northfalcon
ENERGY

SIBYLLA Console
User Manual

SUMMARY

1 - INTRODUCTION

In making out this document, particular attention was paid to ensure that it was as complete and accurate as possible. Therefore North Falcon reserves the right to make unannounced upgrades aimed at improving the product, including management programs.

North Falcon is not responsible for damages deriving from information contemplated in the following document.

This manual was written in compliance with the IEC 82079-1 "standard and the ATEX Directive 2014/34 / EU intended for the use of equipment and protective systems used in potentially explosive atmospheres.

This manual provides all the necessary information about the installation operations of the SIBYLLA console

MANUFACTURER DATA:

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The following symbols are adopted within the document:

SYMBOL	DESCRIPTION
⚠️ IMPORTANT:	Danger to people (including death), things or the environment..
❗ ATTENZION:	Information and notes regarding important operations and useful considerations.

2 - USE WARNINGS

Please read the instructions in this manual carefully before operating the console.

Only appropriately trained and competent personnel are enabled to configure the console.
In case of failure or malfunction or doubts always refer to the manufacturer or as an alternative to authorized
maintenance personnel. Authorized personnel must know all the safety regulations in this manual.

North Falcon is not responsible for any operations not contemplated in this user manual.
North Falcon declines all responsibility for any injuries and / or damage to persons and / or things and / or animals
caused by failure to observe the safety regulations in this manual.

North Falcon is deemed to be relieved of all responsibility before the competent bodies for any tampering made on both
the equipment and the related management software.

IMPORTANT: before using this device it is mandatory to consult the safety instructions

IMPORTANT: Improper use, which does not comply with the requirements described here, can compromise your
safety

IMPORTANT: This manual is completed by the Safety Instructions

ATTENTION: In order to use the console as described below in this manual it is necessary to have the console
installed as for the installation manual and to use the console as for the user manual.

IMPORTANT: The installation and configuration of the console must be performed out by personnel qualified/
format, according to the instructions in the Installation Manual, the Configuration Manual and the safety
instructions.

ATTENTION: Regarding the units of measurement reported in this manual, the possibility of setting different
units of measurement.

IMPORTANT: The crossed-out bin symbol indicates that the product, at the end of its life cycle, must be disposed
of separately from household waste and must be taken to a collection point for electrical and electronic
equipment as required by the European Directive 2012/19 /UE.

3 - GENERAL DESCRIPTION
3.1   Labeling

The following table lists the labeling on the equipment:

USB 1-2	LAN	COM1				COM2	
northFalcon ENERGY	SIBYLLA console	2018	IP41	CE 1347	INTRINSECALLY SAFE CIRCUIT INSIDE		
	S.N. 123456	Tamb=-10 +50°C		Power Supply 100-240Vac 50/60Hz 8VA fuse 0.8A			
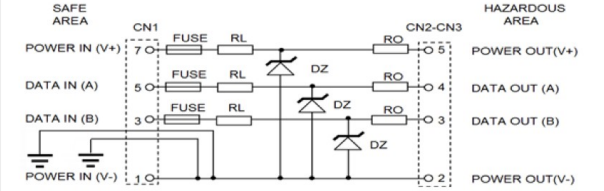
The labeling on the external container shows the following data:

- Name and address of manufacturer
- product name
- production year
- operating temperature (°C)
- degree of protection (IP)
- CE mark with indication of the notified body
- Serial number
- Power supply (V e Hz)
- Absorbed power (VA)
- Fuse rating
- Indication of the presence of intrinsically safe circuits

ATEX labeling placed inside the console

reports the following data:

- Name and address of manufacturer
- Number of the reference ATEX certificate
- Type of equipment , model
- ATEX marking
- Serial number
- Electrical data

3.2 Description

SIBYLLA is a device whose use is intended for monitoring level probes inserted in fuel tanks.

It is able to manage up to 32 probes (16 without addition of expansions, 8 + 8 with the same 2 MagDirect), 32 DVD (Product quality sensor, one for each tank), 4 on-board relays, 6 on-board inputs, and an external expansion module that can carry up to 4 expansion cards. Each expansion card can be: 8 relay outputs, 8 digital inputs or 4-20mA. The combination of these cards leads to an expandability of 32 relays and 0 inputs, 32 inputs and 0 relays, and all other intermediate combinations with modularity 8.

The console can be connected and interfaced with yard management systems (FCC / POS) via serial or Ethernet.

The console is equipped with a touch screen of the resistive type, so you can use it through the contact of fingers (even with gloves), special nibs and the like. Contact and pressure is required for its use.

TECHNICAL FEATURES

Power supply	100 ÷ 240 Vac, 50/60 Hz
Consumption	8 VA
Operating temperature	(-10 ÷ +50) °C
Relative humidity	(5 ÷ 95) %, senza condensa
Number of level probes	35 probes (10 on the internal barrier) the remaining ones through ISB-PM barrier
Inputs ON-OFF/ analog 4-20mA	up to 8 external expandable up to 32
Relay outputs NO/NC	up to 4 external expandable up to 32
Relay contact characteristics	1 A 30 V DC, 0.5 A 125 V AC*1 (resistive load)
Output power supply for the probes	12 V DC, 100 mA for each probe output , MR3 MR4 connectors (up to 5 probes for connector)
Serial comunication probes	RS485
Host comunication (management)	RS232 e TCP/IP (Almost all the management of the apron have the integrated protocol)
Printer connection	RS232
WEB server integrated	TCP/ IP
Container	
Protection	IP41
Dimensions	270 x 170 x 60 mm
weight	1.5 Kg

3.3   Managed devices and expansion modules

The following list indicates the devices compatible with SIBYLLA console:

DELPHI 485	**probe of product and water level with serial protocol RS485**
DELPHI TTL	**Probe of product and water level with serial protocol TTL(3V3)**
DELPHI 420	**probe of product and water level with analogue output 4-20mA**
DELPHI 010	**probe of product and water level with analogue output 0-10Vdc**
DELPHI LPM	**pressure probe with serial protocol RS485**
DELPHI RTD	**Probe of product level and water with radio transmission is expected to be used with appropriate receiver connected with RS485 protocol.**

The following the expansion modules expected with SIBYLLA console:

SY8O	**expansion boards 8 outputs relays**
SY8I	**expansion boards 8 input analog or digital**

NB: The modules can be implemented up to a maximum of 4 corresponding to 32 outputs / inputs.

4 - METHOD OF USE

The SIBYLLA console must only be used as described in this manual.

The intended use is related to the monitoring of the level probes installed in the tanks.

The console must be installed in a safe area and includes an **INTRINSIC SAFETY BARRIER (IPB-PC)** that is used to connect the **DELPHI 485** and **DELPHI RTD** probes (through the use of the **DELPHI 485-R** receiver).

Below is the certificate of the barrier inserted in the console:

$\langle Ex \rangle$ II (1) G[Ex ia Ga] IIB
           FISCO POWER SUPPLY

The specifications for safe use of the console and the Barrier contained in it are shown in this manual and on the product label.

⚠️ **IMPORTANT:** The safety instructions are an annex to this manual and users must read it before using the equipment

⚠️ **IMPORTANT:** The Console should not be used in areas where there is a risk of fire and explosion. The family probes (DELPHI 485) are installed in the area at risk of fire and explosion and must be connected to the barrier contained in the console itself.

Below are some indications regarding the use of the console

The following table lists some reasonably foreseeable incorrect uses:

- For correct use of the touch screen, do not use anything other than fingers or special accessories intended for these types of screen.

- Devices used for USB ports, such as mass storage, must be formatted FAT 32 and the USB port can also be used for the printer if required by the firmware version. (Future implementation)

- It is possible to use the serial ports only for connection to the serial printer and for connection to the station management using the protocols provided by the firmware version.

5 - PROBE CABLE CONNECTION

⚠️ **IMPORTANT:** the connection can only be made by specialized personnel.

The data transmission between the sensors in the field and the control unit takes place via an RS485 serial port, using a proprietary protocol, in the following picture you can see how to connect the 4-wire cable on the barrier.
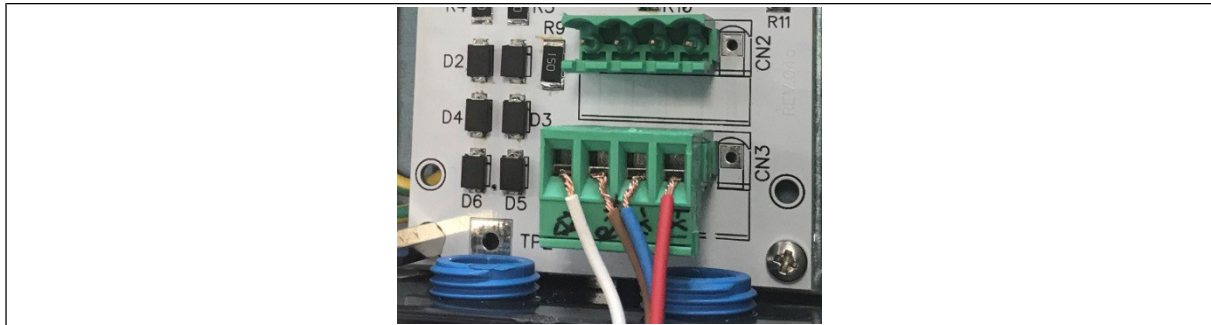
The passive barrier offers two connectors to connect the fieldbus: CN2 and CN3, both can be used without distinction

The meaning of the colors is as follows:

- **WHITE: VCC**

- **BROWN: RS485 – A**

- **BLUE: RS485 – B**

- **RED: GND**

6 - COMMISSIONING

⚠️ **IMPORTANT: Commissioning of the console can only be carried out after installation by trained personnel or trained according to the instructions in the Installation Manual and safety instructions.**

Below is the sequence of preliminary operations necessary to turn on the console:

1   **Make sure the power button is OFF (0)**

2   **Connect the power cord.**

3   **Connect the network cable to the LAN (local area network) if required**

4   **Press the ON button (if present on the device)**

NB. If the console has not yet been configured in the phase following power up, an audible alarm will sound due to the fact that the console is not yet able to communicate with the connected probes.

Therefore press the button at the top right of the screen to display the "ALARM LOG" page then press the ACK button to silence the alarm.

Below is the sequence of operations necessary to shut down the console:

1   **Press the button**   until the **INFO PAGE** page appears

2   **Press "Shutdown system" on the bottom left**

3   **When prompted to confirm, press OK**

4   **Wait for the screen to turn off**

5   **Press OFF on the power button if present**
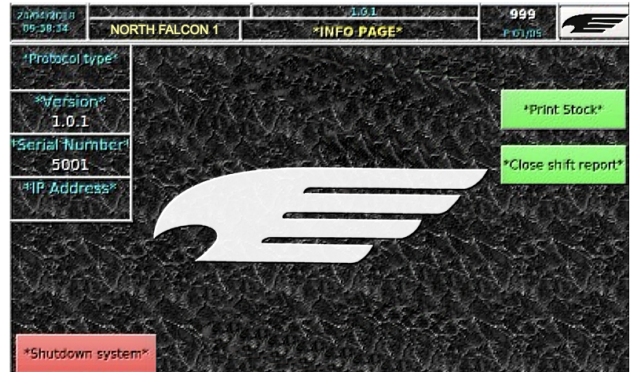
⚠️ **IMPORTANT: the console is equipped with a MICRO SD (8Gb) data memory, so that the stored data are still available**

7 - STATION CONFIGURATION

This section describes how to configure the Sibylla console according to the devices installed in the station.

7.1   Download software

The configuration software can be downloaded from the following internet address, using any browser

http://www.northfalconenergy.com/download/

Note: The address distinguishes between uppercase and lowercase letters, Sibylla_config.exe has the first letter in uppercase.

You can save the executable file anywhere on your hard disk, but you must have the necessary privileges to write to the directory.

7.2   First execution

When the software is launched for the first time, the station list will be empty.

NOTE: let's talk about the list of stations because this software, in addition to allowing to configure the single console, can be used to query a series of stations remotely connected.
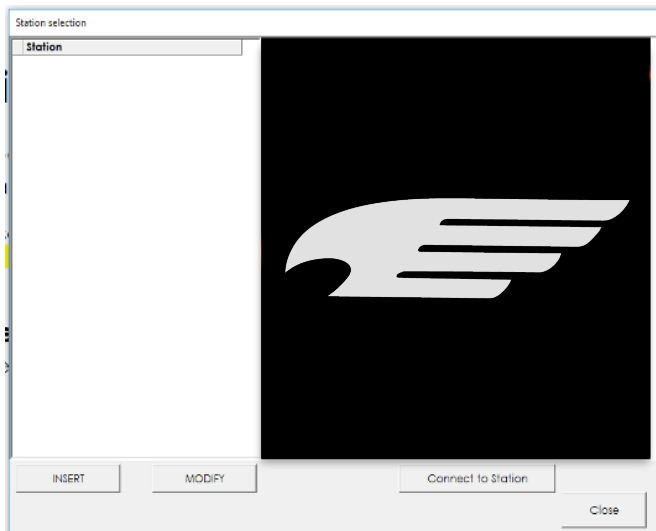
First of all you have to define a new station, use the INSERT key

Fill in all the fields before testing the connection. In the following figure you can see the factory parameters to connect to a Sibylla console never previously configured.

NOTE: you must set the IP address of your PC on the same subnet set on the Sibylla console:
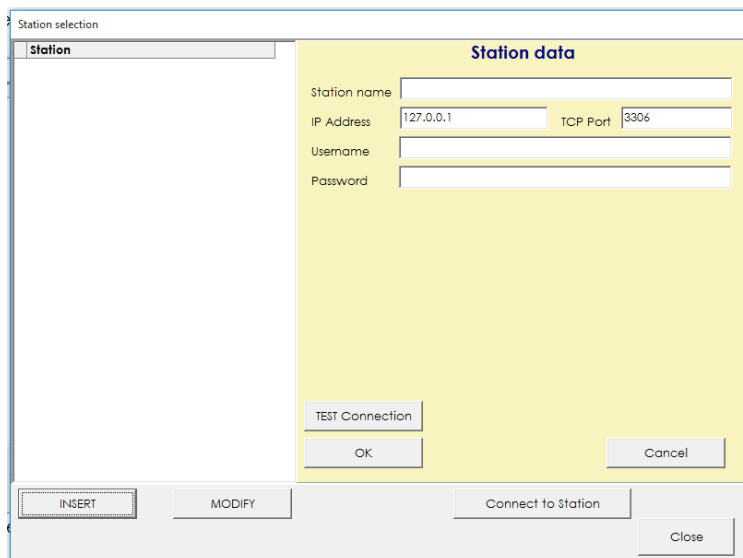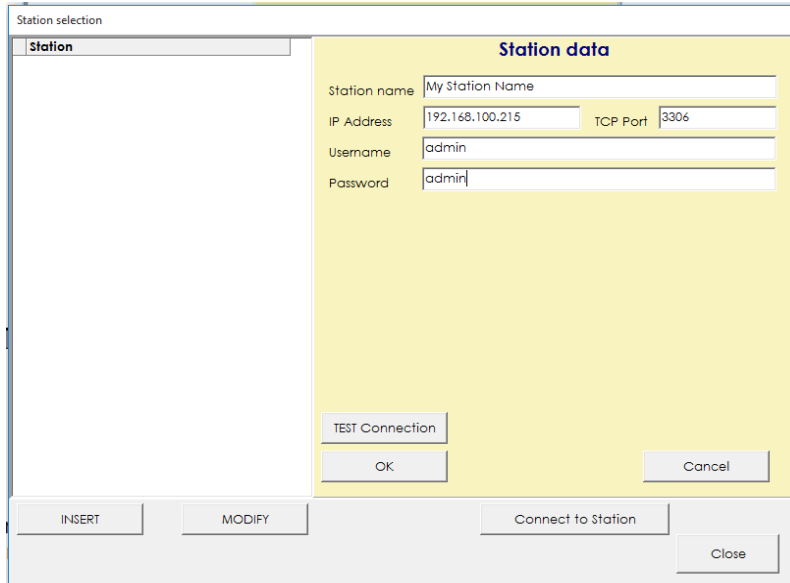
IP: 192.168.100.X - subnet mask: 255.255.255.0

The Sibylla TCPIP address is showed in the upper left of the display

If you want to connect your PC directly to the Sibylla console (without using a network infrastructure), you will need to use a LAN cross cable.

If you have problems connecting, contact your network administrator.

Check the connection parameters using the TEST button; if everything is correct, you can register the parameters using the OK button.
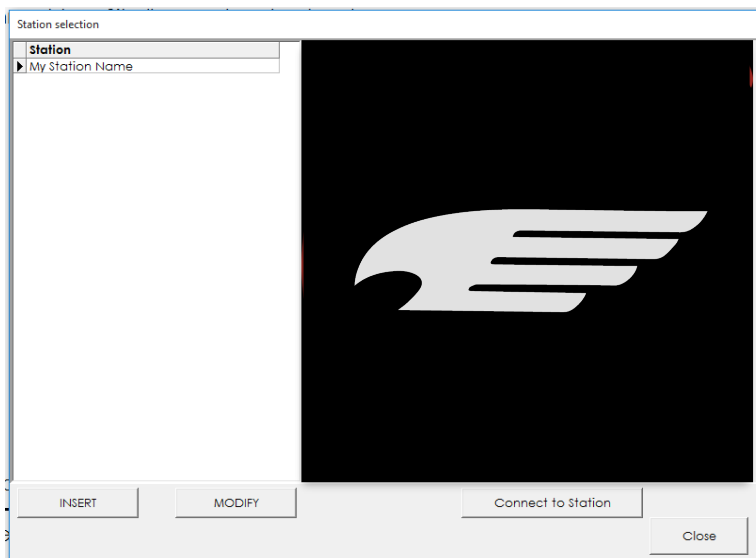
Now you can connect to the Sibylla console using the Connect to Station button, or by double clicking on the station name shown in the list on the left.

7.3   Network Configuration

The System Config page shows network configuration and date-time set on Sibylla console

7.4   General data

The General Data page shows the general data used for the entire service station.

- Station name: station name displayed on Sibylla, up to 40 characters can be used

- Protocol Type: type of protocol used to communicate between Sibylla and POS

- Language: at the moment only English, Italian and Spanish are activated.

- Unit Measure; unit of measurement for level and volume

- Vol.Comp.Temperature: Reference temperature for calculating the compensated volume (statndard: 15)
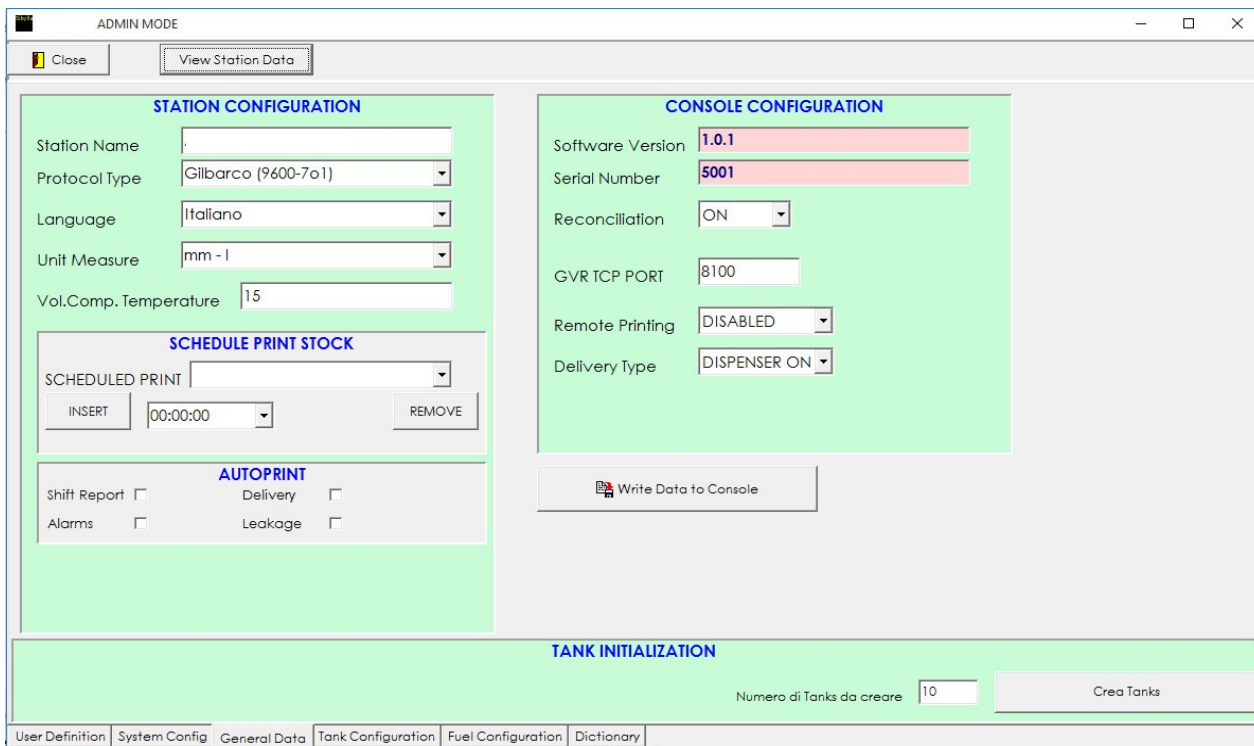
- Schedule Print Stock: you can define some hours when you want to print the station situation, select the destre hour from the combo near the "INSERT" button then press INSERT, you will find the selected hour in the combo near "scheduled print", if you want to remove a scheluded hour, you have to select this hour from the list and use the "REMOVE" button

- Autoprint: select the events you want to print to a serial printer connected directly to Sibylla console

- Software versione: Software version (read only)

- Serial Number: serial number (read only)

- Reconciliation: enables or disables the reception of the delivery data from the POS, these data will be used for the through the standard Gilbarco B, C and D commands.

- GVR TCP PORT: you can connect the POS system to Sibylla using LAN, this value define the TCP PORT used from Sibylla to listening request from POS (the protocol used is the Veeder Root)

- Remote Printind: if this option is enabled, Sibylla saves on the database the station situation for each scheduled hour, you can print the situation saved using Sibylla_config software

- Delivery Type: use this option fot better accuracy in the delivery check, if dispenser are stopped during delivery, set "DISPENSER OFF", otherwise leave "DISPENSER ON"

After setting the general parameters, you must register the data on Sibylla using the Write Data to Console button.

7.5   Tank Configuration

The Tank Configuration page displays the configuration parameters of the individual.
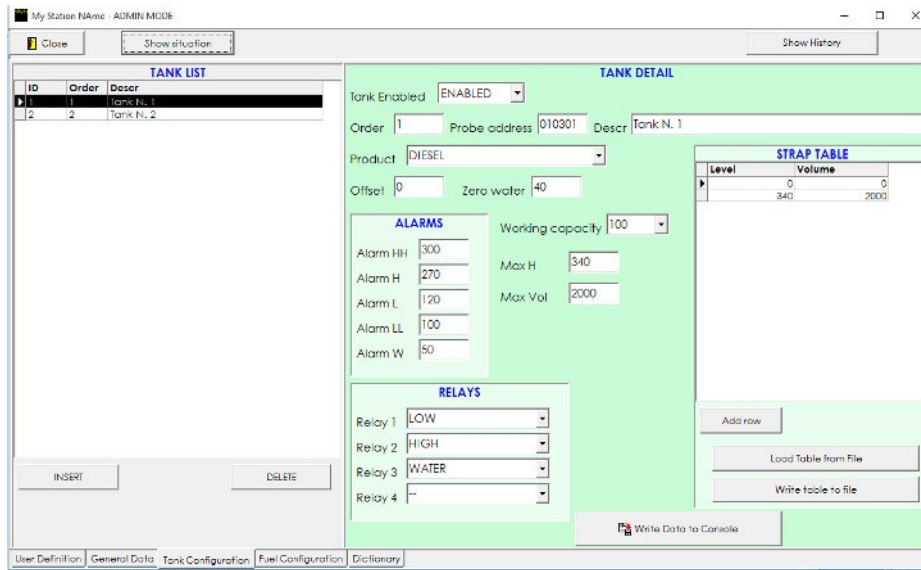
On the left is a list of all the configured tanks.

INSERT: **button used to add a new tank**

DELETE: **button used to delete the selected tank Select a**

specific tank to display the related parameters

- **TANK ENABLED: the standard value is ON, set to OF only if the level probe is not present or does not work correctly**

- **Order: use this number to define the display order of the tanks.**
- **Probe Address: serial number of the level probe, this number is indelibly marked on the probe head. The North Falcon**

  protocol uses a 6-digit serial number.

- **Descr: description of the tank, use up to 40 characters**
- **Product: type of product stored in the tank**
- **Offset: number used to align the level of the product detected by the probe with that measured with the metric rod.**

  This alignment must be performed during the first station configuration. Initially leave this value at 0 and display the

  product level. The number to be reported, after the measurement with the metric rod, is the difference between the

  level of the metric rod and the level of the probe

- **Zero Water: must be at least 2mm greater than the value of the water reported by the probe when the water float is all**

  at the bottom.

- **Working capacity: used to set the percentage of use, used to calculate the ullage**
- **Max H: maximum tank level, set at the maximum level shown in the information table**
- **Max Vol: maximum tank volume, set at the maximum volume in the table**
- **Alarms: set them to a value greater than 0 to enable the specific alarm on the product or on the water**
- **RELAYS: the defined alarms can be connected to one of the 4 relays on the sibylla**
- **STRAP TABLE: in this section you can modify the information table, or you can load it from a text file or save it on a file**

  file Example of a text file with an information table: file name: "tank01.csv"

  ```
  00000;00000
  ```

If you make changes, remember to register them on the console before changing the tank or page

7.6   Dispenser Configuration

You will have to fill in these parameters only if the reconciliation is set to ON
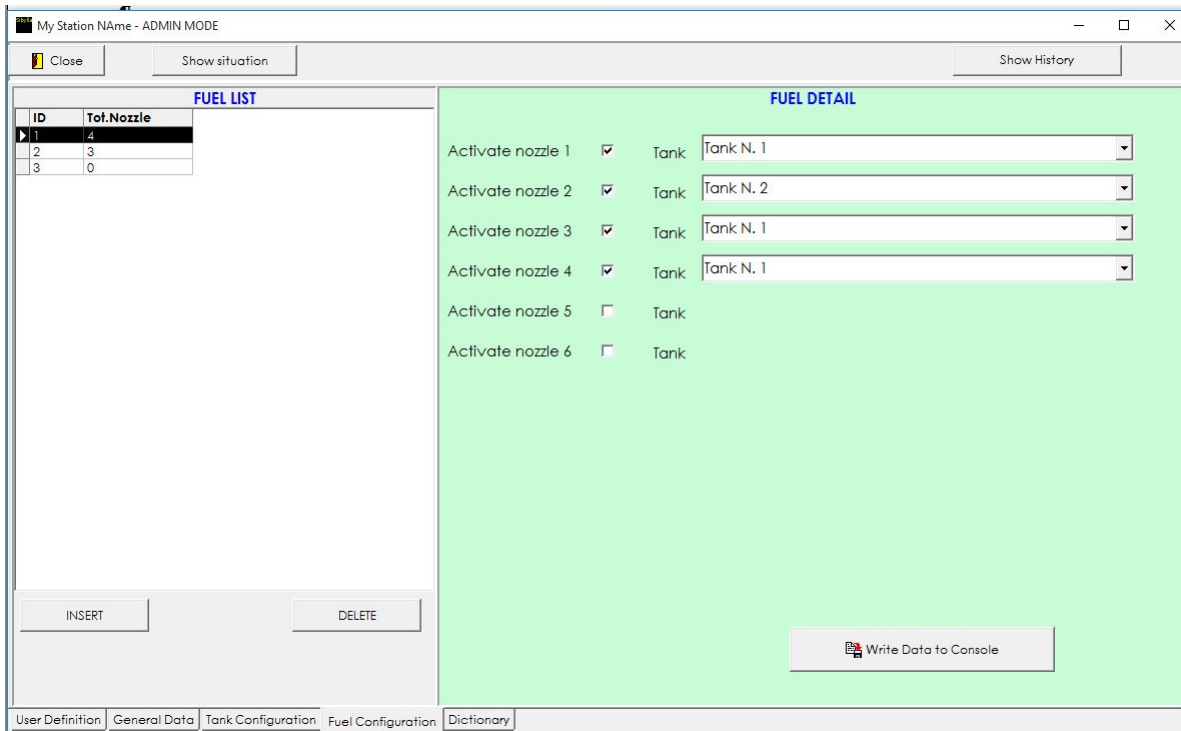
The list of configured regulators is shown on the left.

INSERT button used to insert a new dispenser

DELETE button used to cancel the selected dispenser
Select a specific dispenser to view the tanks connected to each individual gun.

Each regulator can have at most 6 associated guns.

If you make changes, remember to register them on the console before changing the dispenser or page

8 - FUNCTIONS MENU

The application is provided with a sequential menu of simple use, with which the user can move within all the available functions, the functions or pages are marked by a number placed in the box at the top right next to the logo .

PAGE

24/04/2018 09:36:12	192.168.100.215 NORTH FALCON 1	1.0.1 *TANK LIST*	50 P:02/05	

01 Gasolio 1	02 Benzina 1	03 Benzina 2
NO IINK	NO IINK	NO IINK
Prd.Vol(%s) 0.00	*Prd.Vol(%s)* 0.00	*Prd.Vol(%s)* 0.00
Prd (%s) 0.00	*Prd (%s)* 0.00	*Prd (%s)* 0.00
Temp. (°C) 0.0	*Temp.* (°C) 0.0	*Temp.* (°C) 0.0
Water (%s) 0.00	*Water (%s)* 0.00	*Water (%s)* 0.00

04 Gasolio 2	05 Gasolio 3	
NO IINK	NO IINK	
Prd.Vol(%s) 0.00	*Prd.Vol(%s)* 0.00	
Prd (%s) 0.00	*Prd (%s)* 0.00	
Temp. (°C) 0.0	*Temp.* (°C) 0.0	
Water (%s) 0.00	*Water (%s)* 0.00	

Below is the legend of the data visible on the page:

DATE HOUR

IP ADDRESS

FIRMWARE REVIEW   1.01

PAGE NUMBER   50

SERVICE STATION NAME   North Falcon

TANKS LIST
- **Name Tank**

- **Status bar with level indication**
        Green OK probe connected status

        Red threshold alarm

- **Volume produced (l)**

- **Product level (mm)**

- **Temperature product (°C)**

- **Water level (mm)**

24/04/2018 09:57:42	NORTH FALCON 1	1.0.1 *TANK LIST*	50 P·06/08	

01 Tank N. 1	02 Tank N. 2	03 Tank N. 3
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
Prd.Vol(l) 0.00	Prd.Vol(l) 0.00	Prd.Vol(l) 0.00
Prd (mm) 0.00	Prd (mm) 0.00	Prd (mm) 0.00
04 Tank N. 4	05 Tank N. 5	06 Tank N. 6
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
Prd.Vol(l) 0.00	Prd.Vol(l) 0.00	Prd.Vol(l) 0.00
Prd (mm) 0.00	Prd (mm) 0.00	Prd (mm) 0.00
07 Tank N. 7	08 Tank N. 8	
NOT INITIALIZED	NOT INITIALIZED	
Prd.Vol(l) 0.00	Prd.Vol(l) 0.00	
Prd (mm) 0.00	Prd (mm) 0.00	

24/04/2018 09:56:00	NORTH FALCON 1	1.0.1 *TANK LIST*	50 P·07/35	

01 Tank N. 1	02 Tank N. 2	03 Tank N. 3	04 Tank N. 4	05 Tank N. 5	06 Tank N. 6	07 Tank N. 7
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
08 Tank N. 8	09 Tank N. 9	10 Tank N. 10	11 Tank N. 11	12 Tank N. 12	13 Tank N. 13	14 Tank N. 14
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
15 Tank N. 15	16 Tank N. 16	17 Tank N. 17	18 Tank N. 18	19 Tank N. 19	20 Tank N. 20	21 Tank N. 21
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
22 Tank N. 22	23 Tank N. 23	24 Tank N. 24	25 Tank N. 25	26 Tank N. 26	27 Tank N. 27	28 Tank N. 28
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED
29 Tank N. 29	30 Tank N. 30	31 Tank N. 31	32 Tank N. 32	33 Tank N. 33	34 Tank N. 34	35 Tank N. 35
NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED	NOT INITIALIZED

NB. Up to 35 tanks can be viewed on this page

8.1.1   TANK DETAIL

From page 50 of opening the console by pressing on the STATUS box of each configured tank, the TANK DETAIL 100 page is accessed, where it is possible to view all the parameters detected by the measurement probe, including all the levels related to the alarm thresholds set.
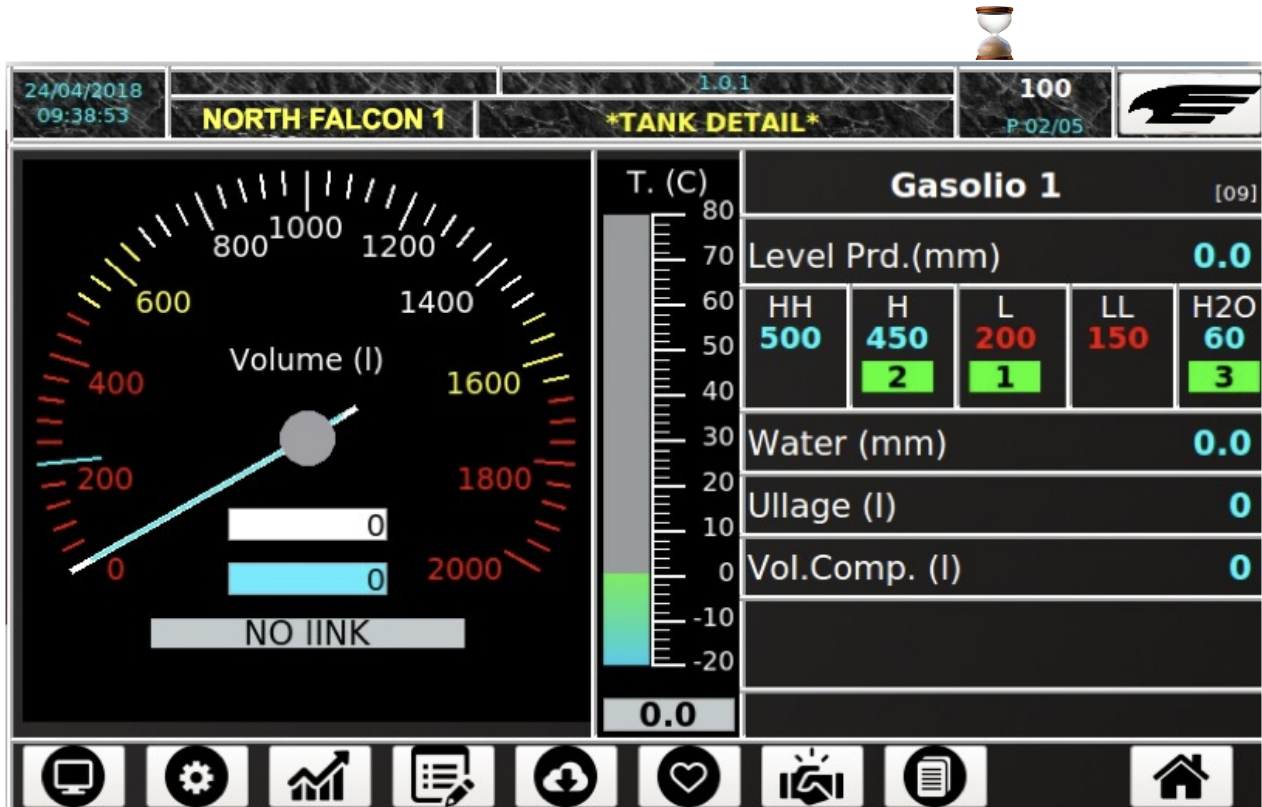
Below is the legend of the data visible on the page:

- Date, firmware revision time, page number of the circular menu

- Station name

- Name and type of product

- Programmed alarm codes HH, H, L„ LL

  - STATUS OK (0)

  - NO LINK (1)

  - HIGH (2)

  - LOW (3)

  - OUT OF RANGE (4)

  - PROBE (5)

  - HIGH + HIGH (6)

  - LOW + LOW (7)

  - WATER (10)

  - WATER + HIGH (12)

  - WATER + LOW (13)

  - WATER + OUT OF RANGE (14)

- **WATER + PROBE (15)**
- **WATER + HIGH HIGH (16)**
- **WATER + LOW LOW (17)**
- **DISABLED (30)**

- **Analogue representation with pointer indicator of the volume of the product present in the tank and of the presence of water**

- **Analogue representation ˚C with bar indicator of product temperature**

- **Numerical indication of the water level present in the tank (Water)**

- **Numerical indication of unused tank volume i (Ullage)**

- **Numerical indication of the volume of the temperature compensated product**

8.1.1.1 Menu bar

		TANK DETAIL	Return button to the single tank
		TANK CONFIGURATION	Display of parameters related to the tank
		HISTORY GRAPHIC	Visualization of the trend over time level / volume / temperature, etc.
		HISTORICAL LIST	Time display of the levels in the tank in tabular form
		LIST OF DELIVERY / LOSSES	Display of the delivery list
		DIAGNOSTICS	Display of diagnostic data
		RECONCILIATION	Display of reconciliation data (visible only if reconciliation is ON)
		SHIFT REPORT	Display of the Shift Report
		HOME	Return to the TANK LIST page

8.1.1.2 TANK CONFIGURATION

The window below shows how the TANK CONFIGURATION page is presented

The following legend lists the elements of the page:

- **Probe address**

- **Capacity (l): tank capacity expressed in [l]**

- **Altez. max (mm): maximum tank height expressed in [mm]**

- **offset (mm): Difference between probe and metric rod expressed in [mm]**

- **Zero H2O (mm): limit below which the water level is considered 0, expressed in [mm]**

- **Dlv. Vol. (L): variation of the delivery volume below which nothing happens (above, we have the Delivery), expressed in [l]**

- **Leakage (l): variation of the volume of Leakage below which nothing happens (above, there is the Leakage), expressed in [l]**

- **The reporting table in use is displayed [level (mm) / volume (l)]**

8.1.1.3 HISTORICAL GRAPHIC

The window below shows how the HISTORY GRAPHIC page is presented

The page shows the progress of the tank level expressed in [mm] as a function of time.
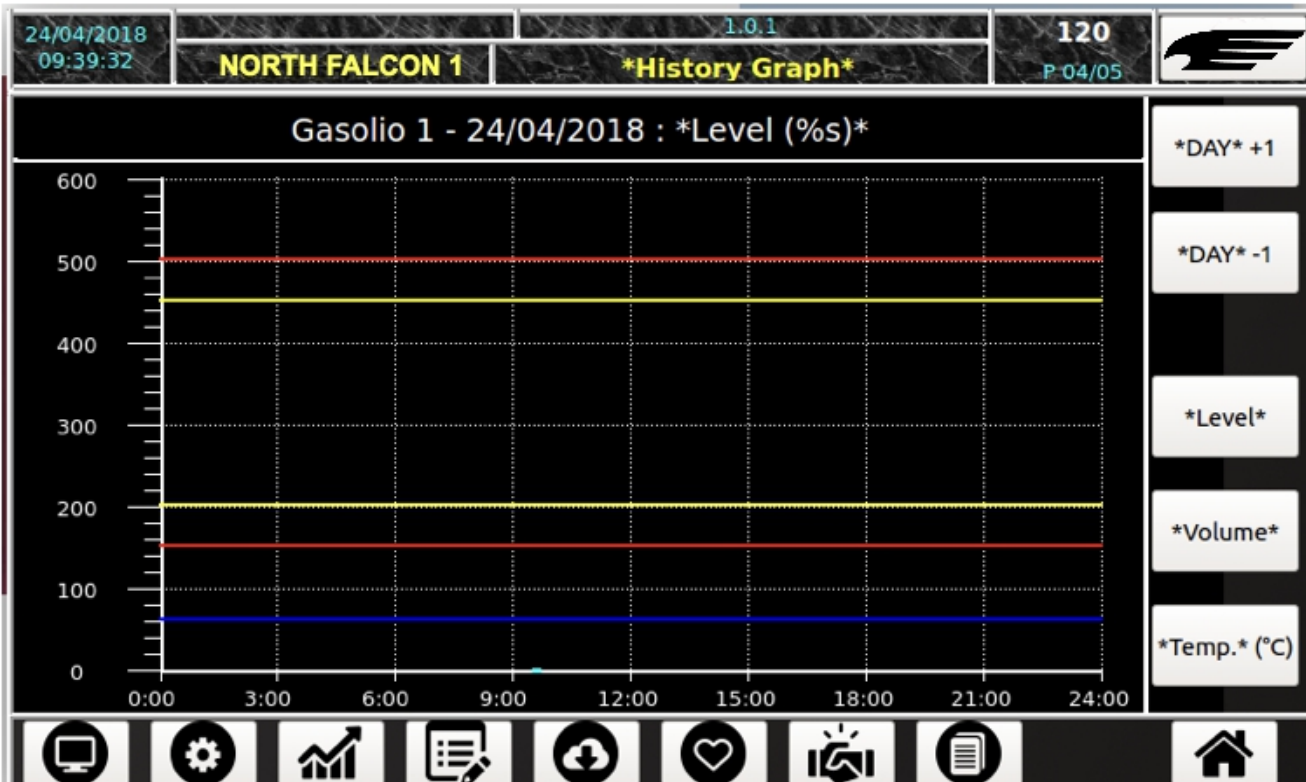
Following the colors legend starting from the top:

COLOR	DESCRIPTION
BLUE	water level
BLUE	threshold WATER ALARM
RED	product level threshold VERY LOW
YELLOW	product level threshold LOW
GREEN	Product level trend
YELLOW	Product level threshold HIGH
RED	Product level threshold ALTISSIMO

Legend   (the   lines   are   present   only   if   the   corresponding   alarms   are   configured):

8.1.1.4 HISTORICAL LIST

The window below shows how the LIST HISTORY page is presented

24/04/2018 09:39:53	NORTH FALCON 1	1.0.1 *History List*	130 P 01/05	

Gasolio 1 - 24/04/2018

Time	*Prd (%s)*	*Prd (%s)*	*H2O (%s)*	*Temp.* (°C)	*Status*	
09:38:56	0.00	0.00	0.00	0.0	01	*DAY* +1
09:37:52	0.00	0.00	0.00	0.0	01	
09:36:48	0.00	0.00	0.00	0.0	01	*DAY* -1
09:35:44	0.00	0.00	0.00	0.0	01	
09:34:39	0.00	0.00	0.00	0.0	01	
09:33:35	0.00	0.00	0.00	0.0	99	
09:32:31	0.00	0.00	0.00	0.0	99	

Below is the legend of the data visible on the page according to the time:

Prd (mm)   **Level of the product in the tank expressed in [mm]**

Prd (l)   **Volume of product in the tank expressed in [l]**

H2O (l)   **Volume of water in the tank expressed in [l]**

T (C)   **Product temperature expressed in [°C]**

Legend of the tank:

- **STATUS OK (0):** everything is OK

- **NO LINK (1):** no communication

- **HIGH (2):** HIGH product level

- **LOW (3):** product level low

- **OUT OF RANGE (4):** the level detected by the probe exceeds the maximum level reported in the information table

- **PROBE (5):** internal probe problem, the detected measurement is not reliable

- **HIGH + HIGH (6):** product level HIGHEST

- **LOW + LOW (7):** product level VERY LOW

- **WATER (10):** level water

- **WATER + HIGH (12):** level water + product level HIGH

- **WATER + LOW (13):** level water + product level LOW

- **WATER + OUT OF RANGE (14):** level water + OUT OF SCALE PRODUCT

- **WATER + PROBE (15):** level water + internal probe problem

- **WATER + HIGH HIGH (16):** level water + product level HIGHEST

- **WATER + LOW LOW (17):** level water + product level VERY LOW

- **WATER + NO LINK (18, 19):** level water + no communication

- **DISABLED (30):** probe disabled during configuration

- **NOT INITIALIZED (99):** tank configured and enabled but still no information received from the probe

8.1.1.5 DELIVERY LIST

The window below shows what the DELIVERY LIST page looks like

PAGE

24/04/2018 09:40:11	NORTH FALCON 1	1.0.1 *Delivery/Leakage List*	140 P 01/05	

Gasolio 1 -				
Date - Time	*Start (%s)*	*End (%s)*	*Qty (%s)*	*Interval (min)*
2018/04/13-00:44	1390.40	1606.50	216.10	6
2018/04/13-00:19	1027.27	1392.83	365.56	7
2018/04/12-22:40	911.27	1326.23	414.96	6
2018/04/12-16:37	755.77	1005.57	249.80	7
2018/04/11-17:22	1195.70	1466.57	270.87	6

Below is the legend of the data visible on the page according to the time:

Init. (l)	Initial volume expressed in [l]
End (l)	Final volume expressed in [l]
Qty (l)	Delivery (quantity discharged into the tank) expressed in [l]
Interval (min)	Duration expressed in [min]

8.1.1.6 DIAGNOSTICS

The window below shows what the DIAGNOSTICS page looks like

PAGE

NB.   The data shown are for personel use NORTHFALCON

8.1.1.7 RECONCILIATION

The window below shows how the RECONCILIATION page is presented

PAGE

Below is the legend of the data visible on the page according to the time:

NOW	Time of reference
VOL-INITIAL	Initial time volume
VOL-FINAL	Final time volume
VOL-DIFF	Volume difference over the hour
SUPPLIER	Volume delivered during the hour
DELTA VOLUME	Value of hourly reconciliation
GG +1	Select next day
GG -1	
AUTOCALIBRATION	Previous day selection
	Self-calibration of data analysis

Reconciliation is only available if the Console receives sales data from an FCC / POS management system that supports the reconciliation process

8.1.1.8 Auto-calibration

This function must be activated by SIBYLLA_CONFIG, where the user can decide which tank self-calibration must be activated, one or more tanks can be activated at the same time.

From the reconciliation section, press ◆ to access the AUTOCALIBRATION session.

Autocalibration Log - Serb. Benzina 1						
Interval	N.Step	*Diff.Orig.*	*Average*	Diff to orig.	*Variation*	
0 - 10	01	22.2	22.2	0.0	0.0	Num.Series
10 - 20	01	22.2	22.2	0.0	0.0	
20 - 30	01	22.2	22.2	0.0	0.0	Differential
30 - 40	01	22.2	22.2	0.0	0.0	
40 - 50	01	22.2	22.2	0.0	0.0	*Variation*
50 - 60	01	22.2	22.2	0.0	0.0	
60 - 70	01	22.2	22.2	0.0	0.0	*Difference*
70 - 80	01	22.2	22.2	0.0	0.0	
80 - 90	01	22.2	22.2	0.0	0.0	
90 - 100	01	22.2	22.2	0.0	0.0	

CHIUSO
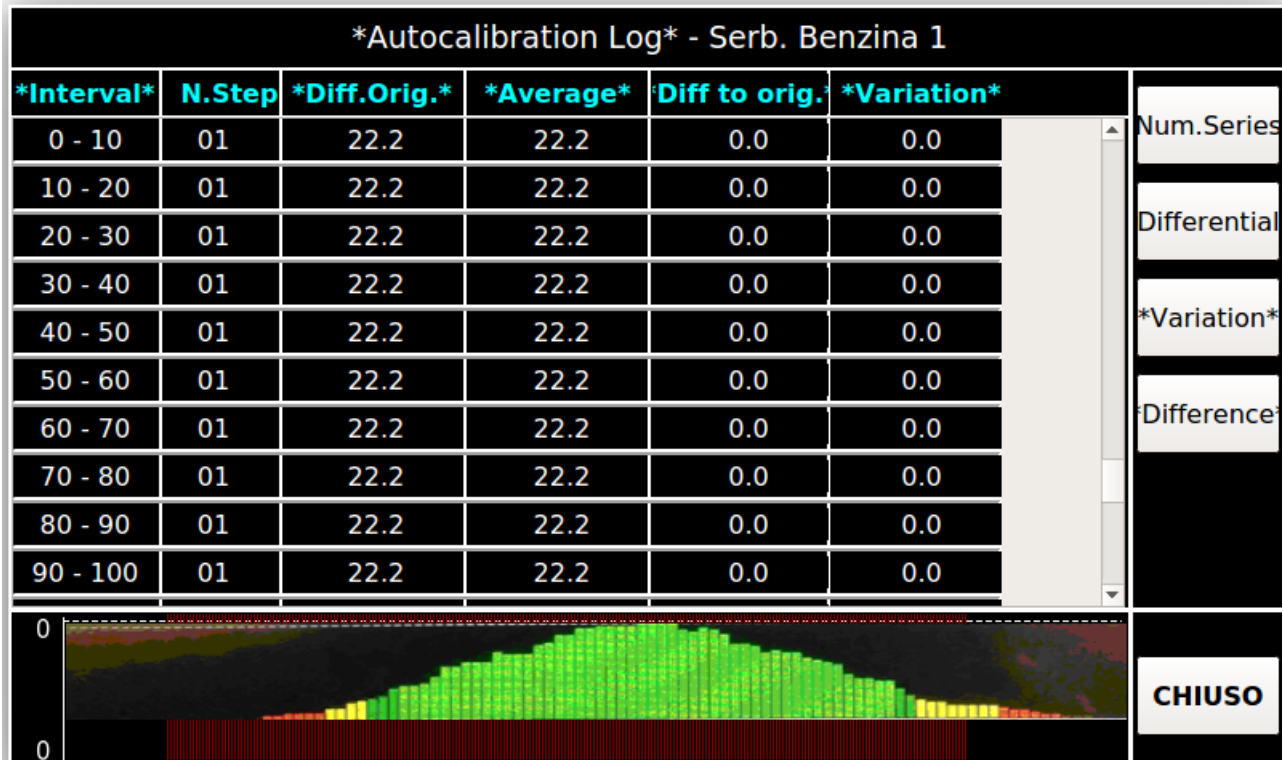
Below is the legend of the data visible on the page according to the time interval:
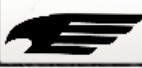
INTERVAL	Interval - height in centimeters
N.STEP Number	of deliveries in the specific range
DIFF ORIGIIN	Volume difference in level range, calculated on the original table
AVERAGE	Average volume difference in the interval, considering all the phases
DIFF TO ORIGIN	Difference between the average and the "original difference".
VARIATION	Variance in the average of differences

NOTE   The keys on the right are used to switch between different types of graphs.

8.1.1.9 *SHIFT REPORT*

The window below shows how the page is presented SHIFT REPORT

ID	Inizio	Fine	Vol.Iniziale	Vol.Finale	Delivery	Shift
01	--:--	15:58	948.73	0.00	0.00	948.73
01	15:58	15:59	974.70	0.00	0.00	974.70
02	15:59	16:00	974.70	972.10	0.00	2.60
03	16:00	16:01	972.10	0.00	0.00	972.10
04	16:01	16:03	1038.13	0.00	0.00	1038.13
05	16:03	16:04	1038.00	729.83	0.00	308.17
06	16:04	22:36	729.83	907.53	0.00	-177.70
07	22:36	22:45	907.53	911.27	0.00	-3.74

Below is the legend of the data visible on the page according to the ID:

ID	**progressive during the day**
START	**Beginning of the turn**
END	**End of the round**
INITIAL VOL	**Volume at the beginning of the turn**
FINAL VOL	**Volume at the end of the shift**
DELIVERY	**Delivery volume if present**
SHIFT	**Start-end volume difference**

8.1.2   LOG ALARMS

Returning to the TANK LIST **page, the circular menu is accessed using the key**

The window below shows the page of the ALARM LOG **sequence menu**

Date - Time	*Tank*	*Alarm*	*Status*
24/04/2018 09:34	04	NO IINK	*ACK*
24/04/2018 09:34	03	NO IINK	*ACK*
24/04/2018 09:34	02	NO IINK	*ACK*
24/04/2018 09:34	01	NO IINK	*ACK*
24/04/2018 09:34	05	NO IINK	*ACK*
24/04/2018 09:34	05	NO IINK	*ACTIVE*
24/04/2018 09:34	04	NO IINK	*ACTIVE*
24/04/2018 09:34	03	NO IINK	*ACTIVE*
24/04/2018 09:34	02	NO IINK	*ACTIVE*
24/04/2018 09:34	01	NO IINK	*ACTIVE*
23/04/2018 09:17	02	NO IINK	*ACK*
23/04/2018 09:17	01	NO IINK	*ACK*
23/04/2018 09:16	02	NO IINK	*ACTIVE*

Header of the screen: 24/04/2018 09:37:12 | NORTH FALCON 1 | 1.0.1 | *ALARMS LOG* | 200 | P·05/05 | **ACK**

Below is the legend of the data visible on the page according to the time:

DATE & TIME	**Date and time of the alarm occurrence**
TANK	**Number of the tank in question**
ALARM	**Tank status**
STATE	
	▪ **ACTIVE (red): active alarm**
	▪ **CLEAR (green): alarm resolved**
	▪ **ACK (yellow): Silenced alarm (taken into charge)**
ACK	**Button to silence all active alarms**

NOTES: **Upon activation of each new alarm the console emits an acoustic sound .. To be silent, the user must open this page and press the** ACK **button. The audible alarm is deactivated and the alarm is marked in yellow to mean taken in charge. If there is a relay associated with the alarm, the relay will remain active until the alarm is present. The** ACK **key silences the audible alarm but does not change the relay signal.**

8.1.3 LIST OF DISPENSERS

Returning to the TANK LIST **page, the circular menu is accessed using the key** The

window below shows the page of the sequential menu LIST OF DISPLAYS

24/04/2018 09:37:59	NORTH FALCON 1			1.0.1 *LIST FUEL*			300 P·05/05	
Date	Hour	*Fuel*	Nozzle	Total (%s)	*Last (%s)*	Tank	Delta Vol.	Volume (%s
24/ 4/2018	09	01	01	0.00	0.00	03	0.00	0.00
24/ 4/2018	09	01	02	0.00	0.00	02	0.00	0.00
24/ 4/2018	09	01	03	0.00	0.00	05	0.00	0.00
24/ 4/2018	09	01	04	0.00	0.00	01	0.00	0.00
24/ 4/2018	09	02	01	0.00	0.00	01	0.00	0.00
24/ 4/2018	09	02	02	0.00	0.00	02	0.00	0.00
24/ 4/2018	09	02	03	0.00	0.00	02	0.00	0.00

The real time situation of the disbursements received from the POS system is reported

Below is the legend of the data visible on the page according to the time:

DATA	**Current date**
NOW	**Current time**
DISPENSER	**Dispenser number configured**
GUN	**Dispenser gun number**
TOT%	**Total disbursements over the hour**
LAST%	**Last delivery**
TANK	**differential tank number connected to the gun**
DELTA VOLUME	**difference between the volume variation detected by the probe and the outputs made**
VOLUME	**volume difference in the tank connected to the gun**

8.1.4   PLLD

Returning to the TANK LIST page, the circular menu is accessed using the key

The window below shows the page of the sequential VALUES PLLD menu

24/04/2018 09:38:17	NORTH FALCON 1	1.0.1 * LPM **VALUES** *	400 P 01/05	
PLLD 01	----			
PLLD 02	----			
PLLD 03	----			
PLLD 04	----			
PLLD 05	----			
PLLD 06	----			
PLLD 07	----			
PLLD 08	----			

Below is the legend of the data visible on the page:

List of PLLDs with the real-time value of line pressure

8.1.5   INFORMATION PAGE

Returning to the TANK LIST **page, the circular menu is accessed using the key The**

window below shows how the accessible page is presented INFORMATION
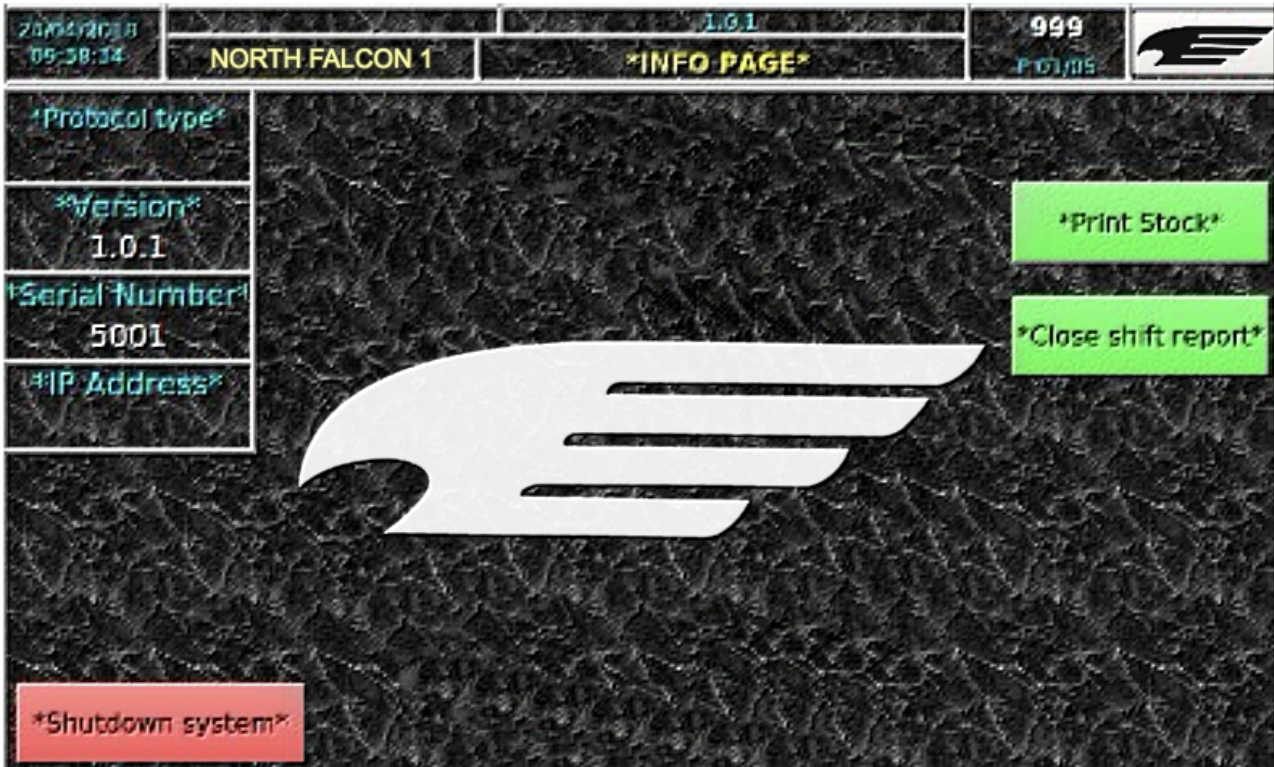
Below is the legend of the data visible on the page:

DATE HOUR	
IP ADDRESS	
FIRMWARE REVIEW	1.01
NUMBER OF PAGE	999
SERVICE STATION NAME PROTOCOL	North Falcon
OST COMMUNICATION RED POWER	Tank name safe shutdown procedure
BUTTON	on RS232 serial port
GREEN PRINT BUTTON	GREEN BUTTON
SHIFT REPORT	

1. Print Stock

The console can be connected to a serial printer via the RS232 serial port. After connection, the user can print the current stock, ie the total product quantity for each tank and also the stock by product group. (Next Implementation)

2. Shift Report

The console is able to manage Shift Reports.

The shift report can be closed and subsequently opened manually. Shift multiple daily reports can be configured.

The following table shows the steps of the procedure required to manage Shift Reports:

1	Get to page 999
2	Press the "Close shift report" button and confirm the resulting message (the current Shift Report is closed and another is opened)

You can access the "Shift Report" page and view the data of the daily Shift Report,
If a delivery is in progress, the value of the final volume of the Shift report is equal to the volume in the cistern before the start of the Delivery.

9 - ROUTINE MAINTENANCE

Maintenance activities are defined and managed according to EN 60079-17.

⚠️ **IMPORTANT:** Maintenance must only be carried out by authorized personnel or by the manufacturer himself

⚠️ **IMPORTANT:** Maintenance of the electrical connections must be carried out only by adequately trained and trained personnel (refer to the console installation manual)

⚠️ **IMPORTANT:** Opening the console may compromise the safety level of the equipment, therefore maintenance operations must be performed only by authorized personnel or by the manufacturer himself

⚠️ **IMPORTANT:** Modifications to the console are prohibited, unless authorized by the manufacturer

⚠️ **IMPORTANT:** Do not use compressed air or detergents / liquids of any kind, to clean the console and screen

⚠️ **IMPORTANT:** Periodically check the cleaning and integrity status of the equipment and its connections

⚠️ **IMPORTANT:** Use a cleaning cloth for monitors / screens / TVs to clean the display and the console

10 - SUPPORT

If North Falcon requires direct assistance, it is essential to connect the console to an Internet network: and to configure the router by associating with the private IP address of the console to a corporate public IP address, open port 22 for the console access and port 80 for web access. All the data of interest of the console can thus be viewed directly by North Falcon staff.

An alternative is to use third-party programs (for example, Team Viewer 7 on the site under Assistance / Support), to allow remote connection between computers (the console must be connected to the computer to which North Falcon will connect remotely).

Contact the assistance service of North Falcon by email: technicalsupport@northfalconenergy.com

11 - SAFETY INSTRUCTIONS

The safety instructions are attached to this document..

12 - NOTIFICATION

13 - REVISIONS

The following table lists the revisions of the document:

N. Of Revisions	Date	Description	Firmware Revision
01	**March 2018**	**Issuance**	**1.0.0**
02			
03			
04			

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