

MIA 2020 software

Starting guide for software installation and use

Run SetupAlcoSoft3.exe program, follow the installation instructions and verify the presence on the desktop of the program and setup icons of the BioPDF virtual printer, to be performed for its installation.

To start MIA 2020 software click on the respective program icon, on the first start choose the DEMO option, which can be used in all its functions for 30 days. If you already have the use key it is possible to permanently activate the software.

- You will be asked to enter the company data that will compile the printouts of the reports in pdf. To save data select "Salva" to exit select "Esci" and fill it later.



Dati Società

Ragione Sociale

Descrizione

Via

CAP Città

Telefono

Salva Esci

- Label printer: the program sets the Brother label printer by default. Press "Esci" to continue (on subsequent use the program will no longer ask for the connection to the printer)



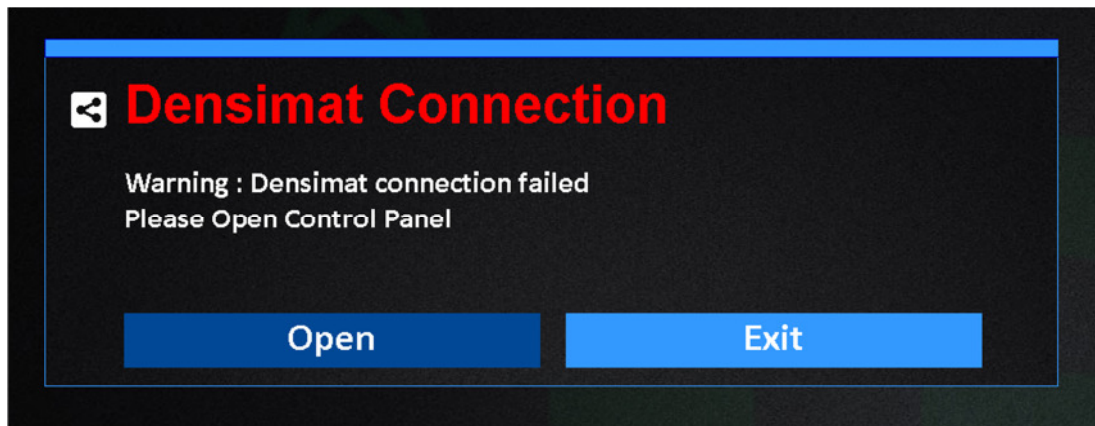
Etichette/Label

No printer was found by the name of 'Brother QL-700'.
Installare il Driver della stampante Brother ...

Installa Esci

- By default, the program will request communication with the respective hydrostatic balance MIA2020. It is possible to operate even without the instrument, to evaluate the functions of the software and by

entering the calculation data manually. To proceed in this direction, press "Exit" (the connection procedure will be proposed each time the program is started)



- The default language is Italian, to proceed to setting the English language select General Settings icon



Use of Demo functions



- Select one of the 3 program functions from the main page: i.e.: Manual TAV;

enter the TAV screen and select the icon with the triangle to proceed with the manual acquisition of TEMPERATURE and DENSITY

ALCOHOLIC STRENGTH BY VOLUME

TEMPERATURE

DISTILLATE DENSITY

Manual Input

DISTILLATE SPECIFIC GRAVITY

DISTILLATE MASS VOLUME

SAMPLE - Code -

OPERATOR FULVIO

LABEL 6

- to enter TEMPERATURE and DENSITY data click on the numeric field, a data entry mask will open.

- the input of the temperature and density values must be performed in accordance with the available calculation ranges that vary according to the tests (TAV, Dry Extract, Must Evaluation). By entering data not included in the calculation ranges, an error message is generated and the results are not displayed.

ALCOHOLIC STRENGTH BY VOLUME

TEMPERATURE 20 °C

DISTILLATE DENSITY 0.98618

ASV

10.24

ASV DISTILLATE AT 20C [%Vol]

Manual Input

DISTILLATE SPECIFIC GRAVITY d20/20 0.9862

DISTILLATE MASS VOLUME AT 20° C 0.98443

SAMPLE - Code -

OPERATOR FULVIO

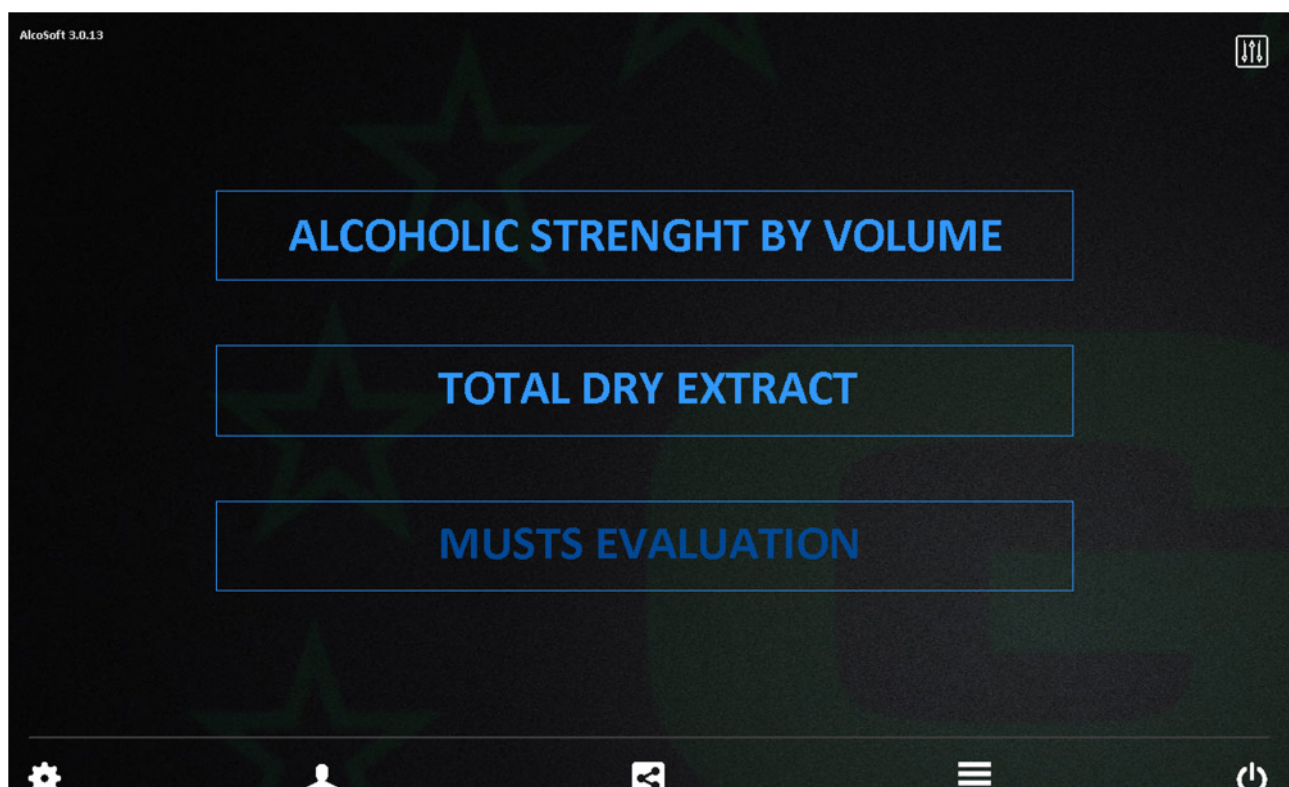
LABEL 6

In DEMO mode it is also possible to evaluate all the other functions of the software including saving analysis, managing samples and customers data, printing pdf reports, consulting the analysis archive, to understand its functionality and evaluate its benefits.

Quick user manual

Each time the program is started, the connection to the hydrostatic balance is proposed and if it is present, the main software screen is displayed:

MAIN SCREEN/MEASURE MENU



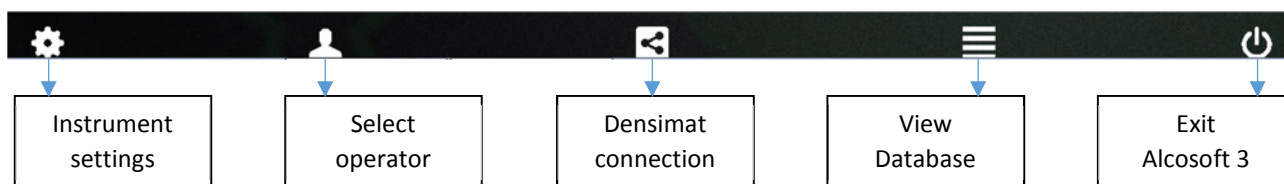
From the main menu it is possible to go directly to the measurement functions, selecting one of the available modes from Alcoholic Strength Volume (TAV), Total Dry Extract or Must Evaluation, whose use is illustrated in the "Sample analysis" section or proceed to the general configuration of the software as indicated in the following paragraphs through the icons of the Toolbar or the General Settings icon:

TOOLBAR ICONS



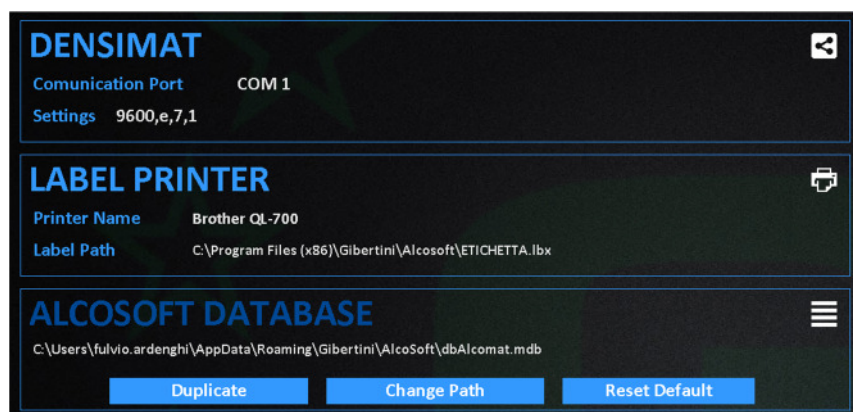
GENERAL SETTINGS ICON





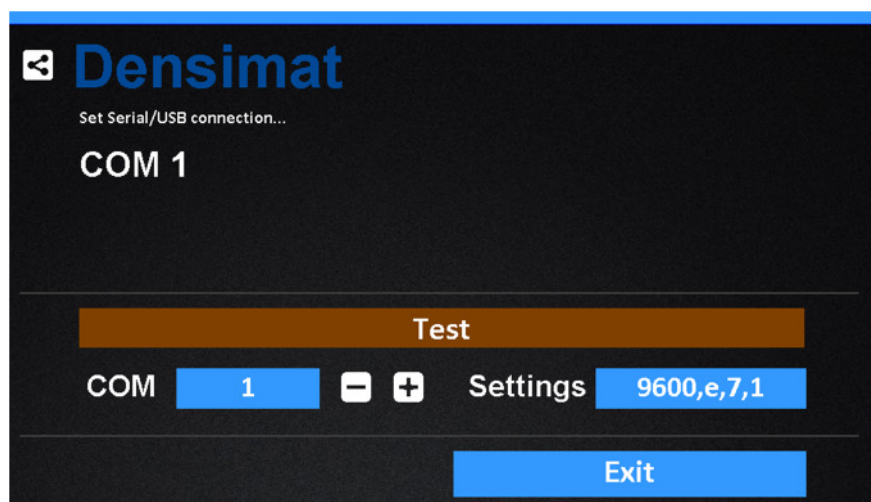
Instrument settings

Select "Instrument settings" to access the configuration window for the hydrostatic balance connection parameters, the label printer (see above) and the archive storage management.



Hydrostatic balance (Densimat)

Select "Hydrostatic scale (Densimat)" to access the configuration window of the serial connection parameters between the scale and the PC or other connected device.



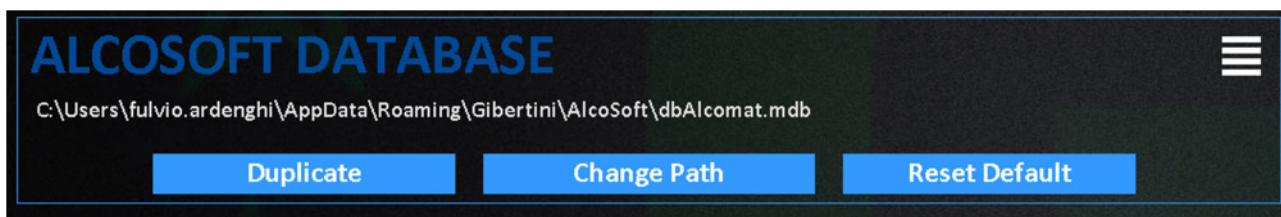
A Test function is available for checking the connection, by pressing the "Test" button in the event of a connection failure, the "Invalid port number" error message is displayed. To change the serial port number of the connected device, select the corresponding COM number by pressing the \pm keys and check the connection with the "Test" function.

Label Printer

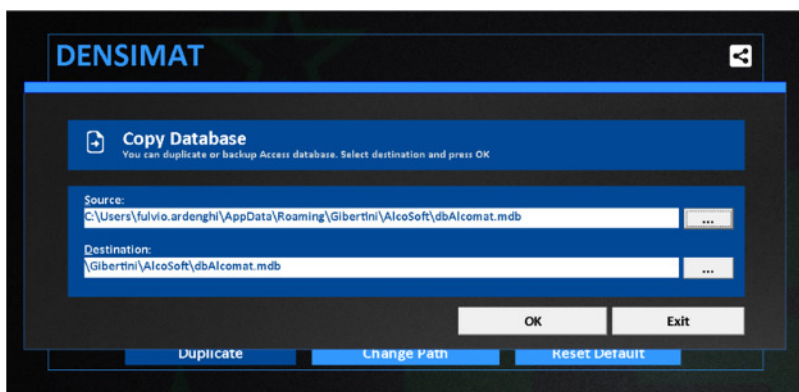
During the first installation of the software, the configuration of the label printer is requested. The program manages and recognizes only the Brother QL-700 printer for which it is possible to use a preset label template or generate a customized one using Brother software. If the printer has not been configured during the first installation, the described menu allows its subsequent installation.

Alcosoft Database

From database menu it is possible to configure the data saving path, duplicate the archive for possible migration to another device, reset the default configuration, delete the archive.

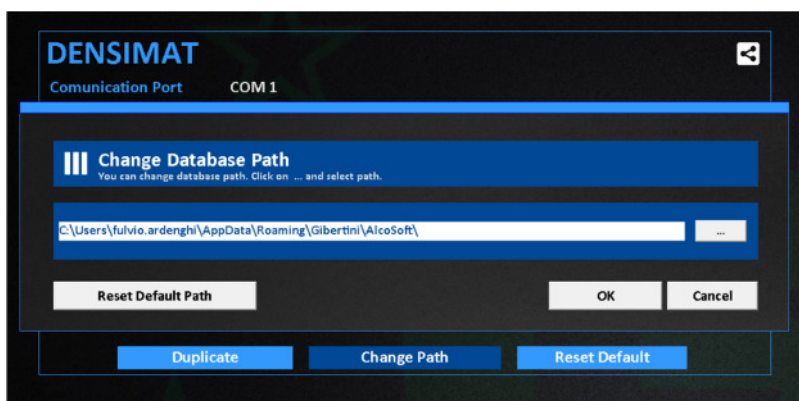


Duplicate



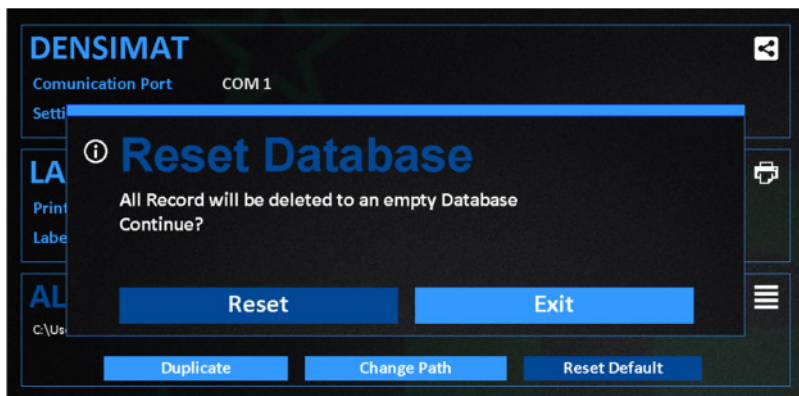
Enter the destination path and press OK to duplicate the data archive

Change Path



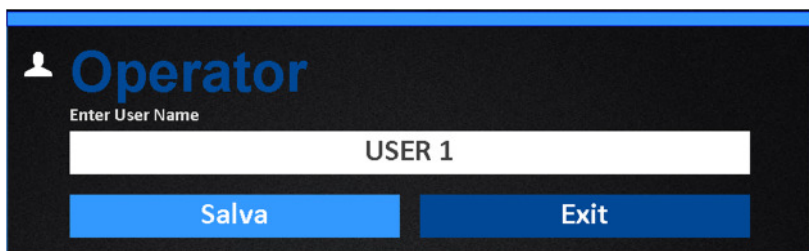
Enter the new path to save the data or restore the default path, press OK to confirm the change.

Reset Default



Press Reset to completely delete the stored archive

Select operator



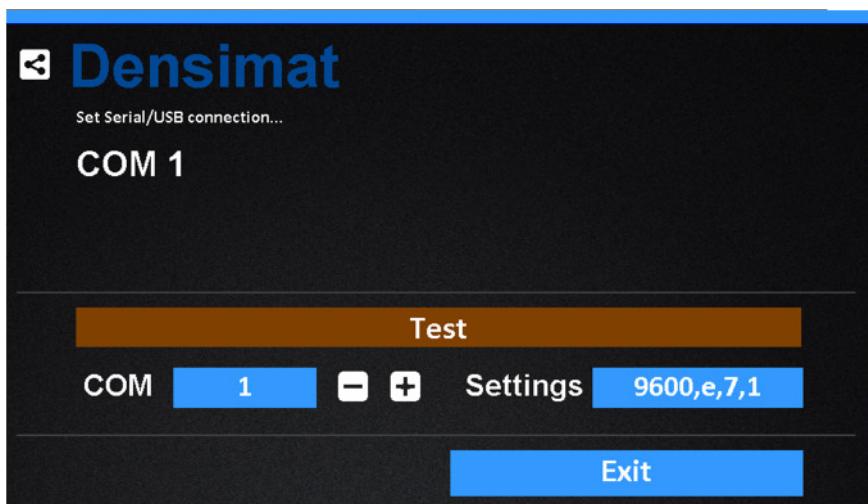
Operator
Enter User Name

USER 1

Salva Exit

Enter the operator name and press Save to store it.

Densimat (hydrostatic balance) connection



Densimat
Set Serial/USB connection...

COM 1

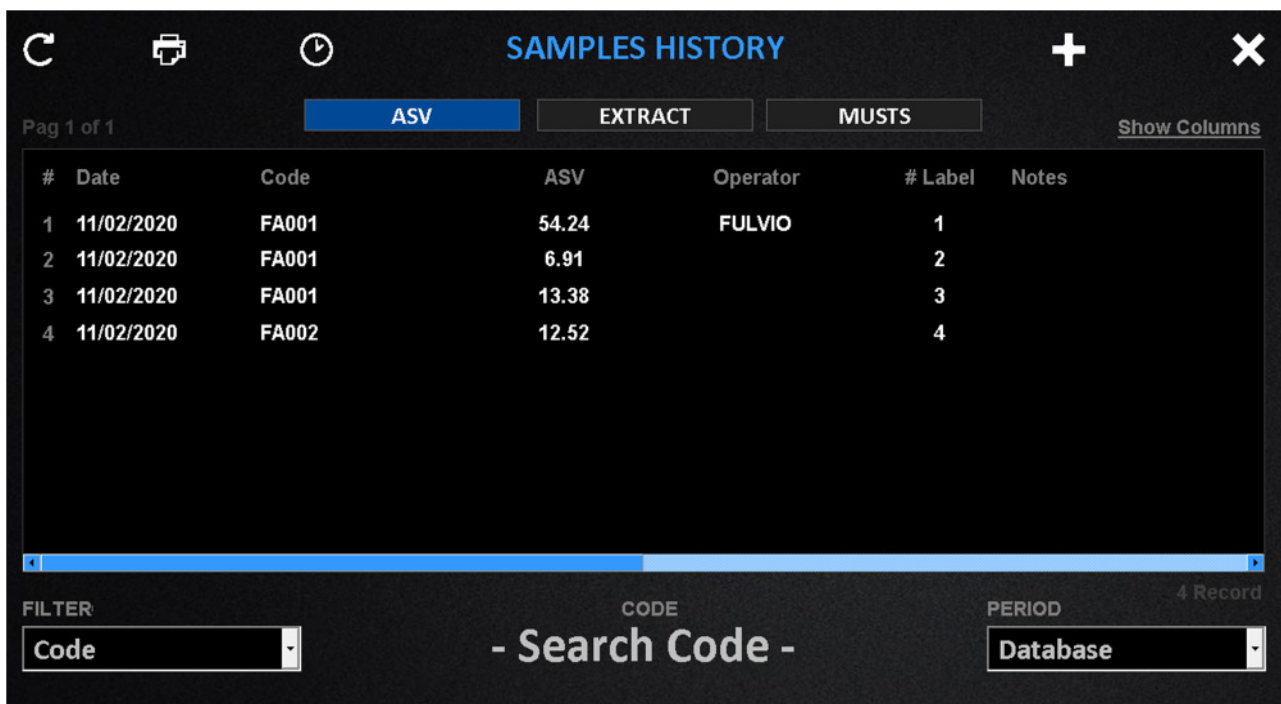
Test

COM 1 - + Settings 9600,e,7,1

Exit

Configuration window of the serial connection parameters between balance and PC or other connected device (see previous paragraphs).

View database



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ASV EXTRACT MUSTS Show Columns

#	Date	Code	ASV	Operator	# Label	Notes
1	11/02/2020	FA001	54.24	FULVIO	1	
2	11/02/2020	FA001	6.91		2	
3	11/02/2020	FA001	13.38		3	
4	11/02/2020	FA002	12.52		4	

4 Record

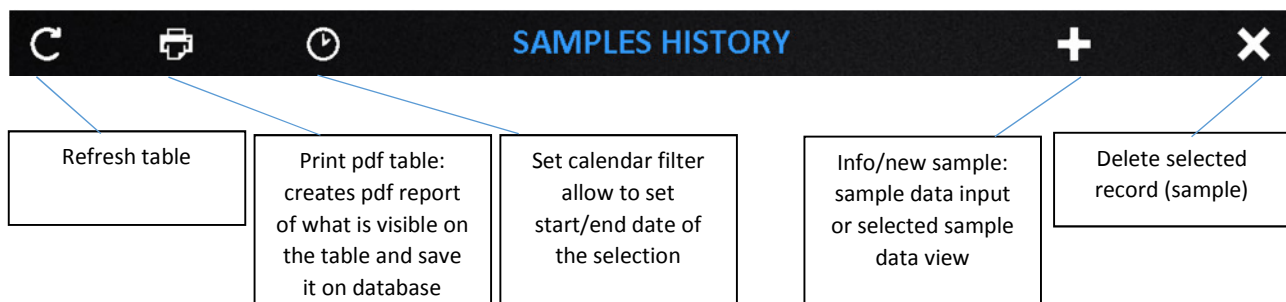
FILTER CODE PERIOD

Code - Search Code - Database

Summary window of the database of all stored samples with progressive sample number, analysis date, code, sample description, batch, customer name, stored parameter, operator, progressive label number, notes, displaying all the fields stored during the analysis phase.

The archive is organized like a classic database, with the possibility of viewing the stored analysis by recalling the data through a series of filters that can be set by the user, based on the archived parameters or on the analysis date / period. The database also allows you to view the results for each type of analysis (TAV, dry extract, musts evaluation) or by grouping multiple types.

AVAILABLE FUNCTIONS



Sample Details
Fill Information fields and Save

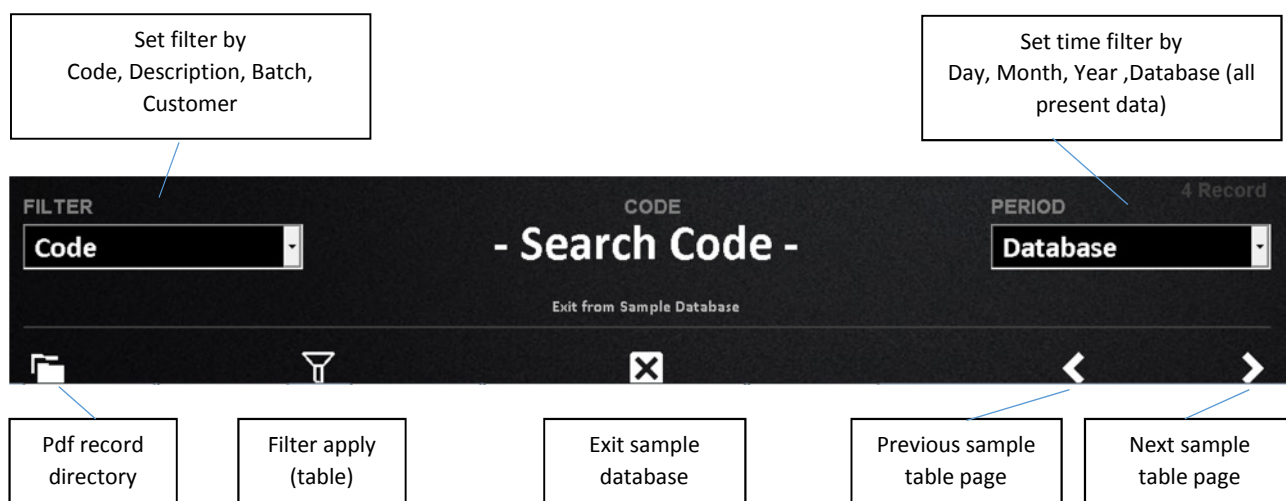
Code

Description

Batch

Customer

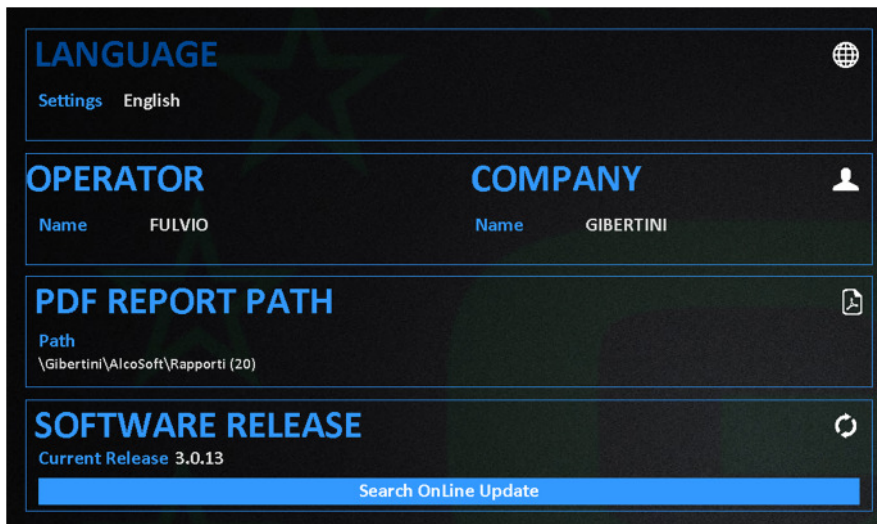
Salva **Exit**



General settings



To enter General settings menu please select following icon from main menu



The screenshot shows a dark-themed settings menu with four sections: **LANGUAGE** (with a globe icon and 'Settings English'), **OPERATOR** (with a person icon, 'Name FULVIO'), **COMPANY** (with a person icon, 'Name GIBERTINI'), **PDF REPORT PATH** (with a folder icon, 'Path \Gibertini\AlcoSoft\Rapporti (20)'), and **SOFTWARE RELEASE** (with a refresh icon, 'Current Release 3.0.13', and a 'Search OnLine Update' button).

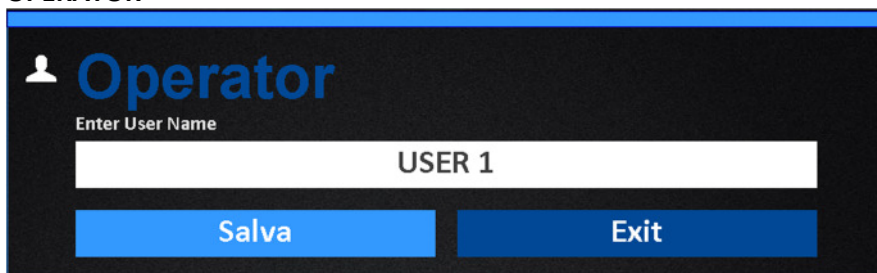
Select system language and confirm with OK

Input Operator and Company data (see details below)

View pdf report saving directory in separate window

Shows installed software release and allows the search and installation of updates

OPERATOR



The screenshot shows the 'Operator' input screen with a person icon, the title 'Operator', the prompt 'Enter User Name', a text field containing 'USER 1', and two buttons: 'Salva' and 'Exit'.

Input operator name and confirm with Save

COMPANY DATA



The screenshot shows the 'Company Details' input screen with an information icon, the title 'Company Details', and several input fields: 'Company Name' (containing 'GIBERTINI'), 'Description', 'Address', 'Postcode', 'Town', and 'Phone'. At the bottom are 'Save' and 'Exit' buttons.

Input Company data and confirm with Save.



Company data entered will be used to fill in the pdf report forms.

ALCOHOLIC STRENGTH ON VOLUME (ASV)

The use of the MIA2020 hydrostatic balance in combination with the software allows to carry out relative density measurements $d_{20} / 20$ of a distillate and the alcoholic strength by volume (ASV) of a distillate to be displayed completely automatically, from 0.13 to 99.98% vol, according to the official OIV methods in a temperature range between 15 ° C and 25 ° C.

- check that the floater is in position on the appropriate support
- select ALCOHOLIC STRENGTH BY VOLUME from the MAIN MENU page. The instrument waits for the measurement of the relative density of the distillate
- wait for the "zero" of the scale or press [Z] for a manual reset;
- position the measuring cylinder with the sample and immerse the temperature probe in the liquid;
- immerse the floater thoroughly clean and dry; shake the floater in the liquid for a few seconds, in a circular motion, so as to uniform the temperature
- at stable reading displays: temperature, read density, specific gravity corrected at 20 ° C, density corrected at 20°C and alcoholic strength by volume of the distillate in question;



once the ASV value has been calculated, it is possible to print using the icon  the relative label and / or store the final result by means of the icon  in a pdf file which will report all the information entered.

To exit from ASV function push  and return to the Main Menu.

At the end of the measurements, wash thoroughly with distilled water, to clean the cylinder and floater from any residue.

For more detailed information on the measurement procedure, refer to the user manual of the MIA 2020 hydrostatic balance.

TOTAL DRY EXTRACT

Total dry extract means the set of all substances that, under certain physical conditions, do not volatilize. The official European method is densimetric.

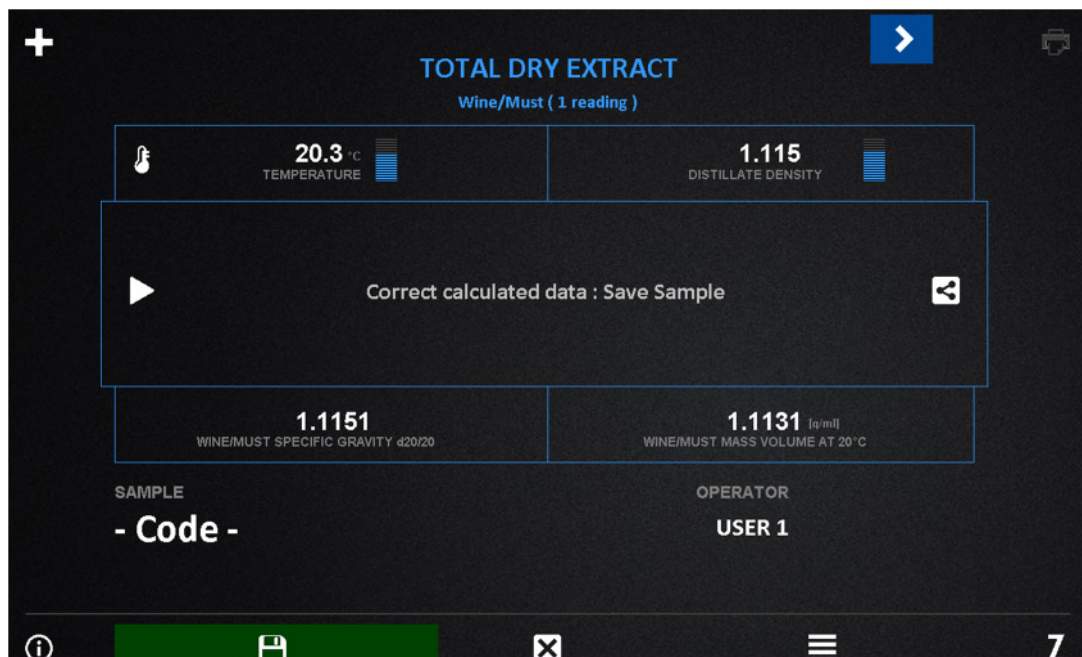
The total dry extract is calculated indirectly on the basis of the density value of the dealcoholised must/wine, i.e. the must/wine from which the alcohol was removed and which was brought back to the initial volume with distilled water.

The dry extract is expressed by the concentration in g / l of a sucrose solution having the same density as the dealcoholised must/wine.

The use of the MIA2020 hydrostatic balance in combination with the relative software allows you to determine the value of the total dry extract of a wine or must for a density between 0.990 and 1.160, in a temperature range between 15 ° C and 25 ° C. Below 15 ° C and above 25 ° C the results are not completely reliable.

Proceed as follows:

- check that the floater is in position on the appropriate support;
- select TOTAL DRY EXTRACT from the MAIN MENU page. The instrument waits for the measurement of the relative density of the wine / must as it is (valid sample with a relative density between 0.99 and 1.16)
- wait for the "zero" of the scale or press [Z] for a manual reset;
- position the measuring cylinder with wine/must and immerse the temperature probe in the liquid;
- immerse the floater thoroughly clean and dry; shake the floater in the liquid gently for a few seconds, in a circular motion, in order to uniform the temperature (be careful not to create air bubbles adhering to the floater or to the floater wire which would distort the measurement);
- at stable reading displays: temperature, read density, specific gravity corrected at 20 ° C and density at 20 ° C of the must / wine sample under examination;



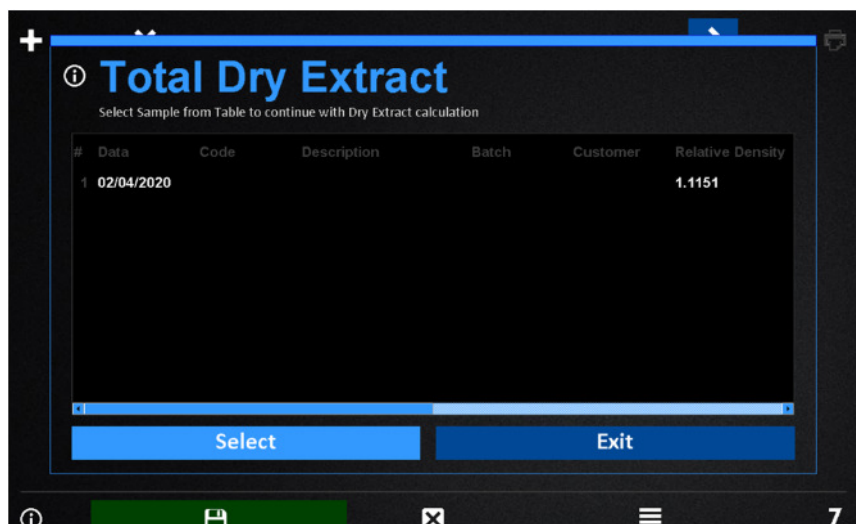
Since this is a determination that involves two measurements on the same sample, after the first measurement on the sample it is necessary to memorize the measured values.

To save sample result push green icon



after identification with the Code function

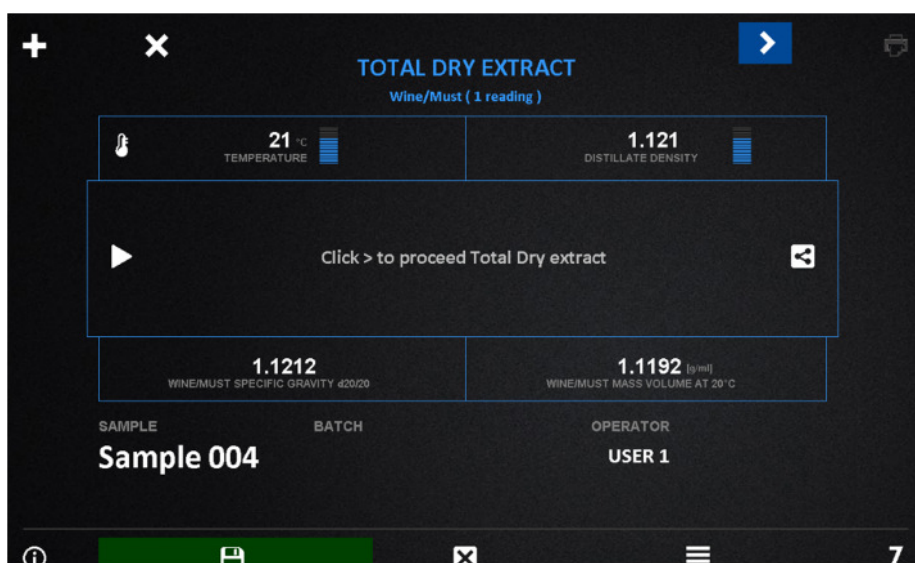
Through software it is possible to memorize a practically infinite number of samples of wine / must as it is and then recall them when measuring the density of the corresponding distillate.



If, on the other hand, you prefer to go directly to the second measurement phase to immediately obtain the final result, once the stored sample has been recalled, press the icon



and proceed with the measurement of the distillate, operating as previously.



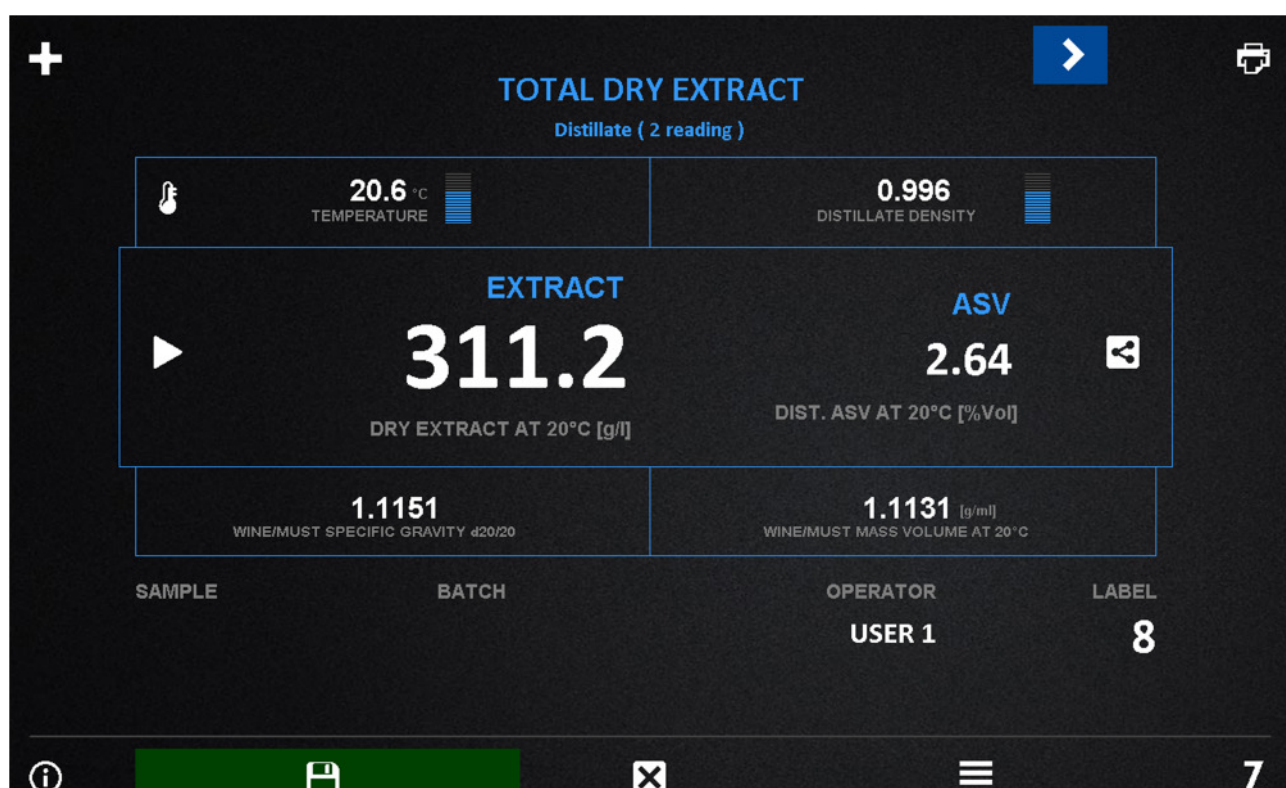
Empty the cylinder before proceeding to the measurement of another sample of wine / must or of the relative distillate.



Wash it abundantly with distilled water and dry it thoroughly.


For accurate measurements or for particularly difficult samples, a cylinder start-up operation may be appropriate, if you have a large sample.

When determining the dry extract, operate as previously and place the distillate sample. The instrument is waiting to be able to measure the density of the distillate obtained from the wine / must in question (valid sample with relative density $d_{20} / 20$ between 0.79000 and 0.99995).

At stable reading, the following are displayed: temperature, density read and alcoholic strength by volume of the distillate together with the total dry extract value in g / l of sucrose.



once the total dry extract value has been calculated, it is possible to print using the icon  the relative label and / or store the final result by means of an icon  in a pdf file which will report all the information entered.

To exit from Total Dry Extract function push  and return to the Main Menu.

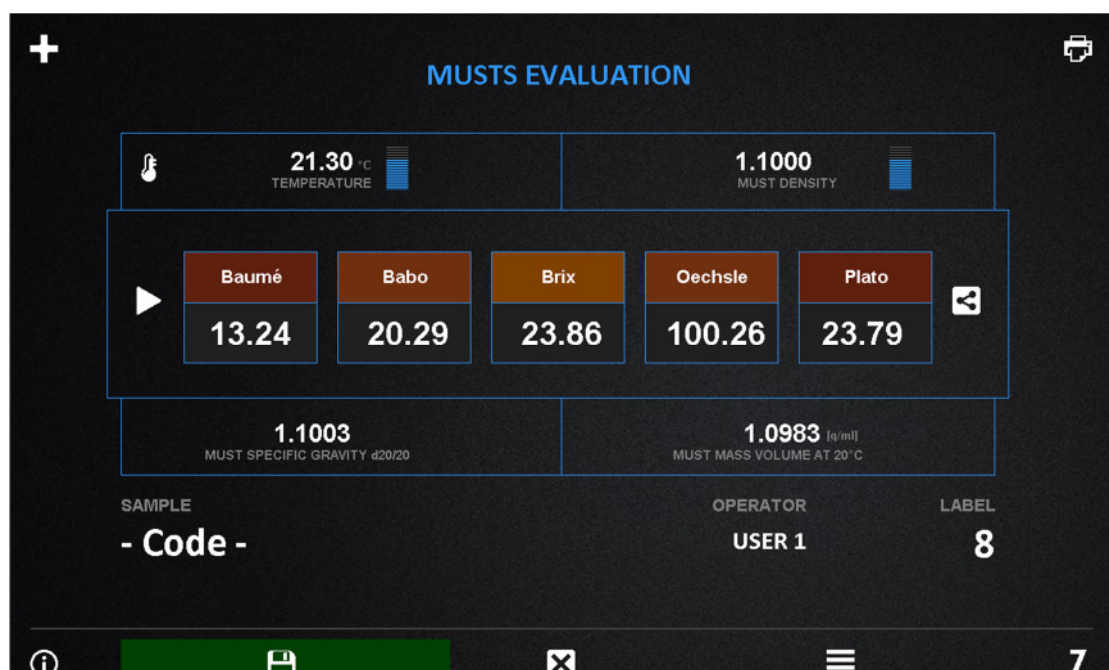
At the end of the measurements, wash thoroughly with distilled water, to clean the cylinder and floater from any residue.



MUSTS EVALUATION


Baumé, Babo, Brix, Oechsle and Plato degrees are related to the relative density $d_{20} / 20$ of a must. The use of software and MIA2020 hydrostatic scale allows to automatically determine the density and the value of the Baumé, Babo, Brix, Oechsle and Plato degrees of a must, for $d_{20} / 20$ densities between 1.04 and 1.16, in a temperature range included between 15 °C and 25 °C. Below 15 °C and above 25 °C the results are not completely reliable.

Proceed as follows:

- If the must is not clear, filter it.
- Select MUSTS EVALUATION from the MAIN MENU page. Wait for the "zero" of the scale and then hang the float on the suspension. Following data are displayed: temperature, density read, density corrected at 20 °C and density at 20 °C of the must sample in question (sample valid for $d_{20}/20$ between 1.04 and 1.16)
- After a few seconds, upon reaching the stable value of relative density, the numerical values corresponding to the Baumé, Babo, Brix, Oechsle and Plato degrees of the must appear on the display.
- The density of the must is obtained by multiplying the density value corrected at 20 °C by 0.998203 g / ml (volume density of the water at 20 °C).

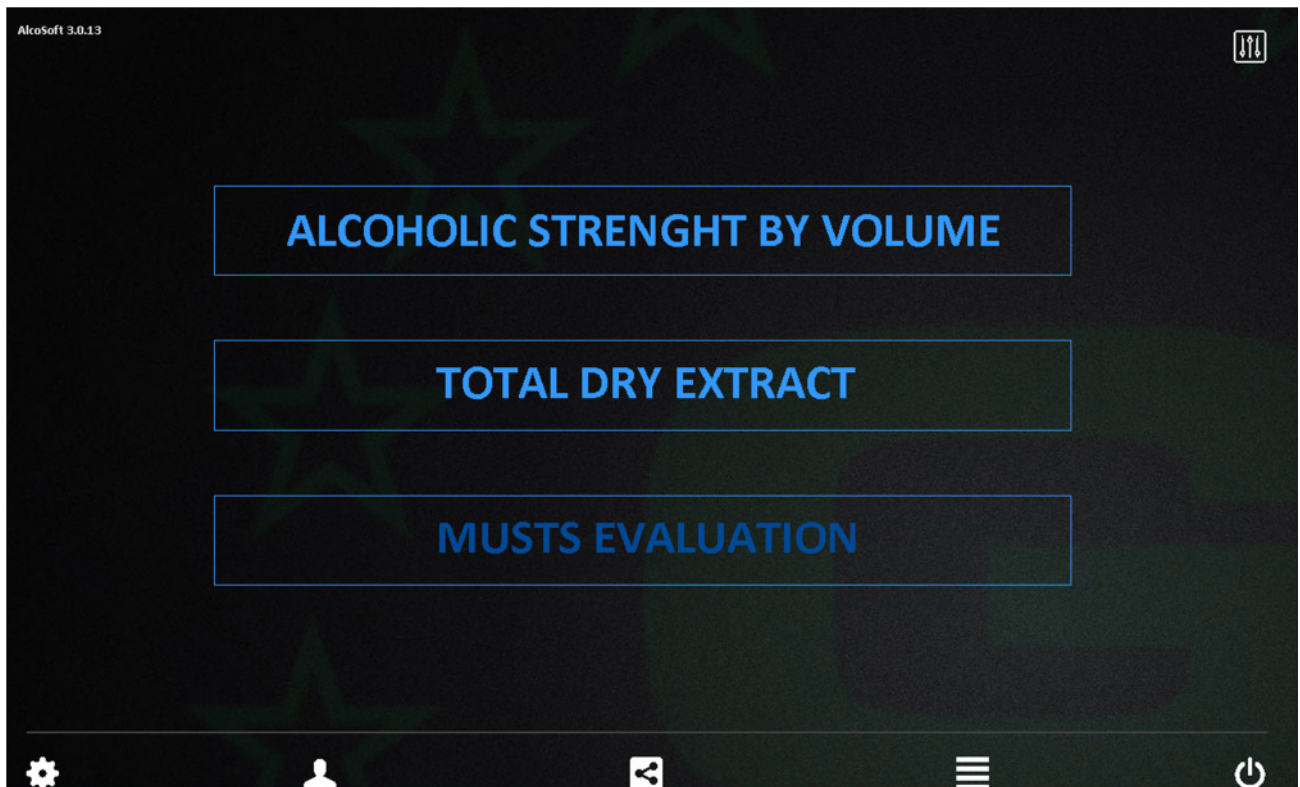


once the Musts Evaluation value has been calculated, it is possible to print using the icon  the relative label and / or store the final result by means of the icon  in a pdf file which will report all the information entered.

To exit from Musts Evaluation function push  and return to the Main Menu.

At the end of the measurements, wash thoroughly with distilled water, to clean the cylinder and floater from any residue.

END OF WORK SESSION



Once the work session has ended, to exit the program, press the icon and then confirm with OK. If desired, press OK in the next window to switch off the device on which the software is installed.