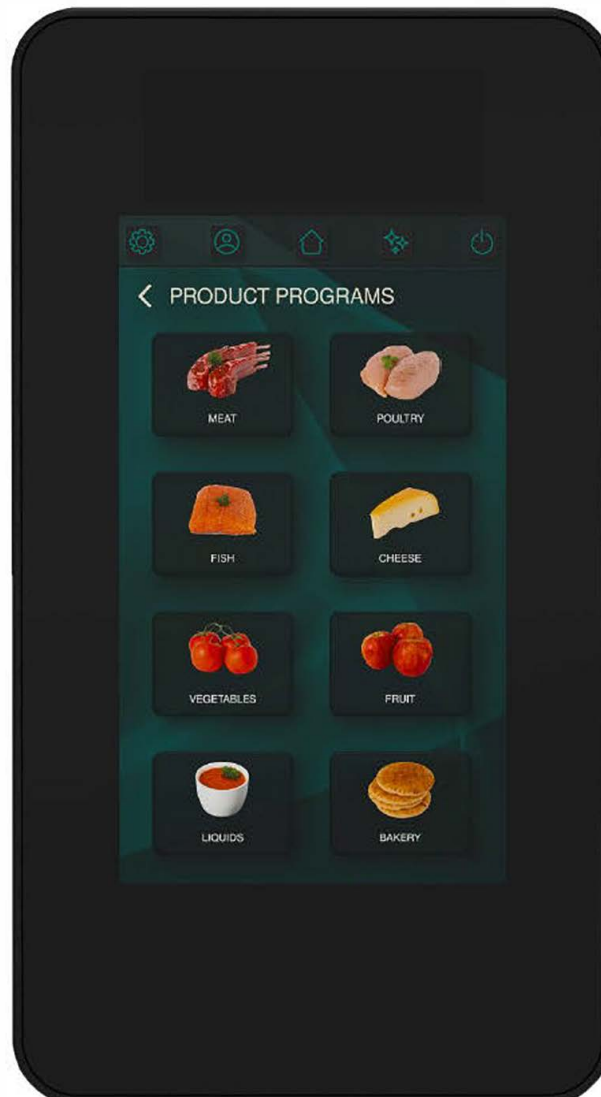




MOD : TA-90/IVAC

Production code : Aura 42+ + PIL/Aura 42+

05/2025



Dealer Manual

Control System

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1 Foreword

This manual contains information about the **Control System** intended exclusively for our distributors.

General information about our machines can be found in the user manual supplied with the unit.

You can download all our user manuals from our website: www.henkelman.com. There you will also find information and videos on servicing and programming our machines.

1.1 Symbols used in this manual

The following symbols are used for all procedures in which the safety of the user and/or technician is at risk and caution is required.



Indicates a potentially hazardous situation that must be avoided. Failure to follow the safety instructions may result in moderate injury and damage to equipment.



Provides additional information to help perform a task or prevent problems.

2 Before first use

Before first use, the following steps must be performed:



Failure to do so may damage the machine beyond repair.

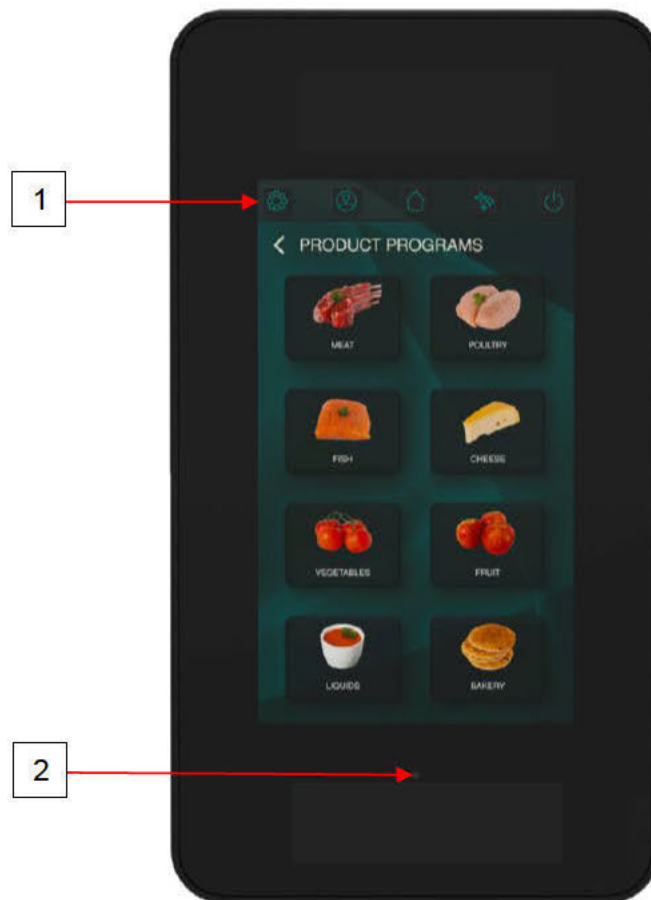
1. Check the pump oil level using the sight glass.
2. Optional: Top up oil if necessary.



For more information on how to perform these steps, see the “Vacuum pump maintenance” section of the user manual.

3 Control System

3.1 Controls



1. Menu bar

From left to right, the menu bar houses the settings, user login, home button, pump cleaning cycle, and power-off button.

2. LED indicator

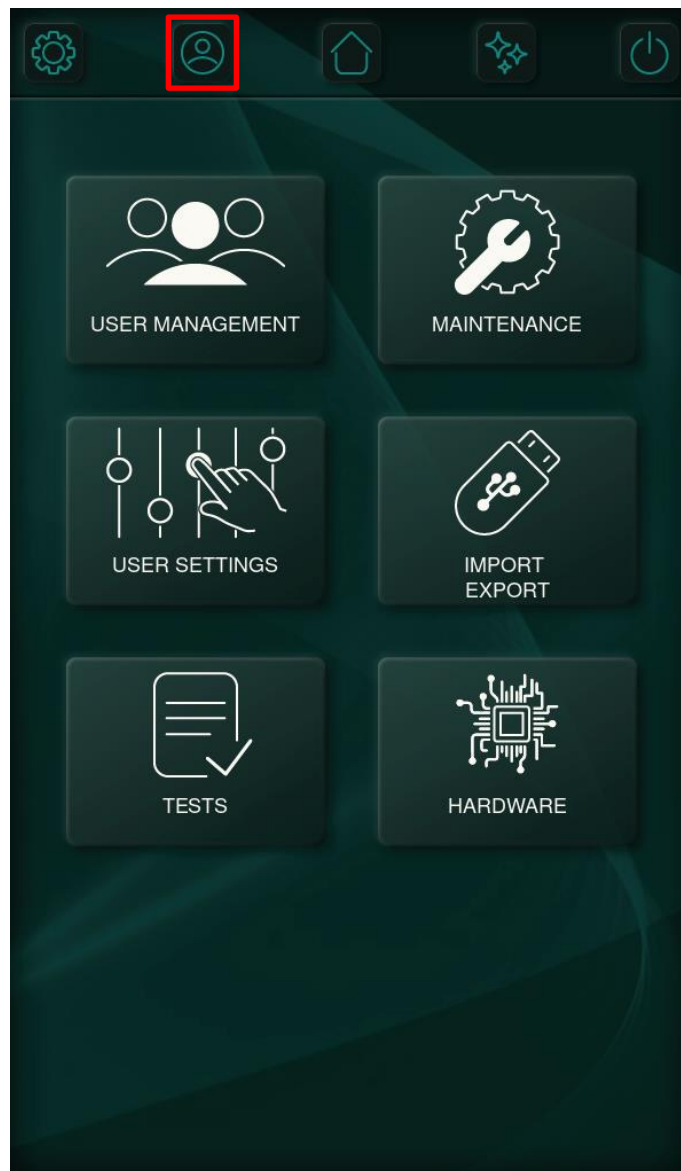
The status of the machine is indicated with the LED indicator. It will light up when the machine is in standby mode.

3.2 Starting up the machine

1. Plug in the power cord.
2. The machine will automatically boot and show the home screen.

3.3 Access to the settings menu

1. Press the user button to open the login menu.
2. The Owner is automatically signed in, press the switch user button and sign in with the Dealer code **4753**.
3. When the gear icon is pressed the settings menu will be displayed.
*Different menus are accessible based on the signed-in user level. The authorization levels include User, Owner, and Dealer.

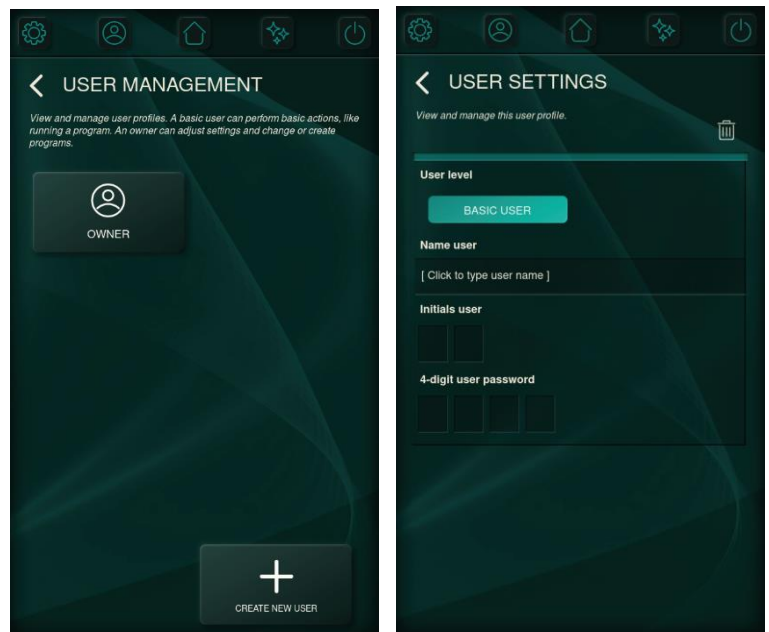


3.4 User management

Owners can change information of and make new users in the user management menu. Pressing the owner button opens the user settings, where the name, initials and password can be changed. Different levels of authorization can be assigned to users by pressing the user level button. The basic user is only allowed to run existing programs and is not able to access the settings menu.

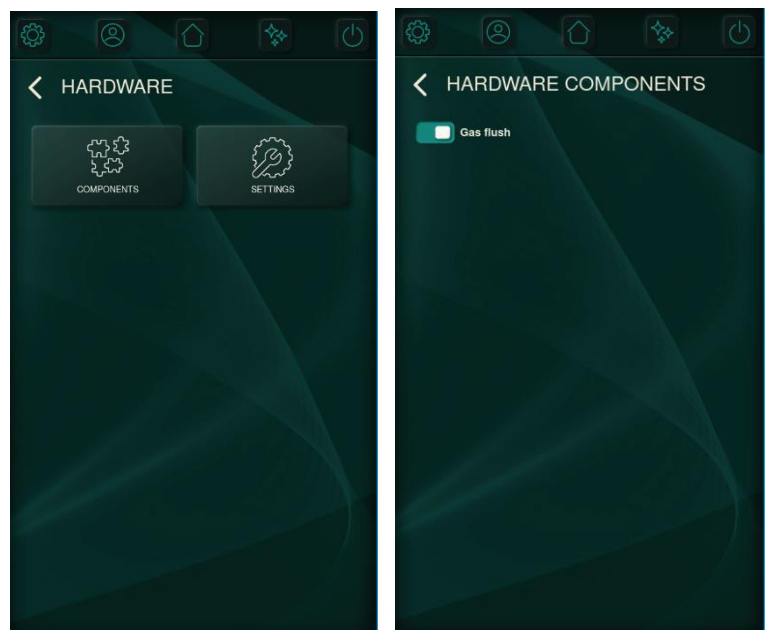
The username has multiple uses, it's used for HACCP logs and can be printed on the label when a label printer is installed.

Existing users can be removed from the overview by opening the profile and pressing the garbage bin button. This action cannot be undone!



3.5 Hardware components

The Aura series can be equipped with a gas add-on. After installing the add-on the function needs to be enabled in the software. Enabling the gas function can be done in the **HARDWARE → COMPONENTS** menu. When enabled the gas function will be shown in manual use and the product programs.



3.6 Hardware settings

Tenderize accuracy

The tenderize accuracy is the allowable pressure difference during the tenderize process. When the set vacuum pressure is reached the pressure is allowed to drop a certain amount of millibars before the pump will start again. Increasing the value will allow more pressure difference

Red meat aeration time

During the red meat process air is allowed back in the chamber to wrap the bag around the product. The red meat aeration time dictates the time that air is let back in the chamber.

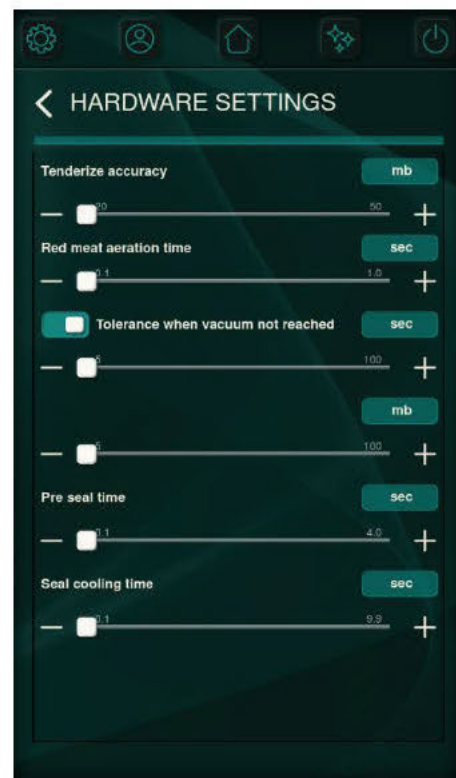
Tolerance when vacuum not reached

During the vacuum cycle the vacuum pressure is monitored, when the vacuum does not increase the process will be stopped. The allowable time that the vacuum does not increase can be altered with the first slider.

The second slider dictates the allowable point to continue the process, when the vacuum level differs more than the set amount of mbar the process is stopped. This is to ensure a proper vacuum level before sealing.

Pre seal time and Seal cooling time

The seal process is defined by three steps. Pre seal time (time that the sealbar is up before sealing), seal time (time that the sealbar is turned on) and the seal cooling time (time that the sealbar stays up after the seal time).



Only change the hardware settings after consulting Henkelman.

4 Import & Export

By incorporating various import and export capabilities, machines can easily be upgraded to the latest standards. This combined with continuous improvements in the software, pre-programs and functions, result in a better general user experience.

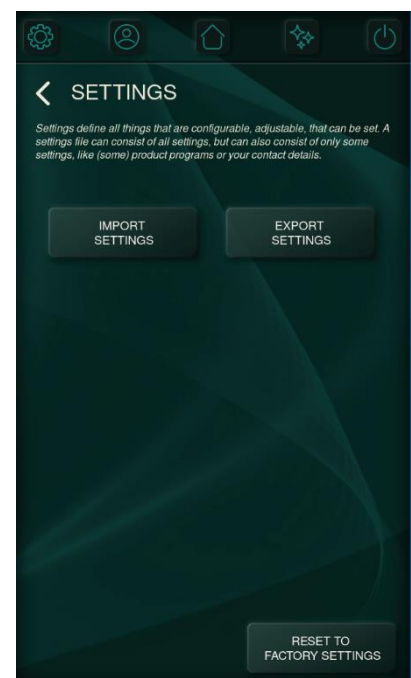
Software updates and improved setting/program files will be published on the Diamond Dealer portal.



4.1 Settings

Settings define all things that are configurable, adjustable and that can be set. A settings file can consist of all settings, but can also consist of product programs or contact details.

Importing and exporting settings allows quick and easy synchronization of machines. After Inserting an USB press the import or export settings button. When the import settings button is pressed an overview of files on the USB will be displayed. Select the desired file and press import, a pop-up will appear showing the progress.



4.2 Software

New software is distributed through the Dealer portal of Diamond. Compare the newest software version with the current software version on the module.

If the software needs to be updated, copy the new software file to a USB without renaming it, as this may prevent the software from updating.

The software can be updated by power cycling the machine with the USB inserted, or through the Import & Export → Software menu. Pressing the “update software” button will reboot the system and start the update.

During the update, which takes approximately 10 minutes, the LED indicator at the bottom of the display will show the progress.

Yellow LED	Searching for update file
Green LED	Installing update
Blue LED	Verifying update
Red LED	Update unsuccessful

When an update is unsuccessful, power cycle the machine with the USB still in the machine, the machine will try to update again. If the update is still unsuccessful, contact the service department.

*The AURA will not update with the same software version that is already installed.

**USBs with exFAT formatting are not suitable for updating the Aura.



4.3 HACCP

HACCP data will be gathered based on user login, time/date, program and achieved vacuum. This data will be combined in a XML file format which can be exported by inserting an USB and pressing the “EXPORT HACCP DATA” button.

When the data has been exported and saved on another device it's advised to clear the HACCP data records, otherwise it will add the new records to the existing list resulting in massive HACCP data logs. Clearing the logs can be achieved by pressing the garbage bin icon.



4.4 Factory reset

A customer or dealer may have changed so many settings that the machine no longer works as expected. In this situation, it can be easy to restore the factory settings.

The settings that may be restored depend on the authorisation level of the logged in user.

Owner (code : 1324)	Dealer (code : 4753)
Clear favourites	Clear favourites
Clear custom programs	Clear custom programs
Visibility of product programs	Visibility of product programs
Display settings	Display settings
	Remove users
	Maintenance settings
	Language
	Units
	Hardware settings

5 Maintenance

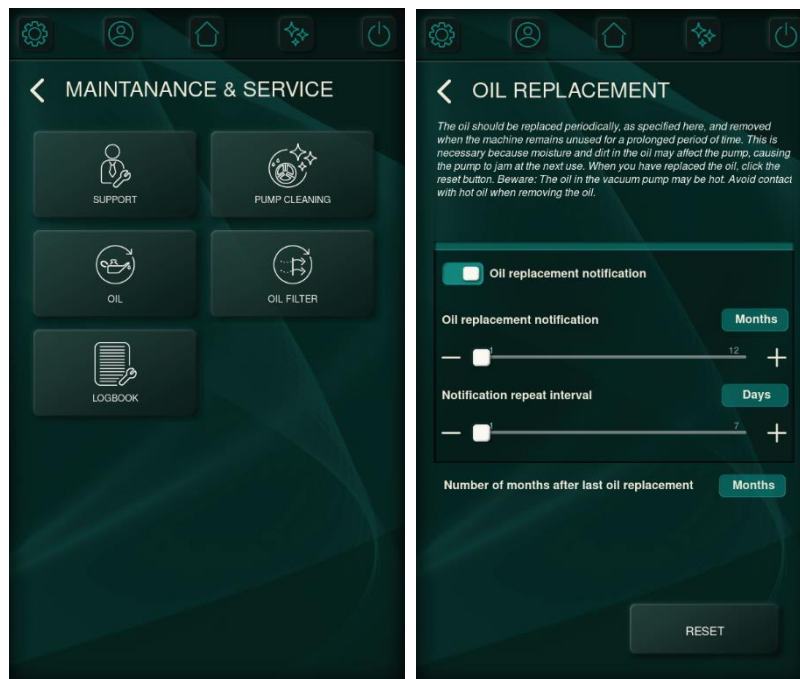
5.1 Maintenance schedule

Operation *	1-D	1-W	1-M	6-M	1-Y	4-Y
Cleaning						
Clean the machine.	X					
Inspections						
Check the oil level.		X				
Run the pump cleaning program.		X				
Inspect the sealing bars.		X				
Inspect the silicone seal of the silicone holders.		X				
Inspect the lid seal.		X				
Check the plastic lid for cracks (if applicable).		X				
Inspect the lid springs. Pay particular attention to signs of any damage and the lid spring fixings.					X	
Lubrication						
Change the vacuum pump oil and oil filter. See <i>Technical specifications</i> on page 26 for oil type.				X		
Replacement						
Replace the seal wires.				X		
Replace the silicone seal of the silicone holders.				X		
Replace the lid seal.				X		
Replace the oil mist filter.					X	
Please contact your dealer for a professional service.					X	
Replace the plastic lid (if applicable).						X

* 1-D = Daily, 1-W = Weekly, 1-M = Every month, 6-M = Every 6 months, 1-Y = Yearly, 4-Y = Every 4 years

5.2 Maintenance counters

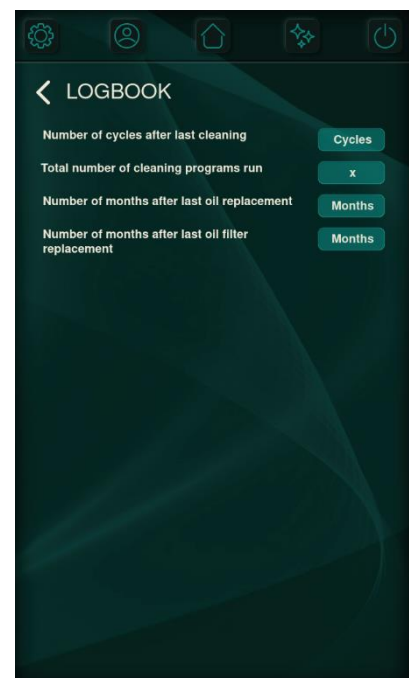
Under the maintenance & service menu three maintenance counters are available, Pump cleaning, Oil replacement and the oil filter. For every counter the parameters of notification and repeat interval can be set. When the maintenance task has been done the pop-up can be cleared/reset in the same menu.



5.3 Logbook

The logbook provides an overview of maintenance information. This includes the following topics:

- number of cycles after last cleaning cycle
- total number of cleaning programs run
- number of months after last oil replacement
- number of months after last oil filter replacement



5.4 Support

Under the maintenance & service menu a support menu is available to insert contact information for the owner. The QR code refers to the Diamond B.V. service and support website where the digital version of the user manual can be downloaded.



6 Troubleshooting

6.1 Troubleshooting guide

The tables below indicate the possible problems, their causes and the steps to be taken.

Problem	Operation	More information
Control panel does not light up.	• Plug the machine into the mains. • Check the circuit breaker. • Check or replace the control transformer fuse.	
The control panel is switched on but there is no activity after closing the lid.	• Check or adjust the lid switch. • Check or replace the control transformer fuse.	
Insufficient final vacuum.	Check the program's vacuum settings and adjust if necessary.	See "Operation" in the user manual.
	Check whether the extraction opening is not covered.	See "Vacuum pump" in the user manual.
	Check the oil level in the pump.	See "Removing oil, adding oil" in the user manual.
	Check/replace the oil mist filter.	See "Replacing the oil mist filter" in the user manual.
	Check/replace the lid seal.	See "Replacing the lid seal" in the user manual.
Vacuum process is slow.	Check whether the extraction opening is not covered.	See "Vacuum pump" in the user manual.
	Check the oil level in the pump.	See "Removing oil, adding oil" in the user manual.
	Check/replace the oil mist filter.	See "Replacing the oil mist filter" in the user manual.
Vacuum bag is not sealed correctly.	Check the program's seal settings and adjust if necessary.	See "Operation" in the user manual.
	Check/replace the Teflon tape and the sealing wires.	See "Replacing the seal wire" in the user manual.

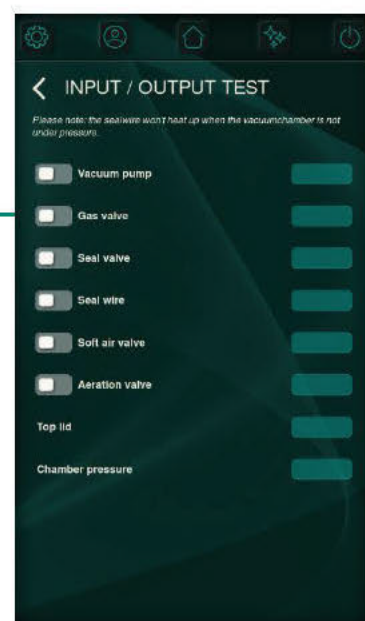
Problem	Operation	More information
	Check/replace the silicone seal in the silicone holders.	See “Replacing the silicone seals in the silicone holders” in the user manual
	Check inside the vacuum bag for any dirt and clean it.	
Lid does not open automatically.	Check the gas springs in the lid.	

6.2 Output test

A step-by-step cycle test can be done using the output test mode. Each switch, valve or relay can individually be tested to make troubleshooting easier.



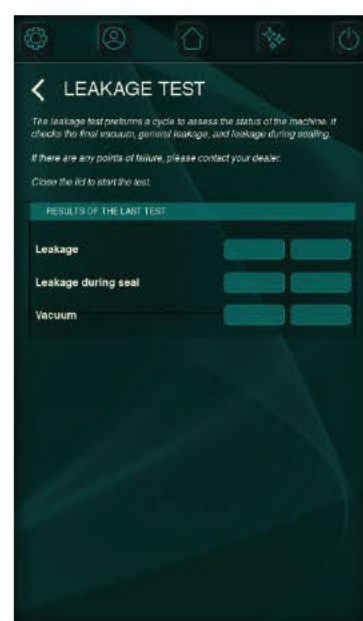
Beware that not all functions will work properly without vacuum in the chamber. Vacuum is necessary to lift the sealbar, activate the seal wire and see the effect of the soft-air and aeration valve.



6.3 Leakage test

The leakage test will run a cycle that measures the vacuum pressure during different stages of the cycle. It will measure the leakage when the pressure is on hold, during the sealing process and what the maximal achievable vacuum pressure is within set boundaries.

When the cycle is ended the result will be shown accompanied with a Pass/Fail.



7 Annexes

7.1 Technical specifications

Aura series	35	35+	42	42+	42XL	42XL+
General						
Ambient temperature during operation	5 to 30 °C	5 to 30 °C	5 to 30 °C	5 to 30 °C	5 to 30 °C	5 to 30 °C
Machine operating conditions: relative humidity (non-condensing)	10-90%	10-90%	10-90%	10-90%	10-90%	10-90%
Noise production	<70 dB(A)	<70 dB(A)	<70 dB(A)	<70 dB(A)	<70 dB(A)	<70 dB(A)
Maximum daily production	5 h/day	5 h/day	5 h/day	5 h/day	5 h/day	5 h/day
Machine dimensions						
Width	451 mm	451 mm	491 mm	491 mm	491 mm	491 mm
Length	543 mm	543 mm	523 mm	523 mm	613 mm	613 mm
Height	454 mm	454 mm	464 mm	464 mm	469 mm	469 mm
Weight	36 kg	41 kg	57 kg	61 kg	68 kg	72 kg
Maximum product height	150 mm	150 mm	180 mm		180 mm	
Electrical connection						
Voltage	*	*	*	*	*	*
Connected load	*	*	*	*	*	*
Vacuum pump						
Capacity	8 m ³ /h	16 m ³ /h	16 m ³ /h	21 m ³ /h	16 m ³ /h	21 m ³ /h
Oil	0.25 litres	0.3 litres	0.3 litres	0.5 litres	0.3 litres	0.5 litres
Type of synthetic oil	Foodmax Air 32	Foodmax Air 32	Foodmax Air 32	Foodmax Air 32	Foodmax Air 32	Foodmax Air 32
Ambient temperature range for synthetic oil	-10 to 40°C**	-10 to 40°C**	-10 to 40°C**	-10 to 40°C**	-10 to 40°C**	-10 to 40°C**

*See machine plate.

**If the temperature is outside this range, please contact your dealer.

7.2 Logbook

This logbook should include the following:

- Annual maintenance work
- Major replacements and emergencies
- Modifications

[illegible]