# Color Tester

# Training & installation



### Agenda – 2 days training

#### ALFA:

	Day #1	Day #2
Morning	<ul> <li>Theory:</li> <li>Concept and operations</li> <li>Pumps</li> <li>Mechanics</li> <li>Unpacking</li> <li>Installation</li> <li>Set-up</li> <li>Questions &amp; Answers</li> </ul>	<ul> <li>Theory:</li> <li>Software and electronics</li> <li>Machine configuration, calibration and features</li> <li>Alfa Admin y Alfa Cloud</li> <li>Importance of connecting the machines to the Network.</li> <li>Questions &amp; answers</li> </ul>



# Color Tester

## Concept & operations



### The concept

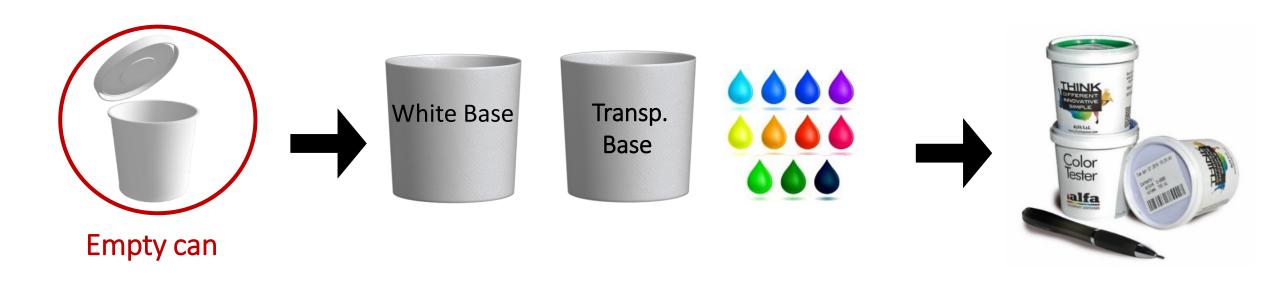


It is a vending machine capable of producing samples of 100 ml in any color, starting from empty cans, in less than one minute.





#### How does it work?



There are 12 circuits for colorants, 1 for a clear base, 1 for a white base and automatic loaders for 100ml cans and relating lids.



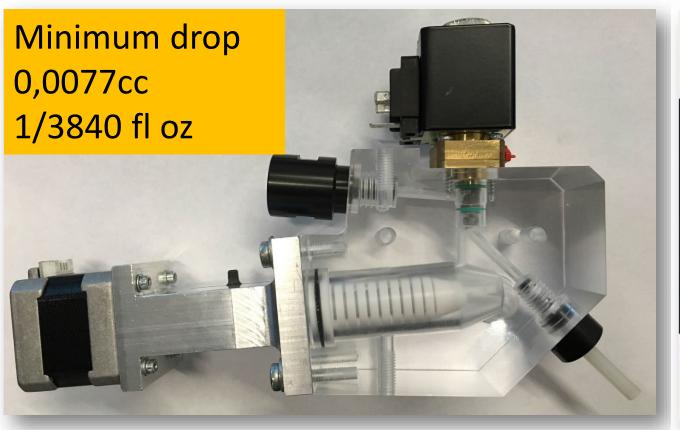
# Color Tester

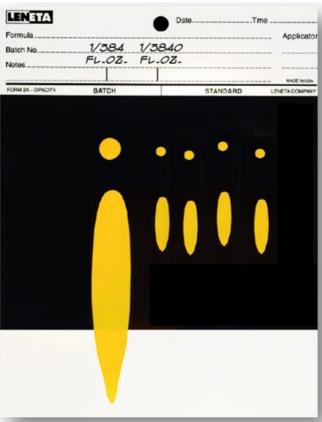
# Pumps



### Colorant pumps

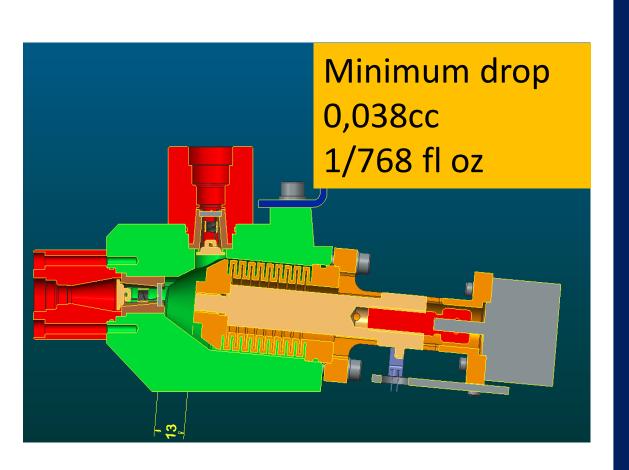
Patented Alfa pump







### Bases pumps



#### Features:

- Piston without seal
- No need of calibration
- System check valve
- Pump designed to prevent air from affecting dispensed volume
- Separate 3 way valve



# Color Tester

## Mechanics



### External components



- 1. Color Card
- 2. Touch screen 12"
- 3. Printed Label slot
- 4. Coin detector (option)
- 5. Samples outlet
- 6. Openable corner door
- 7. Front door
- 8. Locker with key
- 9. Security on-off button
- 10. Mini Mixer

## Internal Components



#### Color Tester components

1.	Empty 100 ml cans storages	2.	Colorant groups
3.	100 ml can lids storages	4.	Can unloading chute
5.	Control electronic panel	6.	Label printer
7.	Negative unloading bag support	8.	Base tank pull-out tray
9.	Base tanks (white and transparent)	10.	Tank tray fastener
11.	Corner door retainer	12.	Coin slot (optional)
13.	Storage and colorants support base	14.	Grippers and Cartesian axes level



### Colorants Groups





The machine is equipped with up to 12 colorant groups. Each group is made up of a valve (1) pump (2) a 1.5 liter canister (3). Each group has its own level sensor (4).

Note: the electric connection and disconnection of the colorant groups must be done when the machine is in OFF mode. Warning: a technical intervention, when the machine is in ON mode, might damage the electronics.



### Electric Panel



Is placed in the back of the machine where the main electric inlets are.

- 1. ON OFF button
- 2. Fuse holder 5x20mm T4A 250Vac
- 3. Standard inlet 100-240Vac CT-120
- 4. Ethernet Port RJ45



### Can Loader



The machine is equipped with 4 columns of empty cans storage, each one with a capacity of 75 pieces.

The software detects the minimum level of the loader, thanks to a specific software which provides a signal, when a column is left with less than 4 pieces.

In case of error in the loading, the software disables the column and select the next available one.

#### Lid loader

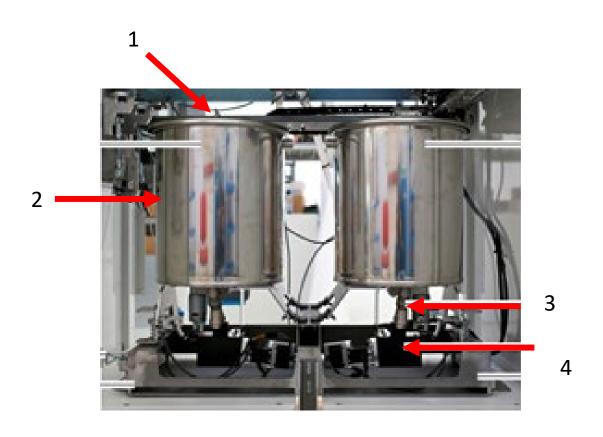


The machine is equipped with 2 columns for lids, each one with a maximum capacity of 200 pieces. Specific sensors are activated when a column is left with 37 pieces.

The machine provides a signal to the operator when one of the columns has reached the warning level. An alarm is set off and prevent the machine from working when both columns are empty (or below warning level).



#### Bases tanks



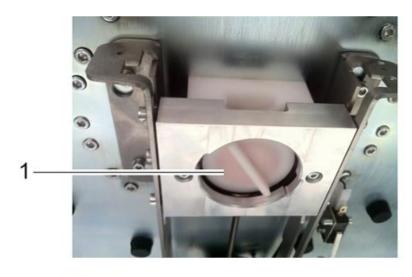
At the bottom of the machine there are two 22 liters tanks for the white and clear bases.

Each tank is mounted on a swinging mechanism with mínimum level detector.

Below the tanks there are the cover (1) the canister (2) interception key with integrated filter (3) and the pump (4).



### Autocap





The autocap is placed below the metal sheet that separates colorant groups from the lower part of the machine.

The humidifying sponge (2) is placed inside a closing cap (1); to maintain and clean the sponge unscrew the closing cap.

The unit has two different modes: CLOSED (humidifier ON) or OPEN (maintenance).



### Clamp

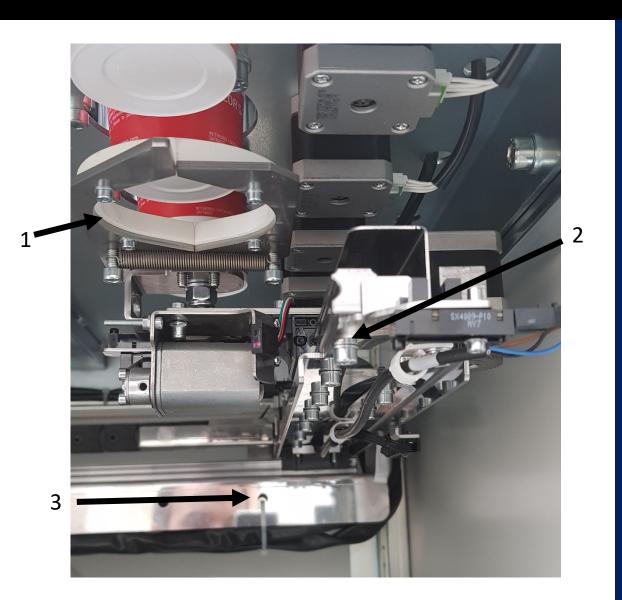


The clamp is needed to take the cans from the loader and bring them to the dispensing head. It is equipped with a "presence" sensor that activates an alarm in case of failed loading or incorrect positioning.

The clamp has a motorized lever (4) that has the function to lift the cans during dispensation to avoid accidental spillage out of the cans.



#### Cartesian Level

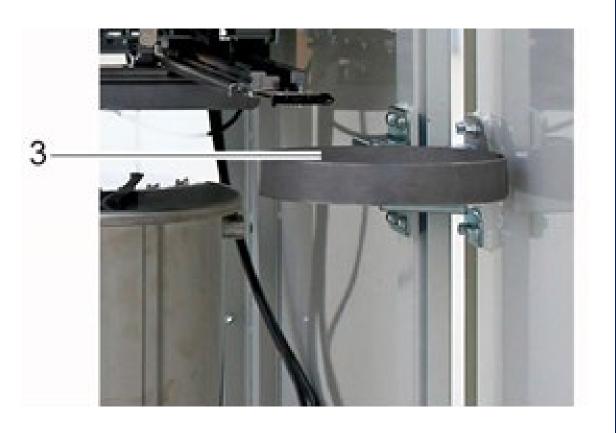


The movement of the clamp (1) is achieved by way of the Cartesian axis that are conventionally named Y (2) and X (3).

The movement of the axis allows for: collecting empty cans, positioning them underneath the dispensing head, moving them to the closing station and finally delivering through the sample outlet.



### Purge unload



In case of malfunctions, the machines discharges the faulty can in the waste bag, hold by a bag holder.

The waste bag, also called "negative discharge", is made up of a plastic bag mounted on a round holder (3), in the front door inside the machine.



### Label printer



The printer produces the adhesive label with the following data:

- Date and hour
- Color code
- Sample volume
- Barcode

When the label roll is finished, the machine activates an alarm.



### Modem Router LTE



The Color Tester is equipped with a device for the LTE connection that allows to control and monitor the machine from remote even without an Ethernet connection. e.s.

- Purge remote
- Reset remote



# Color Tester

# Unpacking



**Video Presentation** 





- Check that tip and tell labels are like in the picture on the left (OK)
- Collect the key placed in the sample outlet (1), together with the user manual.
- Open the door on the right, with the key, then open the door on the left, unlocking the security locks placed in the upper and lower part of the door.

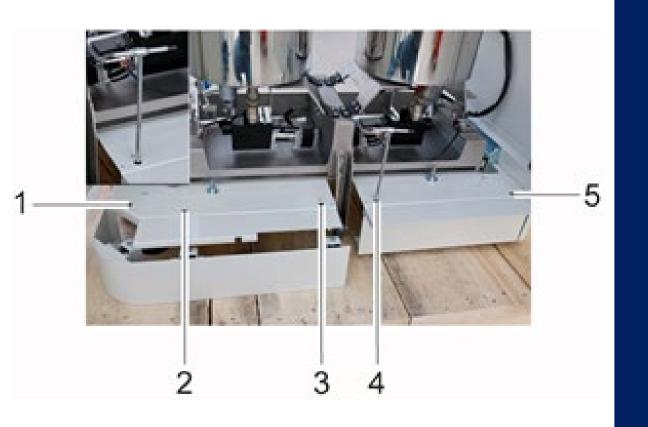




Some additional accessories are also placed in the sample outlet.

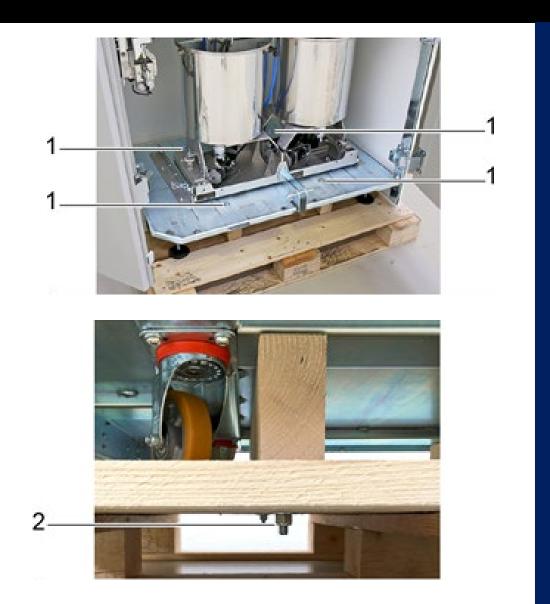
- Right door opening key;
- Power cable;
- Ethernet cable;
- User manual;
- Set of fuses;
- Set of autocap sponges.





Disassemble the two lower protections by unscrewing the screws (1, 2, 3, 4, 5) with a 5mm Allen





Remove the low back panel to facilitate the access to the screws that fix the machine to the wooden pallet. Unscrew the 4 screws M10x200 (1) with a 17mm screwdriver. Use a 17mm wrench to block the corresponding nuts underneath the pallet (2).





Lift the machine up by 2-3 cm by using a forklift. Insert the forks in the supporting slats (3). Move the machine with a forklift or a transpallet and place where it has to be installed.





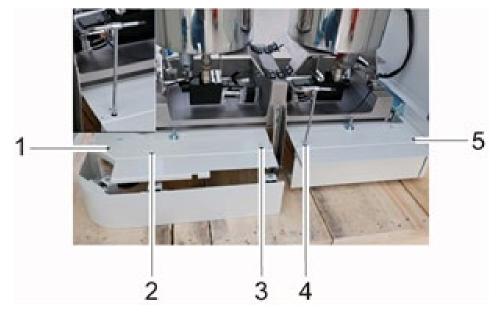


The machine can be also moved by using its castors.

Adjust the support feet in the front (1) and back (2) of the machine. To lower the feet hold the nut (3) with a 19mm allen and turn the nut (4) with a 14mm allen.







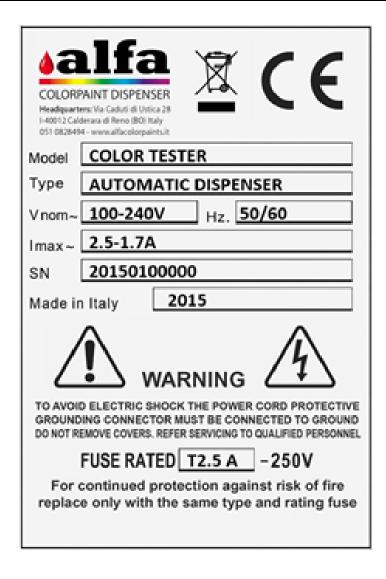
Reassemble the lower protections previously disassembling (1). To move the machine by a transpallet or a forklift, remember to reassemble the lower protections as shown in the picture.

# Color Tester

## Installation



#### Label and electric connection



The electrical data are indicated in the plate:

- Model: machine model
- Type: machine type
- Vnom: Voltage
- Hz: Frequency
- Imax: power consumption
- SN: Serial Number
- Made in Italy: year of production
- Fuse Rate: type of fuse



### Unlock bases tanks



- The bases tanks are locked on the supporting plate. Unscrew the knobs (1,2) to unlock them.
- Unlock the knob of the left tank (1) and right tank (2), so that the level sensor of the bases can work.

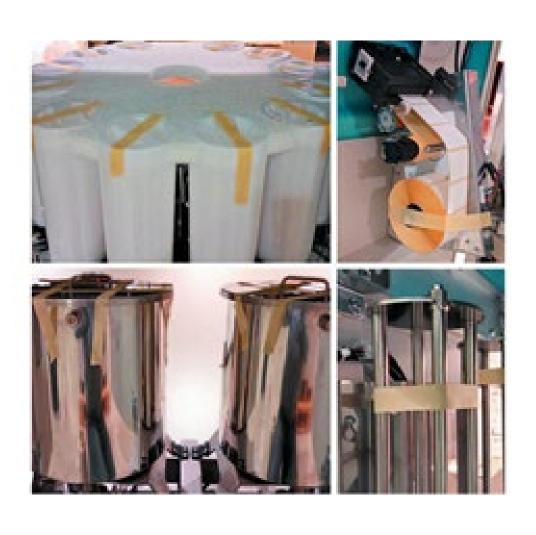


#### Unlock the Cartesian axis



A stud bolt fastens the clamp and the Cartesian system:
-Cut off the cable tie

### Unlock other groups



#### Take the tape off:

- The colorant canisters cover;
- The label roll;
- The Inox cover of the bases tanks;
- The dismountable shaft of the lids loader.
- Take off the polyurethane protection housed between the canisters.

#### Unlock colorant circuits



- Each colorant group is locked with a screw (4).
- Take all the screws off (4) with a
   4 mm Allen key.



#### Switch ON



- Put the ON OFF button in position «I» and check the screen.
- If the machine shows the starting screen in few minutes, the Color Tester is ready to be operated.



#### IP configuration - PC

#### MACHINE:

IP: 192.168.0.100

NETMASK: 255.255.255.0

PC:

IP: 192.168.0.XXX

NETMASK: 255.255.255.0

xxx = free subnet address

① 192.168.15.100



- Connect the PC to the machine through the Ethernet cable supplied.
- The standard IP address is 192.168.0.100.
- Update the configuration with the PC network with the address IP 192.168.0.99.
- Turn the machine ON by moving the switch to "I" position.



#### Installation Form

colorpaint DISPENSER	INSTALLATION A		Technician:
			Company:
	MACHINE IN	FORMATIO	N
Model			
Serial number			
Software version			
	INSTALLATION	INFORMAT	ION
Agent/distributor			
Customer			
Date of installation			
Place of installation			
	TERMS OF	WARRANTY	
later than 15 months fro This warranty covers all s man-hour, board and loc to the customer at the a No warranty is granted in damages are caused by u	warranty is valid for a p m delivery. spare parts, recognized t lging and travel expense pplicable service fees. n case: the machine is in unauthorized modificatic g supply occur; colorant	eriod of 12 by Alfa as de is of the ser stalled by p ons of the m	was successful. months from installation, but not efective. The warranty does not cover vice personnel which will be charged ersonnel not authorized by Alfa; tachine; problems with the power ave not been tested and approved by
Technician's signature			Customer's signature
			Rev.2015042
	AJ Headquarters: Via Caduri di Ustica, Tell. +39 (0)51 03284 Registered Office: Via Santa	fa S.r.I. 28, L-40012 – Caldie 94 Fax +39 (0)51 08	arra di Remo (BO), Italy 13083

For each installation, Alfa will supply an installation form to be filled, signed and sent to Alfa by e-mail. info@alfadispenser.com

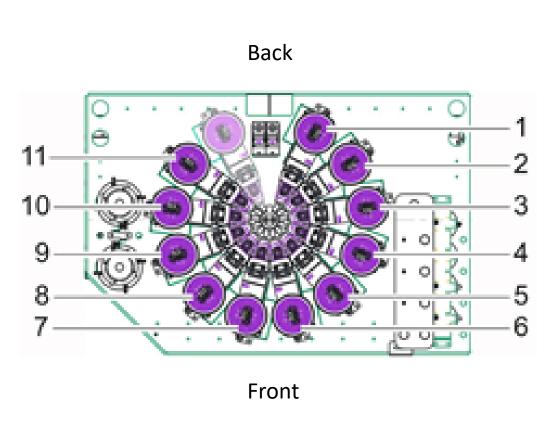
This is required for the certification and to activate the machine warranty.

# Color Tester

Set-up



#### Colorant canisters filling

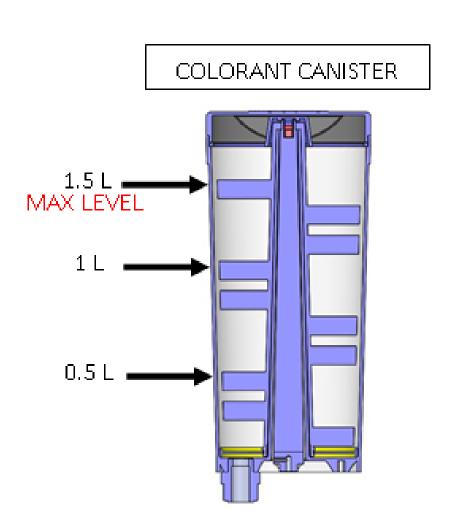


Each colorant group is coupled with an hardware address.
Conventionally, the order of the colorants is the one shown in the picture on the left.

The cansiters are always marked with labels from C1 to Cn, according to the real number of circuits installed.



#### Colorant canistes loading



- 1. Check that products are correct and homogeneous;
- 2. Fill the canisters until max level indicated in the figure beside (MAX LEVEL);
- 3. Update the fill level in the screen;
- 4. Do the machine RESET.

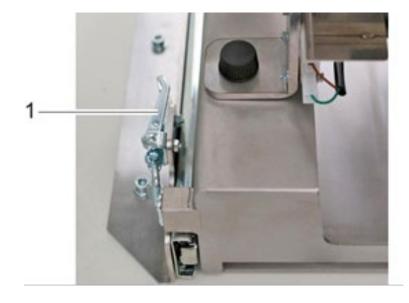


#### Colorant canisters filling



During first installation, the correct tinting system must be configured and the canisters must be filled in the correct order. Then activate the automatic cirtuit and leave them in recirculation mode for the time required to reach a proper state of the colorants.

#### Bases filling

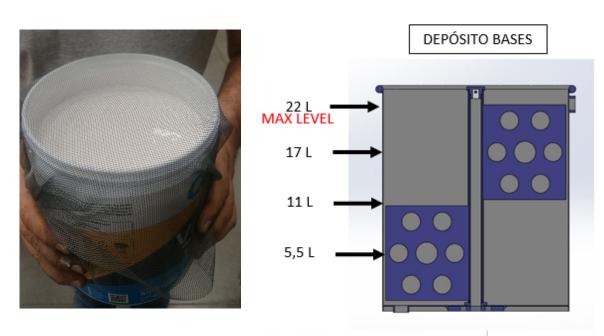




- Open the locker (1) that holds the movable tray of the bases.
- Pull the tray out (2) and fill the bases tanks with the clear and white bases, according to the order indicated in the software.



### Bases filling





Fill the tank up to the maximum level of 22 liters.

We recommend to filter the bases to avoid that residues interfere with the proper functioning of the pumps.

Make sure that valves (1) are open



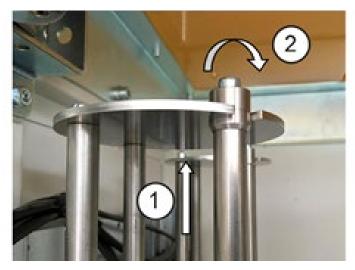
### Can loader charging



- 1. Charge the 4 columns with max 75 cans each, using only Alfa homologated cans;
- 2. Check that there are no cans stuck with each other;
- 3. Proceed with the machine RESET.



# Lid loader filling





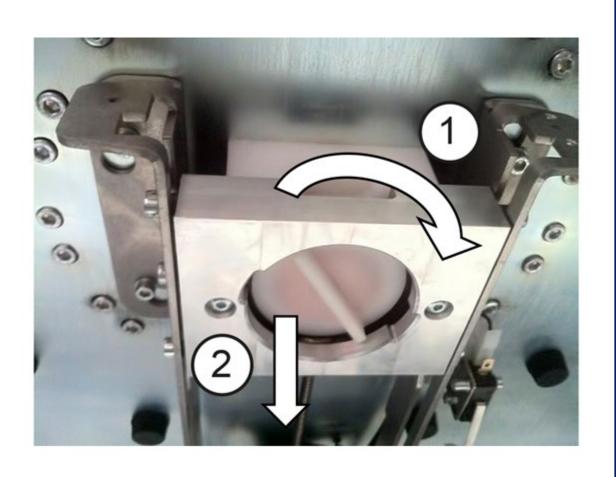
To easily charge the lid loader, the dismountable side rods must be disassembled. To do this, just lift the rods up (1) and remove it from the upper holder (2).

Make sure that the lids are inserted in the loader in the right way (see picture) and that are correctly sitting in the lower notches.

# Can loader charging

Video presentation

#### Humidifying Autocap



During installation, humidify the dispensing head sponge in the following way:

- Unscrew the closing cap (1) and take it off its housing (2);
- Wet the sponge with a mix of water and glycol;
- Place the closing cap with the sponge back in the original position.

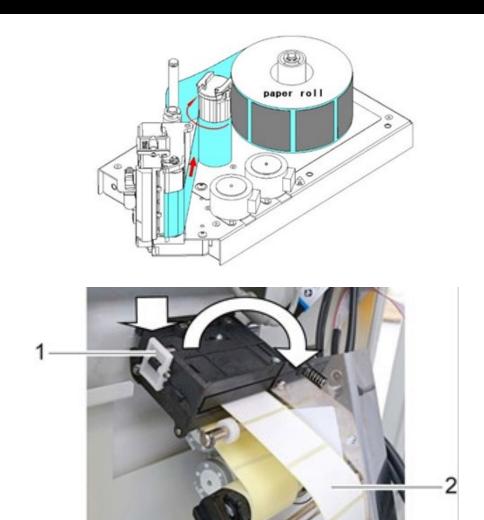


# Humidifying Autocap

Video presentation



### Charge the label printer



- 1. Open the roller dispenser by operating lever (1);
- 2. Introduce the label roll (2) following the instructions in the drawing shown in the printer.
- 3. Warning: use only label rolls homologated by Alfa.

#### Mini Mixer



(1)Plexiglass

(2) Start & stop

(3) Switch

(4)Micro sensor



# Thank you!



