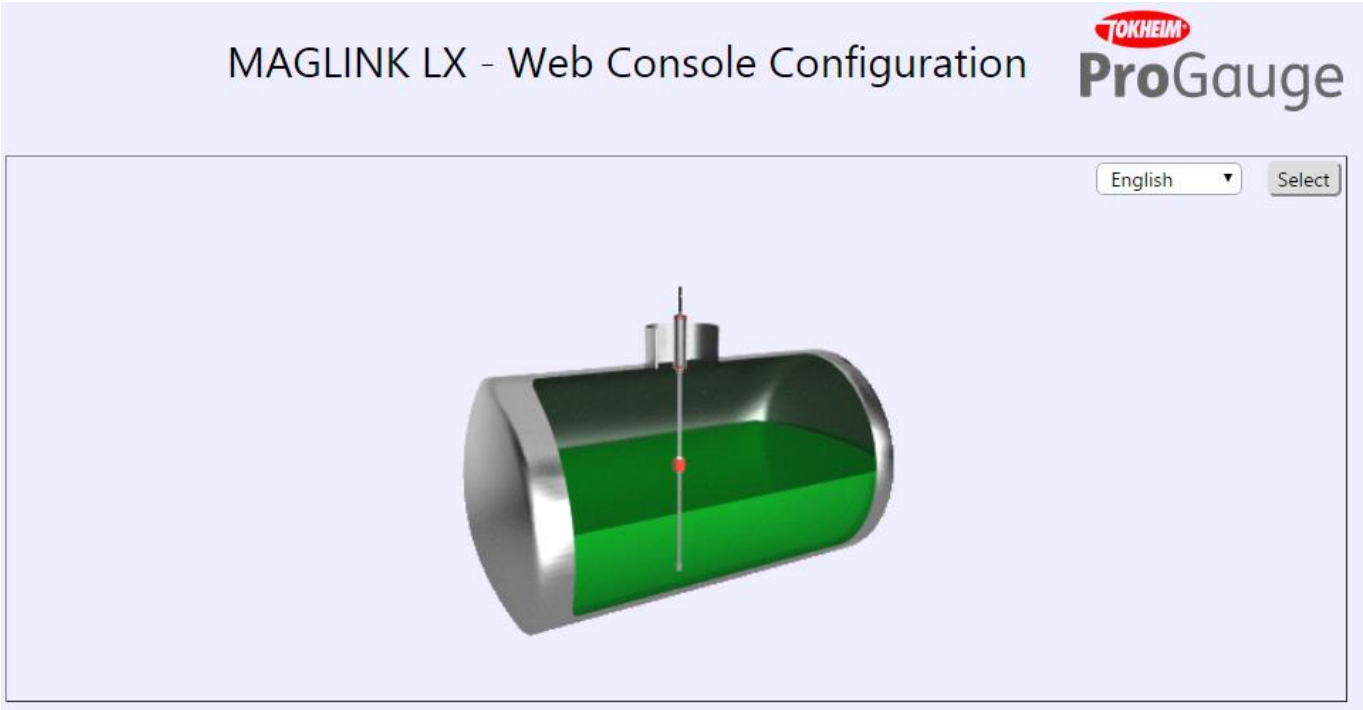
USER MANUAL

WEB CONSOLE CONFIG



Index

Revision Index

Date	Revision #	Description	Software ver.
11-2014	0	INITIAL RELEASE	1.0.x
03-2015	1	System: added communication description to protocol type Added utility page: • Change console date • Reboot console function Added parameters: • Probe type • Measurement unit	2.0.x
04-2015	2	Added reconciliation page Added in utility page Added dipswitch summary information on system page	2.1.x
07-2015	3	Added shift report Added email config Added backup/restore Added restore factory settings Added clear data function (alarms, history, reconciliation, shift report)	2.2.x
07-2015	4	Updated relay summary description	2.2.x

Introduction

This is a browser based application running on Supra Linux operating system on Apache Web Server, deployed on every MagLink LX. This application is used to configure MagLink LX and monitor data read from probes.
To access application you must know the IP address (factory setting is **192.168.1.209**).

The application requires a login that could be as **GUEST** or **ADMIN** user.
The **GUEST** user can see the following information:

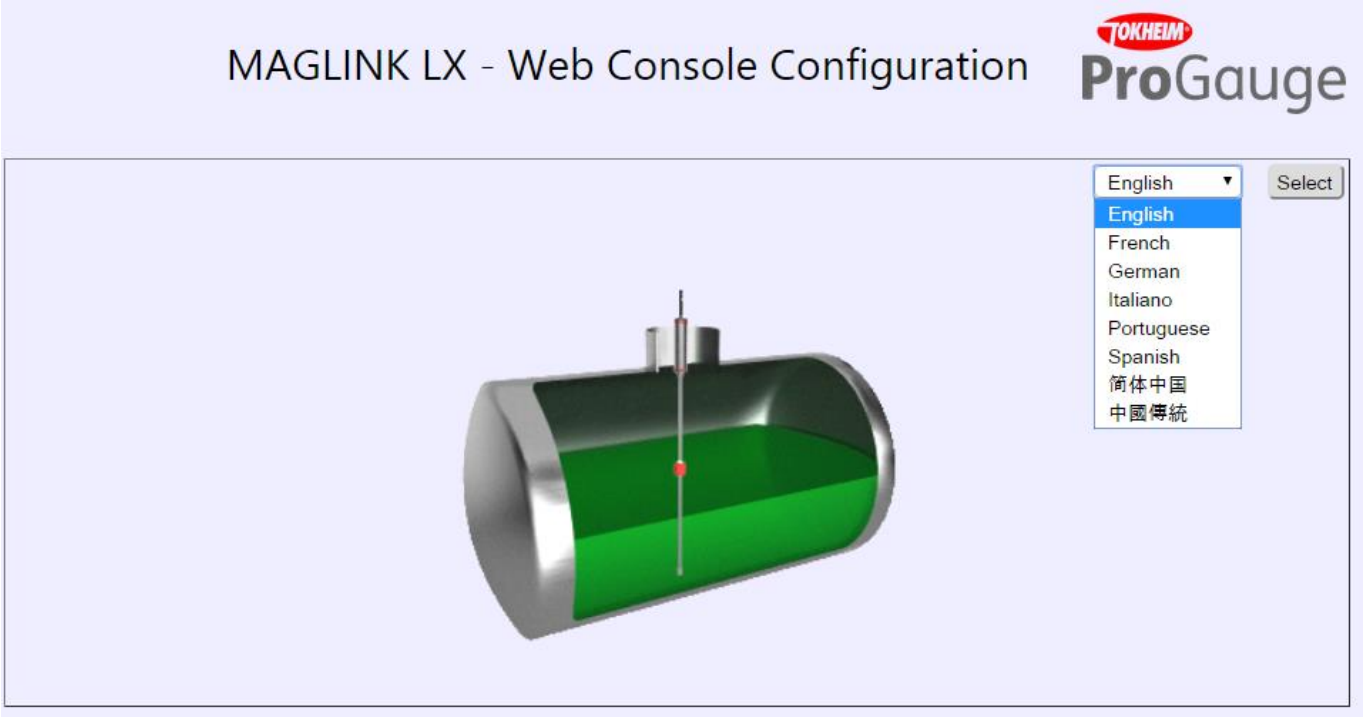
- current tank status of connected probes
- History table
- Alarms status
- Delivery/Leakage
- Login
- logout

The **ADMIN** user can change configuration also, that is system parameters, single tank parameters, relays settings, strapping table management and utility operations.

Home page is provided with language selection, you can choose from the following:

- Chinese Simplified
- Chinese Traditional
- English
- French
- German
- Italian
- Portuguese
- Spanish

To select desired language choose from available list and press Select button, you will be redirected to Login page.



All pages have the same template where the user finds all the commands from the main menu on top of the page. Once logged in as **ADMIN**, user can commit configuration changes to the MagLink LX. He can navigate through pages, change whatever values of whatever parameters and commit changes at the very end. The application stores changes in a temporary file, but these changes won't take effect until Save configuration button is pressed by the user.

From every page you can go back to home page to change language by clicking on the logo, located on the upper right corner of the page. To know in which page you currently are read the title to the left, under the main menu.

Login

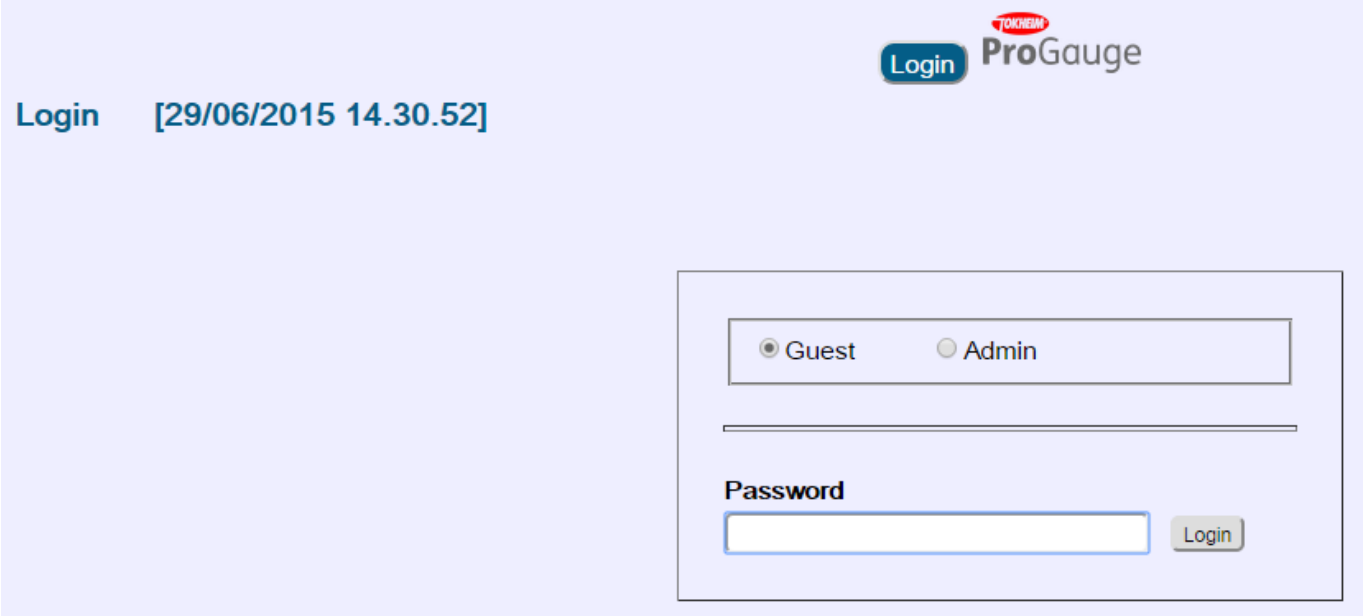
Before any operation can be done the user must login. The factory **ADMIN** password is MAGLINK-LX, and the factory **GUEST** password is GUEST-LX. Please remember passwords are case sensitive.

Only the administrator can change passwords.

The administrator must change passwords as soon as possible to prevent unauthorized access.

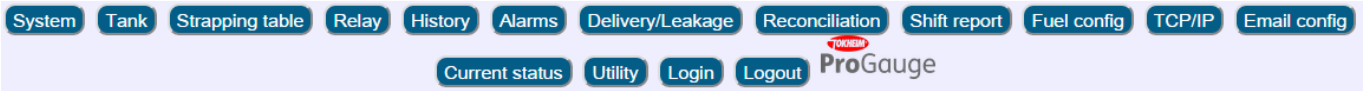
All configuration data can be changed only after **ADMIN** user has logged in.

The user can login as **GUEST** or **ADMIN** just by selecting user type, input password and then press Login button.



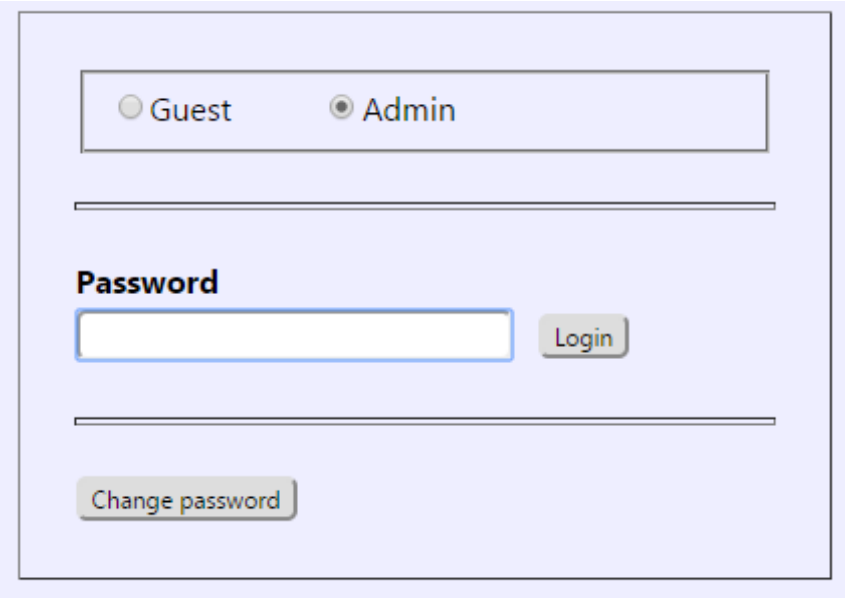
Once the user is logged in as **GUEST** the main menu is described below:

Once the user is logged in as **ADMIN** the main menu is as described below:

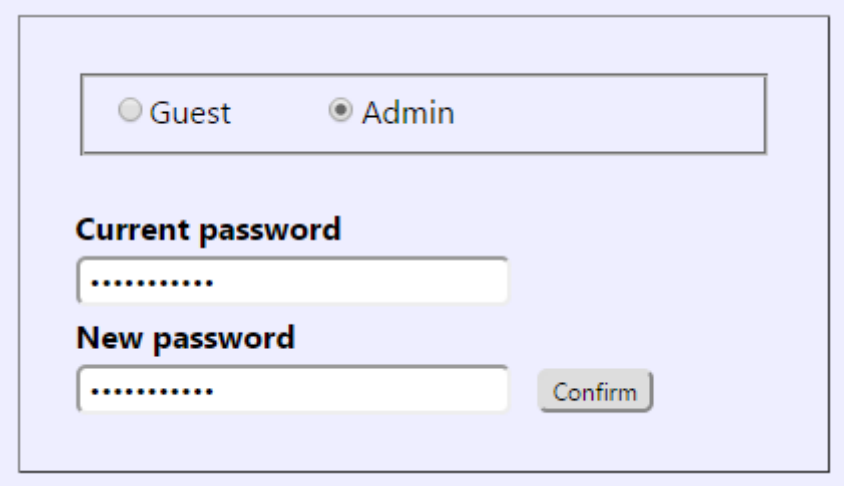


Password change

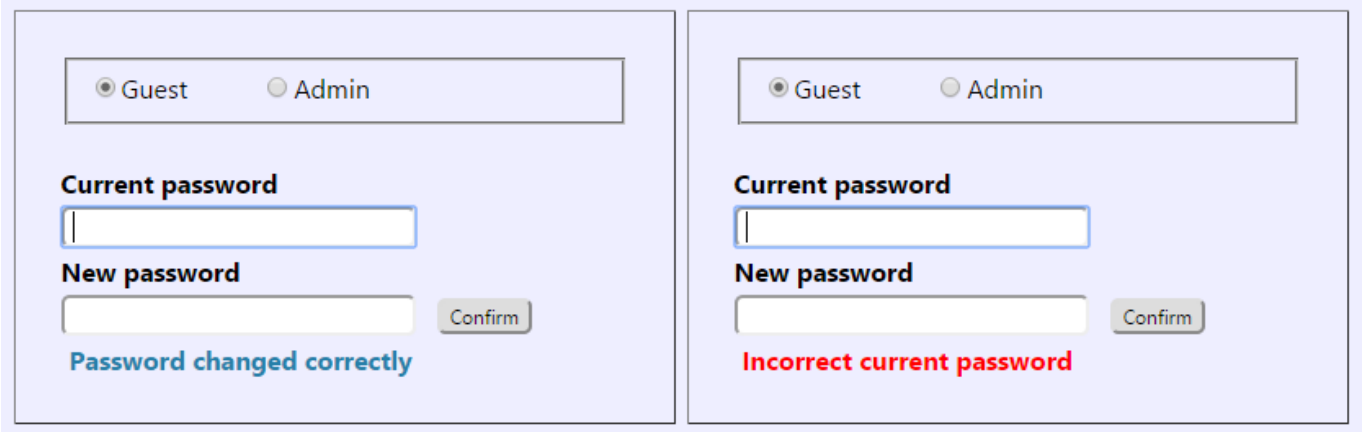
The first operation to perform is to set a new password, for both **GUEST** and **ADMIN** users. To do so, first of all you must be logged in as **ADMIN** user, than press Login button again from main menu and press Change password button.



Now input current password and the desired new password and press Confirm button to confirm password changes.

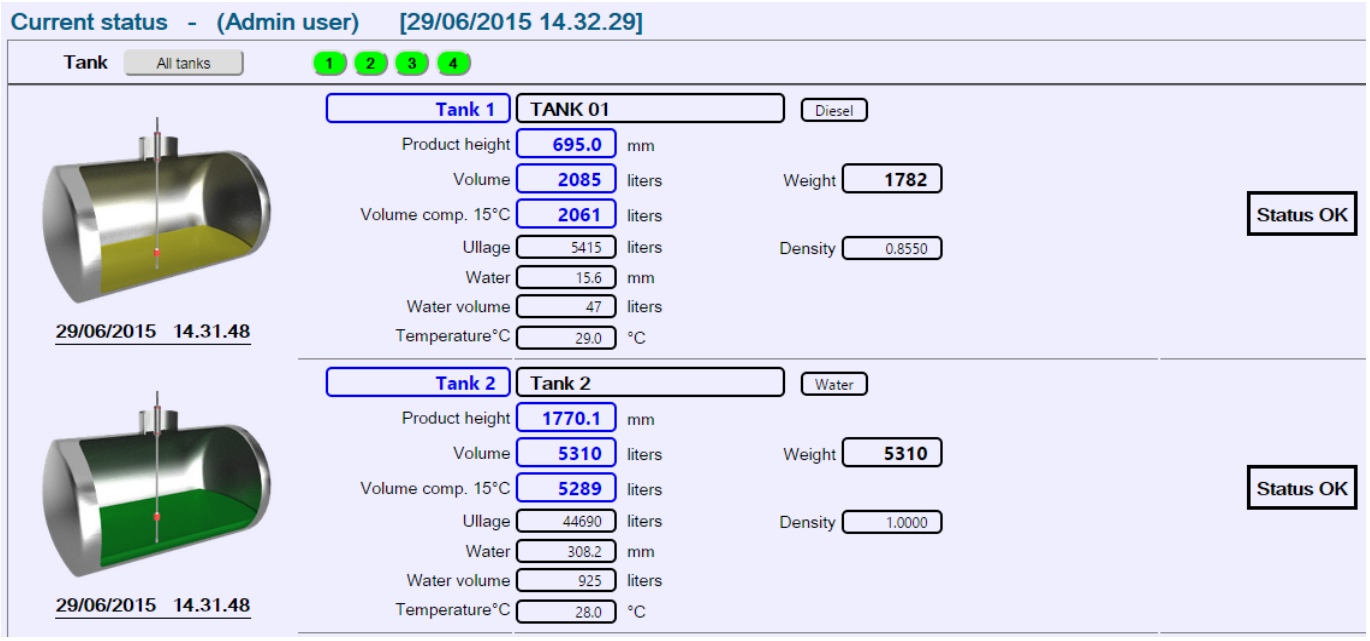


The system will notify the result of the password change operation. Possible screenshots are:



Current status

The current tank status list is available for every user type with no limitations. In this page you can monitor all the information sent by connected probes. The table top row has command buttons (All tanks, 1 ... 16) to show the single probe data measured or the data measured for all probes. This page has an auto-refresh function, every minute it reloads itself, in this way the data displayed is always up to date automatically. The user can always force data refresh just pressing F5 from keyboard or pressing button Current status from main menu.

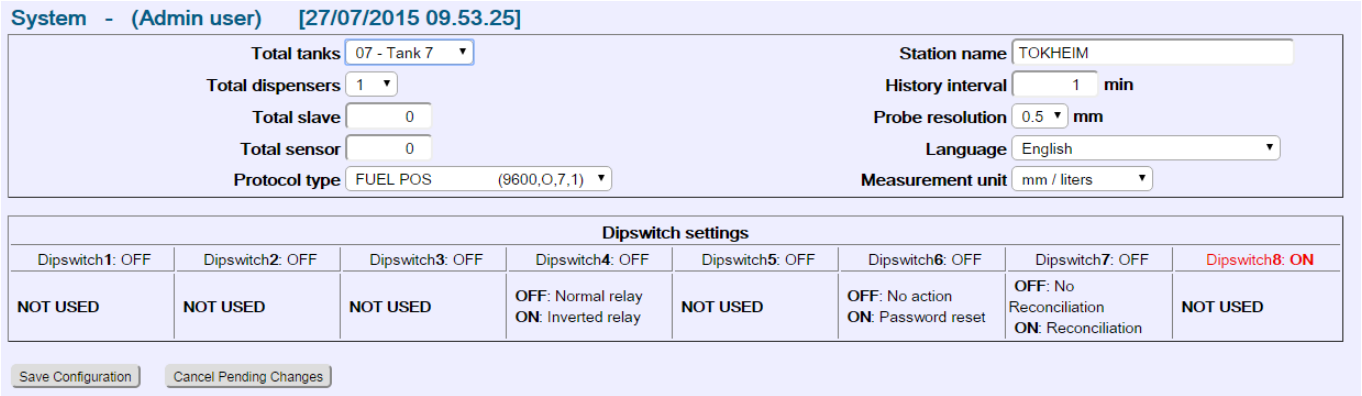


System

The page shows all the system information. The parameters shown here are valid for all connected probes. From here you must define:

- Total tanks, number of connected tanks
- Total dispensers, number of connected dispensers
- Total slave, number of slaves
- Total sensor, number of sensors
- Protocol type, choose from:
  - Dialog
  - Doms
  - Fuel pos
  - Gilbarco
  - Orpak
  - Pignone
  - Retalix
  - Probe emulation
  - TLG-Smith
  - Torex
- Probe resolution, value to 0.5 and please do not change it for any reason
- Station name
- History interval, consider using 1 minute
- Language, console language setting
- Measurement unit, choose from:
  - mm/liters

- inches/gallons
- mm/gallons



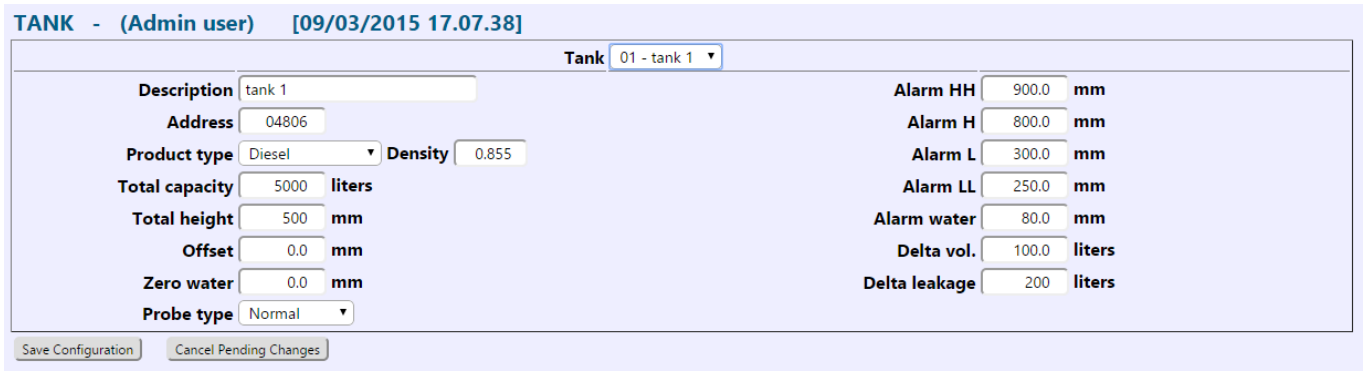
In the bottom of the page is displayed dipswitch settings, to help users, avoiding to open the console when it is not needed:

- Dipswitch 4:
  - OFF relay in normal mode
  - ON relay in inverted mode
- Dipswitch 6: ON password reset. Turn OFF console, turn dipswitch6 ON, turn ON console and wait until cursor blinks on the upper left corner of display. Now turn console OFF, turn dispswitch6 OFF and turn on console again: BE AWARE THAT WHEN RESETTING PASSWORDS ALL INFORMATION ABOUT CONFIGURATION, ALARMS, HISTORY, DELIVERYS, RECONCILIATION ARE LOST!!!
- Dipswitch 7:
  - OFF reconciliation disabled
  - ON reconciliation enabled

Tank

This is the single tank page setting. First of all select the tank you want to work with from Tank list, wait for the page loads all selected tank data and proceeded with configuration paying attention when inputting all the values of these parameters, they are very important:

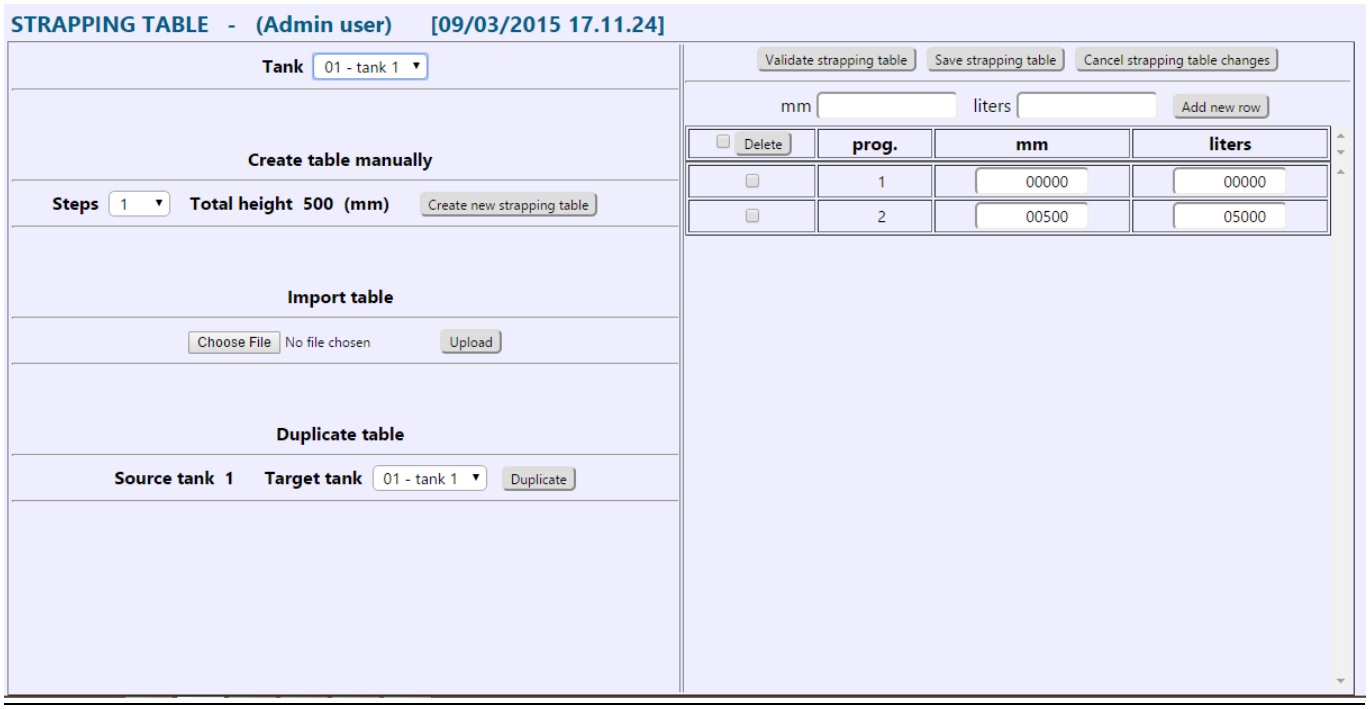
- Description, description of the tank
- Address of the probe; if misspelled MagLink LX won't read any data from the probe
- Product type, the Density field will be filled automatically from an internal data table
- Total capacity, maximum product volume (read only). This parameters can't be set, it's fetched from the strapping table last row.
- Total height, maximum product level (read only). This parameters can't be set, it's fetched from the strapping table last row. If you don't have a strapping table yet you must create one with two rows:
  - 0 mm 0 liters
  - <tank max height> mm <max volume capacity> liters
- Offset, product float offset, acceptable values are from -30000mm to +30000 mm. Used to calibrate product float position
- Zero water, water probe offset (max 30000mm). Used to calibrate water float position, with 1mm of resolution.
- Probe type, normal, laser probe, logger, RF
- Alarm HH, highest alarm level
- Alarm H, high alarm level
- Alarm L, low alarm level
- Alarm LL, lowest alarm level
- Alarm water, alarm level to notify that water has been reached



Strapping table

The strapping table is a must for a correct volume measurement because each tank has its own shape and height. This page allows different strapping table input methods. First operation is to select the tank you want to work with choosing from the available list.

NOTE: strapping tables can have a maximum of 500 points.



Create table manually

This method allows you to generate a complete linear strapping table, where you can only define the step between single points. The table is created according to its total height. Press Create new strapping table to see the newly generated table displayed to the right. Only linear values are precompiled, the corresponding volume values must be set by you.

Once generated you can add, change or delete, each single value according to you needs:

- Add. Set mm value and liters value and press Add new row.
- Change. Just set the desired value in mm and/or liters in the table
- Delete. Check the box near the Delete button if you want to clear all strapping table values or check single table items to delete only selected. When the selection is finished press Delete button.

During input values process you can periodically check the accuracy by pressing Validate strapping table button. The result will evidence, using red color, all the rows in error, if there are any.

If you want to start from the beginning you can create a brand new strapping table or you can press Cancel strapping table changes button.

Remember to press Save strapping table button to confirm changes, otherwise you will lose all you work.

Import table

This is the case you have strapping table values saved in a CSV file format. Choose the file pressing Choose File button and then upload it, pressing the Upload button. You'll see the strapping table values loaded in the table displayed to the right.

Remember to press Save strapping table button to confirm changes, otherwise you will lose all you work.

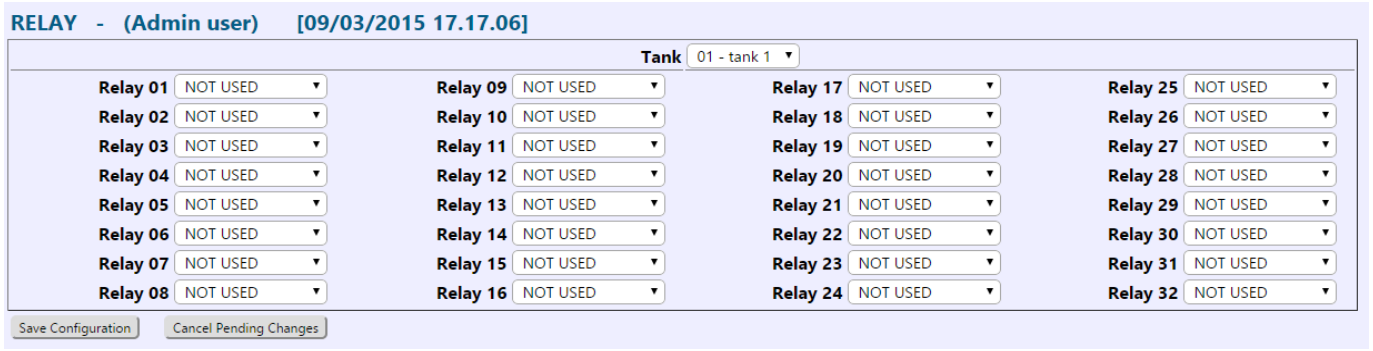
Duplicate table

To handle tanks that can use the same strapping table, you can easily duplicate strapping table, one by one, for each tank. The strapping table used is the one associated to the tank selected on top (Tank list), then choose from Target tank list the destination tank where you want to copy the selected strapping table and press Duplicate. When you duplicate the strapping table, the table is copied directly to the target tank, you have no need to press Save strapping table button to confirm changes.

Relay

In this page you can set for each tank relay settings. Choose the tank from the available list and define the desidered relay setting. Possible values are:

- Not used
- No link
- High
- Low
- Out of scale
- Probe
- High high
- Low low
- Communication
- Water



History

Historical data are stored for future analysis. You can filter data for year/month, each day and finally for single tank, press Display tank history button to show results.

The excel icon is to download displayed data in csv format.

History - (Admin user) [29/06/2015 14.40.18]

Year/Month 2015-06 Day 29 Tank 01 - TANK 01 Display tank history

Time	Tank	Product height (mm)	Water (mm)	Temp.°C	Volume (liters)	Water volume (liters)	Density	Volume comp. (liters)	Status
00.00.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.01.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.02.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.03.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.04.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.05.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.06.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.07.48	01	694.90	15.61	29.0	2085	47	0.0000	2061	Status OK
00.08.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.09.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.10.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.11.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.12.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.13.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.14.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK
00.15.48	01	694.91	15.65	29.0	2085	47	0.0000	2061	Status OK

Alarms

Here is represented the alarm list. You can filter by tank and/or date interval. Press Display alarms button to show search results.

ALARMS - (Admin user) [09/03/2015 17.18.52]

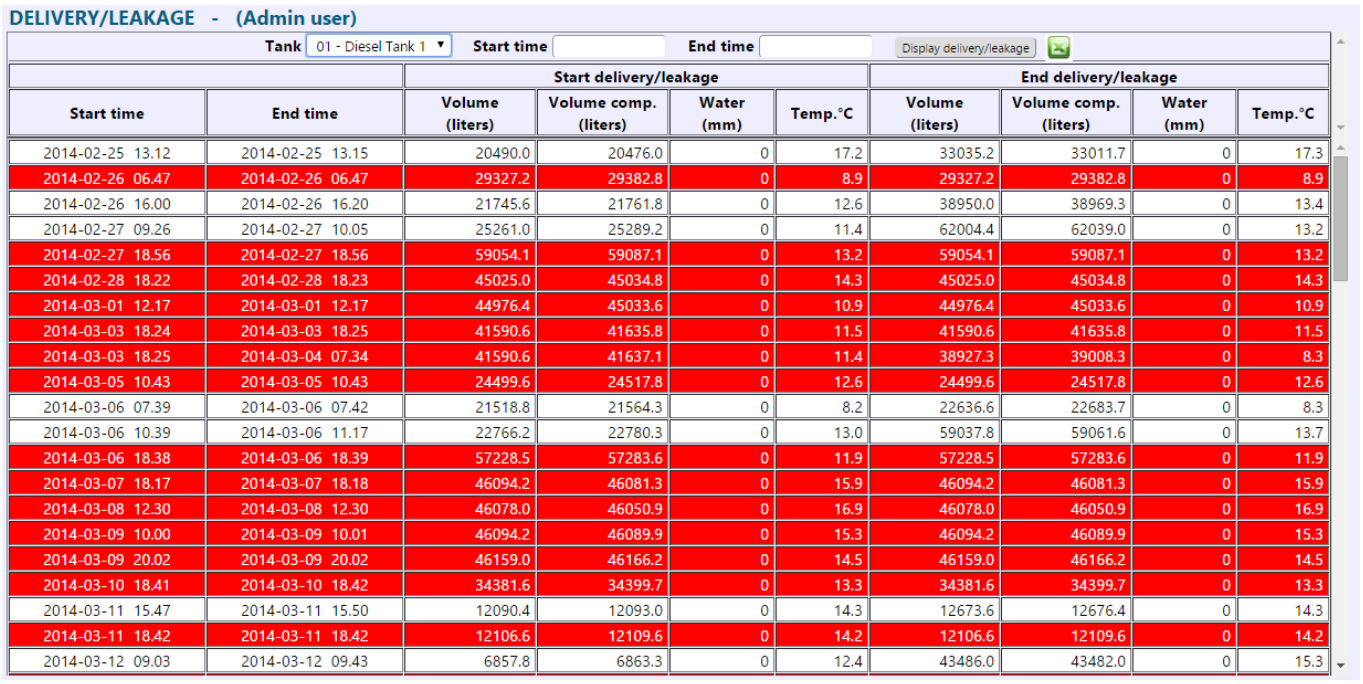
Tank 01 - tank 1 Start date End date Display alarms

Date/time	Tank	Alarm	Status
2015-03-09 17.04.10	01	LOW LOW	CLEAR
2015-03-09 16.55.54	01	LOW LOW	ALARM ON
2015-03-09 16.55.54	01	NO LINK	CLEAR
2015-03-09 16.51.58	01	NO LINK	ALARM ON
2015-02-26 15.31.12	01	LOW LOW	ALARM ON
2015-02-26 15.24.14	01	LOW LOW	ALARM ON
2015-02-26 15.08.46	01	LOW LOW	ALARM ON
2015-02-26 15.02.03	01	LOW LOW	ALARM ON
2015-02-26 14.59.35	01	LOW LOW	ALARM ON
2015-02-26 13.22.20	01	LOW LOW	ALARM ON
2015-02-26 13.21.57	01	LOW LOW	CLEAR
2015-02-26 13.21.44	01	LOW LOW	ALARM ON
2015-02-26 13.21.44	01	NO LINK	CLEAR
2015-02-26 13.21.44	01	NO LINK	ALARM ON
2015-02-26 13.21.02	01	NO LINK	ALARM ON
2015-02-26 13.19.17	01	NO LINK	ALARM ON

Delivery/Leakage

This page displays both information, delivery and leakage. The deliveries are indicated in white background color, the leakage in red background color. You can filter by tank and/or date interval. Press Display delivery/leakage button to show search results.

The excel icon is to download displayed data in csv format.



DELIVERY/LEAKAGE - (Admin user)

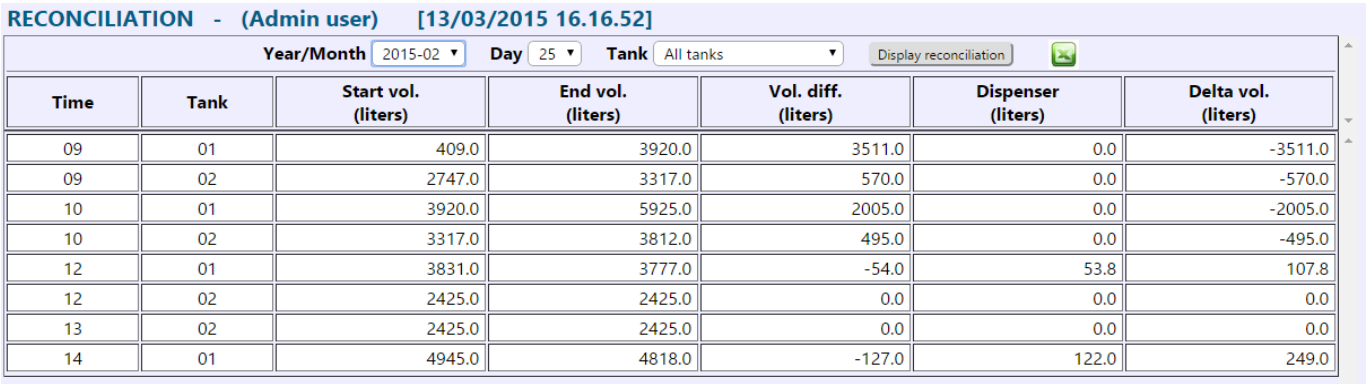
Tank: 01 - Diesel Tank 1 | Start time | End time | Display delivery/leakage

		Start delivery/leakage				End delivery/leakage			
Start time	End time	Volume (liters)	Volume comp. (liters)	Water (mm)	Temp.°C	Volume (liters)	Volume comp. (liters)	Water (mm)	Temp.°C
2014-02-25 13.12	2014-02-25 13.15	20490.0	20476.0	0	17.2	33035.2	33011.7	0	17.3
2014-02-26 06.47	2014-02-26 06.47	29327.2	29382.8	0	8.9	29327.2	29382.8	0	8.9
2014-02-26 16.00	2014-02-26 16.20	21745.6	21761.8	0	12.6	38950.0	38969.3	0	13.4
2014-02-27 09.26	2014-02-27 10.05	25261.0	25289.2	0	11.4	62004.4	62039.0	0	13.2
2014-02-27 18.56	2014-02-27 18.56	59054.1	59087.1	0	13.2	59054.1	59087.1	0	13.2
2014-02-28 18.22	2014-02-28 18.23	45025.0	45034.8	0	14.3	45025.0	45034.8	0	14.3
2014-03-01 12.17	2014-03-01 12.17	44976.4	45033.6	0	10.9	44976.4	45033.6	0	10.9
2014-03-03 18.24	2014-03-03 18.25	41590.6	41635.8	0	11.5	41590.6	41635.8	0	11.5
2014-03-03 18.25	2014-03-04 07.34	41590.6	41637.1	0	11.4	38927.3	39008.3	0	8.3
2014-03-05 10.43	2014-03-05 10.43	24499.6	24517.8	0	12.6	24499.6	24517.8	0	12.6
2014-03-06 07.39	2014-03-06 07.42	21518.8	21564.3	0	8.2	22636.6	22683.7	0	8.3
2014-03-06 10.39	2014-03-06 11.17	22766.2	22780.3	0	13.0	59037.8	59061.6	0	13.7
2014-03-06 18.38	2014-03-06 18.39	57228.5	57283.6	0	11.9	57228.5	57283.6	0	11.9
2014-03-07 18.17	2014-03-07 18.18	46094.2	46081.3	0	15.9	46094.2	46081.3	0	15.9
2014-03-08 12.30	2014-03-08 12.30	46078.0	46050.9	0	16.9	46078.0	46050.9	0	16.9
2014-03-09 10.00	2014-03-09 10.01	46094.2	46089.9	0	15.3	46094.2	46089.9	0	15.3
2014-03-09 20.02	2014-03-09 20.02	46159.0	46166.2	0	14.5	46159.0	46166.2	0	14.5
2014-03-10 18.41	2014-03-10 18.42	34381.6	34399.7	0	13.3	34381.6	34399.7	0	13.3
2014-03-11 15.47	2014-03-11 15.50	12090.4	12093.0	0	14.3	12673.6	12676.4	0	14.3
2014-03-11 18.42	2014-03-11 18.42	12106.6	12109.6	0	14.2	12106.6	12109.6	0	14.2
2014-03-12 09.03	2014-03-12 09.43	6857.8	6863.3	0	12.4	43486.0	43482.0	0	15.3

Reconciliation

When connected to fuel pos systems MagLink-LX can handle reconciliation. The console retrieves information of fuel dispensed and keeps track every hour. So user can compare dispensed volume (Dispenser column) with volume difference (Vol. diff. column), displayed in column Delta vol.

NOTE: during deliveries reconciliation is not managed.



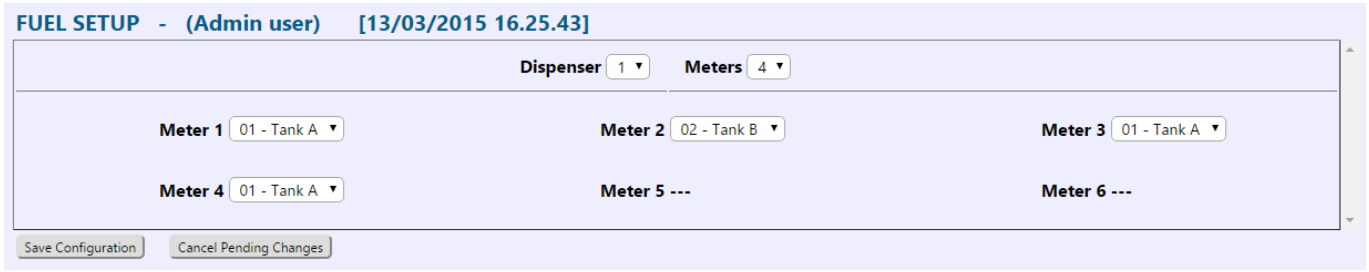
RECONCILIATION - (Admin user) [13/03/2015 16.16.52]

Year/Month: 2015-02 | Day: 25 | Tank: All tanks | Display reconciliation

Time	Tank	Start vol. (liters)	End vol. (liters)	Vol. diff. (liters)	Dispenser (liters)	Delta vol. (liters)
09	01	409.0	3920.0	3511.0	0.0	-3511.0
09	02	2747.0	3317.0	570.0	0.0	-570.0
10	01	3920.0	5925.0	2005.0	0.0	-2005.0
10	02	3317.0	3812.0	495.0	0.0	-495.0
12	01	3831.0	3777.0	-54.0	53.8	107.8
12	02	2425.0	2425.0	0.0	0.0	0.0
13	02	2425.0	2425.0	0.0	0.0	0.0
14	01	4945.0	4818.0	-127.0	122.0	249.0

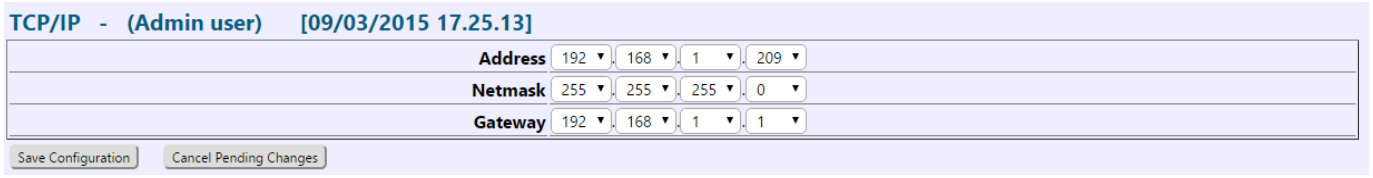
Fuel setup

When fuel pos system is connected user must configure console to manage dispensers and meters. For each Dispenser must be defined how many Meters are connected and which tank is associated to each Meter.



Tcp/Ip

This page displays TCP/IP information. Address is the console IP address used to by WebConfig to access web configuration application. Be careful changing these parameters, for Address use only IP addresses not in use by other device/computers connected to your local network.



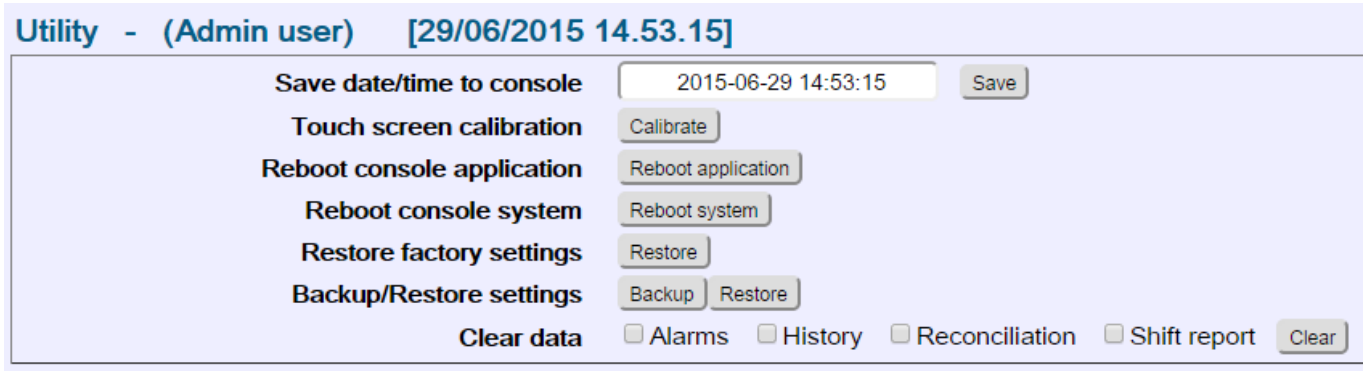
Utility

This page allows to change console system date/time, touchscreen calibration, reboot console function and system restart.

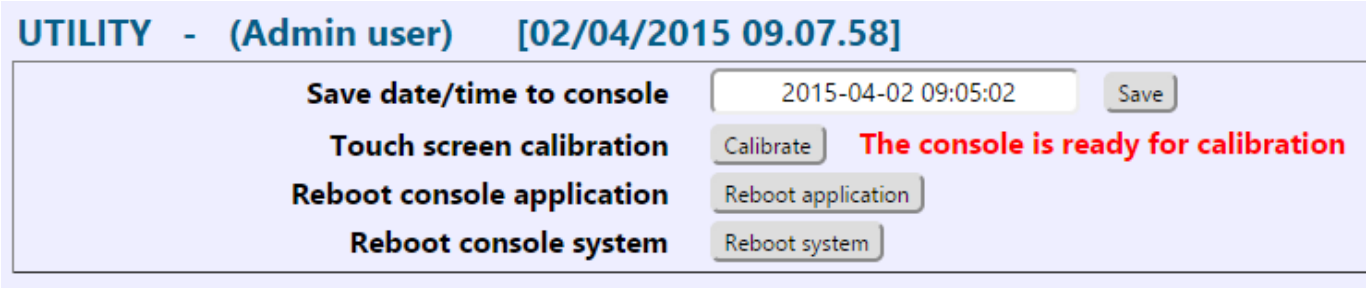
It's important to set correct date/value according to locale date/time. Write the desidered date/time using the same format as shown in your console display, then press Save button.

You can also restore configuration t factory settings, clear independently: alarms data, history data, reconciliation data, shift report data.

Very important is the backup/restore function. Be aware that backup stores only the last one overriding the previous ones. If you want to make backups on external usb pen drive, just connect the usb pen driver to console usb port before proceeding with backup. Restore function will restore configuration from console internal copy of backups.



If for any reason accuracy of touchscreen display gets worse, you must calibrate pressing Calibrate button.

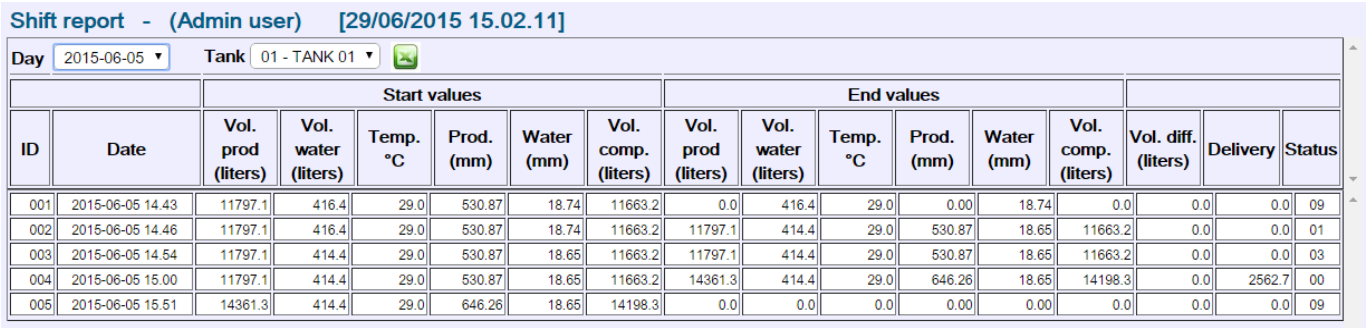


At this point just follow the instruction displayed on the console display that will lead to complete touchscreen calibration. At the end of the procedure, console application will restart.

Reboot application or Reboot system functions are used for example after a language update or just for maintenance.

Shift report

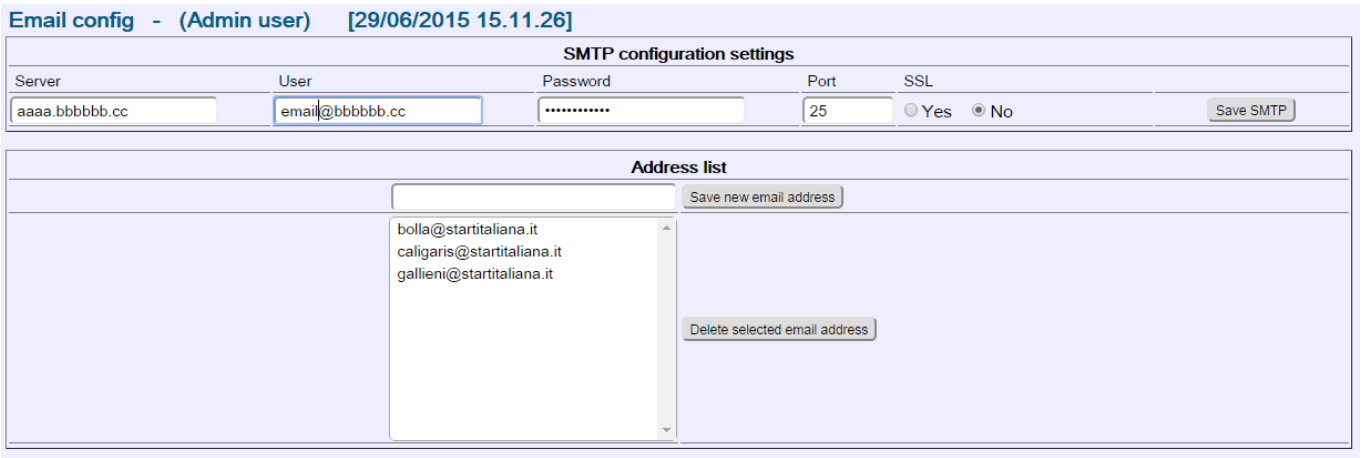
This page displays a grid filled with starting valued and ending values for current shift reports.



		Start values						End values								
ID	Date	Vol. prod (liters)	Vol. water (liters)	Temp. °C	Prod. (mm)	Water (mm)	Vol. comp. (liters)	Vol. prod (liters)	Vol. water (liters)	Temp. °C	Prod. (mm)	Water (mm)	Vol. comp. (liters)	Vol. diff. (liters)	Delivery	Status
001	2015-06-05 14.43	11797.1	416.4	29.0	530.87	18.74	11663.2	0.0	416.4	29.0	0.00	18.74	0.0	0.0	0.0	09
002	2015-06-05 14.46	11797.1	416.4	29.0	530.87	18.74	11663.2	11797.1	414.4	29.0	530.87	18.65	11663.2	0.0	0.0	01
003	2015-06-05 14.54	11797.1	414.4	29.0	530.87	18.65	11663.2	11797.1	414.4	29.0	530.87	18.65	11663.2	0.0	0.0	03
004	2015-06-05 15.00	11797.1	414.4	29.0	530.87	18.65	11663.2	14361.3	414.4	29.0	646.26	18.65	14198.3	0.0	2562.7	00
005	2015-06-05 15.51	14361.3	414.4	29.0	646.26	18.65	14198.3	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	09

Email config

The console is provided with email notification. This means that when console enters in alarm mode or delivery mode an email is sent to enlisted recipients. Be sure to configure SMTP settings correctly so the console can sent emails successfully.



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