulation tab enables organizing obtained weighings in accordance with the Formulation for which the measurements were carried

out. Each report can be sorted in few columns, e.g. by the date of weighing and formulation name for which the weighings were carried out.



The grouping of sorting conditions depends on the order of adding. Time interval including the report is to be set in the upper part of the window.

Additionally, it is possible to use previously described advanced filtering in each of the report window using **filter editor**
(its operation is described in section 3.1.2 of this user manual).

Once you have determined all the desired grouping conditions and pressed 

button, a report is generated as PDF file. It can be saved or printed out on a local printer connected to the computer with **E2R** software.

7.2.7. Weighing Records Archives

Weighing Records Archives tab allows to archive selected measurements.

Functions:

- Move selected records to archives
- Restore selected archival records

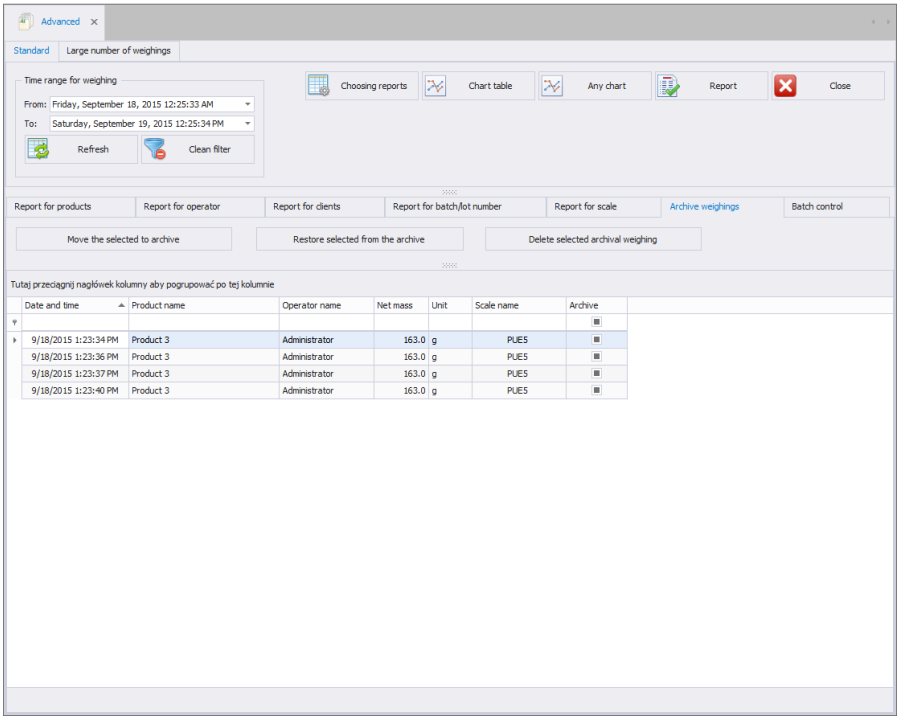
- Delete selected archival records

There are two options for archiving weighing records. It is possible to move either single weighing record or group of weighing records. To perform the operation press “**Move selected records to archives**” button.
There are three methods for archiving group of weighing records:

- By data filtering, enabling to select group of particular measurements (for detailed overview of Filter Editor read section 3.1.2),

- By using SHIFT key, enabling to select limited group of weighing records – select first weighing record, press SHIFT key and while holding it select the last weighing record,

- By using „Ctrl + A” keys combination, enabling to select all weighing records.

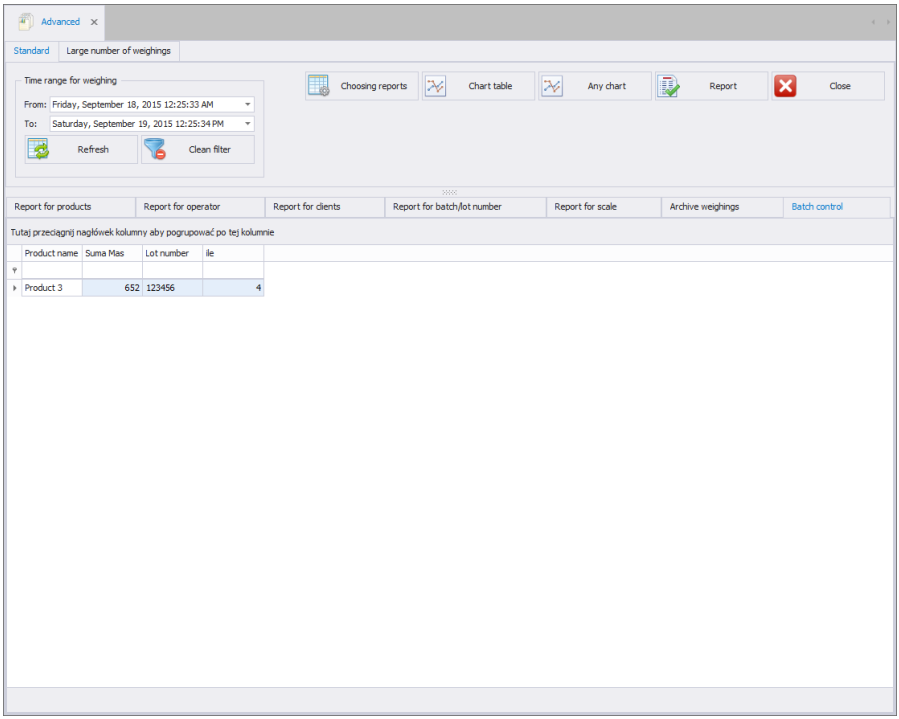


Archival weighing records are restored likewise, to restore the records press “Restore selected archival records”.

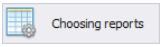
Weighing records can be deleted upon being moved to archives – ONLY archival weighing records can be deleted.

7.2.8. Batch Control

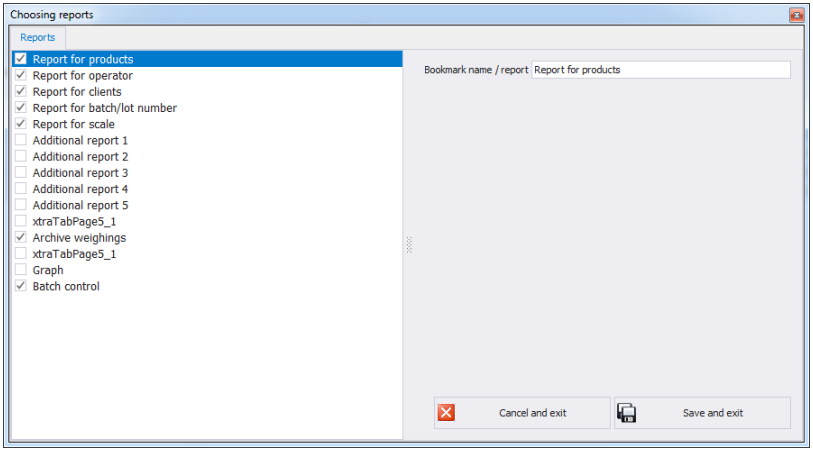
Batch control tab allows to check whether batch numbers are unique. Quantity columns specifies how many times a particular batch number has been used. “1” value informs that a particular batch number has been used once only.

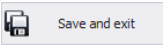


7.2.9. Reports Chooser #frmTabPageChooser#

Press 

button to see the window featuring list of reports:

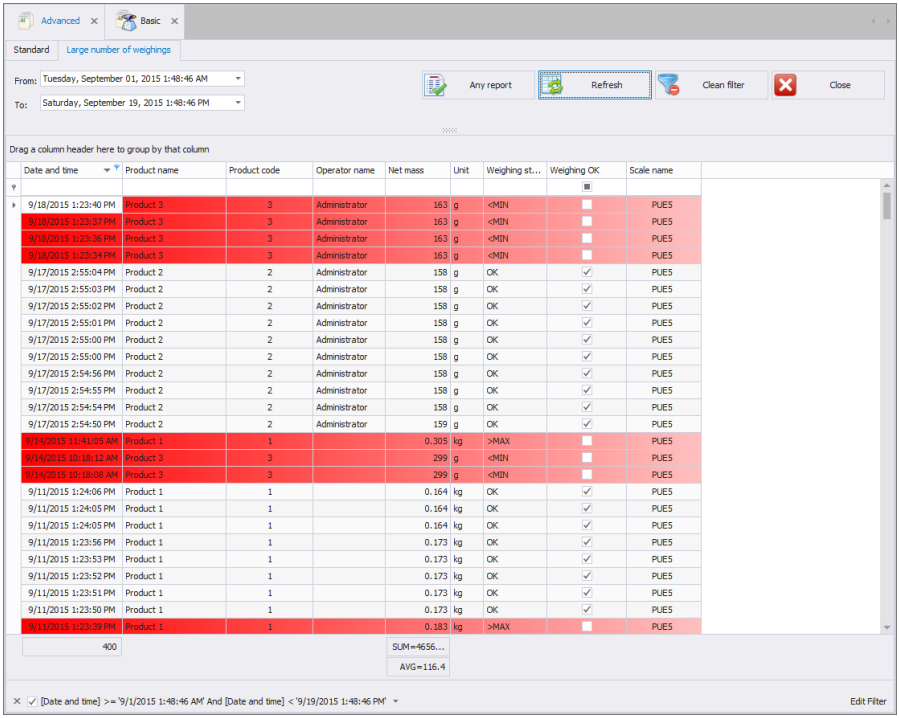


Reports Chooser window allows to show or hide a particular tab of the Complex Reports window, it also enables naming/renaming headers of particular reports. Press 

button to make the introduces modifications valid.

7.2.10. Viewing Large Number of Weighing Records

Standard reports enable presentation of limited number of weighing records. In order to generate and print report on unlimited number of weighing records go to **Large Number of Weighing Records** tab.

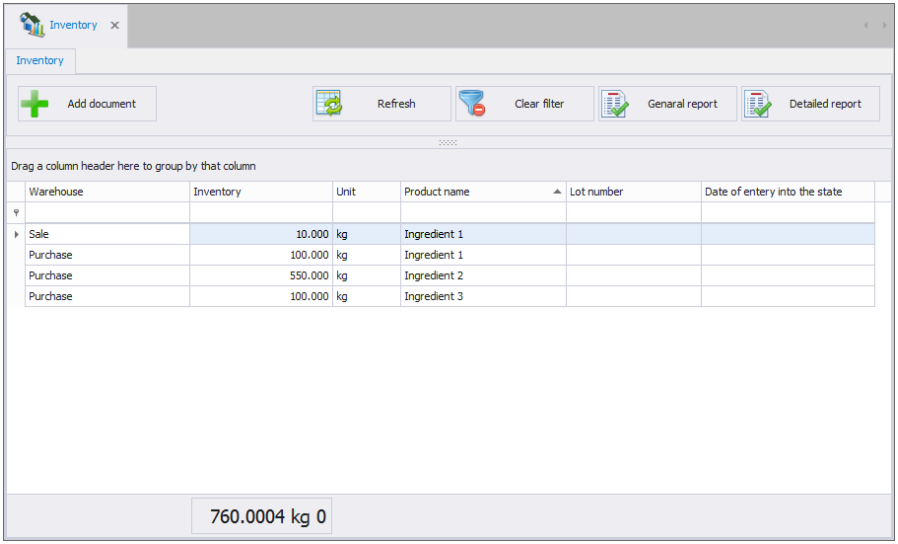


CAUTION!
Presented fields quantity is limited for the above tab.

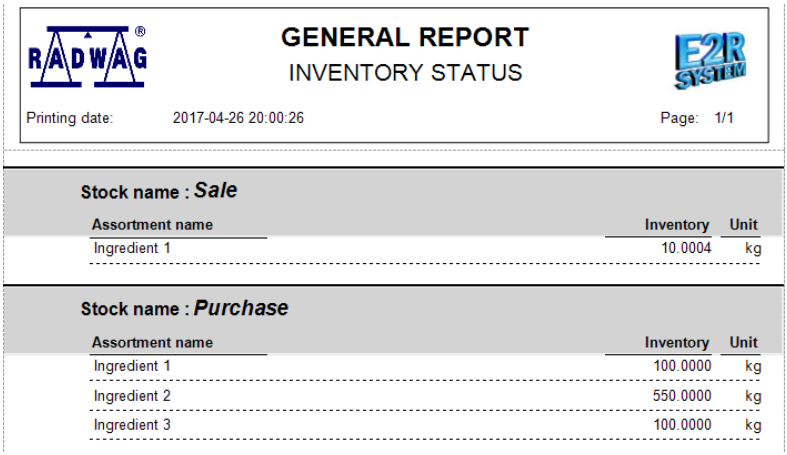
8. PRODUCTION

8.1. Inventory

Inventory tab provides option for generating general and detailed reports, wherein the reports are generated by warehouses from combo box list. Additionally it is possible to display any warehouse inventory and settlement – resource balance of a warehouse.
Inventory window enables you to sort information by any selected column, to do it drag the selected column header over a sort bar. With this option clear readability is guaranteed.



Inventory tab enables the user to generate general report on warehouse inventory, to do it press **General Report** button. The report can be saved to file or printed using printer connected to the computer.



GENERAL REPORT

INVENTORY STATUS

Printing date: 2017-04-26 20:00:26 Page: 1/1

Stock name : *Sale*

Assortment name	Inventory	Unit
Ingredient 1	10.0004	kg

Stock name : *Purchase*

Assortment name	Inventory	Unit
Ingredient 1	100.0000	kg
Ingredient 2	550.0000	kg
Ingredient 3	100.0000	kg

Inventory tab enables the user to generate detailed report on warehouse inventory, to do it press **Detailed Report** button. The report provides all warehouse stored product series with their receipt dates.

DETAILED REPORT

INVENTORY STATUS

Printing date: 2017-04-26 20:01:50 Page : 1/1

Stock name : *Sale*

Assortment name	Series	Date of introduction	Inventory	Unit
Ingredient 1			10.000	kg
		Stock total:	10.000	kg

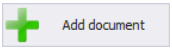
Stock name : *Purchase*

Assortment name	Series	Date of introduction	Inventory	Unit
Ingredient 1			100.000	kg
Ingredient 2			550.000	kg
Ingredient 3			100.000	kg
		Stock total:	750.000	kg

Warehouse inventory can be edited by means of E2R Transactions software, this is done by generating each of accessible transactions:

- Purchase
- Sale
- Warehouse stock transfer
- Waste

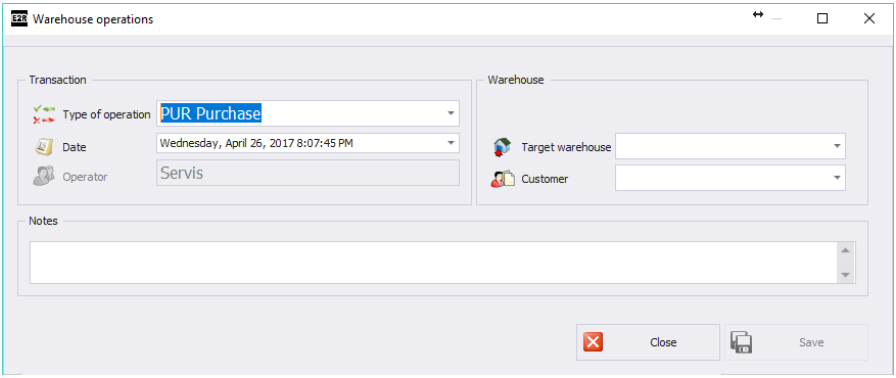
8.1.1. Adding New Transaction Document

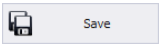
Press 

button to add new transaction document. The Warehouse operations window is opened, you can determine:

- Type of operation,
- Warehouse to which this operation applies (or Warehouses - in case of the warehouse transfer),
- Customer for whom the operation is carried out,
- Notes,

The date and the operator that carries out the operation are loaded from the system without user's intervention (the system date of operation carrying out and currently logged in user).



Upon filling in the basic information, 

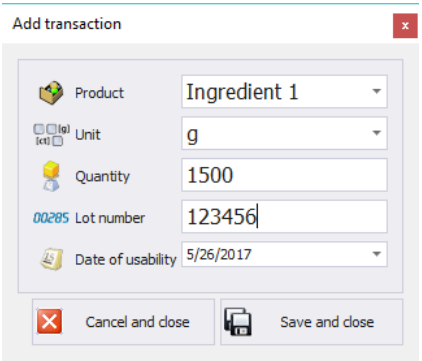
button is activated. Press it to confirm.

Overview of the possible operations:

PUR Purchase	The operation enables to enter selected product or products to the selected warehouse using the software - product quantity is added to the warehouse inventory.
SAL Sale	The operation enables to decrease the quantity of selected product or products in a selected warehouse using the software - product quantity is removed from the warehouse inventory.
W-W Warehouse transfer	The operation enables transferring the product (or products) between two selected warehouses - the product is removed from the first warehouse and added to the second warehouse.
WAS Waste	The operation enables considering the warehouse wastes in the selected warehouse that apply to the selected product (or products) - selected product, determined as the warehouse waste, is removed from the warehouse.

Now you can add the products that are to be subjected to the selected operation. Determine: product quantity in a product unit, lot no., shelf life (default: 60 days).

Caution!
If the product does not have a determined unit, then the value is given in grams.



After filling in all required fields for a specific product, press Save **and close** button. This causes warehouse transfer and adding manual transaction to the system.

9. TOOLS

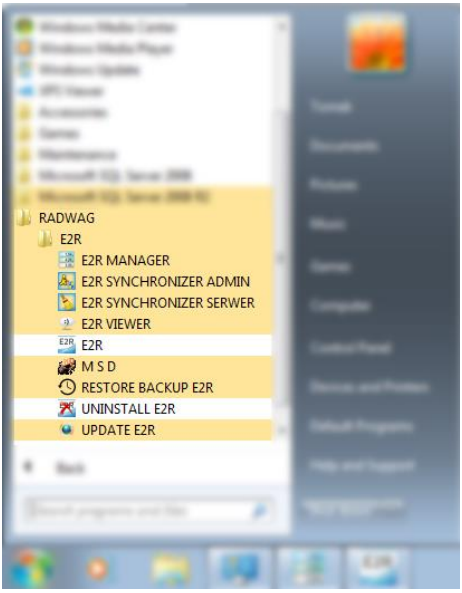
9.1. Scale Viewer

E2R Manager software has been designed to display communication status and scales state preview (ongoing weighing). Additionally it provides information on logged in operator, measured product, nominal net weight (mass standard), batch/lot number of measured product, customer, product tare value, low limit and high limit, working mode and other.

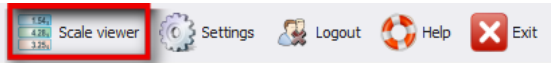
Since **E2R Manager** features simplified interface, it is recommended to use it for scales setup instead of **E2R SYNCHRONIZER ADMIN**.

All messages serve informative purposes, this means that they cannot be save to or printed by **E2R Manager**. To perform the said operations launch **E2R WEIGHING RECORDS** software.

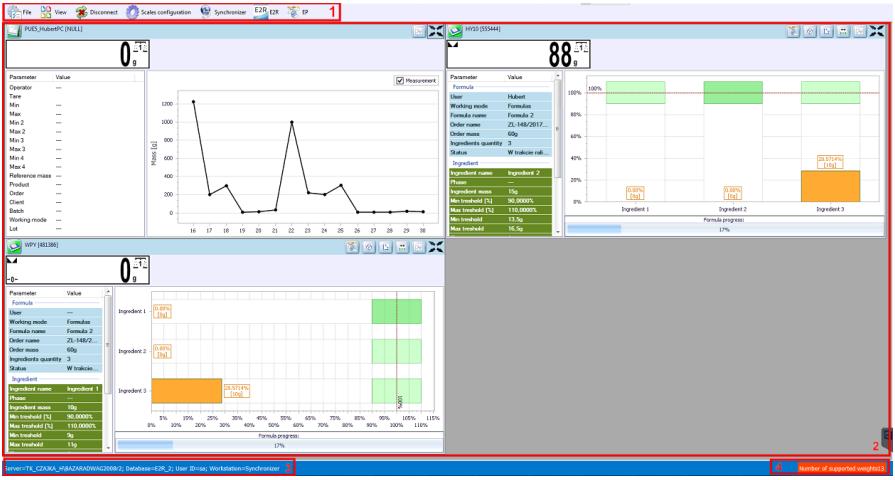
Upon **E2R SYSTEM** installation menu start shall feature **E2R Manager** shortcut.



Another option for accessing **E2R Manager** is to press **Scale viewer** button.



E2R Manager home screen:



Przy czym:

1 - Function buttons

2 - Operated weighing instruments

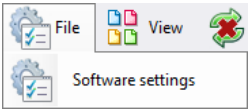
3 - Connection parameters

4 - Maximum quantity of operated weighing instruments

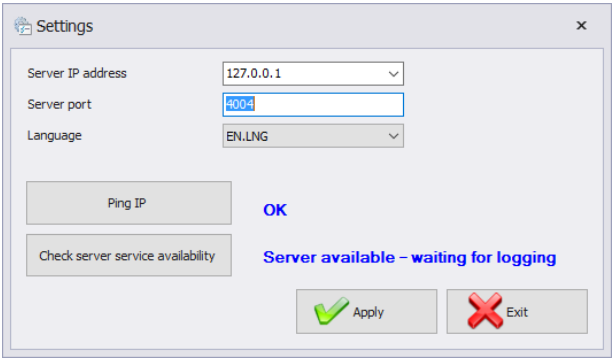
CAUTION!
Scale panel is displayed only upon establishment of communication between **E2R Manager** and **Radwag Synchronizer** provided that the scale is on.

9.1.1. Setting Connection with E2R SYNCHRONIZER

To run E2R SYNCHRONIZER software settings editor press **File** button, next press **Software settings** button.



Software settings editor opens, set IP address and communication port for computer which has been used to support connection with scales (server service).

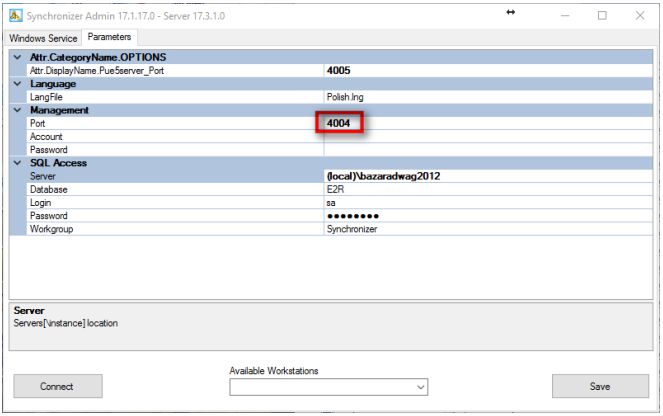


Where:

Server IP address	IP address of computer running the Synchronizer. Combo box provides list of available synchronizers.
Serwer port	TCP port of computer running the Synchronizer
Language	Language of E2R Manager PC software.
Ping IP	Test of connection for selected IP address, by default: local IP address
Check server service availability	Test of E2R Synchronizer availability

If **E2R SYNCHRONIZER** and **E2R MANAGER** are installed on the same computer then the default IP address remains unchained – **127.0.0.1**.

Default server port, **4004,** shall be changed only if it has been previously changed in E2R SYNCHRONIZER. The ports have to match each other.



The software provides various languages.

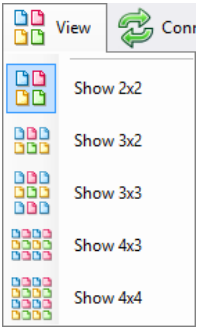
Language options:

PL Polish
EN English
DE German
ES Spanish
RU Russian

Press Apply button to make introduced modifications valid, next exit the program.

9.1.2. Scales Layout

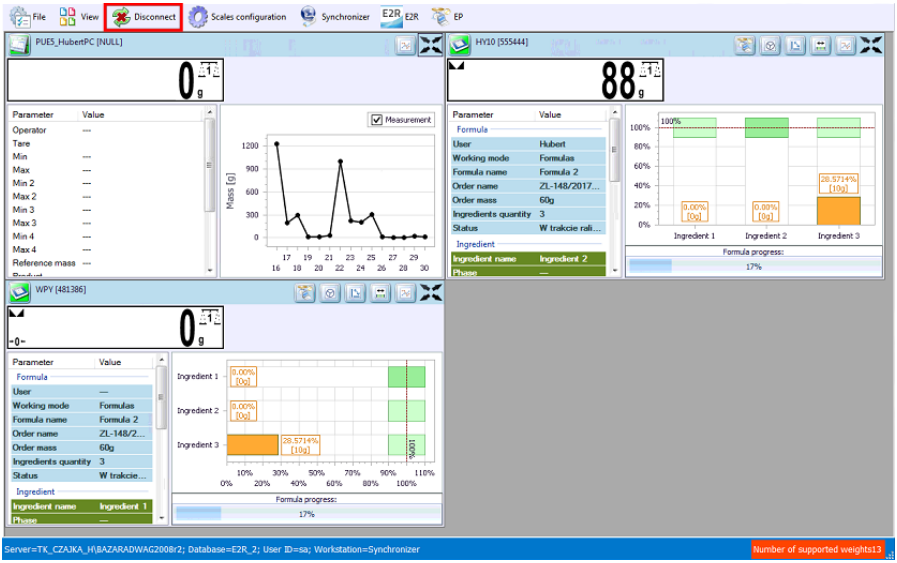
Scales can be freely arranged, to view layout options please press **Layout** button.



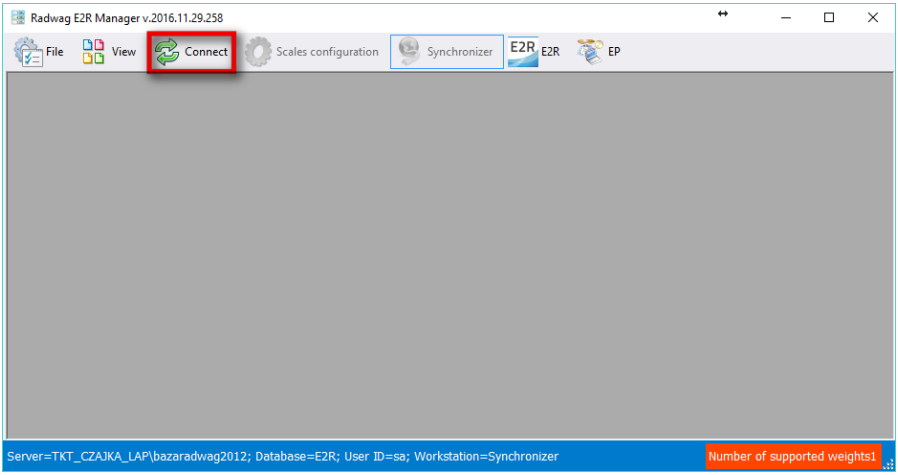
There are 5 standard layout options: 2x2, 3x2, 3x3, 4x3, 4x4.

9.1.3. Connecting/disconnecting E2R SYNCHRONIZER

In order to disconnect synchronizer without exiting the program press Disconnect button.



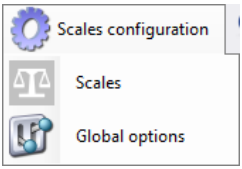
In order to run an on-line preview when the program is being operated, press Connect button.



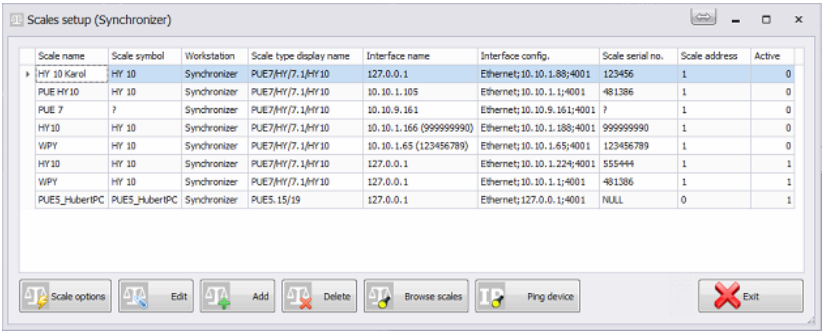
9.1.4. Scales Setup

9.1.4.1. Scales

In order to carry out scales setup press **Scales Setup** button, next press **Scales** button.



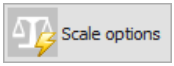
Scales Setup (Synchronizer) window opens, list of system cooperating scales is displayed.



Scale name	Scale symbol	Workstation	Scale type display name	Interface name	Interface config.	Scale serial no.	Scale address	Active
HY 10 Karol	HY 10	Synchronizer	PUE7/HY/7.1/HY10	127.0.0.1	Ethernet;10.10.1.88;4001	123456	1	0
PUE HY10	HY 10	Synchronizer	PUE7/HY/7.1/HY10	10.10.1.105	Ethernet;10.10.1.1;4001	481386	1	0
PUE 7	?	Synchronizer	PUE7/HY/7.1/HY10	10.10.9.161	Ethernet;10.10.9.161;4001	?	1	0
HY10	HY 10	Synchronizer	PUE7/HY/7.1/HY10	10.10.1.166 (999999990)	Ethernet;10.10.1.188;4001	999999990	1	0
WPY	HY 10	Synchronizer	PUE7/HY/7.1/HY10	10.10.1.65 (123456789)	Ethernet;10.10.1.65;4001	123456789	1	0
HY10	HY 10	Synchronizer	PUE7/HY/7.1/HY10	127.0.0.1	Ethernet;10.10.1.224;4001	555444	1	1
WPY	HY 10	Synchronizer	PUE7/HY/7.1/HY10	127.0.0.1	Ethernet;10.10.1.1;4001	481386	1	1
PUE5_HubertPC	PUE5_HubertPC	Synchronizer	PUE5.15/19	127.0.0.1	Ethernet;127.0.0.1;4001	NULL	0	1

Select the scale that is to be edited or deleted.

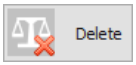
Buttons functions



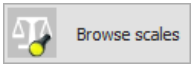
Press to run Scale Options window

Press to edit scale selected out of scales list

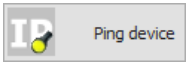
Press to add scale to a system



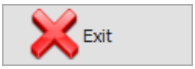
Press to delete selected scale



Press to search scales in local network



Press to check scale IP address



Press to exit Scales Setup window

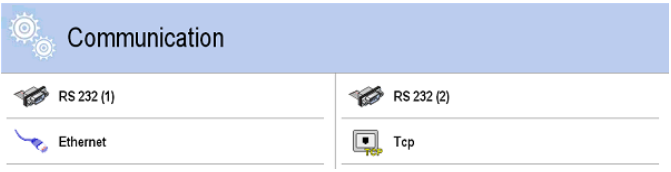
9.1.4.1.1 Adding a Scale

Weighing instruments can be added automatically or manually. Prior adding the weighing instrument to the system, make sure it is correctly configured. Required settings for HY10:

Settings/ Peripherals/ Computer/ Port

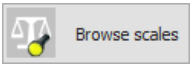
Settings/ Peripherals/ Computer/ E2R System

Correctly configured Communication settings.



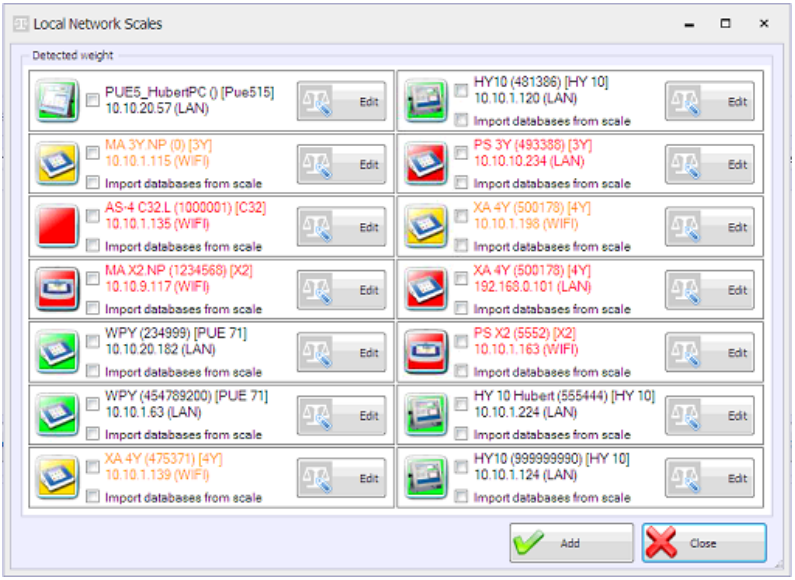
Automatic method:

Weighing instruments connected to the local Ethernet network can be searched and added automatically.

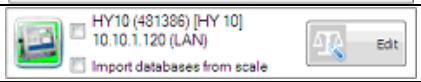
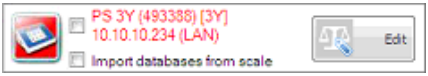
Press 

button, the following message is displayed:

Next Local Network Scales window, featuring list of available scales, opens:



Where:

	Scale already cooperating in the system,
	Detected scale, the scale parameters read correctly
	Detected scale, prior adding the scale to the system some of the parameters need to be completed, e.g. metrological parameters
	Detected scale, the scale has been detected but it is not ready for cooperation in a system, connection setup problems or other problems have occurred

(*) – Incorrectly configured weighing instrument does not connect with the database. Connection parameters have to be set manually: **Settings/Databases/Database configuration/SQL connection.**

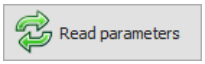
Select the scales that are to be added and press Add button.

Prior adding the scale you can press

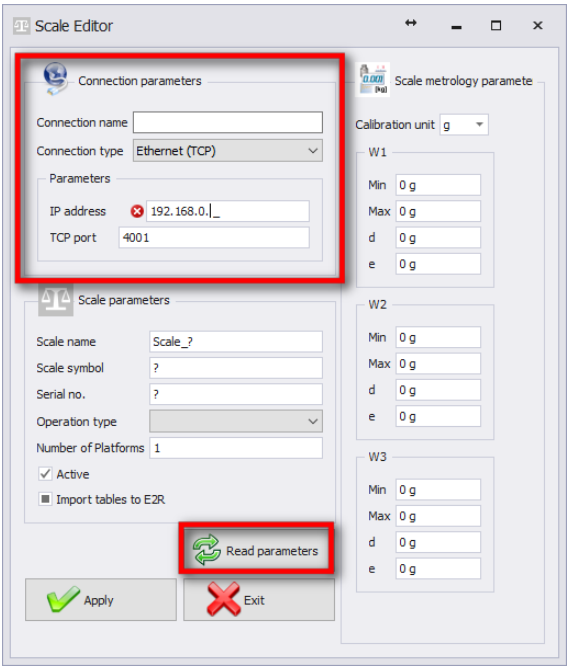
button in order to open Scale Editor and check the scale parameters. For description of Scale Editor read manual method instruction.

Manual method:

Press

button. Scale Editor opens, modify the parameters and press 

button.



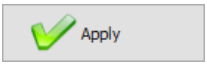
Where:

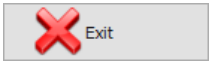
Connection name	Freely designed name of communication interface.
Connection type	Combo box enabling selection of interface for scale connection: Serial – scale connected via RS232, Ethernet – scale connected via Ethernet.

IP address	IP address set in Ethernet interface on a scale.
TCP port	TCP port set on a scale (by default **4001**).
Scale name	Scale name presented on reports.
Scale symbol	Scale symbol exposed on the scale overlay. Required by PGC system.
Serial no.	Serial number of the scale.
Operation type	Type of connection with a scale: • *PUEC41* – connection with PUEC41H indicator, • *Pue7/HY/7.1/HY10* – connection with industrial scales of WLY, WPY, HY10 and HTY series with standard program version, • *3Y/4Y* – connection with laboratory balance of 3Y series, • *Pue7/HY/7.1/HY10 KTP/SQC* – connection with industrial scales of WLY, WPY, HY10 and HTY series operating in PGC mode, • *3Y/4Y PGC*– connection with laboratory balance of 3Y and 4Y series operating in PGC mode, • *DynPGC* – connection with dynamic scale, • *MAX* – connection with moisture analyzer of MAX, PMC series, • *Pue4 Land* – connection with scales based on PUE4L indicator, • *Pue7 PCS* – connection with scales based on PUE7 and HY terminal (version with Parts Counting program), *Disabled for Parts Counting mode of standard scale program*, • *PUE-5* – connection with TMX scale with version 3 or earlier of the software, • *OCS/ISHIDA* – connection with OCS/ISHIDA scale and metal detector, • *R* – connection with laboratory balance of R series • *R Dryer* – connection with moisture analyzer of R series • *X2* – connection with laboratory balance of X2

	series • PUE5.15/19 – connection with TMX scale with version 3 or later of the software.
Number of platforms	Number of platforms supported by the scale
Active	Select the option if the weighing instrument is to be previewed.
Import tables to E2R*	Import of the weighing instrument database
Scale metrology parameters	Scale parameters section: Max, Min, d, e; Required by PGC system

(*) – it is possible to import database of the weighing instrument only when adding the instrument to the E2R.

Press 

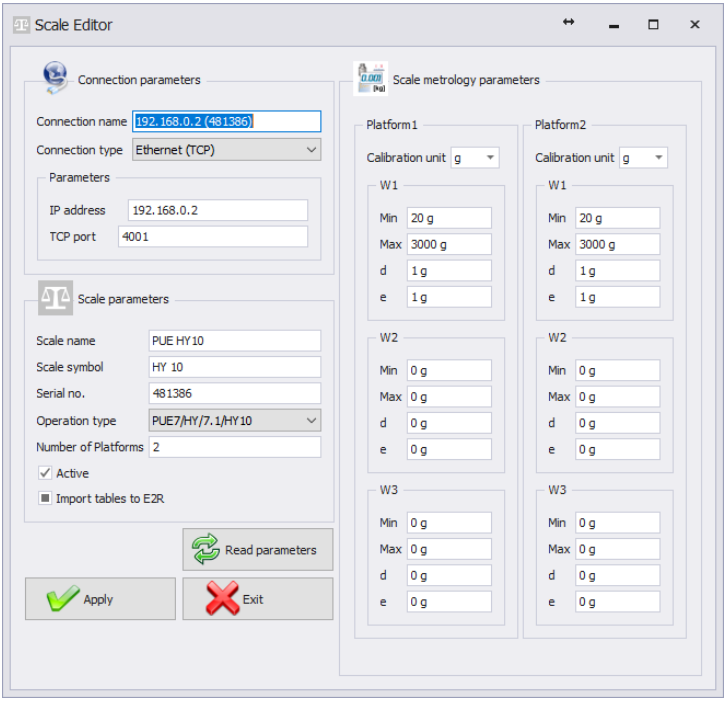
button to make introduced modifications valid, press 

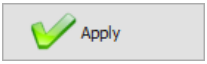
button to exit Scale Editor without saving changes.

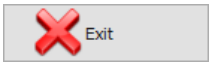
9.1.4.1.2 Editing Scales

Press Scale Setup button, next select Scales option, Scale Setup (Synchronizer) opens, select the scale parameters of which are to be modified, and press

button.

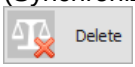


Press 

button to make introduced modifications valid, press 

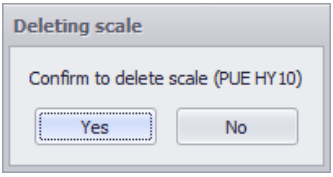
button to exit Scale Editor without saving changes.

9.1.4.1.3 Deleting Scales

Press Scale Setup button, next select Scales option, Scale Setup (Synchronizer) opens, select the scale that is to be deleted, and press 

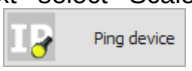
button.

The following message is displayed, press **Yes** button to confirm deletion of a selected scale.

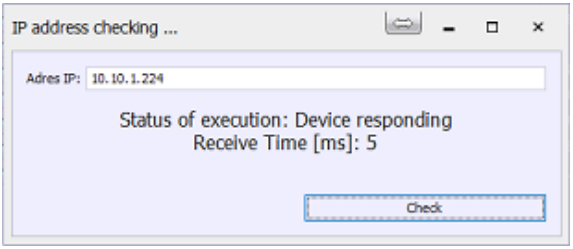


CAUTION!
Be especially careful while deleting scales, along with the scale all scale-related information displayed in a report is deleted.

9.1.4.1.4 IP Address Check

Press Scale Setup button, next select Scales option, Scale Setup (Synchronizer) opens, press 

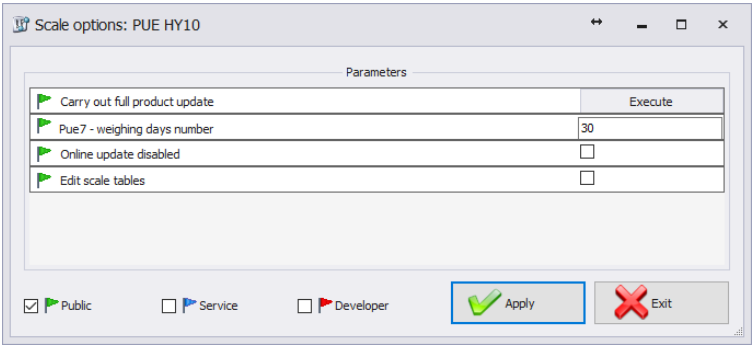
button. “IP Address Checking…” window opens:



Enter scale IP address and press Check button. Information on status and time is provided.

9.1.4.1.5 Scale Options

Scale Options window features three buttons for three different option groups: Public, Service, Developer.



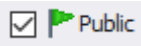
Enabling/disabling options:

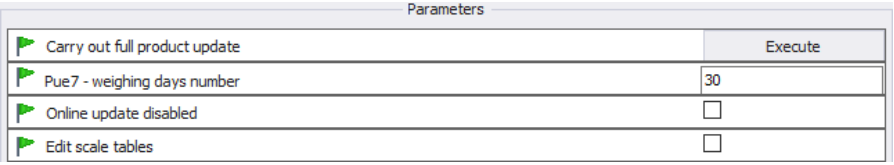
Option enabled

Option disabled

- **Public**

Public options are enabled by default, public options modification does not influence system operation negatively.



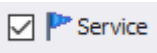


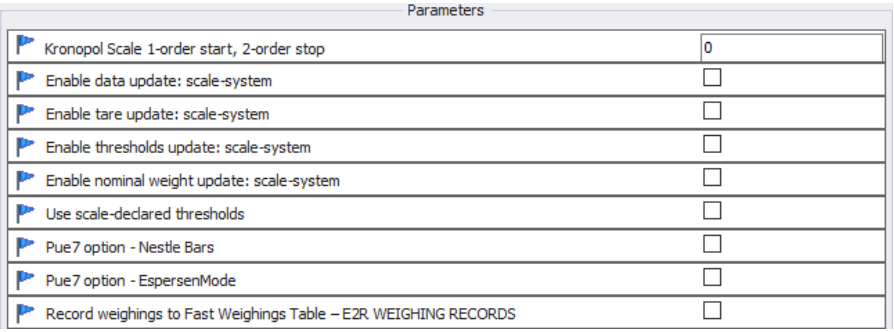
Carry out full product update*	Complete update of products carried out for a particular scale
Pue 7 - Weighing days number	Specifying how long the weighings are to stay archive
Online update disabled	Disabling scale database synchronization
Edit scale tables	Enabling database editing on a balance

(*) – update of products on scales is carried out regularly therefore there is no need to use this parameter

- **Service**

To enable Service options it is necessary to tick Service box.
Option of selected information update, wherein system information is updated with scale information, has to be approved by global options settings.





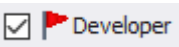
Kronopol Scale 1-order start, 2-order stop	Customized settings for Kronopol scales.
Enable data update: scale-system	Enabling update of system information with scale information. Updated values: tare, thresholds, weight.
Enable tare update: scale-system	Enabling update of system information with scale information. Updated value: tare.
Enable thresholds update: scale-system	Enabling update of system information with scale information. Updated value: thresholds.
Enable nominal weight update: scale-system	Enabling update of system information with scale information. Updated value: nominal weight.

Use scale-declared thresholds	Enabling operation with thresholds set on a scale, instead of operation with thresholds set in the system.
PUE 7 option – Nestle/bars	Customized settings for Nestle scales.
PUE 7 option – Espersen	Customized settings for Espersen scales.
Record weighings to Fast Weighings Table – E2R WEIGHING RECORDS	Customized settings for WPW scales, for E2R Weighing Records software.

CAUTION!
Do not tick "Record Weighings to Fast Weighings Table" option for WEIGHING RECORDS, TRANSACTIONS, FORMULATIONS, PGC, MOISTURE ANALYZERS or CHECKWEIGHER modes.

- **Developer**

To enable Developer options (programming options) it is necessary to tick Developer box. These options serve informative purposes, they shall not be subjected to modification.



Parameters

Version No. of database of products	0
Version No. of database of operators	0
Version No. of database of clients	0
Synchronize universal variables changes	0
Synchronize vehicle changes	0
Synchronize traceability changes	0
Synchronize package changes	0
Synchronize warehouse changes	0
Full scale update	0
Status Description	WAGA WYŁĄCZONA
Set a batch	
Set a lot	11111
Set package ID	
Set Client ID	
Scale serial no.	481386
Weight high threshold - MAX	200
Weight low threshold - MIN	100
Refresh data	1
Scale-set order ID	0
System-set order ID	0
ID of last acquired weighment from PUE7/HY	44
ID of last formulation report acquired from PUE7/HY	0
Last vehicle measurement report ID	0
Scale-set product ID	0
System-set product ID	1
Status	1
Scale-set operator ID	0
System-set operator ID	0
Package ID	0

Database Version No. ... Version number of database taken from scale, the number serves as base for scale databases synchronization.

Scale Serial No. Serial number taken from scale.

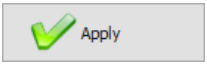
Weight high threshold - MAX High threshold value taken from scale.

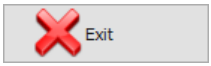
Weight low threshold - Low threshold value taken from scale.

MIN

Scale-set order ID	ID of current order taken from scale.
System-set order ID	ID of current order set in the system.
Scale-set product ID	ID of current product taken from scale.
System-set product ID	ID of current product set in the system.
Scale-set operator ID	ID of current operator taken from scale.
System-set operator ID	ID of current operator set in the system.
Last report, weighing… ID	Number of PUE7/HY records or 3Y records saved in system. Having noticed that weighings or reports are not acquired although automatic algorithm for capturing scale data is in use, set 0 value for particular database.

CAUTION!
Setting 0 value for last report or weighing ID results with acquisition of the same set of weighings from scale to system.

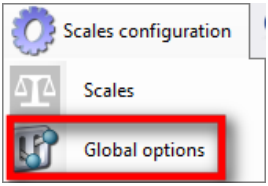
Press 

button to make introduced modifications valid, press 

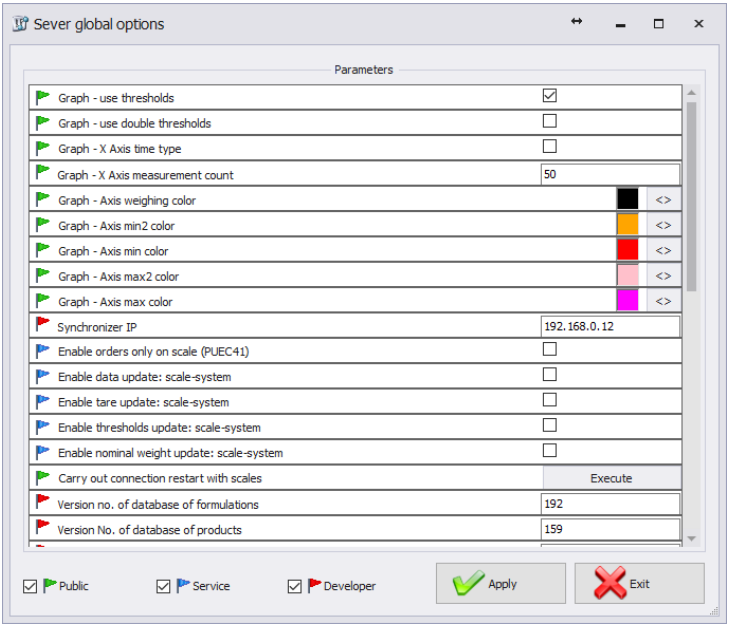
button to exit Scale Options window without saving changes.

9.1.4.2. Global Options

In order to carry out system setup press **Scales Setup** button, next press **Global Options** button.



Global Server Options window opens, list of available parameters is displayed.



Global Options window features three buttons for three different option groups: Public, Service, Developer.

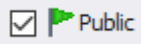
Enabling/disabling options:

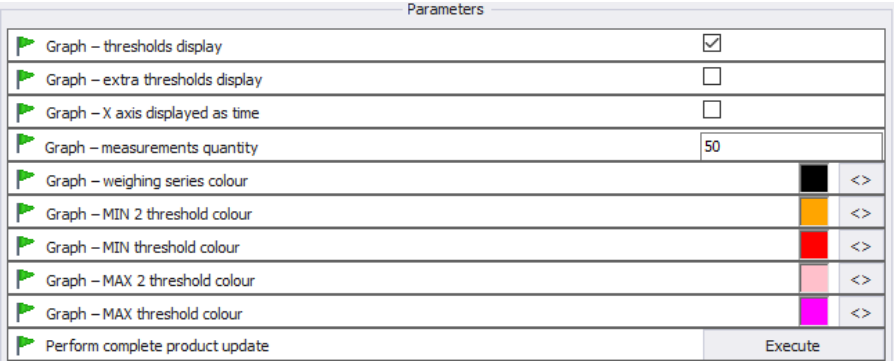
Option enabled

Option disabled

- **Public**

Public options are enabled by default, public options modification does not influence system operation negatively.



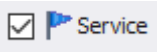


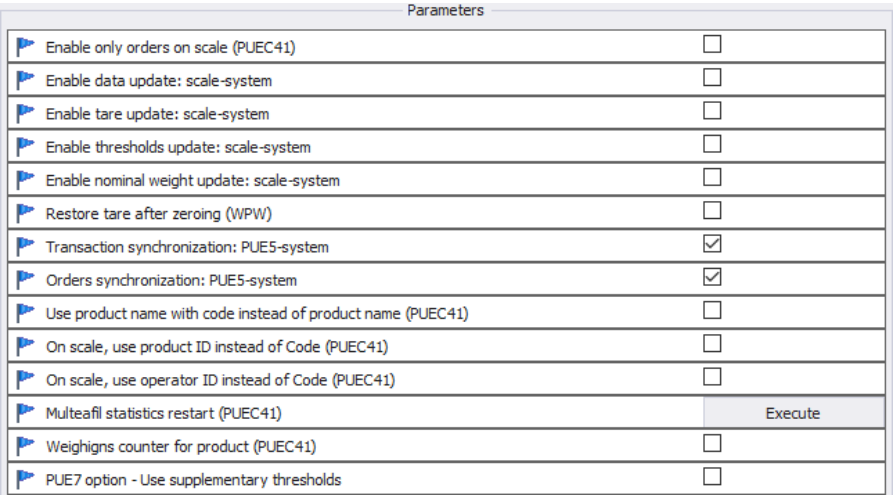
Graph – thresholds display	Graph with MIN and MAX thresholds displayed
Graph – extra thresholds display	Graph with MIN2 and MAX2 thresholds displayed
Graph – X axis displayed as time	Scaling X axis by measurement time
Graph – measurements quantity	Determining quantity of simultaneously displayed measurements
Graph – weighing series colour	Specifying colour for seires of weighings
Graph – MIN 2 threshold colour	Specifying colour for MIN 2 threshold
Graph – MIN threshold colour	Specifying colour for MIN threshold
Graph – MAX 2 threshold colour	Specifying colour for MAX 2 threshold
Graph – MAX threshold colour	Specifying colour for MAX threshold
Perform complete product update*	Forcing performance of complete update of products for a particular

scale.

- **Service**

To enable Service options it is necessary to tick Service box.





Enable only orders on scale (PUEC41)	Manual selection of a product on a scale blocked.
Enable data update: scale-system	Enabling update of system information with scale information. Updated values: tare, thresholds, weight.
Enable tare update: scale-system	Enabling update of system information with scale information. Updated value: tare.
Enable thresholds update: scale-system	Enabling update of system information with scale information. Updated value: thresholds.
Enable nominal weight update: scale-system	Enabling update of system information with scale information. Updated value: nominal weight.

Restore tare after zeroing (WPW)	Restoring product tare value that was valid prior zeroing.
Transaction synchronization: PUE5-system	Enabling synchronization of transaction, synchronization with PUE5.
Orders synchronization: PUE5-system	Enabling synchronization of orders, synchronization with PUE5.
Use product name with code instead of product name (PUEC41)	Modification of name field for PUEC41 indicator, change result: ID + PRODUCT NAME. Function active only when you select option: *Use product ID instead of product code, for scale.*
Use product ID instead of code (PUEC41)	Modification of product code field for PUEC41 indicator, change result: product ID.
Use operator ID instead of code (PUEC41)	Modification of operator code field for PUEC41 indicator, change result: operator ID.
Multeafil statistics restart (PUEC41)	Use of PGC intended software to zero statistics of WPW scale.
Weighigns counter for product (PUEC41)	Synchronization of number of weighings for product from WPW scale.
PUE7 option - Use supplementary thresholds	Activation of MIN 2 and MAX 2 thresholds.

CAUTION!
For WPW scale, code field is limited in databases, the limitation allows 6-character long codes maximum.

- **Developer**

To enable Developer options (programming options) it is necessary to tick Developer box. These options serve informative purposes, they shall not be subjected to modification.

Parameters

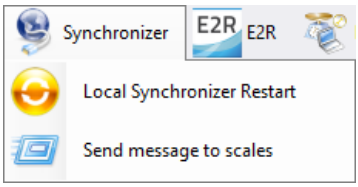
Synchronizer IP	192.168.0.12
Version no. of database of formulations	192
Version No. of database of products	159
Version No. of database of operators	44
Version No. of database of clients	3
Synchronize additional variables changes	0
Synchronize package changes	2
Synchronize warehouse changes	555
Refresh data	1

Synchronizer IP	IP address of computer operating synchronizer.
Database version number ...	System database version number, on the basis of this number all scale databases are synchronized.

CAUTION!
With completed settings modification restart the program.

9.1.5. Synchronizer

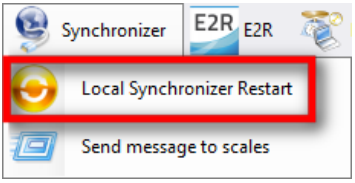
Synchronizer menu features option for connection restart, used to update databases on scales, and option for sending messages to all scales networking in the system.



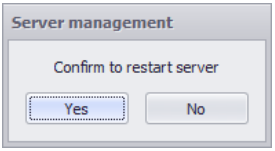
9.1.5.1. Local synchronizer Restart

Local synchronizer restart option has been enabled for computer with **E2R SYNCHRONIZER** launched. With this option it is possible to reboot server setup and to update scales databases.

Go to **Synchronizer** menu and press **Local Synchronizer Restart** button.

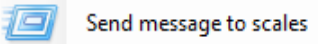


Respective window requesting your confirmation is displayed.

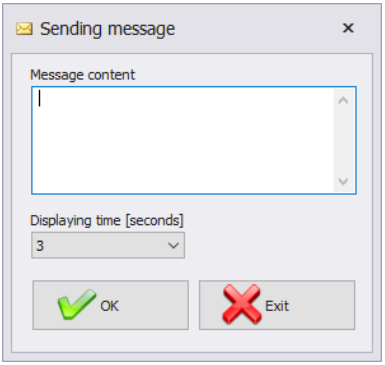


Press **Yes** button to restart server.

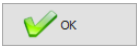
9.1.5.2. Sending Messages to Scales

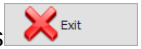
It is possible to send message to scales cooperating in the system. To do it go to **Synchronizer** menu and press 

button.



Message display time range is 3-3600 seconds.

Press 

button to send the message, press 

button to exit Sending Message window.

9.1.6. E2R Manager: Scales Status

Status informing on establishing communication between computer and a scale:

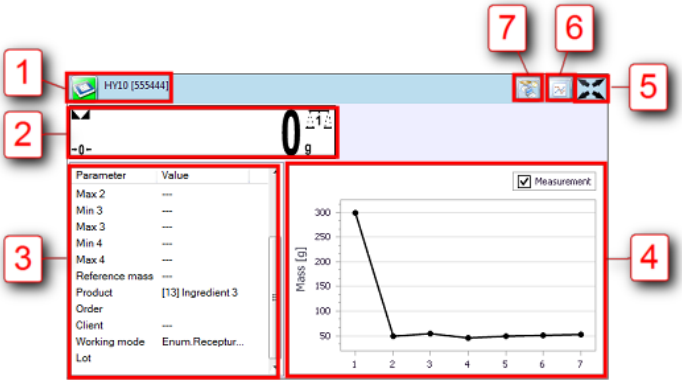
Communication established.
Correct scale setup.
Correct scale setup for E2R Synchronizer.

Communication established.
Temporary lack of response.
Incorrect scale setup or incorrect scale setup for E2R Synchronizer.

Communication not established.
Scale switched off or no communication interface connection.
Incorrect scale setup or incorrect scale setup for E2R Synchronizer.

9.1.7. Scale panel

Overview of the weighing instrument window in Formulations mode:



1 - Scale status/ function button

2 - Current scale-displayed weight value

3 - Current scale parameters

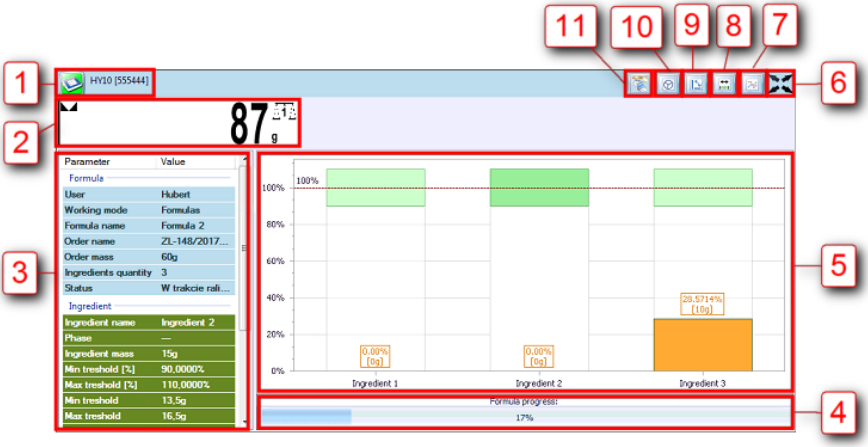
4 - Measurements presented in a form of graph

5 - Full screen button

6 - Parameters on/off button

7 - EP software launch, the software automatically connects with the scale*.

Overview of the weighing instrument window in Formulations/Reports mode:



1 - Scale status/ function button.

2 - Current scale-displayed weight value.

3 - Current scale parameters.

4 - Progress of the formulation preparation.

5 - Measurements presented in a form of graph.

6 - Full screen button.

7 - Parameters on/off button.

8 - The way the deviations are displayed.

9 - Horizontal/vertical graph.

10 - Pie chart.

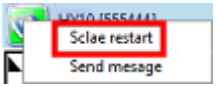
11 - EP software launch, the software automatically connects with the scale*.

(*) – when connection between EP software and a scale gets established, the scale disconnects form E2R.

CAUTION!
Scale panel is displayed only upon establishment of communication between **E2R Manager** and **Radwag Synchronizer** provided that the scale is on.
For key service settings, read E2R SYSTEM service manual.

9.1.7.1. Connection Restart and Scale Update for E2R

It is possible to restart scale in course of system operation, to do it press button, next press **Restart Scale** button.

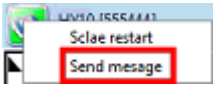


Wait tens of seconds for the scale to connect to the system, and for the scale databases to get updated.

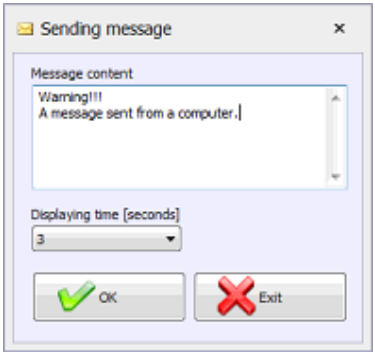
CAUTION!
If scales databases have not been updated, even though they were previously edited, then it is necessary to edit one freely selected database record and to carry out restart once more, update shall proceed.

9.1.7.2. Sending Message to Scales

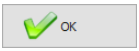
It is possible to send message to one particular scale, to do it press button, next press **Send Message** button.

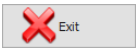


Sending Message window opens, enter respective text that is to be displayed on a given scale.



Message display time range is 3-3600 seconds.

Press 

button to send the message, press 

button to exit Sending Message window.

The following window is displayed on a selected scale.

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