





Biocare Medical 60 Berry Drive Pacheco, CA USA 94553 P: 1-800-799-9499 www.biocare.net



VITRO S.A Calle Luís Fuentes Bejarano Edificio Nudo Norte (Local 3) 41020 Sevilla (SPAIN) www.vitro.bio T. +34 902 366 974

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1 Intended Use

For *in vitro* diagnostics. Instrument for automated histological staining of formalin-fixed, paraffinembedded tissue sections (FFPE). The instrument is designed for use in clinicopathological and physiological situations requiring the analysis of associated biomarkers. This platform is designed to be operated by qualified professionals trained in immunohistochemistry (IHC) techniques in histopathology-related laboratories.

2 Principle Method

Immunohistochemistry is a procedure that aims to detect, amplify and visualize the presence of an antigen by binding to a specific antibody and revealed through a colorimetric enzyme-linked immunosorbent reaction, allowing the presence and localization of the antigen in the tissue to be observed by microscopy. The NeoPATH Pro performs the protocol in an automated way, focusing on four main steps:

- Tissue deparaffinization: First, paraffin is removed from FFPE tissue sections.

- Antigen retrieval induced by heat or enzyme digestion: Once the sample is deparaffinized, an antigen retrieval step is performed to expose the antigen by high temperature or enzymatic treatment. This can be done at different pH values with Low-AR or High-AR reagents depending on the antibody used.

- Detection and Development: Once the antigens have been unmasked, the primary antibody is added, which will bind specifically to the antigen under evaluation. Subsequently, a secondary antibody bound to an enzyme allows visualization of the binding site through an enzymatic reaction that generates a colored product.

- Counterstaining: Finally, the nuclei are stained with hematoxylin to contrast the tissue and identify tissue and cellular structures. Once finished, the stained tissue section is covered with a coverslip and permanent mounting medium for microscopic visualization.

3 System Specifications

3.1 General specifications

The NeoPATH Pro consists of the following parts:

Slide Rack. It contains 42 reaction chambers to place the slides and perform the techniques. Each of them has an LED to indicate its status.

Slides: slides treated for use in immunohistochemistry or hybridization techniques should be used, preferably positively charged slides or silanized slides, whose recommended dimensions are 25 mm x 75 mm x 1 mm.

Reagent Vial Rack. It contains space for 7 reagent racks. Each of them contains a capacity of 8 reagent vials. There is a cold table under the rack in order to keep the reagents at a lower temperature. Temperatures are controlled and parameterizable.

Bulk Flask Containers The instrument has 6 flasks with a maximum capacity of 2 liters, with the reagents required for the different processes. The layout is as follows from left to right:

- Flask 1: contains COVER.
- Flask 2: contains DEWAX.

- Flask 3: contains DAB ENHANCER.
- Flask 4: contains HIGH-AR.
- Flask 5: contains DEWAX-2.
- Flask 6: contains HEMATOXYLIN.





Large Bulk Containers The instrument has 2 bottles with a maximum capacity of 25 liters, with the reagents required for the different washing processes. The layout is as follows:

- Bulk 1: contains WASH BUFFER.
- Bulk 2: contains CLEANING SOLUTION.

Waste Containers. The instrument has 2 containers with a maximum capacity of 25 l. to store the waste generated during series and maintenance. The layout is as follows:

- Waste 1: Hazardous Waste.
- Waste 2: Non-hazardous Waste.

NeoPATH Pro generates 5-6 liters of waste per run of 42 immunohistochemistry tests. This represents approximately 130 milliliters of waste per test. Of the total waste, approximately 60% is non-hazardous waste and the remaining 40% is hazardous waste.

Handling of this waste must be carried out in accordance with current legislation and local regulations and with the involvement of an authorized waste manager if necessary. The waste containers are not designed for the transport of hazardous waste (**DO NOT hand over** to the authorized waste handler). An approved hazardous waste container must be used to store and transport hazardous waste.

Syringe Wash Station. The instrument will simultaneously wash the inside and outside of the reagent probe. It has an anti-overflow safety system due to blockages in the hydraulic waste circuit.

Spreader Washing Station. This is a bathtub style wash station for complete washing of the spreader roll with a drying area for the spreader roll and an anti-overflow safety system due to blockages in the hydraulic waste circuit.

Mixing Vial Rack. It contains space to place up to 6 mixing vials where the system will automatically perform the DAB and AP mix.



Waste Tray. It receives all reagent wastes and has a drainage system that allows for the separate removal of hazardous and non-hazardous wastes into the corresponding waste. It has an anti-overflow safety system due to blockages in the hydraulic waste circuit.

Robotic Arm. The arm will move in the XYZ axis and will have the following components:

- 1. Spreader roller. Allows to spread very viscous reagents on the preparation. Intended for ISH testing
- 2. Slide washing system with Washing Solution or Buffer.
- 3. Air Blow Head to remove reagents located on the slide.

- 4. Reagent Comb. A cluster of 6 probes connected to the bulk flask containers whose purpose is to take the reagents from the flasks and dispense them onto the samples.
- 5. Reagent probe. Its purpose is to collect the individual reagents from the vials and dispense them onto the slides.
- 6. Camera. The camera has the following functions.
 - \circ Determine the position of each element read.
 - Detect the correct positioning of the slides.
 - Scan labels on slides and vials.
 - \circ $\;$ Register slides and vials if the code contains all the necessary information.
 - Detect the existence or absence of the vials and whether they are open or closed.
 - o Detect mixing tubes



Printer. The instrument includes a ZEBRA printer with all the accessories to print slide labels.







3.2 <u>Technical specifications</u>

Equipment labeling for Legal Manufacturer label



Labeling for NEOPATH PRO to be Provided by Purchaser (dimensions: 3" x 5"): New Instrument Label: RMNPP30001 REV A Refurbished Instrument Label: RMNPP30002 REV A



Label symbols

IVD	Medical device for in vitro diagnostics	~~~	Date of manufacture
***	Manufacturer	SN	Serial number
	Waste electrical and electronic equipment (WEEE)	REF	Catalog number
\triangle	Caution (contains hazardous waste)	Ĩ	Please refer to the instructions for use
~	Alternating current		·

Space Requirements

The following spaces must be available around the equipment:





Item	Width	Depth	Height	
NeoPATH Pro	1376 mm (54.17")	741 mm (29.17")	1229.5 mm (48.41")	
PC & Computer	800 mm (31.50")	-	-	
Recommended Safe Distance	100 mm (3.94")	100 mm (3.94")	-	

Weight

- 150kg (331lbs) Benchtop model
- 260kg (574lbs) Floor model with Dock Accessory

Electrical requirements

- Frequency: 50 to 60 Hz
- Voltage: 100-240 V (Universal input)
- Current rating: 5.5 A for 220-240 V
- Current rating: 12 A for 100-110 V
- Power consumption: 1100W maximum
- Standby power consumption: 0,06 kWh

Storage Conditions

• Temperature requirement: -20° - 50°C

Operating Conditions

• Temperature requirement: 5° - 32° C

• Humidity: 40% - 80%

Warranty

The NeoPATH Pro warranty is for one year (12 months) from receipt of purchase and covers all parts and labor when performed solely by Biocare Medical. Warranty is invalidated if equipment is abused, damaged, or improperly maintained by customer. Warranty is not transferable to any other party should the equipment be resold or transferred by the customer to another party. To the extent permitted by law, Biocare Medical disclaims any liability for any incidental or consequential damages related to this equipment or for any warranty related services it performs.

Safety Warning Labels

Warning labels posted on the NeoPATH Pro and in this manual warn you about sources of potential injury or harm. A key for each safety warning label is referenced in the Table.

lcon	Meaning
	CAUTION: contains hazardous waste
Â	CAUTION: Risk of electric shock! This symbol identifies components of the instrument that pose a risk of electric shock if mishandled.
	CAUTION: Hot surface! This symbol identifies instrument components that pose a risk of personal injury due to excessively high temperature if handled improperly.

CAUTION : biohazard
CAUTION: Pinch/Catch Point! This symbol identifies instrument components that may pose a risk of personal injury when moved.

4 INSTRUCTIONS FOR USE

4.1 Turn on and start the system

Turn on the system. To do this, press the power button located at the bottom right front of the instrument.

Turn on the label printer.

Turn on the computer and log on to the system. From Windows, double-clicking on the icon

password fields must be filled in and the "Log in" button must be clicked to open the application.

Before logging in, you have the option to configure the home screen, rather than the application itself, in either English or Spanish. To do so, you'll need to select the language in which the home screen will be displayed from the drop-down menu.

English Spanish English

	We welcome you Enter your credentials	
Username		
Password		8
	Sign in	

When the application is opened, after entering the appropriate login credentials, it will connect to the instrument initialize it.



Certain permissions will be available depending on the role of the user accessing the application.

4.2 Screen Layout

The following is a brief description of the elements that make up the main screen that is displayed when the application is opened:

NEO	1. Menu Instrumento VS-1 2. Button panel		START	Instrumento	VS-1		Read	iy		4. F	ersonal	Configura	ation		SI	C→
n	Instrumento VS-1 Reagents	Slide			ding Ma										~	II %
supes	0 Containers - 0 Kit 🖉	0 Slide	s - 0 High p	riority 🏴									5. Ex	it	election (⊃∓
REAGENTS	н															
REPORTS	G C C C C C C C C C C C C C C C C C C C	c	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		8	0	0	0	0	0	0	0	0	o	0	0	0	0	0
	c	A														
ଡ୍ଡ			1	2	3	4	5	6	7	8	9	10	11	12	13	14
SETTINES		Bulk Reag	pents					_	Carboys			Mixing	viab	Waste dep	iosits	
() IELP		COVER 1	DEW	CAB	ENH 3	HIGH-AR	DEWAX-2	HXHDH3	WASH	DUFFER 0	CLEANING SOLUTION 2			HAZARDO	US NON H	AZARDOUS 2

- 1. MAIN MENU. Gives access to each of the essential actions:
 - **SLIDE**: manages pending work and allows the user to create or print labels for lab testing.
 - **REAGENTS:**
 - Inventory management of reagents.
 - Management and configuration of the reagents that can be used in the instrument and their characteristics.
 - **REPORTS:** Access to view and export reports generated by the application. The reports include results from series executions, detailed information about slides and reagents, as well as a log of user activity.
 - SETTINGS:
 - Management of the different configuration options at instrument level.
 - Management and configuration of application users.
 - Management and configuration of protocols and techniques.
 - **HELP**: Provides access to a quick start guide and a complete manual for consulting and answering questions about the application's operation and use.
 - Quick Start Guide: Simplified instructions for quick reference of key aspects.
 - Complete Manual: Detailed manual covering all the application's features and settings.
- 2. BUTTON PANELS: control the instrument and initiate the reading and verification of the slides and reagent racks before allowing the start of a run.
 - Report the status of the instrument at any given moment.
- 3. MAP. Presents each physical component of the instrument and its status.
 - o Slide rack.
 - Reagent rack.
 - o Bulk Flasks.
 - o Large Bulk Containers
 - Mixing vials.
 - o Waste.

- 4. **PERSONAL CONFIGURATION**: manage language, password and personalized avatar.
- 5. **EXIT**: the "Exit" icon closes the application.

4.3 Personal configuration

Personal Settings can be accessed from any screen you are on from the profile icon of the user who has accessed the application, by clicking on PERSONAL SETTINGS.



In the Personal Settings window, the user data is displayed. The actions that can be carried out are as follows:

NEOI	PATH RO Instrumento	15 -1		Instrumento VS-1	Roady	SU C→
SLIDES REAGENTS	SETTINGS Avatar Construction Aboved Here prog. jp.g.geg	Username Seperusurio Name Senvico	Sumane Administrador	Muil servico teorico1@vitro.iso	Larguage English •	
REFORME REFORME	Password Famoil	Ounge parsonned				
€ Settines						
(?) Helt						

- Change or delete avatar.
 - By clicking on the icon , you will be able to choose the path of the desired image to change the avatar.
 - \circ From the icon \square , you can delete the currently configured avatar.

• Change language. A selecatble list of available languages is displayed. The selected language is the language that is set by default for the user who configures it.

Language	
English	-
Spanish	
English	

• Change password. When you click on the Change Password button, the following window opens with information about the password requirements and the necessary fields to be filled in to change the password.

Password change	×
The password must contain at least 8 characters and include a number, one uppercase letter and one lowercase letter.	
Current password *	
Ø	
New password *	
<i>Z</i>	
Confirm new password *	
Ø	
Cancel Save	

4.4 Prepare slides and print labels

Click on the "Slides" button in the main menu to open the slide management module.



The list of slides created in the system will open. To create a new one from this section, click on the "+" button.

The following fields are available for registering a slide in the system:

- **Identifier:** This field appears blank by default, allowing customization of the slide identification.
- Priority: Defaults to "Normal" priority but can be edited to "Urgent."
- **Pathologist:** A pathologist can be created or directly assigned to be responsible for the sample.
- **Technique:** The user must select one or more techniques from the available list, specifying how many times each technique should be performed for the same ID.
- **Center:** This is a mandatory field. If the installation is single-center, the field will not be visible. In multi-center installations, the different centers configured in the system will be displayed.
- Notes:
- Print Labels Checkbox: Checked by default.

Once the data entry is complete, the user will have the following options:

- Save: Saves the created slide and closes the window.
- Save and Add Another: Saves the current slide and allows you to continue creating more slides without leaving the window. This makes it easy to quickly enter multiple consecutive slides with similar identifiers.

dentification		Technique* 0 Selected techniques		
dentifier*	ID Slides	Filter		 Repeats
	192	19q13/19p13 FISH Probe	1	\sim
Viority	\sim	1p36/1q25 FISH Probe	1	\sim
athologist Select	+	A.C.IX	1	\sim
lotes		ACT.MG	1	\sim
		ACT.ML	1	\sim
		ACT.SAR	1	\sim
		ACTH	1	\sim
			1	\sim

When the user clicks "Save and Add Another," the functionality is similar to the "Save" button, but with one key difference: the modal window does not close, allowing the user to continue entering more slides without having to reopen the window.

The following fields are NOT reset when the button is clicked.

- **Identifier:** The previously entered identifier is retained, making it easier to create consecutive slides.
- **Center:** If the center field is enabled, the entered information will be retained.
- Pathologist: The previously assigned pathologist is retained.
- **Print Check:** If the user selected the print option, it is retained.

The following fields ARE reset when the button is clicked.

- Priority: Resets to its default value, which is "Normal."
- Technique: The field is cleared to allow new technique selections.
- Number of Repeats: The field is reset to allow new repeats to be entered if needed.
- Notes Field: The notes field is cleared to be filled again if necessary.

	Unable to print labels
Check all co	nnections and ensure that the device is power on

If the label cannot be printed due to a problem with the printer, this message will be displayed. Please ensure that the device is turned on and connected to the computer.

Once the slide has been created, it will appear in the list with the status "Pending" and the following information will be provided:

- Identification.
- Site (only for multi-site installations).
- Origin.
- Status.
- Technique.
- Protocol.
- Priority.
- Pathologist (if the field has been filled out).
- Instrument Name/Serial. This field is only filled out when the camera has read the label.
- Creation date.
- Print date.
- End of staining run.

\square	Jines													
SLIDES	test		0							┝ Generate Run fik	≥ I+D +I+D	+ 🗟	Ø	
		Identifier	Origin	Status	Technique	Protocol	Priority	Pathologist	Instrument	Creation	Printing		Actions	
ŧ,		TEST/MVS001	Manual	PENDING	ACT.MG	#IHQ_105C_H	Normal			03/20/2025 10:04:24		Ś	à 4	:
REAGENTS		TEST/MVS002	Manual	PENDING	A.C.IX	#IHQ_105C_H	Normal			03/20/2025 10:04:24		ę	2 A	:
Đ														

4.4.1 Actions on a pending slide

At the slide level there are diferents types of actions that can be performed:

• **Print the label.** The label will be printed individually for only one specific slide. With multiple selection, activate the top print button, and pressing it will print the labels for all the selected slides. Once the label printing is complete, a confirmation message will appear.

Slides												
test	0							Generate Run file	► I+D	+1+D	+ 2 0	,
Ident	tifier Orig	in Status	Technique	Protocol	Priority	Pathologist	Instrument	Creation	Printing		Action	ns
Protocol - Slidelab	el								×		율	*
Slidelabel ID	Position		Status			Inst	rument					
TEST/MVS001				PENDING								
Technique ACT.MG	Protocol #IHQ_10	5C_HRP_10MINAB_V.	Protoc	ol descript	ion							
Application of protocol #	HQ_105C_HRP_1	MINAB_V.02										
Start date		End date			Tot	tal time						
Stages and steps												
1. Dewaxing	0/6	Stage not started							~			
2. HIER	0/11	Stage not started							\sim			
4. Detection	0/23	Stage not started							~			
Reagents									~			

- **Review** the steps to be performed on that sample. The following screen will open, displaying the phases and steps to be performed.
- Change the status of a pending slide to completed or Click the three dots, Change Slide Status > Completed Validated > Change Status. With multiple selection, operation can be performed on different slides.

	More options	vali	idated.
	< Export	0	and
Finalized	and Validated	the	same

The slide TEST/MVS0	001 - ACT.MG		
is in state Pendin	g loading		
Are you sure you want to chan and Validated	ge the slide to I status?	Finalized	

4.5 <u>Physically load slides into the instrument</u>

Slides should be loaded into the instrument preferably from 1-A to 14-C position. That is, from left to right and starting with the row closest to the user, row A.

They should be placed with the label facing up and towards the front of the instrument.



4.6 Physically load reagent vials into the instrument

Prepare the reagents following the instructions provided by Biocare Medical, LLC and detailed in the data sheet of each vial.

The reagent vials should be loaded with the rack removed and the lid should be open. Once the vials have been placed, the rack must be inserted in the corresponding position of the instrument. At that time, the system will detect the rack and display it on the screen automatically marked for reading.





4.7 <u>Place the mixing vials</u>

The instrument has space for 6 mixing vials. Before starting a run, check that they are all in place and clean. If this is not the case, the missing ones must be installed and/or unsuitable ones must be replaced.



Mixing vials

4.8 Refill bulk flasks

It is very important to record each replacement of the bulk flask in the system to maintain traceability of the slides made with that batch. The flasks should be removed and replaced with the appropriate reagent. Once replaced, screw the cap back on and place it in the corresponding position.



If there isn't enough volume to start a set, the device will report a shortage. To resolve this issue, replace the flask and you need to go to the "<u>Troubleshooting Flask Problems</u>" section to address it at the application level

Note: If the device hasn't been used for several days, the system integrates a purge of the flasks that will be used at the beginning of the cycle.



4.9 Refill large bulk containers

It is very important to record each filling of the bulk carboy in the system to maintain traceability of the slides made with that batch.

The cap should be unscrewed, and the bottle filled with the appropriate reagent. Once filled, the cap must be screwed back on and placed in the corresponding position.



The user should check that sufficient volume is available before starting a run. If there is not enough volume to start a run, the equipment will notify you. To resolve this issue, the bulk reagent must be filled, and you need to go to the "**Troubleshoot Containers**" section to address it at the application level.

Note: If the device hasn't been used for several days, the system integrates a purge of the carboys that will be used at the beginning of the cycle.

4.10 Emptying waste containers

Unscrew the cap and empty the waste container. Dispose of waste in accordance with federal and local regulations.

The connector of the tube will be disconnected from the stopper using the metal tab and the waste will ve disposed of properly. The cap will then be screwed on again and the tubing will then be reconnected to the container.





The instrument checks that the waste containers are not full before starting a run; otherwise, the system will display the "Container Full" error. To resolve this issue, the waste in the container must be discarded, and you need to go to the **"Troubleshoot Containers"** section to address it at the application level.

4.11 Starting a run

4.11.1 Disable slide rack positions

There is the possibility of disabling positions, if a problem is detected in one of the reaction chambers. This prevents any slides from being placed in this position.

 Stide - 0 Highproity
 Manual Section
 Image: Constrained and the section of the se

By right-clicking on a position in the slide rack, the **Disable Position** option appears.

A disabled position will not be taken into account in the execution of a run and will be represented as shown below. On the instrument the position led will be off.



4.11.2 Scanning of the slide rack

Scanning of the slide rack can be done in two ways:

• **Automatic mode:** the instrument will scan from position 1-A to position 14-C, as many positions as slides have been indicated to be loaded in the instrument in the next window.

Init run		×
	There are 42 available positions	
	Unavailable or disabled positions won't be checked	
	How many slides have you loaded?	
	- 0 +	
	Cancel	

- Manual mode: Selection of the specific positions to be scanned.
 - The manual mode is activated from the *Manual selection* activation button, and the positions to be scanned must be selected on the position of the slide rack.



4.11.3 Scanning of the reagent rack

Scanning of the vial rack can be done in two ways:

- **Automatic mode:** the instrument will scan the positions according to the situation in which the vial rack was previously located:
 - If racks are loaded or there are manually marked positions, only those racks or positions will be read.
 - If no new rack has been loaded and there are previously detected vials, all racks in the rack will be reread and a check will be made to see if there is sufficient volume for the series.
 - If no rack or position is selected and no previously detected vial is present, all loaded racks will be read.



- Manual mode: Selection of the positions of the vial rack to be scanned.
 - The manual mode is activated from the Manual selection activation button, and the positions to be scanned must be selected on the position of the reagent vial rack.



4.11.4 <u>Begin a run</u>

Once the instrument is prepared with all slides and containers, to run a series, close the hood and click the **"START"** button on the Work in Progress screen.

Before starting the series, if the equipment has not been used for several days, a priming of the flasks must be performed before starting the cycle.



The system will first check that the containers (bulk flasks, large bulks and waste containers) are correctly prepared for the execution of a series.

NEOR	PAI	T H RO	0%	VStainerS					STOP	Сонтике	VStaine	er5	0	It is not possible	e to start the ru waste deposit	n						SL) (→
0	VSta Rea	ainer5 gents							Slide														II %
SLIDES	00	D v	Kit			Manual	selection (0 Slie	les - 0 High p	riority 🏴										Manual so	election (⊃ ∓
REAGENTS	н	0	o	o	0	0	0	0															
REPORTS	G	0	0	0	0	0	0	0	C	0	0	0	0	o	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0															
	E	0	0	0	0	0	0	0	В	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	D	0	0	o	0	0	0	0															
	c	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	o	0	0	0	o	0	0
Ø_	В	0	0	0	0	0	0	0		1	2	3	4	5	6	7	8	9	10	11	12	13	14
SETTINGS	A	0	0	0	0	0	0	0	Bulk Res	gents DEW	AX DA	8.ENH	HIGH-AR	DEWAX-2	HXHDH3	Carboys WASH I	BUFFER	CLEANING	Mixing	vials	Waste dep	osits	
(?) HE P				63			60	a 7.	1			3	4	s	6		9	2			HAZARDOI 1	US NON H	AZARDOUS 2

After the verification of the bulks, the instrument proceeds to the scanning of the slide rack, the reagent vial tier, flasks and mixing vials. As indicated above, scanning will be performed in automatic mode or will be performed in manual mode if Manual selection has been activated.

After scanning the slide and vial rack, the scanned positions are displayed as the instrument performs the reading.

• **Slide rack:** the information displayed on each scanned position is the identification and technique of each slide in the rack.



• **Reagent Vial rack:** the information displayed on each scanned position is the acronym of the reagent contained in the vial of each position.



Once all checks are successfully completed, the estimated duration of the run will be displayed. With this information, the user can immediately start the run or schedule its start or end time. At this point it is also possible to cancel the run by unloading the slides to be able to start it again.

NEO	PA	THPRO						You can execute > the series	es					
~	VSta	niner5						Slide						II ×
5005			© Kit			Manual	selection (1 Sildes - 0 High priority M Run execution				Manual se	lection (
MEAGENTS.			DAB.A					Estimated time for completion \oslash 4 min						
								Start now						
							DAB.A	Program execution						
		0		Bloc.Ps		0		beschould within the next 24 hours						
		•			DA8.8			Finish						
			61 0 A		DABA •		•							
ø.		AMILOJ	BARD 0					Cancel run Start						
SETTINGS				AMILOJ		DABA		COVER DEWAX DAEDNH HIGH-AR DEWAX2 HIGH-GR				0		0
(?) HE P												HAZARDOL 1		

4.11.4.1 Troubleshooting bulk reagent problems (bulk flasks, large bulks and waste)

If during the verification of bulk flasks, large bottle containers and wastes a problem of insufficient volume or full waste tank is detected, a warning will be displayed, and the run cannot be executed until the problems are solved.

To correct the errors, click on the "**Correct errors**" button and proceed to refill the corresponding carafes, or empty the full waste tank, as appropriate. If you do not wish to continue with the run at this point, you have the option to Cancel the run by pressing the "**Cancel Run**" button.



The error in the corresponding containers is represented with the icon Θ . And, in addition, the button panel informs the user about the elements that have errors.



The error summary can also be accessed from the icon shown in the reagent rack.

NEO	0 %			N	Instrumento	VS-1	01	it is not possibl	e to start the r arboys	an -						SU	(→
0	Instrumento VS-1 Reagents		Slide														II %
SUDES	0 Containers - 0 Kit 🖉	Manual selection 💽 Ţ	0 Slide	s - 0 High pr	iority 🏓										Manual se	flection () Ţ
Carboys Position 1 2	Error () Insufficient volume Fill the carboy with WASH BUFFER () Insufficient volume Fill the carboy with CLEANING SOLUTION		c	o	0	0	0	0	0	0	0	0	0	0	0	0	0
	E 0		в	0	0	0	0	0	0	o	0	0	0	0	0	0	o
	c		A														
ଡ _ଡ	8			1	2	3	4	5	6	7	8	9	10	11	12	13	14
SETTINGS (?) HELP	A 0 (b) 1 (b) 2 (b) 3 (b) 4	85 86 87	Bulk Reag	DEWA	X DABE	NH F	HIGH-AR	DEWAX-2	нононз	Carboys	BUFFER	CLEANING SOLUTION		i vials	Waste depe	us NON H	AZARDOUS

Once the problems are resolved, physically on the instrument, click on each position with error and click on the "*Fix errors* " button.

ENGENTIS	
Waste deposit	
Position	Error
1	① Full deposit Empty the hazardous waste container
2	Full deposit Empty the non-hazardous waste container

The error then disappears from the position.

To refill bottles, you can do so directly from the main screen when the instrument is in the Ready state. You can also refill a run when it is stopped due to errors during testing.

By right-clicking on the bottle you want to fill and clicking Record Fill, the Record Fill window will automatically open, allowing you to manually enter the filling data. Since the series started when the refill was requested, the purging will be integrated into the series when it begins.

Once the bottle has been filled, the complete refill history can be accessed from the context menu of each bottle by clicking on Refills.

Once all errors have been corrected, the "Continue" button is enabled to continue with the rest of the checks, and the widget displays the error resolution.

4.11.4.2 Slide troubleshooting

During slide scanning, a number of problems may occur with the reading of loaded slides. When a slide error occurs, an information window is displayed with the position and the error that occurred on each position.

To fix the errors, click on the "*Fix errors*" button. If you do not wish to continue with the run at this point, you have the option to Cancel the series by pressing the "*Cancel Run*" button.



The error in the slide rack is represented by the following icon ¹. By clicking on the position the user can see all the information necessary to detect the error occurred

In addition, the error summary can be accessed via the icon at the top.

NEOI	PAT	TH mo	0%	VStainer5						VStainerS		() It	is not possible Errors in s	e to start the r slides	In						SL) (→
2005	VSta Rea 0 0	siner5 gents Containers -	0 Kit			Manual	selection (Slide 40 Slides -	0 High priority 🏴										Manual se	election (₹₹ ₹
REACONS	H	0	0	0	0	0	0	0	Position 2-A 3-A 4-A 5-A	Error Pending to vali Reading error Reading error Pending to vali	date date		PRUEBAJU LI/MVS005 ACTH	PRUEBAJU LI/MVS025 ALKSA4	PRUEBAJU LI/MVS024 ALKSA4	PRUEBAJU LI/MV5023 ALK544	KO/ MVS001 ACTH	KO/ MVS003 ACTH	PRUEBAJU LI/MVS026 ALK544	PRUEBAJU LI/MV5035 AMILO.A	PRUEBAJU LI/MV5007 ACTH	
REPORTS	r t	0	0	0	0	0	0	0	6-A 8-A 9-A 10-A 12-A 13-A	Reading error Pending to vali Pending to vali Pending to vali Pending to vali Pending to vali	date date date date date		PRUEBAJU LI/MVS029 AMILO.A	PRUEBAJU LI/MVS028 ALKSA4	PRUEBAJU LI/MVS027 ALK544	PRUEBAJU LI/MVS036 BARTON	PRUEBAJU LI/MVS040 BARTON	PRUEBAJU LI/MVS039 BARTON	PRUEBAJU LI/MVS037 BARTON	PRUEBAJU LI/MVS038 BARTON	PRUEBAJU LI/MVS033 AMILOA	PRUEBAJU LI/MVS012 ACT.MG
	D	0	0	•	•	0	0	0	2-C 9-C 10-C 14-C A	Discarded interrupted interrupted The slide doesn	't exist in sys	stem	REGRESIO N/MVS009 ACTH		•	REGRESIO N/MVS006 ACTH	REGRESIO N/MVS005 ACTH	REGRESIO N/MVS004 ACTH		REGRESIO N/MVS002 ACTH	REGRESIO N/MVS001 ACTH	QAV MVS139 ACT.MG
⊗ ⊛ settings		0	0	0	0	•	0	0	Bulk Reagents	• 9	3	4	5	6	o 7 Carboys	8	9	10 Mixing	n 11 g vials	12 Waste dep	13 Nosits	. н
() HE 2	A	•	0 (b) 2	• (5 3	•	•	•	o († 7	COVER 1	DEWAX DABLE	NH HIGH-	AR	DEWAX-2	HXXHDH3	WASH	BUFFER	CLEANING SOLUTION 2			HAZARDO	US NON H	AZARDOUS 2

To eliminate the problems that appear during the run, the user must click on the error itself.

Possible problems that may occur in the slide rack reading are as follows:

• Not detected

This error occurs when the camera's image sensor is disabled. Corrective actions are the same as for a reading error (see next point).

Reading error



The solution options are:

- **Manual Identification:** the slide loading window will be displayed where all the necessary data for the creation of the slide must be entered:
 - Identifier
 - Priority
 - Technique
 - Pathologist
 - Center (only in multi-center facilities)
 - Notes (optional)
 - Protocol and phases (once the technique is selected, the protocol and phases are completed with the default value for each of them).
 - Protocol
 - Priority
 - Phases (once the protocol is selected, the phases are completed with the default value for each one of them).
 - Notes (optional)
- **Repeat reading:** perform the slide reading again

• **Unload:** The slide in the position is unloaded and shown as available.

dentification						
dentifier*	Technique*	Pri	ority	Pathologis		
	Select	∼ No	ormal 🗸			\times +
lotes						
rotocol and Phases						0/18
Protocol and Phases Protocol Select	~					0/18
rotocol and Phases rotocol ielect ewax	HIER	Enz	yme		Detection	0/18
Protocol and Phases Protocol Select Dewax Select	HIER Select	Enz Sel	yme lect	~	Detection	α/1 1

Once all the necessary data have been entered correctly, the **Save and Load** action is activated, so that the slide is registered in the system and therefore appears loaded in the rack.

- Slide identifier already loaded in the same or another instrument.
 - Repeat Reading: The slide will be read again.
 - Download: The position is downloaded and displayed as available.

()	There is an slide with the same identification in instrument VStainer1, position 2-A.	×
[I S	Position 1-A] elect an option to remove the error	
	Repeat reading Position will be rechecked	
	Unload Position won't be rechecked	

• The slide identifier read does not exist in the system

!	The slide doesn't exist in system	×
	[Position 1-A] Select an option to remove the error	
	Create slide	
	Repeat reading Position will be rechecked	
	Unload Position won't be rechecked	

The solution options are:

- **Create slide:** the slide loading window will be displayed where all the necessary data for the creation of the slide must be entered:
 - Identifier
 - Priority
 - Technique
 - Pathologist
 - Center (for multi-center facilities)
 - Notes (optional)
 - Protocol and phases

Identification							
Identifier*		Technique*		Priority	Pathologis		
			~	Normal			\sim +
Votes							
							0
Protocol and Phases							0
Protocol and Phases							0
Protocol and Phases Protocol Select	~						۵
Protocol and Phases Protocol Select Dewax	~	HIER		Enzyme		Detection	0

- **Repeat reading:** The position will be reread on the next scan after the remaining errors have been resolved. The position is displayed as available.
- **Unload:** the slide position is unloaded and shown as available.

• Slide states other than pending

After a slide rack reading, it may happen that there are slides loaded in the rack that are in a state other than pending. In this case, the application will flag the position where one of the following states is detected as an error and allow you to perform the following actions depending on the slide status
• Pending validation, Completed and validated, Discarded, Interrupted:

- **Repeat Reading:** The slide will be read again.
- **Download:** The position is downloaded and displayed as available.

There is a slide with the same identifie	cation ×	$\ensuremath{}$ There is a slide with the same identification	>
Position 2-A]		[Position 2-C]	
he slide is Pending of validation. Check the	list of slides.	The slide is Discarded. Check the list of slides.	
Repeat reading Position will be rechecked		Repeat reading Position will be rechecked	
Unload Position won't be rechecked		Unload Position won't be rechecked	
Q	There is a slide with the s [Position 9-C] The slide is Interrupted. Check	ame identification ×	
Q	There is a slide with the s [Position 9-C] The slide is Interrupted. Check Reper Position w	ame identification × the list of slides.	

4.11.4.3 Reagent Vial troubleshooting

During scanning of the reagent vial racks, a number of problems can occur with the reading of loaded vials. This error is represented by an information window in each of the positions.

To fix the errors, click on the **"Solve errors"** button. However, if the user decides not to continue with the execution of the run, he/she has the option to cancel the series by clicking on the *"Cancel Run"* button.

The error in the reagent vial rack is represented with the icon 🙂 . Additionally, the information section indicates where the error has occurred.

Each position is represented on the rack according to the error shown. The error summary can also be accessed from this icon located at the top left of the screen.

To resolve the errors, click on each position with the error where. Depending on the error, possible solutions will be offered. A vial can also be added manually by tapping on an available position after performing an initial reading of the vial tier. When this occurs, the system will display the message "Unselected vials must be placed and opened," to alert the user of the action they should take.

2.5mL, 15mL and 50mL Empty Vials are "user-fillable" vials that are designed for the utilization of alternate primary antibodies or probes not offered within the NeoPATH Pro reagent line on the NeoPATH Pro. 2.5mL Empty Vials have a dead volume of 85uL. 15mL and 50mL Empty Vials have a dead volume of 400uL.

The possible problems and their options, which can occur in the reading of the vial rack, are as follows:

• Vial with closed cap



To solve the error, the reagent vial cap located in the reagent vial position must be physically opened. When closing the displayed prompt, the position is represented as available.

Reading error



The identification code of the reagent vial must be entered, either manually or with a label reader.

When accepting, if the reagent vial already exists in the system, the position with error is updated with the reagent information of that reagent vial.

If the reagent vial does not exist in the system, the reagent vial registration window will open. If it is recognized by the label reader, the reagent vial data will appear on the registration form, otherwise it must be entered manually to complete the registration.

1 ——	_ 2	- (3)
Register code	Vial	
🖓 Vial		
Vial ID *	Reagent *	
	Select	
Lot *	Expiration *	
Vial type *	Initial volume *	
Select 👻		
Z Enable		
Reagent storage disabled reasons *		
		0 / 1

• Expired vial



The reagent vial must be unloaded to solve the error. The position with the error remains as available position.

• Insufficient volume



The reagent vial must be unloaded to solve the error. The position with the error remains as available position.

• Disabled vial



If a user that has an access level that allows editing and enabling a reagent vial is logged in, they may do so in a way that is represented by the acronym of the reagent in the reagent vial. If the user does not have this access level, the user must unload the reagent vial so that the position with the respective error becomes available again.

• Vial loaded in another position or instrument



The vial must be unloaded to solve the error. The position with error remains as available position.

4.11.4.4 Troubleshooting Flask Problems

Flask errors will only be reported for those that don't have enough volume to complete the set in question. This means that flasks that aren't going to be used in the set won't display any errors.

When you select the flask with the error, the following window will appear:

When replacing a pouch, it is necessary to record its replacement for proper traceability. By clicking Replace, you can identify the new pouch by reading the barcode on the label, or you can also record it manually. The replaced pouch will be purged at the start of the series.

- **Replace**: To replace a pouch that failed due to insufficient volume during the series checks, you must click on it. The application will present the following solutions:
- **Continue:** By clicking this button, the pouch error will disappear, the system will not recheck the pouch, and the series will begin.

Once the pouch replacement is complete, the complete replacement history can be accessed from the context menu for each pouch by clicking on Replacements.

4.11.4.5 Troubleshooting mixing tubes

During scanning mixing tubes, problems may occur with the reading of the mixing tubes. When an error occurs in the mixing tubes, an information window appears with the position and the error in the application step.

To resolve errors, click the "Correct Errors" button. If you do not wish to continue the run at this time, you have the option to cancel the run by clicking the "Cancel Run" button.

Alternatively, if you wish to continue the run, you must click on the element with the error and click the "Resolved" button. At the same time, all mixing tubes must be placed in the instrument so that no errors are returned when a second reading is taken.

4.11.5 Immediate start

Whe	n do you want to start the serie execution?
Start new start	ow
O Progra	m execution
Select run be schedu	start or finish date and time. The execution must lled within the next 24 hours
	Start
	Finish

If you decide to start the run immediately, you must select the Start now option and click on the **Start** button.

4.11.6 Schedule run

For scheduling a run, the **"Schedule Run"** option must be selected. This is where a run can be scheduled by start or end date and time. To schedule the start of the run, the user must click on the **Schedule** button.

By default, the series schedule is configured to limit its execution to within the next 24 hours, although this may vary depending on the parameter value. This will be indicated in the previous modal.

When do you want to start the serie execution? tart now rogram execution ct run start or finish date and time. The execution mu
tart now rogram execution ct run start or finish date and time. The execution mu cheduled within the next 24 hours
rogram execution ct run start or finish date and time. The execution mu cheduled within the next 24 hours
rogram execution ct run start or finish date and time. The execution mu cheduled within the next 24 hours
ct run start or finish date and time. The execution mu cheduled within the next 24 hours
cheduled within the next 24 hours
Start
● 03/22/2025 12:53:30 PM 0
Finish
6

In the information part of the button panel, it informs that the run is scheduled, how much time is left for the start, the duration of the run, and the start and end time and date.

			The run will start	Run Duration
		Instrumento VS-1	© 15:00:59	്യ 02:48:15
STOP	PROGRAMMED		Start 07/12/2023 06:00:00	End 07/12/2023 08:48:15

4.11.7 Execution Information

Once the run has started, in the button panel information section, the end date of the run is indicated, along with the option to stop it.



The progress of the run is indicated by a percentage bar, which fills to 100% as the cycle progresses. In addition, as the different slides are completed, the positions of the slides change to flashing green.



Clicking on each position displays a new window with all of the information corresponding to the status and execution of the slide, so that the user can track the protocol in real time.



Additionally, the complete protocol can be accessed in detail by pressing the button SHOW COMPLETE PROTOCOL



Additionally, it is possible to know which phase and step is being executed.

VS	Stainer	5									ACT.M	ique IG			Prot #IH	tocol Q_105C	_MACH4	_MOUSE_	Protocol	description				^		17
Re	agents								Slide		Applic	ation of	protoco	HIHQ	105C_M	ACH4_N	NOUSE	AP_10MINA	B_V.01							
	6 Contai	ners - 0 I	Gt			Manual	selection (1 SI	ides - 0	Start d 3/21/2	ate 025 11:	16:36				End date				Total time 00:23:30				selection (D
	AC	тн	RED A								8 S	tages a	and ste	ps												
Ŀ		•	•	0	0	0	0	0			0	1. Der	waxing											^		
	AC	T.MG							c			~ 1/6	SET Step	P ends	started at	11:16 A	M and fi	nished at 11	18 AM					~		
	1	•	0	0	0	0	0	0				× 2/6	DIS	PENSE p ends	started at	11:18 /	AM and f	inished at 11	:19 AM					~	•	
2	AN	IPLIFI										✓ 3/6	SET	TEMP p ends	started at	11:19 A	M and fi	nished at 11	20 AM					~		
	PO	LYME	0	0	0	0	0	0	в			× 4/8	INC Step	UBATE	started at	: 11:20	AM and f	finished at 1	1:30 AM					~		
			0	0	0	0	0	0				✓ 5/€	DIS	PENSE	started at	t 11:30 /	AM and f	inished at 11	:30 AM					~	0	
	REI	ОВ								Б		C 6/8	INC	UBATE rent step	started at	11:30 A	M							~		
	-	•	0	0	0	0	0	0		DCF/ MVS																
	c	0	0	0	0	0	0	0	А	ACT.M	G													T		
												2		3	4		5	6	7	8	 。	10	11	12	13	
		0	0	0	0	0	0	0	Rulk De	strene									Carbo			Mixin	vi viale	Waste d	lanosits	
,	A											1								,.	(6		

At the end of a run, the following warning appears.

Finished 3/21/2025	() 12:41:13 PM	Total duration 00:01:51
	Unload the slide r	ack

To restart a new run, the slide rack must be unloaded. All slides and reagent vials can be unloaded from the interface using the double arrow button, as well as only reagents or slides using the single arrow buttons located on each side of the interface (indicated in the image with arrows).

4.11.8 Run cancellation

The run can be canceled in various ways.

4.11.8.1 Cancellation by pressing the Stop button



As soon as a run is started, the "STOP" button is enabled.

By using this action the run can be canceled. When the "STOP" button is pressed, a confirmation window is displayed. At whatever stage the run is in when the "STOP" button is pressed, to start a new run, the slide must be unloaded, if any slides have already been read.



When the cancellation of the run is confirmed, the information section displays a message indicating that the series has been canceled and that the slide rack must be reviewed and unloaded in order to start a new run.

If any position in reagent vials has an error when a run is canceled, it will be represented as a warning.



When the cancellation occurs during a run, the slides may be in multiple different statuses:

• **FINISHED** (Pending validation/Validated): The staining has correctly come to an end on the slide.

NEOR	PAT	H reo	100%	VStainer5					100 ELDE	START	VStainer5	✓ Finalized serie Unload the sides to start a new run	Fi Te	nalized 3/21/203 () 12:13:5 Ital duration 00 d	15 4 PM 01:19						SU	C→
~	VSta Reag	iner5 gents							Slide		PRUEBA/MVS001	i	×									II %
SLIDES	10	iontainers - 0	Kit			Manual	selection (1 Slie	des - O H	Status FINISHED PENDING VALIDATION	Creation date 3/21/2025 12:11:56								Manual se	lection (⊃ ∓
REAGENTS	н	ACTH O	0	0	0	0	0	0			Request creation date 3/21/2025 12:11:56 Technique	Priority Normal Protocol										
REPORTS	G	0	0	0	0	0	0	0	c		ACTH Start date 3/21/2025 12:13:15	ga (by default) End date 3/21/2025 12:13:23		0	0	0	0	0	0	0	0	o
	F	0	0	0	0	0	0	0			Notes											
	E	0	0	0	0	0	0	0	8	•	Stage - Step/index and currer Dewaxing 1/1 - Executing DISPENSE (/	d step ACTH) from the 12:13 PM		0	0	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0		PRUE	SHOW COMPL 01	ETE PROTOCOL	-									
	c	0	0	0	0	0	0	0	A	астн		0 0		0	0	0	0	0	0	0	0	0
ଞ୍ଚ	8	0	0	0	0	0	0	0	Ruth Dec	1	2 3	4 5		6	7	8	9	10	11	12	13	14
SETTINGS	A	0	0	0	0	0	0	0	COVER	igents	DEWAX DAB.ENH	HIGH-AR DEWAX	(-2	нхнрнз	WASH 8	NUFFER	CLEANING					
(?) HELP				6 3		b 5			1		2 3	4 5		6		1	2			HAZARDOL 1	IS NON HA	ZARDOUS 2

• **INTERRUPTED**: Staining on that slide was in progress, and had not yet been completed. By clicking on the information card, you can see in detail where you were in the execution.

Slide	S	Constitute data					
	INTERRUPTED	3/21/2025 10:43:48					
	Request creation date 3/21/2025 10:43:48	Priority Normal					
	Technique ACT.MG	Protocol #IHQ_105C_MACH4_MOUSE_AP_10MINAB_V.01 (by default)					
	Start date 3/21/2025 11:16:36	End date					
ſ	Notes						
	Stage - Step/index and curr HIER 11/37 - Executing INCUBA AM	ent step ITE (Cover) from the 11:49					
	Stage - Step/index and curr HIER 11/37 - Executing INCUBA AM	ent step ITE (Cover) from the 11:49 SHOW COMPLETE PROTOCOL					
В	Stage - Step/index and current HIER 11/37 - Executing INCUBA AM	ent step ITE (Cover) from the 11:49 SHOW COMPLETE PROTOCOL					

• PENDING: Staining has not started on these slides.

Slides -	01 🖉 PRU	EBA/MVS00	3	×
	Status		Creation date	
	PE	NDING	3/21/2025 12	:43:32
	Request creation	ation date 12-43-32	Priority	
	5/21/2025	TETTO ISE		
	Technique ACT.MG		Protocol QATC (by defai	ult)
	Start date		End date	
	Notes			
3	Stage - Step	/index and curre	nt step	
	Ξ.	SHOW COMP	LETE PROTOCOL	
PR	RUE VSI			
	RUE VS CT.MG			
	RUE VS		0	0

4.11.8.2 Canceling by pressing Cancel Run from the troubleshooting windows

The option to cancel a run is available as soon as the run is started and a problem occurs in reagents or slides. In case of errors, a summary window is displayed. By pressing the **Cancel Run** button, the behavior is the same as described in the previous section, when the Stop button is pressed.



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4.11.8.3 Unload slide and vial rack

To empty the slide or reagent vial rack, click on the "Unload"

button of each rack, or,

alternatively, the "Unload all" button, which will empty the slides and reagent vials (if any are read).

It is also possible to unload only manually selected items, both in the slide rack and in the reagent vial rack.

4.11.9 Unloading slides after calculating required volumes

If pending slides are unloaded after the required volumes for running the series have been calculated, all reagent volumes in the protocol associated with the unloaded slide will be subtracted from the calculations already performed. In addition, the system will subsequently recalculate all required volumes before running the series to ensure there is sufficient volume to run it.

This will be reflected in the volumes of the required reagent modes:

4.11.10 Reagent information card

Clicking on each of the positions of the vial, flask, bottles or tanks racks displays a window with the relevant information for each container.

4.11.10.1 Vial rack

Once the reagent vial rack has been entered, the title with the acronym of the reagent registered to the reagent vial is displayed and any warning or error it may have is also displayed. When the information is displayed in the header, the following data are shown in addition to the acronym of the reagent vial:

- Information on the error or warning
- Vial identifier
- Acronym
- Lot

- Supplier
- Vial capacity
- Current volume
- Expiration date
- First use date
- Last use date
- Viscosity
- Danger
- Air filter



4.11.10.2 Bulk Flask Containers

Any warnings or errors will be shown on the map of the bulk flasks. By opening the information card of a bulk flask, the header shows the title with the acronym of the reagent contained in the flask. In addition, the following bulk flask data are displayed:

- Information on errors or warning
- Supplier
- Danger
- Capacity
- Current volume
- Expiration date
- Last refill date



급 DAB.ENH		×	
Supplier	Dangerous YES		
Capacity 2000 ml	0 ml 💧		0
Expiration Date	Last recharge da	ite	6
DAB.ENH H	HIGH-AR	H	IEME
3	4 5		6
3 eplace bulk reagent -	4 5 • DAB.ENH	×	6
3 eplace bulk reagent -	4 5 - DAB.ENH	×	6
3 eplace bulk reagent - The bulk reagent will the run Position 3]	4 5 - DAB.ENH	×	6
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4.11.10.3 Bulk Carboys rack

The header of the information card of a carboy shows the title with the acronym of the reagent contained in the bottle and indicates first the warning or error it may have. In addition, the following bottle data are displayed:

- Supplier
- Danger
- Capacity of the carboy
- Current volume
- Expiration date
- Last refill date

Flasks	Cara	ofes	Mixing tubes	Waste deposits	
COVER DEWAX DAB.ENH HIGH-AR 1 2 3 4 5	HEME W	ASH BUFFER 1 2		HAZARDOUS 1	NOT HAZARDOUS 2
WASH × BUFFER > Supplier Dangerous NO NO Capacidad Current volume 12 L Enough 7 Expiration Date 0/01/2024 06/12/2023 11:29 Carafes Mixing tubes					
Filling registration - Carboy	- WASH	BUFFER			×
[Position 1]					
The use of the volume sensor is being possible to have sufficient volume	g ignored. It	is recommended	to fill the car	boy as much a	35
Fill datetime *		Lot *			
03/21/2025	齿				
Expiration Date *					
	5				
			Cancel	5	Save

4.11.10.4 Waste tank rack

The header of the information card of a waste container shows the title and icon representing whether the container is a hazardous or non-hazardous waste container and first indicates the warning or error it may have. In addition, the following container data are displayed:

- Capacity
- Current volume: Full or Not full
- Last emptying date



4.12 Pausing a Run

Once the run has started, the user can request a pause from the system interface (the appearance of the pause button will be parameterized).

STOP PAUSE	Instrumento VS-1	Run end time () 13:52:59 03/21/2025

Once requested, the following confirmation window will appear:



4.12.1 Initial Checks

Once a pause is requested, the system will check the following conditions before allowing the pause:

• Mixes on Slides: The pause is allowed if all slides contain HRP reagents or all are AP reagents, but not both together.

Pause is not possible

The combination of protocols of the run is not allowed

- Slide Status: The pause is allowed if at least one slide has a pending step that can be paused.
- Position Availability: The pause is allowed if there is at least one empty position for inserting a new slide or a position with a completed slide for removing it.



4.12.2 Calculating the Estimated Time to Pause

If all conditions are met, the system will calculate the estimated time to complete the pause. This information will be displayed in a pop-up modal window that will include the estimated time to complete the pause.

4.12.3 Actions on the Pause Series Modal Window



The user can decide what to do from the Pause Series modal window:

• Cancel the Pause

- If the user cancels the pause request before the process is complete, the run will continue as normal.
- \circ If canceled after 5 minutes, there is a risk of causing delays in the run.
- Continue the Pause
 - o If the user confirms that they want to continue the pause, the process will continue.
 - Once the pause is confirmed, it will not be possible to reverse this action.
 - If the user does not take any action, the modal window will close automatically once the system has completed the pause.

4.12.4 Actions During the Pause

The user will be notified that the system has completed the pause as follows:

STOP Instrumento VS-1 Don't remove any mixing tubes until instructed to do so On pause
--

At this point, the user can perform the following actions:

- Slide Management:
 - Remove completed slides.
 - Place new slides in the available positions.
- Rack and vial management:
 - Remove or place racks to replace or refill vials.
- System maintenance:
 - Replace vials.
 - Refill reagent bottles.
 - o Empty waste.
 - Purges of vials and bottles are integrated into the run resumption process.
- Unloading slides:
 - $\circ~$ Only slides that are not in progress can be unloaded (pending and completed slides can be unloaded).

4.13 Resuming a run

At the end of the pause, the system will perform the same checks it performs at the start of a run:

- Slide check: Any problems detected with the slides will be reported.
- Vial and reagent check: The reagents and consumables will be validated to ensure they are sufficient to continue.
- Mixing Tube Management:
 - The system will inform you if any mixing tubes that have already been used during the process can be replaced (highlighted in green).

	4 5 6	
	Before restart the series	
😋 Replace	the mixing tubes: 1, 2	

- It will also notify you if there are any mixing tubes that should not be removed because they will be needed when resuming the run (highlighted in red).
 - If the user has already removed any mixing tubes at that time, they will all need to be replaced so the planner knows how to perform the mixes again and must have sufficient volume.

Mixing tubes sta	atus	
	4 (5) (6) (1) (2) 3	
В	efore restart the series	
🔀 Do not replac	e the mixing tubes: 3, 4	
I have already rep	laced some of thes tubes	
		Restart series

Mixing tubes	s status	
	4 (5) (6) (1) (2) (3)	
	Before restart the series	
🔀 Do not re	eplace the mixing tubes: 3, 4	
I have alread	y replaced some of thes tubes	
🔺 If you've	replaced any, replace all	
		Restart series

If all checks are correct, the run will automatically resume, and the system will update the estimated completion time.



4.14 List of slides

From this module, slides can be <u>created</u> and managed regardless of their status.

The possible statuses are:

- Pending execution.
- In process.
- Finished.
- Interrupted.
- Discarded.
- Canceled.
- Completed (Pending validation).
- Completed (Validated).

The various slide list configuration options may be affected depending on the application's settings.

If there is integration with a LIS (the LIS Integration parameter is enabled), the changes will be as follows:

• "Origin" column, to be able to differentiate the origin of the request to which the slide corresponds (LIS or Manual).

4.14.1 View the steps of a slide and the reagents used

For all of them you can see the status of each phase and step, as well as its duration.

N€OP	ATHmo	68%.				VStainer5	Run end	d time ① 2:14:50 PM (03/21/2025			SU
SLIDES	Slide	60 0								Generate Run file	▶ I+D + I+D +	\$ # Ø ···
REAGENTS		Identifier QA/MVS160	Origin Manual	Status IN PROCESS	Technique ACTH	Protocol 1240_COVER	Priority Normal	Pathologist	Instrument VStainer5	Creation 3/19/2025 14:59	Printing 1:36	Actions
REPORTS												
												3

Protocol - Slidelabel

.

l

Application of protocol 1240_COVER_HRP End date

Start date 3/21/2025 14:12:35

Total time 00:00:25

Stages and steps

~		-		
3	4.	Dete	ction	^
	~	1/7	DISPENSE started at 2:12 PM and finished at 2:12 PM Step ends	~
	~	2/7	WASHSLIDE started at 2:12 PM and finished at 2:12 PM Step ends	~
	0	3/7	DISPENSE started at 2:13 PM Current step started	~
		4/7	WASHSLIDE Step not started	~
		5/7	DISPENSE Step not started	~
		6/7	WASHSLIDE Step not started	~
		7/7	WASHSLIDE Step not started	~

From this same window the reagents used during staining can be viewed.

4.14.2 End or discard a slide

Once the user has decided whether the slide has remained at a valid point or whether it should be discarded, the user can change its status from the more actions button and select the final status. The user may also finish it manually if it is recoverable and then change its status to finished and validated.

		more of	puons				:			
	<	Export								
	<	Change	slide sta	iti Finaliz	ed and	l Valid	ated			
				Discar	ded					
0 %			starr vs	Stainer5 N	Ready There is pending mainte	nance				(
cl' I										
Slides						•	Generate Run file	▶ 1+D +1+D +	\$ ¢	2
Slides Search Identifier	Origin	Status [†]	Technique Pr	rotocol Priority	Pathologist	Instrument	Generate Run file	▶ I+D + I+D + Printing	\$ \$	Acti
Slides	Origin Manual	Status Y INTERRUPTED	Technique Pr HER2/CEN17 FI	rotocol Priority ISH_HIBRIDA Normal	Pathologist	Instrument	Generate Run file Creation 10/21/2024 14:21	I+D +I+D + Printing 1:16 10/21/2024 14:21:23	\$ \$	Acti
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The status of these slides can be changed depending on their current status:

- Interrupted Slides: A slide changes to interrupted status if the procedure was started and the run has been canceled, either by user decision, an instrument failure, or a disconnection. The new statuses the user can choose are: Completed and validated or Discarded.
- Slides pending loading: The new status the user can choose is: Completed and validated.
- Completed slides pending validation: The new statuses the user can choose are: Completed and validated or Discarded.

4.14.3 Repeat and print label for slides from the LIS

For slides from the LIS, there is the option to repeat slides from the LIS, ensuring that this can only be done under certain conditions. This way, a slide may be discarded, but the user will be able to repeat the slide associated with the same LIS origin request and maintain traceability.

This action will only be available for slides from the LIS that are not loaded in the slide rack and are in the Interrupted, Discarded, and Completed pending validation statuses.



After repeating and printing a slide, a new slide is recorded in the Pending status, equal to the original. The original slide's status changes to Discarded.

Identifier ^	Origin	Status	Technique	Protocol	Priority	Pathologist	Instrument	Creation
22B0026180-A-1-30	LIS	PENDING	ADIPOF	#IHQ_105C_H	Normal	JOSÉ ANTONI		3/18/2025 17:36:17
22B0026180-A-1-40		DISCARDED	ACTH	#IHQ_105C_H	Normal	JOSÉ ANTONI		3/20/2025 11:33:48
22B0026180-A-1-40		PENDING	ACTH	#IHQ_105C_H	Normal	JOSÉ ANTONI		3/21/2025 09:16:54

4.15 Vial inventory

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SETTINGS						Bulk Rea	gents						Carboys	1		Mixing	vials	Waste depr	osits		
(?) IRL/	b 1	b 2 b 3			60	COVER	DEWA	X DAB	ENH H	IGH-AR	DEWAX-2	HXHDH3	WASH	LUFFER	CLEANING SOLUTION			HAZARDOL	IS NON H	AZARDOUS	The

Inventory is accessed through the REAGENTS button in the vertical menu on the left side of the main screen.

4.15.1 <u>Register vials</u>

Vials can be deregistered in two ways:



Automatically: when the vial rack is scanned at the start of a series, the instrument will read the positions of the racks that have been inserted and detected by the instrument.

All vials will be added to the Inventory automatically by reading the labels on the vials.

•

	Reagen	ts				314/1								
\checkmark		Inventory		List of reagents	т	ype of kits								
SUDES	Search													+
Î		Туре	Vial ID	Reagent	Lot	Exp. Date	First use date	Last use date	Initial vol.	Current vol	Enabled	Supplier		Action
REAGENTS		8 50 ml	PCL4	PCL4	324	02/28/2025			50 ml	50 ml		Vitro S.A.	0	
Ē		🔗 50 ml	PCL3	PCL3	11	12/12/2024			50 ml	50 ml	•	Vitro S.A.	0	1
REPORTS		8 50 ml	PCL2	PCL2	11	12/20/2024			50 ml	50 ml		Vitro S.A.	0	Û
A CONTRACTOR													0	

Manually: from the Inventory screen, click on the button to access the form for adding new vials to the Inventory.

It can be registered manually or with a label reader.



In one way or another, the vial registration form opens. All data will be reported if the code reading of the vial label has been performed correctly. Or enter the vial data manually.

Add vial		
1	_ 2	3
Register code	Vial	
🔗 Vial		
Vial ID *	Reagent * Select	
Lot *	Expiration *	
Vial type *	Initial volume *	
v Enable		
Reagent storage disabled reasons *		
		0 /
Save and add new	Cancel	Save

The data to be reported to register vials are as follows:

- $\circ \quad \text{Vial ID}$
- o Reagent
- o Lot
- Expiration

- o Vial type
- o Initial volume
- \circ $\;$ The vial will be enabled by default when it is registered.

The options available from this window are:

- **Save**: if all the data entered are validated correctly, the form is closed, and it appears in the inventory list.
- **Cancel** or cross in the upper right corner to close the registration form.
- **Save and add new,** it validates that all the data entered are correct and, after closing the form and updating the inventory with the vial created, the window opens again to report the barcode or register manually and continue with the registration.

4.15.2 Edit vials

For each vial record, by accessing the icon \checkmark from the Inventory list.

The vial editing window opens. The editing window is similar to that of the vial registration, with the added fields of Current volume and date of first and last use.

- If the vial has not been used. All data can be updated, except current volume, and date of first and last use.
- If the vial has not been used. All data will be displayed in read mode, but will not be editable, except for the Enable field, and only if the user has permissions, and the vial meets the criteria to be enabled.

NEOF	PATH®	0 %	imento VS-1				imento VS-1	Read	v				SU		⇒
<i>↓</i> SLIDES	Reagent	ts Inventory		List of reagents	1	ype of kits								+ 🛍	
ติ		Туре	Vial ID	Reagent	Lot	Exp. Date	First use date	Last use date	Initial vol.	Current vol.	Enabled	Supplier	Ac	tions	
REAGENTS			PCL4	PCL4	324	02/28/2025			50 ml	50 ml		Vitro S.A.	0	ŵ :	
E		🔗 50 ml	PCL3	PCL3	11	i 12/12/2024			50 ml	50 ml		Vitro S.A.	0	i	
REPORTS		🔗 50 ml	PCL2	PCL2	11	i 12/20/2024			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	PCL1	PCL1	11	02/28/2025			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	alk	ALK.5A4	1111	01/17/2025			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	adipof	ADIPOF	41	i 12/31/2024			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	ACTH	ACTH	1	6 02/13/2025			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	acth33	ACTH	2	6 09/21/2024			7 ml	7 ml		Vitro S.A.	0	ŵ :	
		🖉 50 ml	ACTH3	ACTH	1	6 09/20/2024			50 ml	50 ml		Vitro S.A.	0	ŵ :	
		🔗 50 ml	acth2	ACTH	1	6 09/13/2024			50 ml	50 ml		Vitro S.A.	0	ŵ :	

The options available from this window are:

- Save: if all the data entered are validated correctly, the form is closed and appears updated in the inventory list.
- **Cancel** or cross in the upper right corner to close the registration

In addition, if the vial can be removed, the following option is available:

• **Delete:** The Delete button will only be available if the vial has not been used and will display a confirmation dialog after pressing it. After confirmation, the corresponding record will be deleted, the window will close, and the inventory list will be updated.

Edit vial		>
🔗 Vial		
Vial ID *	Reagent *	
PCL4	PCL4	~
.ot*	Expiration *	
324	02/28/2025	i.
/ial type *	Initial volume * Current volume *	
Vial 50 ml 🔹	50 ml 50 ml	
First use	Last use	
✓ Enable Reagent storage disabled reasons *		
		0 / 18

4.15.3 Delete vials

You can delete a vial individually by clicking on the icon at the record level in the list.

Re	agent	s														
	5	Inventory		List of reagents	Тур	e of kits										
	Search														+	
		Туре	Vial ID	Reagent	Lot	Exp. Date	First use date	Last use date	Initial vol.	Current vol.		Enabled	Supplier		Action	IS
			V23-0001534	TRIPTAS	07090021	d/30/2025			12 ml	12 ml			Vitro S.A.	0	Ô	
		🔗 15 ml	S-VIS	S-VIS	G	3/28/2025			5 ml	5 ml			Vitro S.A.	0	Û	
		🔗 50 ml	red.b	RED B	23132	1/25/2028	1/21/2025	2/17/2025	50 ml	37.67 ml		•	Vitro S.A.	0	Û	
		& 50 ml	red b	RED B	569	8/13/2027			50 ml	50 ml			Vitro S.A.	0	1	
		& 50 ml	redbp04	RED B	44	5/6/2026			44 ml	44 ml			Vitro S.A.	0	Û	
		🔗 15 ml	REDB	RED B	050324A-2	8/31/2025	10/3/2024	11/21/2024	8 ml	0.41 ml			Vitro S.A.	0	Û	
		🔗 50 ml	red.bb1	RED B	3434	5/23/2025			50 ml	50 ml	٠		Vitro S.A.	0	Û	
		🔗 15 ml	RED8-2-P05	RED B	050324A-2	d/30/2025	10/7/2024	11/22/2024	8 ml	2.63 ml			Vitro S.A.	0	Ô	
		8 50 ml	redb.2.p05	RED B	234 Tu o	idenador está compartido a	ctualmente con vitrostainer	Egmail.com Dejar de	compartir	50 ml			Vitro S.A.	0	1	
		🔗 50 ml	red a	RED A	5986	8/16/2028			50 ml	50 ml			Vitro S.A.	0	Û	
		🔗 50 ml	red.a	RED A	3232	☐ 2/2/2028	1/21/2025	2/17/2025	50 ml	37.67 ml			Vitro S.A.	0	Û	
		🔗 50 ml	redap04	RED A	44	5/6/2026			44 ml	44 ml			Vitro S.A.	0	Û	
						**				• · · ·						

The Delete button will only be enabled if the vial has not been used and will display a confirmation dialog after pressing it. After confirmation, the corresponding record will be deleted, the window will close, and the inventory list will be updated.

The table level button will be enabled only if you select one or more rows in the list that have the row level delete button visible, and none of them have previous uses. After pressing it, a confirmation dialog is displayed. After confirmation, the corresponding records are deleted, the window is closed, and the inventory list is updated.

4.16 List of reagents

Access to the List of reagents is through the REAGENTS button in the vertical menu on the left side of the main screen.

1	Reagent	ts										
l	Search	Inventory	List	or reagents	Type of	kits						+
		Туре	Short name	Name	Viscosity	Hazardous	Technique group	Protocol	Mix	Description	Act	ons
		Antibody	ACTH	ACTH (Adrenocort	000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	ACT.MG	Actin, Muscle Spe	000		IHQ	#IHQ_105C_MAC.,			0	İ
		Antibody	ADIPOF	Adipophilin (Polyc	000		IHQ	#IHQ_105C_HRP			0	Ō
H		Antibody	ALK.5A4	ALK/P80 (5A4)	000		IHQ	VSSW_1158_AP			0	
H		Antibody	ALDH1	ALDH1A1 (Polyclo	000		IHQ	#IHQ_105C_HRP			0	Û
		Dewax	Dewax	Dewax	000		IHQ				0	Û
		Antibody	ANTQUIM	Alpha-1 Antichym	000		IHQ	#IHQ_105C_HRP			Ø	
L		Others	Alcohol	Alcohol	000		IHQ				Ø	
		Antibody	P504	AMACR / p504S (000		IHQ	#IHQ_105C_HRP			0	۵
		Antibody	AMILO.A	Amyloid A (MC1)	000		IHQ	VSSW_1158_AP			Ø	Û
		Antibody	AMILO.P	Amyloid P (EP101	000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	RANDRO	Androgen Recept	000		IHQ	#IHQ_105C_HRP			Ø	Û
		Antibody	ANEXIN.A	Anexin A1 (29)	000		IHQ	#IHQ_105C_HRP			0	
	Page 1 of	21									# # 1 2 3 4 5 6 7	8 9 10

The data of each reagent can be accessed, but only in read mode, from the icon \checkmark . It can also be accessed by selecting a single record and clicking on the icon at the table level.

F	Reagent	ts										
,		Inventory	List	of reagents	Type of	f kits						
	Search											
		Туре	Short name	Name	Viscosity	Hazardous	Technique group	Protocol	Mix	Description	Ad	tions
		Antibody	ACTH	ACTH (Adrenocort	000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	ACT.MG	Actin, Muscle Spe	000		IHQ	#IHQ_105C_MAC			0	0
		Antibody	ADIPOF	Adipophilin (Polyc	000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	ALK.5A4	ALK/P80 (5A4)	000		IHQ.	VSSW_1158_AP			I	Û
		Antibody	ALDH1	ALDH1A1 (Polyclo	000		IHQ	#IHQ_105C_HRP			0	Û
		Dewax	Dewax	Dewax	000		IHQ				0	Û
		Antibody	ANTQUIM	Alpha-1 Antichym	000		IHQ	#IHQ_105C_HRP			Ø	Û
		Others	Alcohol	Alcohol	000		IHQ				I	۵
		Antibody	P504	AMACR / p504S (000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	AMILO.A	Amyloid A (MC1)	000		IHQ	VSSW_1158_AP			0	
		Antibody	AMILO.P	Amyloid P (EP101	000		IHQ	#IHQ_105C_HRP			0	Û
		Antibody	RANDRO	Androgen Recept	000		IHQ	#IHQ_105C_HRP			0	
		Antibody	ANEXIN.A	Anexin A1 (29)	000		IHQ	#IHQ_105C_HRP			0	Û
	Page 1 of	21										8 9 1

The reagent that meets the criteria will have the icon \square enabled and can be deleted. When the icon is clicked, a window is displayed to confirm or cancel the action of deleting a reagent. The same icon will also be enabled at the table level for the mass deletion of reagents, if they all meet the conditions for deletion.

Reage	Inventory	List	of reagents	Type o	f kits						
Search											
	Туре	Short name	Name	Viscosity	Hazardous	Technique group	Protocol	Mix	Description	Ac	tions
	Antibody	ACTH	ACTH (Adrenocort	000		IHQ	#IHQ_105C_HRP			0	Û
	Antibody	ACT.MG	Actin, Muscle Spe	000		IHQ	#IHQ_105C_MAC.			0	Û
	Antibody	ADIPOF	Adipophilin (Polyc	000		IHQ	#IHQ_105C_HRP			0	Û
	Antibody	ALK.5A4	ALK/P80 (5A4)	000		IHQ	VSSW_1158_AP			0	0
	Antibody	ALDH1	ALDH1A1 (Polyclo	000		IHQ	#IHQ_105C_HRP			0	Û
	Dewax	Dewax	Dewax	000		IHQ				0	
	Antibody	ANTQUIM	Alpha-1 Antichym	000		IHQ	#IHQ_105C_HRP			0	۵
	Others	Alcohol	Alcohol	000		IHQ				0	Û
	Antibody	P504	AMACR / p504S (000		IHQ	#IHQ_105C_HRP			0	۵
	Antibody	AMILO,A	Amyloid A (MC1)	000		IHQ	VSSW_1158_AP			0	Û
	Antibody	AMILO.P	Amyloid P (EP101	000		IHQ	#IHQ_105C_HRP			0	Û
	Antibody	RANDRO	Androgen Recept	000		IHQ	#IHQ_105C_HRP			0	Û
	Antibody	ANEXIN.A	Anexin A1 (29)	000		IHQ	#IHQ_105C_HRP			0	Û

4.17 Protocols and techniques

To access the management of protocols and techniques, click on Settings/Protocols.



4.17.1 Protocols

From this module you can view the protocols assigned to each group of techniques and see which is the default protocol.

NEOPA	TH no Vitamet			StainerS	Ready		SU	
0	Protocols Techn	iques	-					
sume.	fanch						+	8
~	Protocol	Ry default	Owner		Description	Actions		
Ð	Technique - CISH(6) - #CISH_90C_30MIN_V.01							
1046013	Technique - FISH(32) - FISH-Base completo							
8	Technique - IHQ(40) - #IHQ_105C_HRP_10MINAB_V.0.	2						
NETOPOS								
œ_								
SETTINGS								
(?)								

4.17.2 Techniques

To access the techniques, click on the Techniques tab.

L		Protocols	Techniques						
L	Search_			_				+	0
L		Name	Short code	Activated	Technique group	Primary reagent	Default protocol	Actions	R)
L		ALK.5A4		•	IHQ	ALK.5A4	#IHQ_105C_HRP_30MINAB_V.02	0 8	9
L		ALDH1			IHQ	ALDH1	#IHQ_105C_HRP_10MINAB_V.02	00	0
L		ADIPOF			IHQ	ADIPOF	#IHQ_105C_HRP_10MINAB_V.02	08	0
L		ANTQUIM		•	IHQ	ANTQUIM	#IHQ_105C_HRP_10MINAB_V.02	08	0
L		ACT.MG			IHQ	ACT.MG	#IHQ_105C_HRP_10MINAB_V.02	0 8	0
L		P504			IHQ	P504	#IHQ_105C_HRP_10MINAB_V.02	08	0
L		AMILO.A			IHQ	AMILO.A	#IHQ_105C_HRP_10MINAB_V.02	08	0
L		AMILO.P		•	IHQ	AMILO.P	#IHQ_105C_HRP_20MINAB_V.02	08	0
L		RANDRO			IHQ	RANDRD	#IIIQ_105C_HRP_10MINAB_V.02	0 8	0
L		ANEXIN.A			IHQ	ANEXIN.A	#IHQ_105C_HRP_10MINAB_V.02	08	0
L		ARG.1			IHQ	ARG.1	#IHQ_105C_HRP_20MINAB_V.02	0 8	9
ι.		ACTH			IHQ	ACTH	#IHQ_105C_HRP_20MINAB_V.02	1 8	0
		ANT.TRIP		•	IHQ	ANT.TRIP	#IHQ_105C_HRP_10MINAB_V.02	1 8	0
1.		AFP			IHQ	AFP	#IHO 105C HRP 10MINAB V.02	1 6	6

From this module you can see the list of techniques and their configuration.

- Technique activated or not.
- Group of techniques to which it belongs.
- Primary reagent associated with the technique.
- Protocol associated with the technique.

	Protocols	Techniques	_				
Search							+
	Name	Short code	Activated	Technique group	Primary reagent	Default protocol	Actions
	ACTH		•	IHQ	ACTH	#IHQ_105C_HRP_10MINA8_V.02	0 8
	ACT.MG		•	IHQ	ACT.MG	#IHQ_105C_MACH4_MOUSE_AP_1	0 8
	ADIPOF		•	IHQ	ADIPOF	#IHQ_105C_HRP_10MINAB_V.02	0 0
	ALK.5A4			IHQ	ALK.5A4	VSSW_1158_AP	0 0
	ALDH1			IHQ	ALDH1	#IHQ_105C_HRP_10MINAB_V.02	0 0
	ANT.TRIP			IHQ	ANT.TRIP	#IHQ_105C_HRP_10MINA8_V.02	00
	ANTQUIM			IHQ	ANTQUIM	#IHQ_105C_HRP_10MINAB_V.02	00
	AFP			IHQ	AFP	#IHQ_105C_HRP_10MINAB_V.02	00
	P504		•	IHQ	P504	#IHQ_105C_HRP_10MINAB_V.02	00
	AMILO.A			IHQ	AMILO.A	VSSW_1158_AP_HRP	0 0
	AMILO.P			IHQ	AMILO.P	#IHQ_105C_HRP_20MINAB_V.02	00
	RANDRO			IHQ	RANDRO	#IHQ_105C_HRP_10MINAB_V.02	00
	ANEXIN.A			IHQ	ANEXIN.A	#IHQ_105C_HRP_10MINAB_V.02	00
	ARG.1			IHQ	ARG.1	#IHQ_105C_HRP_20MINAB_V.02	1 6

To edit the technique, click the icon $^{ heta}$. From here, you can access the technique editing window.

NEOP	ATHmo					
	Prot	ocols Technique	5			
						+ 🛛 🔊
	Name	Edit technique			×	Actions
	ACTH	Technique				08
	ACT.N	Technique Group * N	ame* Co	de		1 0
	ADIP(IHQ /	ACTH			1 0
	ALK.5	ACTH Y				1 3
	ALDH					1 ⊗
	ANT.1	Protocol and Phases *				1 🛞
		Protocol				1 🛞
	AFP	#IHQ_105C_HRP_10MINAB_V.02 V	Personalize			1 8
	P504	Phases				1 8
	AMIL	#DEWAX V2	#HIFR H 30MIN 105C V2	Enzyme Does not have	#DETECT HRP 10MIN AB V/2	1 8
	AMIL					1 8
	C RAN					1 🛞
Ø _m	ANEX				Cancel Accept	1 ⊗
SETTINGS			e IHQ			1 ⊗
	Página 1 de 19					3 4 5 6 7 8 9 10 - * *
	Total 361 items 0 s	elected items				

The window contains the following options:

- Technique group.
- Name.
- Code.
- Primary reagent: The system will allow a reagent to have multiple associated techniques. This means that, when creating or editing a technique, the user can select any reagent from the system, even if it is already linked to another technique.
- Protocols and phases.

4.18 Instruments

To access instrument management, click on Settings/Instruments. From this module you can view and change the configuration of the instruments.



N€OF	PATH 20 %	Instruments V5-1 Ready	SU	(→
€ 51055	Search + 1 - Instrumento VS-1 PCULUM Vitaliner	Instrumento VS-1 Name and description Name		ì
REAGENTS REPORTS		Instrumente VS-1 x PC/ULBN Description		
		Sound alerts Maximum time that the audible alert must last when an instrument is disconnected with a run or maintenance started, or with HW errors. Ahnyps Maximum time (seconds) Mover	0/18	0
(C) SETTINGS		Maximum time that the audoble alert must last when a run or maintenance ends Ahnays Maximum time (seconds) - 3000 + Uight alerts		
(?) HELP		Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Cancel	Save	

4.18.1 Alert configuration

At the end of a series, maintenance or when a problem occurs, the system activates sound and light alerts to inform of the event.

These alerts can be configured to work as follows:

- **Always.** (option by default). They will be activated until the window informing about the event is closed.
- **Maximum time.** They will be activated until the maximum time set is reached or the window informing of the event is closed.

• **Never.** They will not be activated at any time.

Sound alerts
Maximum time that the audible alert must last when an instrument is disconnected with a run or maintenance started, or with HW errors
Always
Maximum time (seconds) - 30 +
O Never
Maximum time that the audible alert must last when a run or maintenance ends
Always
Maximum time (seconds) - 3000 +
O Never
Light alerts
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) - 30 +
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) - 30 + Never
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) Never Maximum time that the LED will remain illuminated at the end of a a run or maintenance
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) Never Maximum time that the LED will remain illuminated at the end of a a run or maintenance
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) Never Maximum time that the LED will remain illuminated at the end of a a run or maintenance Always Maximum time (seconds) Jump Maximum time (seconds) Jump
Light alerts Maximum time that lighting should last when an instrument is disconnected with a run or maintenance started, or with HW errors Always Maximum time (seconds) Never Maximum time that the LED will remain illuminated at the end of a a run or maintenance Always Maximum time (seconds) Jump Maximum time (seconds) Jump Never

4.18.2 Cold table configuration

The cold table is internally configured with the following values:

- Storage temperature: 18°.
- Temperature during the series: 20°.

These values can be changed if necessary.

Cold table	e
	Activate the cold plate
	Storage temperature (C°). Permissible values: between min. 15 °C and max. 30 °C - 18 +
	Run temperature (C°). Permissible values: between min. 15 °C and max. 30 °C, must exceed or equal the storage temperature 📃 📃 20 +

4.19 Users management

To access user management, click on Settings/Users. From this module the system users can be managed.

NEOI	PATH 200 Instrumento VS-1	100 K	START	Instrumento	VS-1		Read	∮y							SU	C→
	Instrumento VS-1 Reagents	Slide														II X
SLIDES	0 Containers - 0 Kit 🖉* Manual selection 🗨	0.55	des - 0 High pr	iority 🏴										Manual se	ection () Ţ
REAGENTS																
8500875	°	c c	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								$\mathbb{N}/$								
	•	8	o	0	0	0	0	Å	o	0	0	0	0	0	0	0
	0															
		A.	o	0	0	0	0	0	0	0	0	0	0	0	0	0
ଡ୍ଡ	General		1	2	3	4	5	6	7	8	9	10	11	12	12	14
SETTINGS	Protocols Instruments	Bulk Re	agents						Carboys			Mixing	vials	Waste depe	osits	
(?) HELP	User	COVER	DEWA	X DAB.	ENH H	IGH-AR	DEWAX-2	HXHDH3 6	WASH	BUFFER	CLEANING SOLUTION 2			HAZARDOL 1	IS NON H	ZARDOUS 2

When logging in, the list of users will be displayed.

NEOPA	ATH 780	0 %	VS.1				Instrumento VS-1		Ready				SU	()
	Users n	nanagement												
2005	Search											+ 🗅	o 1	١ ١
		Username	Name	Surname	Position	State	e*	Deactivation date	Block date	Password expiration date	A	tions		
9		Superusuario	Servicio	Administrador	Administrator		Activated			09/09/2044	0	8 🛍		
REAGENTS		Distributor	Distributor	Distributor	Distributor		Activated			10/09/2044	0	8 🛈		
B														
REPORTS														
SETTINGS														
0	Stat	e in Activated Stocker	e)										1	×
HELP	Page 1 of	1										H	4 1 10	101

4.19.1 Register users

To create a new user in the system, click on the "+" button.

N€OP.	ATH®	0 %	o VS-1			Instrumento VS-1		Ready		SU C→	>
~	Users	management									
subes	Search									🕀 6 d 🖻	
		Username	Name	Surname	Position	State *	Deactivation date	Block date *	Password expiration date	Actions	
Ð		Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044		
REAGENTS		Distributor	Distributor	Distributor	Distributor	Activated			10/09/2044	0 8 10	
REPORTS											

Then, in the creation window, the following fields must be filled in:

• User.

- Password. Clicking (?) displays a window indicating what's needed for a secure password.
- Position. The user can choose between the role of Lab Administrator or Lab Technician.

Add user	×
Username *	
Password *	
Confirm password *	
Firstname	Lastname
Position *	Email
Select -	
Save and add new	Cancel Save

4.19.2 Edit users

Clicking on the edit icon \mathscr{P} will open a window where you can edit the information and change the user's password.

NEOP	PATH®	80	0 %	VS-1				Instrumento VS-1		Ready				su c→
	Use	ers m	anagement										(†)	cf 🖻
1000	1		Username	Name	Surname	Position	Sta	te *	Deactivation date	Block date *	Password expiration date		Actions	
Ð			Superusuario	Servicio	Administrador	Administrator		Activated			09/09/2044	Ø	A 🛈	
REAGENTS	1		Distributor	Distributor	Distributor	Distributor		Activated			10/09/2044	0	8	
REPORTS														

4.19.3 Block user

To block a user, press the button \triangle . In this way, access to the system can be blocked from the date indicated in the block.

N€OP	PATH	PRO	0 %	s VS-1		-	Instrumento VS-1		Ready		SU C	⋺
	L	Jsers n Search	nanagement								+ 6 6 0	
300453			Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions	
9			Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 8 1	
REAGENTS			Distributor	Distributor	Distributor	Distributor	Activated			10/09/2044	0 🕒 🛍	
REPORTS												

Edit user					×
Username *			Firstnam	e	
Superusuario		×	Servicio)	×
Lastname			Position	*	
Administrador		×	Vitro A	dministrator	•
Email					
servicio.tecnico1@vitro.l	oio	×			
Change password Password *	••	× 0			
Confirm password *					
•••••	••	R			
Deactivate	LOCK			Cancel	Save

• If we block with current date the user will be immediately blocked.

Search									+ 8 6 1
	Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions
	Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 A 🗊
	Distributor	Distributor	Distributor	Distributor	Blocked		03/21/2025	10/09/2044	0 G 🛍

• If we block with a future date. The user will be able to work normally until the indicated date arrives, which will be reflected in the blocking date section, once the date arrives the user will be blocked.

N€OP	PATH 📧	0 %	o VS-1			Instrumento VS	-1	Ready		SU	(→
n	Users	management									
supes	Search									+ 6 6 🛍	
		Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions	
1		Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 A 🗊	
REAGENTS		Distributor	Distributor	Distributor	Distributor	Activated		03/23/2025	10/09/2044	0 G 0	
8											
REPORTS											

This blocking can be done massively by selecting different users from the list and pressing the button at the top.

٠
TH BO	0 %	5 VS-1			Instrumento VS-1		Ready		SU C→
Users	management								+ 🖪 🗠 🖷
	Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions
	te3st			Technician	Activated			03/21/2045	2 A
	Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 8 0
	Distributor	Distributor	Distributor	Distributor	Activated		03/23/2025	10/09/2044	0 G
	Users Search	Users management	Users management Sweth. Users management Sweth. Username Name C to3st Superusuario Servicio C Distributor Distributor	Uters management Users management Sumin. Usersme Name Surname Userbat Supensuario Servicio Administrador Distributor Distributor	Users management Users. Usersame Name Surrame Position Users. Usersame Name Surrame Position Users.	Utersemangement Users management Users management Users. Usersame Name Surname Position State* Usersame Name Surname Position State* Users. Usersame Name Surname Position State* Users.	Uters management Users	Dist Intrumento VS-1 Recoly Users management Sum Sate* Descrivation date Block date 2 te3at Technician Activated Intrumento VS-1 Block date 2 bistibutor Distributor Distributor Activated 03/23/2025	Distance Distributor Distributor Distributor Distributor Distributor Objectibutor Distributor Distributor Distributor Distributor Distributor Distributor

4.19.4 Unblock user

To unlock a user, press the button \square . In addition, the user's password can be changed from the unlock window.

				Unlo	ck user					×			
				User									
				Distri	butor								
				Chang Passw	e password ord *								
							x ?						
				Confir	m password *								
				•••	•••••		N .						
									Cancel	Accept			
		0%	-						Gancer	Ассерг			
NEOPA	ATH mo	Instrumente	s VS-1			START	Instrumento VS-1		Ready			SU	(→
~	Users n	nanagement											
sudes	Search										+	6 6 1	Ô
0		Username	Name	Surname	Position	State	,τ	Deactivation date	Block date	Password expiration date	Actions		
Ð		Superusuario	Servicio	Administrador	Administrator		Activated			09/09/2044	0 8 0	1	
REAGENTS		Distributor	Distributor	Distributor	Distributor		Blocked		03/21/2025	10/09/2044	0 6 6	1	
8													
REPORTS													

This unblocking can be done in bulk by selecting different users from the list and pressing the button at the top.

<u>کم</u> ک	itro ainers	oR	0 %	o VS-1				Instrumento VS-1		Ready				S	0 €
Ø	U	sers m	nanagement										+	- A -	5 @
3003			Username	Name	Surname	Position	St	ate▼	Deactivation date	Block date	Password expiration date		Action	5	
8			te3st			Technician		Blocked		03/21/2025	03/21/2045	0	6	Û	
REAGENTS			Superusuario	Servicio	Administrador	Administrator		Activated			09/09/2044	0	۵	Û.	
图			Distributor	Distributor	Distributor	Distributor		Blocked		03/21/2025	10/09/2044	0	ъ	Û	
2290875															

4.19.5 Deactivate user

To deactivate a user, press the button 100. In this way, the user can be deactivated and prevented from accessing the system from the date indicated in the blocking.

NEO	PATH	PRO)	0 %	o VS-1			Instrumento VS-1		Ready		SU C→
	Use	ers n	nanagement								
sudes	St	earch									+ 6 6 0
			Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions
9			te3st			Technician	Activated			03/21/2045	/ 8 🔟
			Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	/ A 🗊
B			Distributor	Distributor	Distributor	Distributor	Activated			10/09/2044	
REPORTS											

• If we deactivate the current date the user will be immediately blocked.

NEOP.	ATH®®	0 %	s VS-1			Instrumento VS-1		Ready		SU C→
^	Users r	nanagement								
SUDES	Search									+ උ උ @
		Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions
9		te3st			Technician	Deactivated	03/21/2025		03/21/2045	0 & m
REAGENTS		Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	2 A 0
		Distributor	Distributor	Distributor	Distributor	Activated			10/09/2044	0 A tt

• If we deactivate with a future date. The user will be able to work normally until the indicated date arrives, which will be reflected in the blocking date section, once the date arrives the user will be blocked.

NEOP.	ATH®®	0 %	o VS-1			Instrumento VS-1		Ready			SU	€
•	Users n	nanagement										
subes	Search									+	8 6 6	۵
		Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions		
9		te3st			Technician	Activated	03/23/2025		03/21/2045	0 8+	Û	
REAGENTS		Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 8	Ô	
B		Distributor	Distributor	Distributor	Distributor	Blocked		03/21/2025	10/09/2044	0 6	Û	
REPORTS												

This deactivation can be done massively by selecting different users from the list and clicking on the button at the top.

NEOI	PAT	Hmo	0 % Instrumento	9 VS-1			Instrumento VS-1		Ready		SU C→
~		Users n	nanagement								
SUDES		Search									+ 🛆 🖻
			Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions
9			te3st			Technician	Activated			03/21/2045	
REAGENTS			Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 8 0
Ð			Distributor	Distributor	Distributor	Distributor	Blocked		03/21/2025	10/09/2044	0 f 🛍
REPORTS											

4.19.6 Activate user.

To activate a user, press the button \cong . In addition, the user's password can be changed from the activation window.

NEOP	PATH 📧	0 % Instrumente	o VS-1			Instrumento VS-1		Ready			SU	€
~	Users	management										
subes	Search.									+ 6	6	Û
		Username	Name	Surname	Position	State *	Deactivation date	Block date	Password expiration date	Actions		
9		te3st			Technician	Deactivated	03/21/2025		03/21/2045	0 🕾 🛍		
REAGENTS		Superusuario	Servicio	Administrador	Administrator	Activated			09/09/2044	0 A 0		
		Distributor	Distributor	Distributor	Distributor	Activated			10/09/2044	1 8 1		
REPORTS												

4.19.7 User accessibility: permissions and roles

There are four levels of user access in NeopathPro . The options available for each profile are described below:

Activate user			×
User			
te3st			
Change password Password *			
•••••	2		
Confirm password *			
•••••	R		
		Cancel	Accept

Permission / Role	Vitro Administrator	Distributor	Laboratory Supervisor	Laboratory Technician
Slide Option		Not ap	oplicable	
See R&D button	Х			
Change or create evalutions				

View Reagents Options	х	x	Х	х
View inventory option	Х	Х	Х	Х
Register a vial	Х	Х	Х	Х
Edit a vial	Х	Х	Х	Х
Delete a vial	Х	Х	Х	Х
Enable/disable vials	Х	Х	Х	Х
View Reagents' list option	Х	Х	Х	Х
Edit a Vitro reagent	Х	Х		
Delete a Vitro reagent	Х	Х		
Register a custom reagent	Х	Х	Х	Х
Edit a custom reagent	Х	Х	Х	Х
Delete a custom reagent	Х	Х	Х	Х
View options for types of kits	Х			
Register a type of kit	Х			
View Settings Options	Х	Х	Х	Х
View General option	Х	Х	Х	
Access to Configure Alerts	Х	Х	Х	
Access to Configure Notifications	Х			
Access to configure requests and slides	Х	Х	Reading only	
Login to set up Password security	Х			
Access to configure Reagents	Х			
Access to configure Sites	Х	Х	Х	
View Protocols options	Х	Х	Х	Х
Protocols tab		Not aj	oplicable	
Create protocols	Х	Х	Х	
Edit protocols	Х	Х	Х	
Delete protocols	Х	Х	Х	
View Techniques tab	Х	Х	Х	
Create and edit techniques	Х	Х	Х	
Deactivate / actívate techniques	Х	Х	Х	
Change Technique protocol	Х	Х	Х	
Change phases of the protocol	Х	Х	Х	
View instruments options	Х	X		
View users options	X	X	X	
User registration	Х	X	Х	
User edit	Х	X	Х	
User deregistration	Х	X	Х	
User blocking	Х	Х	Х	

*The breakdown of permissions and roles is incorporated based on the information in the table from VitroStainer Soft version 80 onwards.

4.20 Reports

To access the reports module, click the Reports option in the sidebar. From this module, you can view and manage all reports.

4.20.1 Series Report

4.20.1.1 Detailed Series Report

The purpose of this report is to obtain a document with the most relevant information about the slides and reagents used. It focuses on allowing the user to access records of completed, stopped, or interrupted series within a defined date range.

The report structure allows for managing information on series and executed processes, optimizing their traceability, analysis, and documentation for audits or technical reviews.

The entire slide execution process is included.

The configuration parameters for displaying records in this report are:

- Parameter to limit the date range to a maximum number of days. By default, it is limited to 365 days.
- Parameter to establish which predefined date range values will exist for this type of report. The following types are available for this report:
 - o Today
 - Yesterday
 - o Last week
 - o Last month
 - o Last year
 - The default value will be Today.
- Parameter to limit the number of records to select in the grid. Initially, this will be limited to 1 by default.

Filters

The filters that can be applied in this report are based on the 'Date Range' field. The options are:

- Predefined date and time range. By default, Today will be selected, and it will be displayed in the Start Date and End Date fields.
- Custom date range. When selecting this option, the 'Start Date' and 'End Date' fields must be enabled. These dates must meet the following criteria:
 - Start date and time: Must be less than or equal to the current date. Otherwise, an error message will be displayed. The message will be "Must be current or earlier."
 - End date and time: Must be greater than or equal to the start date and less than the start date + the parameter value to limit the date range to a maximum number of days, and always less than or equal to the current date. If the date range is not within the range, an error message will be displayed below the field.
 - If it is less than the Start date, "Must be the start date or later."
 - If it exceeds the maximum number of days, "Date outside the maximum range of days: value of the _Parameter to limit the date range to a maximum number of days."
 - The results grid will only be updated when both the start and end dates have a correct date, that is, within the limits.

Results Grid

By default, the results grid displays records corresponding to the series whose execution start date falls within the previously selected date range. This report will only display records from series that are in the finished, stopped, or interrupted status, and will not display records from series that are running. These records will also be sorted by series date.

The columns that should be displayed are:

- Selector
- Series
- Status
- Instrument
- User
- Version

Additionally, a button appears at the bottom of the grid with the value 'Generate report.' This button will only be enabled when a series ID has been selected.

tart date		From*			To*						
loday	~	03/21/2025 00:0	0	×	03/21/2	025 23:59	× (
Ser	ial		Stat	us			Instrument	User	V	lersion	
ge 1 of 1											M 44 1

Report Layout

- Header
 - o Logo
 - Report Title
- For each series:
 - o Date and time of the series
 - o Series status
 - o Number of slides
 - o Instrument name
 - Version in which the series was run
 - User who ran it
 - \circ For each Load in the series, a subheader will be displayed with the slide information:
 - o Reaction chamber

- o Slide ID
- o Technique
- o Protocol
- o Slide status
- Information on the protocol steps and reagents in columns.
 - Group the phases by the following data:
 - o Step name
 - Dispensed reagent
 - Vial ID
 - For dispensing a mixture, information must be provided for each vial used for the mixture.
 - Batch
 - Expiration date
 - Volume dispensed in microliters
 - Number of blows
 - Number of washes
 - Step status
 - Temperature for SETTEMP
 - Incubation time
- Reagent section used in the series. This section must be shown for each series. The data will be grouped as follows:
 - Section title: Reagent Use
 - Header
 - Reagent
 - o Data by reagent
 - Vial ID
 - Batch
 - Expiration date
 - Volume dispensed
 - Number of slides made
 - List of slide IDs
- Series observations section, where data for each slide in the series related to warnings, errors, or notes will be reported. The columns will be divided into the following data:
 - o Slide ID
 - Reaction chamber
 - о Туре
 - If the field is not null in the Type column, the value 'Warning' will be displayed
 - If the field is not null in the Type column, the value 'Notes' will be displayed
 - If both fields are null, no information will be reported for each slide.
 - o Observation
 - If the field is not null, the Observation column will display the value of the field itself.
 - If the field is not null, the value of the field itself will be displayed in the Type column.
 - If both fields are null, no information will be reported on each slide.
- Footer: This will be repeated on each page of the report.
 - o User Date and time of printing

- o Software version from which the print is made
- o Total page number

Detailed	serial rep	ort					/ICCO stainer	sof
3/21/2025 1 slides	13:22	State Finalized	Instrument Instrumento V	/S-1	Version 1.0.81.2	User Sup	erusuario	
			CHARGE 1					
1-A TR/	/MVS001	(CHARGE 1)	— CHARGE 1					
1-A TR/	MVS001	(CHARGE 1) Technique	— CHARGE 1	Protocol #ILLO			02	
I-A TR/	/MVS001 /alidated	(CHARGE 1) Technique ACTH	— CHARGE 1	Protocol #IHQ_	105C_HRP_	10MINAB_V.	02	
I-A TR/ State Finalized and V DEWAX	/MVS001 /alidated Reagent	(CHARGE 1) Technique ACTH ID. Vial	Lot Expiration	Protocol #IHQ_ Vol. (µl)	105C_HRP_ Blows Wash	10MINAB_V.	02 Incubation	State
I-A TR/ tate Finalized and N DEWAX	Validated Reagent ACTH	(CHARGE 1) Technique ACTH ID. Vial acth2	Lot Expiration adsfadsf 12/31/2025	Protocol #IHQ_ Vol. (µl) 325	105C_HRP_ Blows Wast	10MINAB_V. nes Temp. (*C)	02 Incubation	State

4.20.1.2 Summary series report

This report allows users to view, analyze, and export relevant details about the run, including the final status of the slides, reagents used, and any observations recorded during the run, without going into the details of the run process.

The configuration parameters for viewing logs in this report are:

-Parameter to limit the date range to a maximum number of days. By default, it is limited to 365 days.

- Parameter to establish which predefined date range values will exist for this report type. The following types are available for this report:

- o Today
- o Yesterday
- o Last Week
- o Last Month
- o Last Year
- The default value will be Today.

- Parameter to limit the number of records to select in the grid. By default, this value will be limited to 1.

Filters

The filters that can be applied in this report are based on the 'Date Range' field. The options are:

- Predefined date and time range. By default, Today will be selected, and it will be displayed in the Start Date and End Date fields.

- Custom date range. When selecting this option, the 'Start Date' and 'End Date' fields must be enabled. These dates must meet the following criteria:

- Start date and time: Must be less than or equal to the current date. Otherwise, an error message will be displayed. The message will be "Must be current or earlier."
- End date and time: Must be greater than or equal to the start date and less than the start date + the parameter value to limit the date range to a maximum number of days, and always less than or equal to the current date. If the date range is not within the range, an error message will be displayed below the field.
 - If it is less than the Start date, "Must be start date or later."
 - If it exceeds the maximum number of days, "Date outside the maximum number of days: _Parameter value to limit the date range to a maximum number of days."

-The results grid will only be updated when both the start date and the end date have a correct date, that is, within the limits.

Results Grid

By default, the results grid displays records corresponding to the series whose execution start date falls within the previously selected date range. This report will only display records from series that are in the completed, stopped, or interrupted status, and will not display records from series that are running. These records will also be sorted by the series date.

The columns to be displayed are:

- Selector
- Series: The date of the first record in the series with a started status will be displayed.
- Status: The name of the status corresponding to the last record in the series will be displayed.
- Instrument: Name of the instrument associated with the series.
- User: The user registered in the final status of the series will be displayed.

- Version: The version registered in the final status (completed, stopped, or interrupted) of the series will be displayed.

Additionally, a button with the value 'Generate report' appears at the bottom of the grid. This button will only be enabled when a series ID has been selected.

tart date		From*		Т	0*							
oday	~	03/21/2025 00:00	\times	U	03/21/2025 23:5	59 ×	\bigcirc					
Se	erial		Status			Instrumer	ıt	Use		Version		

Report Layout

- Header
 - o Logo
 - o Report Title

- For each run, a subheader will be displayed with the following information:

- \circ $\,$ Date and time of the run
- o Run status. It can be Finished, Stopped, or Interrupted.
- $\circ \quad \text{Number of slides}$
- o Instrument name
- \circ Version in which the run was run
- o User who ran it

- For each load in the run, a subheader will be displayed with the slide information. This information includes:

- o Reaction chamber
- o Slide ID
- o Technique
- o Protocol
- o Slide status

- Information on the protocol steps and reagents in columns.

Reagents used in the series section. This section must be displayed for each series.
 The data will be grouped as follows:

- Section title: Reagent Use
 - Header

- Reagent
- o Data by reagent

- o Vial ID
- o Batch
- Expiration date
- o Volume dispensed
- Number of slides made
- o List of slide IDs
- Series observations section, where data related to warnings, errors, or notes will be reported for each slide in the series. The columns will be divided into the following data:
 - o Slide ID
 - Reaction chamber
 - o Type
 - If the field is not null in the Type column, the value 'Warning' will be displayed
 - If the field is not null in the Type column, the value 'Notes' will be displayed
 - If both fields are null, no information will be reported for each slide.
- o Observation
 - If the field is not null, the field value will be displayed in the Observation column.
 - \circ $\;$ If the field is not null, the field value will be displayed in the Type column.
 - \circ $\;$ If both fields are null, no information will be reported on each slide.
- Footer: This will be repeated on each page of the report.
 - User Date and time of printing
 - o Software version from which the report is printed
 - o Total page number

Summary seria	al report				C	vitro stainersoft
3/21/2025 13:22	State	ind	Instrument	to 1/0 1	Version	User
			CHARGE	1 —		
D. Slide	Chamber	State		Technique	Protocol	
R/MVS001	1-A	Finalized and Valio	dated	ACTH	#IHQ_1050	C_HRP_10MINAB_V.02
		USE	OF REA	GENTS		
ACTH D. Vial	Lot	Expiration	Vol. (µl)	Slides	List	
cth2	adsfadsf	12/31/2025	357	1	TR/MVS001	

4.20.2 Slides Report

4.20.2.1 Processed slides

The purpose of this report is to provide a structured and filterable breakdown of the slides processed in a series. It allows users to view key information about the status, run, and configuration of each slide, including instrument, user, protocol, reagents used, and observations. It also facilitates process traceability and assists in the validation and quality control of the results obtained.

Parameter settings

- Parameter to limit the custom date range to a maximum number of days. By default, this will be set to 31 days.
- Parameter to define which predefined date range values will exist for this report type. The following types are available for this report:
 - o Today
 - o Yesterday
 - o Last week
 - o Last month
 - The default value will be Today.
- Parameter to limit the number of records to select in the grid . By default, this will be limited to 100.

Filters

The filters that can be applied to this report are related to the following fields. The options are:

- Porta Id: Text field where you can enter a search string that filters matching results in the system.
- Status: Only portal statuses with a specified execution date should be displayed. By default, 'All' should be selected.

- Slide run date: You can select one of these options directly and slides whose run date falls within the selected dates will be filtered.
- Predefined date and time range. By default, Today will be selected, and it will be displayed in the Start Date and End Date fields.
- Custom date range. When selecting this option, the 'Start Date' and 'End Date' fields must be enabled. These dates must meet the following criteria:
 - Start date and time: Must be less than or equal to the current date. Otherwise, an error message will appear. The message will be "Must be current or earlier."
 - End date and time: Must be greater than or equal to the start date and less than the start date + the *parameter value to limit the date range to a maximum number of days*, and always less than or equal to the current date. If it is not within the range, an error message must be displayed below the field.
 - If it is less than the Start date "Must be Start date or later"
 - If it exceeds the maximum number of days "Date outside the maximum range of days: _Parameter value to limit the date range to a maximum number of days"

The results grid will only be updated when both the start date and end date are within the correct date range, that is, within the limits.

Filter results grid

The columns to be displayed sorted by portal id are as follows:

- Selector
- Id porta
- State
- Series: the start date of the series to which the slide is associated will be displayed.
- Load: the run of the series to which the slide is associated will be displayed
- Instrument: name of the instrument where the slide was processed
- User: The registered user will be displayed in the final status.
- Version: The version recorded in the final state will be displayed
- Center: This field will only be displayed if the multi-center option is enabled.
- Origin: This field will only be displayed if you have LIS integration
- Technique
- Protocol
- Priority
- Pathologist
- Creation date
- Execution date.
- Warning
- Grades

By default, records corresponding to portals whose execution date falls within the selected date range should be displayed, and only those portals that have an execution date reported.

Additionally, a button appears at the bottom of the grid with the value 'Generate Report'. This button will only be enabled when a serial ID has been selected.

Slides	5		State				Execution date	e F	From*		То	*		
			All selected			\sim	Today	~	03/21/2025 00	00 ×		3/21/2025 23:59	×	C
	Identifier	Status	Serial	Load	Instrument	Username	e Version	Origin	Technique	Protocol	Priority	Pathologist	Creation d	Execution
	luendher	Status	Serial	LUdu	instrument	Username	version	Origin	rechnique	PIOLOCOI	Phority	Pathologist	creation d	Executi

Composition of the report

- Head
 - o Logo
 - Title of the report
- Subheader with the data for each of the slides in the selection.
 - o Id porta
 - o State
 - Series: The start date of the series to which the portal is associated will be displayed. Only if the portal has been executed will be reported.
 - Load: The execution of the series to which the porta is associated will be displayed. Only if the porta has been executed will be reported.
 - \circ the porta has been made.
 - User: The registered user will be displayed in the final status.
 - \circ $\;$ Version: The version recorded in the final state will be displayed
 - Center: only if it is multicenter
 - Origin: only if LIS Integration exists
 - o Technique
 - Protocol
 - Priority
 - Pathologist
 - Creation Date
 - \circ $\;$ Execution Date. Only if the contract has been executed will be reported.
 - Information about the protocol steps and reagents in columns. Since there are many columns, it would be important to determine whether the report is displayed horizontally or vertically.
 - Only the steps taken should be shown.
 - Finished. All because all are done.

- Interrupted, discarded, and canceled: all that has been done.
- Group the following data by phase:
 - Step name
 - Dispensed reagent (only reported in the case of DISPENSE and WASHSLIDE)
 - \circ $\:$ Vial ID (will only be reported in the case of a DISPENSE of vials).
 - In the case of dispensing a mixture, the information for each vial used for the mixture must be reported.
 - o Batch (only reported in the case of DISPENSE and WASHSLIDE)
 - Expiration date (only reported in the case of DISPENSE and WASHSLIDE)
 - Volume dispensed in microliters (only reported in the case of DISPENSE and WASHSLIDE)
 - Number of blows (only reported in the case of a DISPENSE and WASHSLIDE)
 - Number of washes (only reported in the case of a WASHSLIDE)
 - Step status: Completed or not, indicated with a check.
 - Temperature for the SETTEMP
 - Incubation time (only reported in the case of an INCUBATE)
- Observations section for each page, where any warnings, errors, or notes will be reported. If there are no warnings, errors, or notes, they will not be displayed. The following data will be shown in columns:
 - Id porta
 - Reaction chamber
 - Type. For each port, a record will be created for each of the following fields:
 - If the field is not null in the Type column the value "Warning" will be displayed.
 - If the field is not null in the Type column the value "Notes" will be displayed.
 - \circ $\;$ If both fields are null on each page, nothing will be reported.
 - Note: For each portal, a record will be created for each of the following fields:
 - If the field is not null, the value of the field itself will be displayed in the Observation column.
 - If the field is not null in the Type column, the value of the field itself will be displayed.
 - \circ $\;$ If both fields are null on each page, nothing will be reported.

- Foot:
 - o User Print date and time
 - o Version of the SW from which printing is made
 - o Total page number

TR/MVS001	Serie: 03/21/2025 12:19:29 PM	(Load: 1)	Origin: Manual
State	Technique		Protocol
Finalized and Validated	ACTH		#IHQ_105C_HRP_10MINAB_V.02
Priority	Instrument		Pathologist
Normal	Instrumento VS-1		
Creation date	Execution date		User
3/21/2025 13:16	3/21/2025 13:22		Superusuario
Version	Center		
1.0.81.2	HEALTH CAREEEE		

4.20.2.2 Pending Slides

This report provides a detailed overview of slides in the "Pending" status, i.e., those that have not yet been processed. It allows users to filter, view, and generate a report with key information for each slide, including its origin, technique, protocol, priority, and assigned pathologist. In addition, any associated warnings or notes are included, facilitating the management and planning of pending samples.

Parameter settings

- Parameter to limit the custom date range to a maximum number of days. By default, this will be set to 31 days.
- Parameter to define which predefined date range values will exist for this report type. The following types are available for this report:
 - o Today
 - o Yesterday
 - o Last week
 - o Last month
 - The default value will be Today.
- Parameter to limit the number of records to select in the grid . By default, this will be limited to 100.

Filters

The filters that can be applied to this report are related to the following fields. The options are:

- Porta Id: Text field where you can enter a search string that filters matching results in the system.
- Slide creation date. You can select it directly from any of the options. Slides whose creation date falls within the selected dates will be filtered, only for slides with a 'Pending Upload' status.
 - Predefined date and time range. By default, Today will be selected, and it will be displayed in the Start Date and End Date fields.

- Custom date range. When selecting this option, the 'Start Date' and 'End Date' fields must be enabled. These dates must meet the following criteria:
 - Start date and time: Must be less than or equal to the current date. Otherwise, an error message will appear. The message will be "Must be current or earlier."
 - End date and time: Must be greater than or equal to the start date and less than the start date + the parameter value to limit the date range to a maximum number of days, and always less than or equal to the current date. If it is not within the range, an error message must be displayed below the field.
 - If it is less than the Start date "Must be Start date or later"
 - If it exceeds the maximum number of days "Date outside the maximum range of days: _Parameter value to limit the date range to a maximum number of days"
- The results grid will only be updated when both the start date and end date are within the correct date range, that is, within the limits.

Filter results grid

The columns to be displayed sorted by portal id are as follows:

- Selector
- Id porta
- Center: This field will only be displayed if the multi-center option is enabled.
- Origin: This field will only be displayed if you have LIS integration
- Technique
- Protocol
- Priority
- Pathologist
- Creation date
- Warning
- Grades

By default, records corresponding to portals whose execution date falls within the selected date range should be displayed, and only those portals that have an execution date reported.

Additionally, a button appears at the bottom of the grid with the value 'Generate Report'. This button will only be enabled when a serial ID has been selected.

Slides	Creation	late	From*			To*				
	Today	~	03/21/2	2025 00:00	\times	03/21/20	25 23:59 ×	\bigcirc		
ldentifier	Origin	Techniqu	ue	Protocol		Priority	Pathologist	Creation date	Warning	Notes

Composition of the report

- Header: It will be repeated on each page of the report
 - o Logo
 - Report Title: Pending Slides
- Data for each of the selection's portals:
 - o Id porta
 - Center: only if it is multi-center
 - o Origin
 - o Technique
 - o Protocol
 - Priority
 - Pathologist
 - Creation Date
 - Execution Date. Only if the contract has been executed will be reported.
- Observations section for each page, where any warnings, errors, or notes will be reported. If there are no warnings, errors, or notes, they will not be displayed. The following data will be shown in columns:
 - o Id porta
 - Type. For each port, a record will be created for each of the following fields:
 - If the field is not null in the Type column the value "Warning" will be displayed.
 - If the field is not null in the Type column the value "Notes" will be displayed.
 - If both fields are null on each page, nothing will be reported.
 - Note: For each portal, a record will be created for each of the following fields:
 - If the field is not null, the value of the field itself will be displayed in the Observation column.
 - If the field is not null in the Type column, the value of the field itself will be displayed.
 - If both fields are null on each page, nothing will be reported.

- Foot:
 - o User Print date and time
 - Version of the SW from which printing is made
 - o Total page number

25-000001/MVS001		Origin Manual
Priority	Technique	Protocol
Normal	ACT.MG	#IHQ_105C_HRP_10MINAB_V.02
Creation Date	Pathologist	Center
03/21/2025 13:37	False	LABORATORIO
	OBSERVATIONS	
Type Observation		
Note		

4.20.3 Reagent reports

4.20.3.1 General reagent report

This report provides a detailed list of the reagents available in the system, allowing their identification through key attributes such as acronym, name, technique group, and specific characteristics (hazard, viscosity, and whether they are part of a mixture). Its purpose is to facilitate the management and control of reagents in the laboratory, ensuring rapid reference and monitoring of them.

Filters

- Acronym: Text field where you enter a search string that filters the system's matching results.
- There are currently no advanced filters, so the button should remain hidden.

Filter results grid

- The columns to be displayed are the following, and it should be possible to filter by each of them.
 - Type of reagent
 - o Acronym
 - o Name
 - Group of techniques
 - Dangerous
 - o Goo

- o Mix
- By default, all reagents should be displayed.
- Currently, changing any filter will require refreshment of the results. If a record was already selected, the previous selection will be lost.
- Generate Report Button:
 - The Generate Report button will only be enabled when you have selected at least one record.
 - The report must be generated in the same language configured for the application.
 - Clicking the button changes the view to the report preview.

Reage	nts 🕨 General reage	ents report					
Select t	he items to be included	d in the report					
Short	name	Technique Group					
		All selected	\checkmark				
	Reagent type	Acronym	Reagent	Technique Group	Dangerous	Viscosity	Mix
	ANTIBODY	ACTH	ACTH (Adrenocorticotr	IHQ	No	Low	No
	ANTIBODY	ACT.MG	Actin, Muscle Specific (IHQ	No	Low	No
	ANTIBODY	ADIPOF	Adipophilin (Polyclonal)	IHQ	No	Low	No
	ANTIBODY	ALK.5A4	ALK/P80 (5A4)	IHQ	No	Low	No
	ANTIBODY	ALDH1	ALDH1A1 (Polyclonal)	IHQ	No	Low	No
	Dewax	Dewax	Dewax	IHQ	No	Low	No
	ANTIBODY	ANTQUIM	Alpha-1 Antichymotryp	IHQ	No	Low	No
	Others	Alcohol	Alcohol	IHQ	No	Low	No
	ANTIBODY	P504	AMACR / p504S (13H4)	IHQ	No	Low	No
	ANTIBODY	AMILO.A	Amyloid A (MC1)	IHQ	No	Low	No
	ANTIBODY	AMILO.P	Amyloid P (EP1018Y)	IHQ	No	Low	No
Page 1	of 20					H4 44 1 2 3	4 5 6 7 8 9 10 ₩ ₩
Total 3	96 items selected items : 0)					
							Generate report

Composition of the report

- Header: It will be repeated on each page of the report
 - Logo
 - Report Title: Reagents
 - Information for each reagent
 - Type of reagent
 - Acronym
 - Name
 - Group of techniques
 - Dangerous
 - Goo
 - Mix
- Foot:

0

- Date and time of printing
- User Version of the SW from which printing is made
- Total page number

Genera	l reagents	report	TV.		i tro ainersof
FISH					
Reagent type	Acronym	Name	Hazardous	Viscosity	Mix
FISH	HER2/CEN17 FISH Probe	HER2/CEN17 FISH Probe (for MD-Stainer)	No	High	No
Dewax	DEWAX-2	DEWAX-2	No	Low	No
IHQ					
Reagent type	Acronym	Name	Hazardous	Viscosity	Mix
ANTIBODY	ACTH	ACTH (Adrenocorticotropic Hormone) (Polyclonal)	No	Low	No
ANTIBODY	ACT.MG	Actin, Muscle Specific (HHF35)	No	Low	No
ANTIBODY	ADIPOF	Adipophilin (Polyclonal)	No	Low	No

4.20.3.2 Slides processed by Id vial

This report records and details the use of vials in slide processing within a selected date range, including the lot identifier. It allows you to identify key reagent inventory information, such as the vial ID, type, lot, expiration date, and volume, as well as their use on the different slides processed. It also provides a detailed view of the usage history of each vial, facilitating the control, traceability, and auditing of reagent consumption in the laboratory.

Parameter settings

- Parameter to limit the custom date range to a maximum number of days. By default, it will be limited to 31 days.
- Parameter to define which predefined date range values will exist for this report type. The following types are available for this report:
 - o Today
 - o Yesterday
 - o Last week
 - o Last month
 - The default value will be Today.
- Parameter to limit the number of records to select in the grid . By default, this will be limited to 100.

Filters

The filters that can be applied to this report are related to the following fields. The options are:

- Road ID: Text field where you can enter a search string that filters the system's matching results.
- Reactive: multi-selector or text.
- Last use date. You can select one of these options directly, and slides whose last use date falls within the selected dates will be filtered.
 - Predefined date and time range (the *parameter to limit the date range to a maximum number of days does not apply to predefined ranges*)

- Today, yesterday, last week, last month. Those defined in the *Parameter to* establish which predefined date range values will exist for this type of report.
- By default, the Today option will be selected (*Parameter to set which predefined date range should appear selected by default from those existing in the previous parameter*) and will be shown selected in the Start Date and End Date fields.
- Custom date range. When clicked, the Start Date and End Date fields should be enabled with the predefined range. The Start Date and End Date fields should be limited.
 - Start date: Must be less than or equal to the current date. If it is not within the range, an-error message will appear below the field ("Must be current or earlier").
 - End date: Must be greater than or equal to the start date and less than the start date + the *parameter value to limit the date range to a maximum number of days and* must always be less than or equal to the current date. If it is not within the range, an error message must be displayed below the field.
 - If it is less than the Start date "Must be Start date or later"
 - If it exceeds the maximum number of days "Date outside the maximum range of days: _Parameter value to limit the date range to a maximum number of days"
 - The results grid will only be updated when both the start date and end date are within the correct date range, that is, within the limits.
- There are currently no advanced filters, so the button should remain hidden.

Grid of filter results.

The columns to be displayed are as follows, in ascending order by Last Used Date, and it should be possible to filter by each of them.

- Selector.
- Road identifier.
- o Reagent.
- o Guy.
- o Batch.
- Expiration
- First use
- o Last use
- o Initial volume
- Current volume
- Enabled
- o Supplier

By default, the corresponding inventory records whose last use date falls within the selected date range should be displayed.

Currently, changing any filter will require a refreshment of the results. If a record was already selected, the previous selection will be lost.

Generate Report Button:

• The Generate Report button will only be enabled when you have selected at least one record.

- Currently, only a maximum of 100 records can be selected, and the user must be informed of this limitation. Furthermore, the user must be informed if they exceed the limit of 100 without deselecting the current selection.
- The report must be generated in the same language configured for the application.
- Clicking the button changes the view to the report preview.

al ID		Reage	ent		Last use date	From*		To*			
		All se	lected	~	Today	• 03/21/2025 0	00:00 ×	03/21/2	025 23:59	×	
	Vial ID	Reagent	Туре	Lot	Expiration Da	te First use date	Last use date	Initial volume	Current Volume	Enabled	Supplier
re 1 of 1											et 1 H

Composition of the report

- Header: It will be repeated on each page of the report.
 - Logo
 - Report Title: Slides processed by Id Vial
 - Subheader: Vial information (there is only one) if grouped by Vial ID
 - Total number of portas made with that vial.
 - Road identifier.
 - Reagent.
 - Guy.
 - Batch.
 - Expiration
 - First use
 - Last use
 - Initial volume
 - Current volume
 - Enabled
 - Supplier
 - Information about each slide where the vial has been used, in columns. To do this, retrieve information about all slides where that vial has been used.

- o Serial date
- o Instrument
- Version
- o Slide identifier
- o State
- Date of execution
- o Technique
- o Protocol
- Foot:
 - $\circ \quad \text{Date and time of printing} \\$
 - o User Version of the SW from which printing is made
 - o Total page number

VIAL acth2			Total s	lides: 1			Reagent: AC	тн
Туре			Lot				Expiration	
Vial 50 ml			adsfac	dsf			12/31/2025	
First use			Last us	e			Enabled	
3/21/2025 13:22			3/21/2 13:22	025			 Enabled 	
Init volume			Current	vol			Supplier	
50 ml			49.64	ml			Vitro S.A.	
				SLIDES				
Slide ID	Serie date	Execution	date	Instrument	Version	State	Technique	Protocol
TR/MVS001	3/21/2025 13:19	3/21/2025	13:22	Instrumento VS-1	1.0.81.2	Finalized and Validated	ACTH	#IHQ_105C_ HRP_10MIN AB_V02

4.20.3.3 Slides processed by batch Id

This report records and details the use of vials in slide processing within a selected date range, including the lot identifier. It allows you to identify key reagent inventory information, such as the vial ID, type, lot, expiration date, and volume, as well as their use on the different slides processed. It also provides a detailed view of the usage history of each vial, facilitating the control, traceability, and auditing of reagent consumption in the laboratory.

Parameter settings

- Parameter to limit the custom date range to a maximum number of days. By default, it will be limited to 31 days.
- Parameter to define which predefined date range values will exist for this report type. The following types are available for this report:
 - o Today
 - o Yesterday

- o Last week
- o Last month
- The default value will be Today.
- Parameter to limit the number of records to select in the grid . By default, this will be limited to a value of 1.
- -

Filters

The filters that can be applied to this report are related to the following fields. The options are:

- Batch: Text field where you enter a search string that filters the system's matching results.
- Road ID: Text field where you can enter a search string that filters the system's matching results.
- Reactive: multi-selector or text.
- Last use date. You can select one of these options directly, and slides whose last use date falls within the selected dates will be filtered.
 - Predefined date and time range (the *parameter to limit the date range to a maximum number of days does not apply to predefined ranges)*
 - Today, yesterday, last week, last month. Those defined in the *Parameter to* establish which predefined date range values will exist for this type of report.
 - By default, the Today option will be selected (Parameter to set which predefined date range should appear selected by default from those existing in the previous parameter) and will be shown selected in the Start Date and End Date fields.
 - Custom date range. When clicked, the Start Date and End Date fields should be enabled with the predefined range. The Start Date and End Date fields should be limited.
 - Start date: Must be less than or equal to the current date. If it is not within the range, an-error message will appear below the field ("Must be current or earlier").
 - End date: Must be greater than or equal to the start date and less than the start date + the *parameter value to limit the date range to a maximum number of days*, and must always be less than or equal to the current date. If it is not within the range, an error message must be displayed below the field.
 - If it is less than the Start date "Must be Start date or later"
 - If it exceeds the maximum number of days "Date outside the maximum range of days: _Parameter value to limit the date range to a maximum number of days"
 - The results grid will only be updated when both the start date and end date are within the correct date range, that is, within the limits.
- There are currently no advanced filters, so the button should remain hidden.

Reagents						
Select the items to be included in the report (1 maxim	nun)					
Lot Vial ID	Reagent	Last use date	From*		To*	
	All selected	Today 🗸	03/21/2025 00:00	× C	03/21/2025 23:59	\times (
Lot	Reagent			Vials number		
D 1 1						
rage i or i Total 0 itame : calactad itams : 0						M 41 1 19 191
Total o items - selected items : 0						
						Generate report

Grid of filter results.

The columns to be displayed are as follows, in ascending order by Last Used Date, and it should be possible to filter by each of them.

- o Batch
- o Reagent
- Number of vials

By default, the corresponding inventory records whose last use date falls within the selected date range should be displayed.

Currently, changing any filter will require the results to be refreshed. If a record was already selected, the previous selection will be lost.

Generate Report Button:

- \circ $\;$ The Generate Report button will only be enabled when you have selected at least one record.
 - Currently, only a maximum of 100 records can be selected, and the user must be informed of this limitation. Furthermore, the user must be informed if they exceed the limit of 100 without deselecting the current selection.
- The report must be generated in the same language configured for the application.
- Clicking the button changes the view to the report preview.

Composition of the report

- Header: It will be repeated on each page of the report.
 - Logo
 - Report title: Slides processed by Id Vial

- Subheader: Vial information (there is only one) if grouped by Vial ID
 - Total number of slides made with that batch.
 - Road identifier.
 - Reagent.
 - Guy.
 - Expiration
 - First use
 - Last use
 - Initial volume
 - Current volume
 - Enabled
 - Supplier
 - Information about each slide where the vial has been used, in columns. To do this, retrieve information about all slides where that vial has been used.
 - o Serial date
 - o Instrument
 - o Version
 - Slide identifier
 - o State
 - Date of execution
 - o Technique
 - o Protocol
- Foot:
 - o Date and time of printing
 - \circ $\:$ User Version of the SW from which printing is made
 - o Total page number

lides processed by Batch ID					1	vitro stainersoft			
Lot: adsfadsf	Totals	lides: 1							
Vial: acth2	Totals	lides: 1		Reagent: A	стн				
Туре	Lot			Expiration					
Vial 50 ml	adsfa	adsfadsf		12/31/2025					
First use	Lastus	e		Enabled					
3/21/2025 13:22	3/21/2 13:22	025		 Enabled 					
Init volume	Current	volume		Supplier					
50 ml	49.64	ml		Vitro S.A.					
			SLIDES						
Slide ID	Serie date	Execution date	Instrument	Version	State	Technique	Protocol		
TR/MVS001	3/21/2025 13:19	3/21/2025 13:22	Instrumento VS-1	1.0.81.2	Finalized and Validated	d ACTH	#IHQ_105C_ HRP_10MIN AB_V.02		

4.20.4 User Activity Report

The purpose of this report is to record and detail user activity in the system within a selected date range. It allows you to monitor actions performed, identifying the type of activity, the user who performed it, the date and time of the event, and the device from which it was executed. Its use is key for monitoring operations, internal audits, and access control on the platform.

Parameter settings

- Parameter to limit the custom date range to a maximum number of days. By default, it will be limited to 365 days.
- Parameter to define which predefined date range values will exist for this report type. The following types are available for this report:
 - o Today
 - o Yesterday
 - o Last week
 - o Last month
 - o Last year
 - \circ $\;$ The default value will be Today.
- Parameter to limit the number of records to select in the grid . By default, this will be limited to a value of 1.

Filters

The filters that can be applied to this report are related to the following fields. The options are:

- User: Text field where you enter a search string that filters the system's matching results.
- Activity Type: Selector with available values Login or Logout .
- Access date range: You can select one of these options directly. This will filter the activity of users whose access date falls within the selected dates.
 - *parameter to limit the date range to a maximum number of days* does not apply to predefined ranges.)
 - Today, yesterday, last week, last month, last year. Those defined in the *Parameter to establish which predefined date range values will exist for this type of report.*
 - By default, the Today option will be selected (*Parameter to set which predefined date range should appear selected by default from those existing in the previous parameter*) and will be shown selected in the Start Date and End Date fields.
 - Custom date range. When clicked, the Start Date and End Date fields should be enabled with the predefined range. The Start Date and End Date fields should be limited.
 - Start date: Must be less than or equal to the current date. If it is not within the range, an error message will appear below the field ("Must be current or earlier").
 - End date: Must be greater than or equal to the start date and less than the start date + the *parameter value to limit the date range to a maximum number of days* and must always be less than or equal to the current date. If it is not within the range, an error message must be displayed below the field.
 - If it is less than the Start date "Must be Start date or later"

- If it exceeds the maximum number of days "Date outside the maximum range of days: Parameter value to limit the date range to a maximum number of days
- The results grid will only be updated when both the start date and end date are within the correct date range, that is, within the limits.
- There are currently no advanced filters, so the button should remain hidden.

Grid of filter results.

- The columns to be displayed are the following, and it should be possible to filter by each of them.
 - o Selector
 - o User
 - Type of activity
 - o Date
 - **PC**
- By default, records corresponding to user activity whose date falls within the selected date range should be displayed.
- Currently, changing any filter will require the results to be refreshed. If a record was already selected, the previous selection will be lost.
- Generate Report Button:
 - The Generate Report button will only be enabled when you have selected at least one record.
 - The report must be generated in the same language configured for the application.
 - o Clicking the button changes the view to the report preview.

ect the items to be inc	luded in the report					
sername	Activity type		Activity date	From*	To*	
II selected	✓ All selected	~	Today 🗸	03/21/2025 00:00	03/21/2025	23:59 × (
Username		Activity type		Date and time		PC
User		Login		03/21/2025 11:25:37		28d31122-bfe7-4ae7-acb1-b8e8571ac40
User		Logout		03/21/2025 13:30:07		28d31122-bfe7-4ae7-acb1-b8e8571ac40
User		Login		03/21/2025 13:30:18		28d31122-bfe7-4ae7-acb1-b8e8571ac40
ge 1 of 1						144 44 1 bb

Composition of the report

- Header: It will be repeated on each page of the report
 - o Logo

- Report Title: User Activity
- The data to be reported are the following, grouped by user; each grouping will be displayed as a subheader.
 - o Activity
 - o Date and time
 - o PC
- Foot:
 - o User Print date and time
 - o Version of the SW from which printing is made
 - o Total page number

User activity	, ,		Stainer sof
User			
Activity	Date/Time	PC	
Login	03/21/2025 11:25:37	28d31122-bfe7-4ae7-acb1-b8e8571ac405	
Logout	03/21/2025 13:30:07	28d31122-bfe7-4ae7-acb1-b8e8571ac405	
Login	03/21/2025 13:30:18	28d31122-bfe7-4ae7-acb1-b8e8571ac405	

5 HW OR DISCONNECTION ERRORS

At any time, the system can detect an error in the robot or a disconnection of the robot, because the USB cable has been disconnected or because the protective case has been opened while the instrument is running (the latter case does not apply when the instrument is in standby mode).

In these cases, series or maintenance cannot be started and, if any of them had been started, they will be automatically canceled and the behavior on them will be as described in the <u>cancellation</u> point.

To inform the user of the problem, it is indicated by a red stripe in the work in progress window.

NEOF		Distruments VS-1 ATENTON UNABLE TO STRAT				SU) ເ→
\mathbf{Q}	Reagents	Slide					
5.05	0 Containers - 0 KR 😸 Manual selection 🧕	0 Slates - 0 High priority			Manual se	lection (
I							
REAGENTS		() Instrument with errors					
		ATTENTION! UNABLE TO START Detention (1:58:42 03/21/2025					
		It will not be possible to start a run or maintenance If error persists, turn off the instrument, wait for 30 seconds, and turn it back on.					
		2 Errors ROBOT, LBROR. The robot has detected an error, has not yet performed a HOME after being turned on, or the lid ha 32					
		Close					
-							

To view the error(s) that have occurred, click on the "Check errors" button.

To solved the error(s) and restart the robot, click on the "Restart robot" button.



To start a new series or maintenance, the user must <u>unload</u> the slides, if any, and start the series or maintenance again.

6 Maintenance And Configuration Of Sensors And Devices

In the Work in progress screen there is a button to the configuration of sensors and devices.



When maintenance is required, a red warning will appear on the maintenance icon indicating that maintenance is needed.



Pressing the icon will open the maintenance and sensors tab. In the maintenance section, you will find two parts:

- **Pending Maintenance:** This section lists all maintenance tasks that need to be performed at that moment but have not been done yet.
- Advanced Maintenance: This section lists all maintenance tasks that can be performed on the equipment:

Maintenance	Devices and sensors	
Q Search	Mandatory	
Pending maintenances	Reaction chambers reaction: unload the slides before the start of the automatic wash. All reaction chambers used shall be washed.	
Advance maintenance	Start wash	
		Close

Maintenance	Devices and sensors	
Q Search	Hydraulic circuit cleaning Last use 20/03/2024 08:57	
Pending maintenances	It is necessary to use the mixing tubes and check that they are prepared for correct use before starting the automatic wash It is necommended to place the vials of the cleaning kit in the first positions of Rack 1	
Advance maintenance	Start wat	sh
	Reaction chambers reaction Image: The necessary to unload the slides before starting the automatic washing Chamber number Image: Description of the necessary to unload the slides before starting the automatic washing Chamber number Image: Description of the necessary to unload the slides before starting the automatic washing Chamber number Image: Description of the necessary to unload the slides before starting the automatic washing Start washing	sh
	Flasks purging Last purging 22/03/2024 14:30 Flasks positions COVER DEWAX DAB ENH HIGH-AR UNUSED HXHDH3 1 2 3 4 5 6 Start purging	ge
	Carafes purging Last purging 16/01/2024 13:45 Carafes positions WASH BUFFER CLEANING SOLUTION 1 2	linse

Maintenance	Devices and sensors
Q Search	COVER DEWAX DAB_ENH HIGH-AR UNUSED HXHDH3 1 2 3 4 5 6
Pending maintenances	Start purge
Advance maintenance	Carafes purging Last purging 16/01/2024 13:45 Carafes positions WASH BUFFER CLEANING SOLUTION 1 2 Start purge
	Syringe washing station and syringe probe purging Last purging 10/01/2024 16:26 Syringe washing station Syringe probe
	Start purge
	Extensor washing station purging Extensor washing station
	Start purge
	Tray manual washing pump Last activation 23/10/2023 11:05 Tray manual washing to unload the slides before performing manual washing
	Close
Maintenance Q Search Devices	Devices and sensors Ignore use of the imaging camera in checks I
Sensors	Ignore all checks on slides, vials and mixing tubes Slides
	Ignore general slides check Ignore misplaced slide check Ignore upside-down slides check
	Vials Ignore general vial check
	Ignore closed lid check
	Mixing tubes
	Ignore check

In VitroStainer NeopathPro only two maintenances are mandatory:

- Washing of the hydraulic circuit, which is compulsory after every 230 preparations.
- Washing of the reaction chambers is optional after each cycle and mandatory after 2 cycles performed in the same positions.

6.1.1 <u>Maintenance programs</u>

This screen shows different sections corresponding to all the maintenance tasks of the instrument.

In order to start maintenance, it is necessary that a series or other maintenance is not being executed.

When one of the maintenances is started, the screen closes and the maintenance is started in the instrument and displayed in the Work in Progress window, except for the manual recording of the extensor drying towel change, which does not require any action by the instrument. Each maintenance has its own verifications of the elements that are required for its execution. In this way, as with a series, if an error occurs, it will be displayed in the information section of the keypad.

Once it has been verified that all the elements required for the execution of a maintenance are correct, the instrument executes the corresponding maintenance program. The information section of the keypad shows a countdown with the remaining maintenance time, as well as the start and end date.



As in a series, the maintenance can also be stopped, informing at any time from the keypad that the maintenance has been canceled, after the confirmation of definitive cancellation.

	lly want to cancel the	e reaction chambers washing?
,	,	
MARKET -	ancelling maintenance	process, please ensure slide
while c		
while c	modules are co	ompletely dry
while c	modules are co	ompletely dry
Keep	modules are co	Cancel maintenance

When maintenance is completed, an acoustic alert is activated and a wash completion message is displayed. The information section of the control panel will indicate the end of the washing process. In turn, in the Maintenance window, next to each of the available maintenances, the date of the last washing, purging or corresponding maintenance will appear.

 Ignore the use of detection sensors for the introduction and extraction of reagent racks

 Image: By ignoring the use of the sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically.

 Racks positions

 Image: Detection sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically.

 Racks positions

 Image: Detection sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically.

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 Image: Detection sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically.

 Image: Detectin sensor in a rack, its

6.1.1.1 Hydraulic circuit washing

It started by clicking on the **Start Washing button.** It is recommended that the cleaning kit be placed in the first position (position 1-A) to save time when scanning the vial tier.

Hydraulic circuit cleaning Last use 20/03/2024 08:57
🔺 It is necessary to use the mixing tubes and check that they are prepared for correct use before starting the automatic wash
(1) It is recommended to place the vials of the cleaning kit in the first positions of Rack 1

6.1.1.2 Reaction chamber washing

The number of reaction chamber positions in which the washing is to be performed must be indicated. When a number greater than 0 is selected, the **Start washing** button is enabled, which washes the number of positions indicated starting from the 1-A position.

Reaction cham	bers reaction
(i) It is necessary	y to unload the slides before starting the automatic washing
Chamber numb	er
- 0	+

In this maintenance, an initial camera reading is performed at the selected positions to detect whether there are slides. If the camera sensor is disabled for slides, this check will not be performed, and the maintenance will proceed directly.

If we are not ignoring the slides, slide detection will be performed at the positions, giving the following options:

- No slides detected: Maintenance begins immediately.
- A slide is detected: The lower modal appears, giving us the option to repeat the reading or continue the maintenance directly.

6.1.1.3 Purging of flask probes

To enable this maintenance, you must first select the flask probe positions to be purged. Once all the positions to be purged have been selected, the **Start purge** button will be enabled, which starts this maintenance.



6.1.1.4 Purging of bottle probes

To enable this maintenance, you must first select the cylinder probe positions to be purged. Once the positions to be purged have been selected, the **Start purge** button will be enabled, which starts this maintenance.


6.1.1.5 Syringe wash station and syringe probe purging

To enable this maintenance, you must first select whether you want to purge the Syringe Wash Station, the Syringe Probe, or both. Once the selection has been made, the **Start purge** button will be enabled, which starts this maintenance.

Syringe washing station and syrin	ge probe purging Last purging 10/01/2024 16:26
Syringe washing station	Syringe probe

6.1.1.6 Extender wash station purging

In order to **Start purging**, it is necessary to select the Enable station purging option and press the start button.



6.1.1.7 Activate pump for manual washing of the tray

Before starting maintenance, please be informed that all slides must be removed so that manual washing of the slide tray can be performed. In this way, when pressing the **Activate button to perform manual washing**, if it is verified that there are no slides in the rack, the pump is activated for washing during the set time.

Tray manual washing pump	Last activation 08/03/2024 12:57
(i) It is necessary to unload the	slides before performing manual washing
Activation wash pump durati	on: 15 min

6.1.1.8 Change of drying towel of the spreader

The drying towel of the spreader will be changed manually, so that the date of the last change is recorded in the system, the record must be made in this section.

Extender drying towel	replacement r	ecord			
③ The selected date and	time cannot be	greater ti	han the current d	ate and tim	ne
Select date *			Select date	*	
03/27/2024	×		10:29	×	0

To do this, the date and time must be selected in the box for the date the change was recorded. The following window opens to set a date and time.

	Dev	ces and sense		
Q Search	Syringe wa	ge washing station	n 🗌	purging Last purging Lovol/2024 to 20 Syringe probe
Pending maintenances				Start purge
dvance maintenance	Extensory	aching station pu	raina	
	Extensor	nsor washing stat	ion	
	01	25	2022	Start purge
	02	26	2023	23/10/2023 11:05 forming manual washing
	03 March	27 Wednesday	2024	Activate to manual washing
	04	28	2025	
	05	29	2026	than the current date and time Select date *
	03/27/20	24	× 🛅	10.29 🗙 🕐
				Register solution
				Close
tandar daving towal rapia	amont record			
The selected date and time of	cannot be greater t	han the current	date and ti	ne
lect date *	3	Select dat	e*	
		[24	

By clicking on the **Register solution** button, the date of the last change is displayed next to the maintenance section.

6.1.2 Devices and sensors

This screen shows different sections corresponding to all the devices and sensors of the instrument. These devices and sensors can be configured to be ignored in case of detecting a problem in any of them, so as not to prevent the use of the instrument while they are being solved.

In addition, for each sensor and device, the consequences of ignoring them when performing a series or maintenance are briefly reported.

NEO	PATH	0%	ATTRITION MAINTINANCE CANCELLD	SU	(→
	Instrumento	Maintenance	Devices and sensors		
0	Reagents	Q Search	Ignore use of the imaging camera in checks	1	44 28
SUDES	0 Containers	Devices	If upported the thereads, the presence of mixing tubes and/or vial labels, collocation and condition of vial caps will no longer be reported. Positions will be displayed with read error with the option to manually enter data into sides and vials. Improve all checks on sides: vials and mixing tubes	election (
Ű		Sensors	Slides		
REPORTS			Ignore general slides check Ignore misplaced slide check Ignore upside-down slides check	0	
			Vials		
			Ignore general vial check Ignore closed lid check		
			Mixing vials		
			Ignore check		
				11	
Co Streed				vasits.	
?			Cancel	US: NON H	AZARDOUS 2

6.1.2.1 Imaging camera

To ignore the imaging camera, you mark it to be ignored and save the settings.

NEO	PATH®	7	ATTENTORE MAINTENANCE CANCILLED	SU C→
		Maintenance	Devices and sensors	
	Reagents	Q Search	Ignore use of the imaging camera in checks	
		Devices	In globel in the checks, the presence of many labels advold shall advold wait labels, concation and contains or via caps will no longer be reported. Positions will be dependent of the advold shall be advold wait labels, concation and contains or via caps will no longer be reported. Positions will be dependent of the advold be advold wait labels, concation and contains or via caps will no longer be reported. Positions will be dependent of the advold be advol	niection 💽
		Sensors	Slides	
			I gnore general alides check I gnore misplaced alide check I gnore upside down alides check I gnore upside down alides check	0 0
			Vials Ignore general Vial check Ignore closed lid check	0 0
			Mixing vials Ignore check	0 0
		C		13 tá
			Cancel Save	us NON HAZARDOUS

When running a series or maintenance, and the use of the imaging camera is being ignored, the scanning of the port and vial racks is not performed in the port and vial verification, and all positions that were to be read with the imaging camera are represented with not detected error for manual data entry.

• Slides:



• Vials:



When starting a series or maintenance, and this device is being ignored, the behavior and consequences of ignoring the imaging camera are reported in a window.

🔥 Ser	sors use will be ignore	×
	Do you really want to ignore sensors usage?	
Image o	amera	Î
Warning		
When ig they are	noring the detection of misplaced slides, it should be verified that correctly placed in the reaction chambers	
When ig	noring the test of mixing vials, it should be verified that they are	
placed c	prrectly if they are necessary for the run.	┚
Bulk Rea	agents	
Position	Warning	
1	By ignoring sensor use, the actual volume will no longer be reported. The entire bulk reagent container must be filled to	
2	have sufficient volume in the run or maintenance.	
	Cancel Accep	t

6.1.2.2 Reagent rack

To ignore the sensor that detects the insertion or removal of vial racks, the position of the corresponding rack(s) to be ignored is marked to be ignored and the configuration is saved.

NEOPA	THese	Maintenance	2 There are gending maintenance Devices and sensors	SU C→
Ø	Containers / I	Q Search	gnore use of protective shell opening and closing detection sensor	
5.065		Devices	By ignoring the use of the sensor, its status will no longer be reported. It should be visually checked that the cover is open/closed on the instrument.	election
REAGENTS	H	Sensors	Ignore the use of detection sensors for the introduction and extraction of reagent racks O by ignoring the use of the sensor is a rack, its status will no longer be reported. All rack positions Racks positions 1 2 3 3 4 5 6 6 7	0 0
	2		Ignore use flasks volume detection sensors O If yourning tensor Use, the actual volume will no longer be reported. The entire flask must be filled to have sufficient volume in the sense or maintenance. Flasks positions COVER DEVLAX D If	0 0
	0 C		Ignore carafes volume detection sensors use Or by ignoring answer use, the actual volume will no longer be reported. The entire bottle must be filled to have sufficient volume for the series or maintenance. Carates positions Wast EULTRY LEANING SOLUTION 1 2	0 0
© _© s≣≣vos	A		Ignore deposits volume detection sensors use O by ignoring sensor usage, the actual volume will no longer be reported. Its volume should be checked visually.	
(?) 	6		Cancel Sove	US NOT HAZARDOUS 2

When running a series or maintenance, and the use of the sensor is being ignored, it is not reported if a rack is inserted or removed, and all ignored rack positions will be scanned in the vial rack check.

When starting a series or a maintenance with this configuration, a window informs about the consequences of running a series with the ignored sensor.

	Do you really want to ignore sensors usage?	
Carboys		
Position	Warning	
2	By ignoring sensor use, the actual volume will no longer be reported. The entire bulk reagent container must be filled to have sufficient volume in the run or maintenance.	
		-
Reagents	s rack	
Reagents Position	s rack Warning	
Reagents Position 1	s rack Warning By ignoring the use of the insert/remove sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically.	

6.1.2.2.1 Removing/Installing Racks

If, during the start of a run, a rack containing vials loaded for use in the run is removed, regardless of whether the rack is ignored or not, the run will be stopped if it is a rack with necessary reagents and will continue if the reagents are not required to continue the run. This same situation will also apply to maintenance runs and scheduled runs that use reagents loaded in the removed rack.

Furthermore, installing a new rack during a series or maintenance should not cause any downtime.

If the above scenario occurs, the system will record the critical error that occurred and the reason for the series stoppage in the series report.

6.1.2.3 Sensors for flasks, bottles and waste

To ignore the flasks, bottles and tank sensors, the positions of the corresponding flasks, bottles or waste to be ignored are marked and the configuration is saved.

Maintenance	Devices and sensors
Q Search	Ignore the use of detection sensors for the introduction and extraction of reagent racks
Devices	O By ignoring the use of the sensor in a rack, its status will no longer be reported. All rack positions will be checked automatically. Racks positions
Sensors	
	Image: Image
	Deposits positions HAZARDOUS NON HAZARDOUS 1 2 Cancel Save

When running a series or maintenance, and the use of the sensor is being ignored, the volume or capacity will not be reported, and should be checked visually, to avoid running a run without sufficient reagent volume or capacity.

When starting a series or a maintenance with this configuration, a window informs about the consequences of running a series with one of these ignored sensors.



🔥 Sens	sors use will be ignore	×
	Do you really want to ignore sensors usage?	
Carboys		
Position	Warning	
2	By ignoring sensor use, the actual volume will no longer be reported. The entire bulk reagent container must be filled to have sufficient volume in the run or maintenance.	
Waste de	eposits	
Position	Warning	
1 2	By ignoring sensor use, the actual volume will no longer be reported. The entire bulk reagent container must be filled to have sufficient volume in the run or maintenance.	
	Cancel Accep	ot

7 States Of The Elements

7.1 Microscope slide

The different states on the slides are:

• Unloaded position:



• Disabled position:



• Pending or in process:



• Finalized:



• Not detected:



• Reading error:



o Other errors:



• Poorly placed:



• In process with warnings:



• Finished with warnings:



7.2 <u>Racks</u>

Positioning of the racks in the rack.



7.3 <u>Vials</u>

The different states on the roads are:

Unloaded position:



 \circ $\,$ Vial loaded and required in the series:



• Vial with warning:



• Not detected:



• Reading error:



• Closed lid error:

Ŋ	
θ	

• Other types of errors:



 \circ Not used in the series:



• Not used in the series and with a warning:



7.4 <u>Flasks</u>



7.5 <u>Big bottles</u>



7.6 Waste tanks



8 MEANING OF LEDS

8.1 Slide LEDs

The instrument has an LED in each chamber to indicate different situations. This representation is also done from the application.

SLIDES And POSITIONS	LEDS
Disabled position	No light
Empty position and machine without HW errors	Fixed green
Empty position and machine with HW errors	No light
Position occupied (Slide on the rack in pending execution state or in process) and machine with series started	Fixed red
Slide/position with Error (Check error or interrupted)	Flashing red
If there are still some slides to be placed in the rack	Flashing green
Slide finished	Flashing green
Position occupied (carrier in the rack in a pending execution state) and machine stopped by the user, due to errors or disconnection.	Fixed green

8.2 Front LED

The instrument has illumination on the chassis to indicate its status in different situations.

INSTRUMENT	LEDS
Disconnected	No light
Ready	Green
In process	Fixed red
Set	Fixed red
Waiting for the pause	Flashing orange
Paused	Fixed orange
Completed	Flashing green

Check error	Flashing red
HW or disconnection error	Flashing red
Stopped	Flashing red

9 Warnings And Precautions

- Verify at the end of each cycle that all tissues are stained correctly by checking that the internal or external positive controls included in each slide are correct.
- Ensure that none of the vials are empty at the end of a cycle; at least the dead volume must remain within the vials.
- Do not interchange reagent vials between different instruments.
- Store vials are not to be used in a cycle with the cap closed at the temperature indicated by the manufacturer on the label. Do not use the instrument to store unused reagents.
- Ensure that reagent vials are stored closed and in an upright position with minimal risk of tipping.
- It is not recommended to run the cycles on weekends.

1	0	Cha	nge	Log
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Date	Description
11/10/2023	Creation of new document
03/01/2024	 Expansion of the section "Intended use"
08/08/2024	 Redefinition of the intended use
	 Addition of the section "Principle of the method"
11/11/2024	 Slides are included in section 4.1 "General specifications"
	- Included in section 4.2 "Technical specifications": label of the
	equipment, symbols, electrical requirements and operating conditions.
13/02/2025	 Section 1. "Revision history" is deleted
	- Relevant information on waste production, management and handling is
	included in section 3.1 "General specifications"
	- New version of the instrument label, symbols and storage conditions
	included in section 3.2 "Technical specifications"
	 Addition of section 4.17.7 "Users accessibility: permissions and roles"
	- Information on maintenance and periodicity is included in section 6.
	"Maintenance and configuration of sensors and devices"
	– Addition of section 9. "Warnings and Precautions" and section 10.
	"Change Log"
21/03/2025	 The setting to allow working with the hood open has been removed
	 A reports section has been added.
	 A continuous charging section has been added.