WINEFICATOR ROMAT VIP

EN

Letina
STAINLESS STEEL TECHNOLOGY

Content

1. Product descriprtion

Wineficator Romat VIP is a machine with a vertical vessel for maceration and fermentation of must grapes. It is designed to make it easier to submerge the must grapes. Made of durable, high-quality stainless materials suitable for use in the food industry. With prescribed use, it ensures long-lasting work.

A pneumatic cylinder with three rotating blades breaks up and submerges the pomace layer, extracting color, tannins and aromas. The blades of the diver are designed to rotate by 10° during each dive, thus efficiently breaking and submerging the pods. The rotating HELI planter evenly soaks the upper layer of pomace, while the built-in screen separates the solid from the liquid.

The control cabinet with a touch-sensitive screen enables manual or automatic control of the installed equipment. The basic control is with a pneumatic cylinder and a cooling system. The design of the duplicator enables efficient cooling even when the container is not completely full. Temperature regulation by cooling is carried out by an electromagnetic valve at the entrance of the coolant to the duplicator. With the built-in additional heating system, it is also possible to manage the heating grapes.

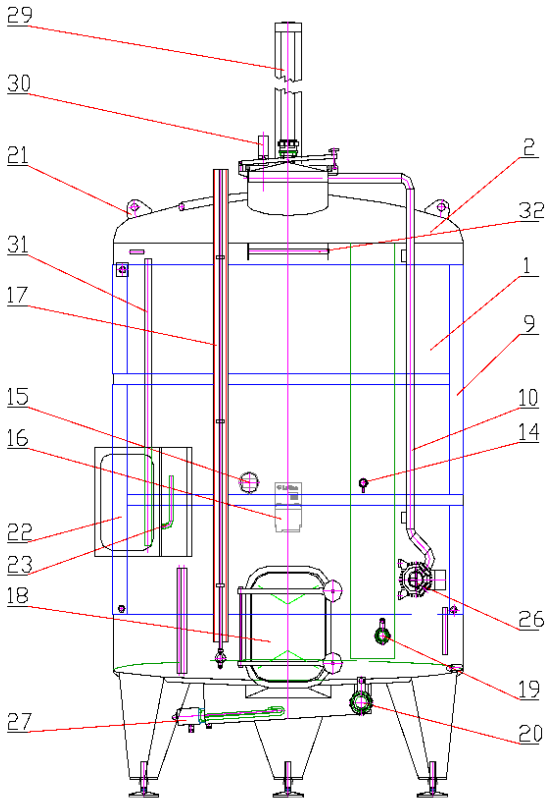
2. Tehnical data – Version with a flat floor

Wineficator ROMAT VIP	Tip	**2400 3200 4000**	**4200 5200 6200**	**5100 6300 7500**	**8900 10500 13900**	**12300 14200 16200**	**14100 16400 18600**	**15500 18000 20400 25300**	**18300 21200 24000 29800**
Nominal capacity	**[lit]**	2400 3200 4000	4200 5200 6200	5100 6300 7500	8900 10500 13900	12300 14200 16200	14100 16400 18600	15500 18000 20400 25300	18300 21200 24000 29800
Working capacity	**[lit]**	1830 2600 3360	3340 4340 5330	4040 5240 6440	7300 8970 12330	10400 12340 14280	11910 14150 16380	13050 15500 17940 22840	15250 18100 20980 26700
Diameter	**[mm]**	1402	1593	1752	2071	2230	2389	2501	2708
Mantle height	**[mm]**	1500 2000 2500	2000 2500 3000	2000 2500 3000	2500 3000 4000	3000 3500 4000	3000 3500 4000	3000 3500 4000 5000	3000 3500 4000 5000
Power supply	**[V~]**	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V
Frequency	**[Hz]**	50	50	50	50	50	50	50	50
Heater power	**[kW]**	3 3 3	3 3 3	6 6 6	6 6 6	6 6 6	2 x 6,0 2 x 6,0 2 x 6,0	2 x 6,0 2 x 6,0 2 x 6,0	2 x 6,0 2 x 6,0 2 x 6,0
Pump power	**[kW]**	0,75	0,75	0,75	0,75	1,5	1,5	1,5	1,5
Installed power	**[kW]**	3,76	3,76	6,76	6,76	7,51	13,51	13,51	13,51
Current	**[A]**	10	10	14,2	14,2	10,8	19,5	19,5	19,5
IP protection	**----**	IP 42	IP 42	IP 42	IP 42	IP 42	IP 42	IP 42	IP42
Weight	**[kg]**	354 398 444	445 496 541	497 550 604	716 775 896	911 955 1057	976 1056 1203	1116 1204 1323 1551	1251 1386 1536 1722

3. Tehnical data - Version with spoon-shaped floor

Wineficator ROMAT VIPS	Tip	**1250 1700 2200**	**1850 2600 3400**	**3300 4250 5250**	**3900 5100 6300**	**4600 6100 7450**	**6950 8650 11950**	**7900 9850 13750**	**8900 11150 15600**
Nominal capacity	**[lit]**	1250 1700 2200	1850 2600 3400	3300 4250 5250	3900 5100 6300	4600 6100 7450	6950 8650 11950	7900 9850 13750	8900 11150 15600
Working capacity	**[lit]**	850 1300 1700	1180 1930 2730	2460 3410 4410	2850 4050 5250	3350 4850 6200	5400 7100 10400	6120 8070 11970	6830 9080 13530
Diameter	**mm**	1116	1402	1593	1752	1911	2071	2230	2389
Mantle height	**mm**	1500 2000 2500	1500 2000 2500	2000 2500 3000	2000 2500 3000	2000 2500 3000	2500 3000 4000	2500 3000 4000	2500 3000 4000
Napajanje	**[V~]**	3N~400 /230V	3N~400 /230V	3N~400 /230V	3N~400 /230V	3N~400 /230V	3N~400/ /230V	3N~400/ /230V	3N~400/ /230V
Frekvencija	**[Hz]**	50	50	50	50	50	50	50	50
Heater power	**[kW]**	3 3 3	3 3 3	3 3 3	6 6 6	6 6 6	6 6 6	6 6 6	2 x 6,0 2 x 6,0 2 x 6,0
Pump power	**[kW]**	0,75	0,75	0,75	0,75	0,75	0,75	1,5	1,5
Installed power	**[kW]**	3,76	3,76	3,76	6,76	6,76	6,76	7,51	13,51
Current	**[A]**	10	10	10	14,2	14,2	14,2	10,8	19,5
IP protection	**----**	IP42	IP 42	IP 42	IP 42	IP42	IP 42	IP 42	IP 42
Weight	**[kg]**								

4. Parts list



1	Coat
2	Cap
9	Coolling/Heating jacket
10	Sprayer pipeline
14	Sample tap
15	Termometer
16	Type plate
17	Level maker
18	Door
19	Clear outlet
20	Total outlet
21	Carne supports
22	Control unit
23	Shell for probe
26	Pump
27	Heater
29	Pneumatski cylinder
30	Pneumatski valve
31	Cables protection pipe
32	Ladder support

Standard equipment

- Pneumatic Cylinder (with 3 blades)
- Control Panel (touchscreen) – Cylinder Control
- HELI Rotating Sprinkler
- Pipe – DN32 DIN11851 (with fitting)
- Manhole Cover – Round Ø400 mm
- Manway Door – Rectangular (type Z1500)
- Legs – Standard (Closed)
- Temperature Control
    - Cooling Jacket (1 m^2/1000 L)
    - Thermometer (analog)
    - Thermowell (with PG9 fitting)
- Valves
    - Sample Tap (DN15)
    - Partial Discharge – Ball valve (DN32 DIN11851)
    - Total Discharge – Ball valve (DN65 DIN11851)
    - Vent Valve – DN50 (PVC)
- Mesh Screen
- Level Indicator – Ø16 mm acrylic tube (scaled, open)
- Type Plate – With note card
- Ladder Rack – Coat height 1500 mm onwards
- Welding – Brushed finish

Optional equipment

- Automatic Pomace Discharge
- Automatic Pulsation Devices
- Control Panel – Temperature and Pump Control
- Pump (for pumping over)
- Manway Door
    - Custom sizes
    - Additional oval door (on hinge)
- Legs – Adjustable height and tilt
- Temperature Control
    - Heating Jacket
    - Cooling Jacket (>1 m^2/1000 L)
    - Bottom-mounted electrical heater
    - Digital thermoregulator (with temperature control)
- Valves
    - Ball or butterfly (Clamp, Garolla, WG, Macon, Gas, etc.)
    - Electromagnetic or electromotor valves
    - Stainless steel caps (on all valves and fittings)
- Fittings
    - Inclined stirrer fitting
    - Inert gas fitting
- Level Indicator – Ø24 mm acrylic tube (scaled, closed)
- Decanter
- Welding – Brushed and polished (Ra<0.8 µm)

5. Setting up and connecting the machine

Wineficator is intended for installation in a closed or at least covered area. It is placed in an upright position on a concrete base. All legs must be level under equal load. Lifting and positioning of the machine is done via the lifting lugs. The carrying capacity of each lug is indicated by a sticker next to it. It is necessary to place in the work area that there is enough space on each side for safe use and maintenance. If water is used in the cooling or heating system, it is mandatory to protect the machine from freezing or drain both systems after use.

Prerequisites for starting the machine:

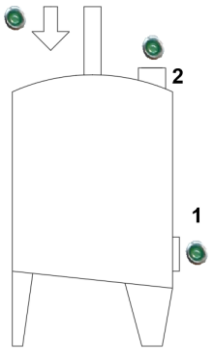
• Connect the machine to a source of compressed air up to a maximum of 6 bar. The connection is a quick pneumatic coupling of 1 / 2".

• Connect the machine to a 3-phase power source 3N~400/230V, frequency 50Hz. The connection is made with a rubber-insulated cable 4x2.5mm2 with an industrial 5-pole 16A plug.

• Connect the cooling unit to the duplicator. The inlet of the cooling liquid is provided on the upper side of the duplicator, where the electromagnetic valve is also located.

• Fill the heating system with water. (If this option is installed)

6. Safety switches on the doors



There is a safety switch on all container doors. The condition for the cylinder to work is that all doors are closed. Even if only one door is open, the condition for starting the cylinder will not be met and its piston will be stopped. The open/close control signal is connected to the control cabinet.

LED signal lights are located in the control cabinet. The signaling of these lights is as follows:

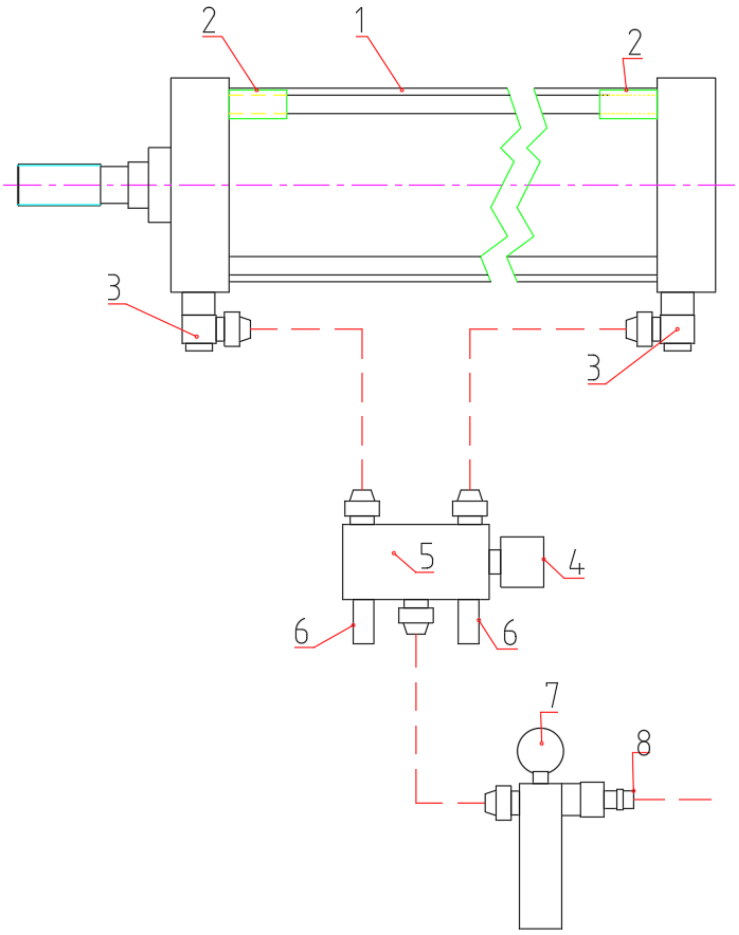
- GREEN LIGHTS – Doors are closed
- NO LIGHTS – No power or opened door

7. Pneumatics

The figure shows a pneumatic circuit. The user connects his compressor to the input of the filter regulator. The inlet air pressure must not exceed 6 bar. On the filter regulator, the user sets the desired output air pressure of 2 - 2.5 Bar. The regulated air then goes to the distribution valve, which is located on the drop of the container, not far from the cylinder.

The distribution valve is controlled by a coil from the control cabinet. When the coil is activated, air passes through the distribution valve and the cylinder moves downwards. The movement of the cylinder continues to the end position where it activates the reed switch for the lower position. The automation initiates a pause of about 15 seconds and switches off the valve coil. This allows the distribution valve to pass air in the opposite direction, so the cylinder moves up to the end position and the reed switch to the upper position.

The up and down stroke speeds are regulated by manual adjustment on the throttle valves (which are mounted on the ends of the cylinder).



1	Cylinder
2	Reed switch
3	Throttle valves
4	Solenoid
5	Distribution valve
6	Damper
7	Filter/regulator
8	Main input

8. Hazards

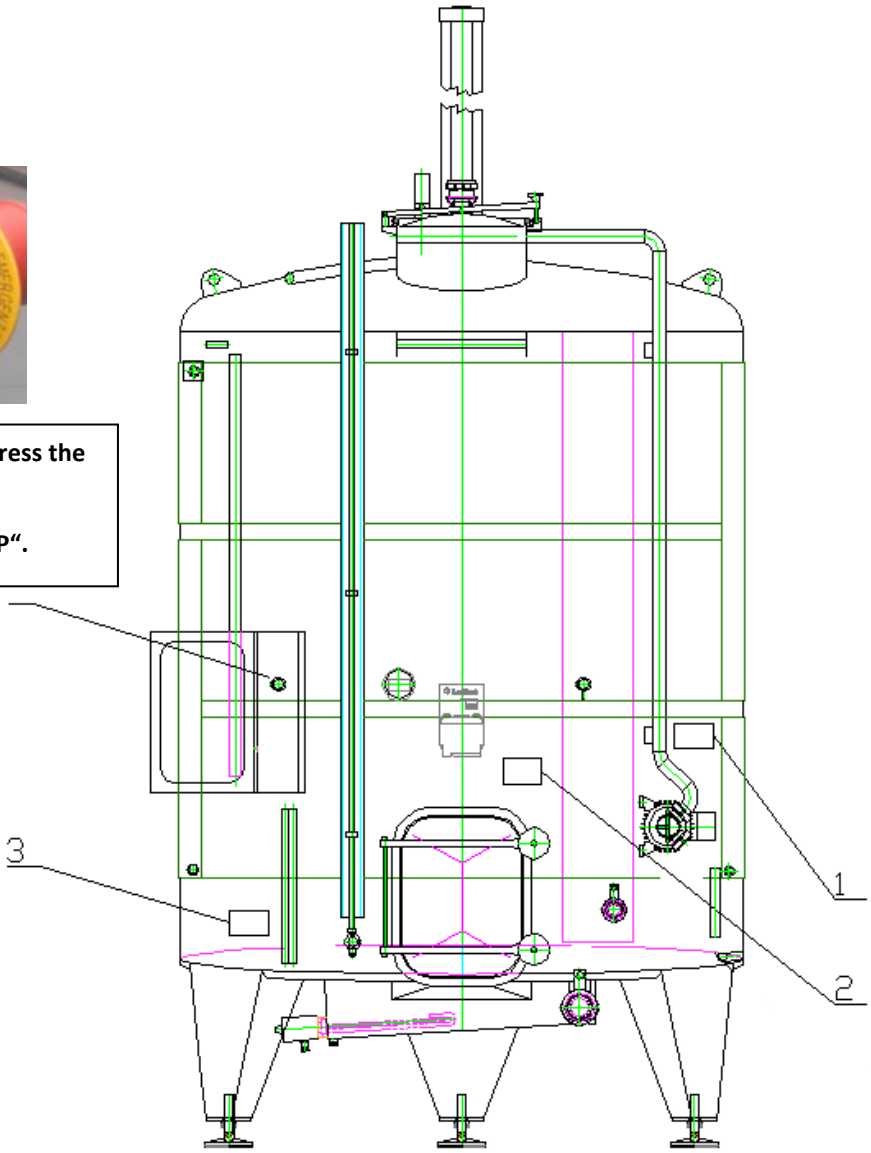
1. **Slip hazard**

2. **Entrapment hazard**

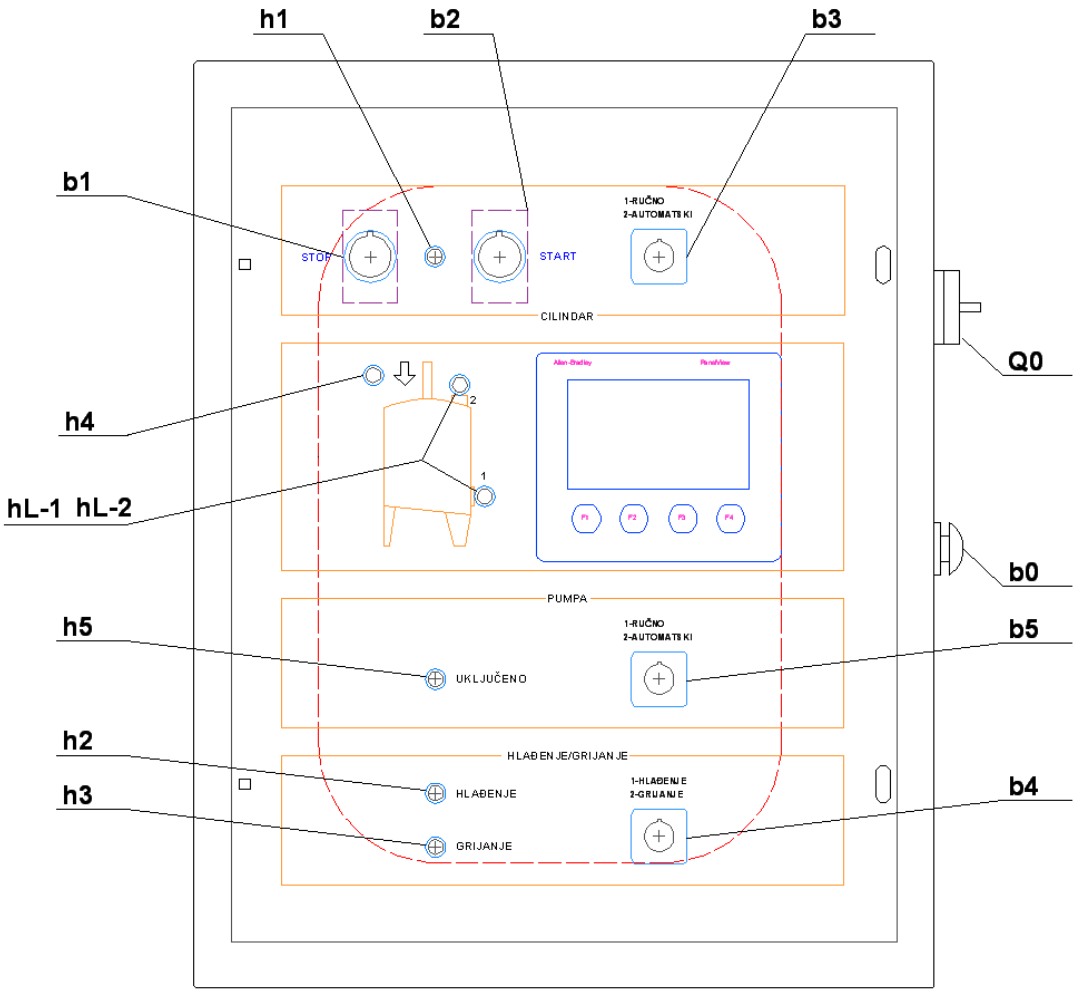
3. **Burn hazard**

In case of any danger, press the safety switch

„EMERGENCY STOP“.



9. Control cabinet



Q0 - main switch
b0 - emergency stop button
b1 - button for stopping the operation of the pneumatic cylinder
b2 - button for starting the operation of the cylinder
b3 - switch 1-0-2 serves to select manual-automatic cylinder operation mode
b4 - switch 1-0-2 is used to select the heating or cooling mode
b5 - switch 1-0-2 serves to select the manual-automatic pump
hL-1,hL-2 - signal LED that lights up green when some of the doors are closed
h1 - signal LED lights up green when the cylinder drive is in Start mode
h2 - signal LED lights up green when the cooling system is on
h3- signal LED lights up green when the heating system is on
h4 - the signal LED lights up green when the cylinder piston is moving downwards
h5 - signal LED lights up green when the pump is on
__ - touch screen for monitoring and entering process parameters 4.3''

10.Instructions for work

• Check whether the working conditions of the machine are met:

a. Machine set up according to instructions.

b. Connected to sources of electrical power, compressed air, cooling.

c. Heater filled with water. (If this option is installed)

d. Machine filled with oil up to the blades in the upper position.

e. All doors closed.

• Turn on the main switch Q0. After a while, the initial management screen appears on the screen.

• Select the cylinder operation mode using the b3 (Manual/Automatic) switch and start operation by pressing the b2 (Start) button.

a. Manual operation - The piston of the pneumatic cylinder begins to move alternately up and down. During operation, the piston rests in the lower position for 15 seconds.

b. Automatic operation - The piston of the pneumatic cylinder begins to move alternately up-down depending on the set time of the cylinder operation on the screen. The piston rests in the lower position for 15 seconds. After the working time has expired, the cylinder rests depending on the set cylinder pause time. After the pause time expires, the work time will start again and the specified cycle will be repeated until it is switched off with the b1 (STOP) button.

• Select the pump operation mode using the b5 (Manual/Automatic) switch and start operation by pressing the b2 (Start) button.

a. Manual operation – The pump starts working. In order to protect the pump, the pump is blocked at the factory after 3 minutes.

b. Automatic operation - The pump starts working depending on the set pump operation time on the screen. After the operation time has expired, the pump stops depending on the set pump pause time. After the pause time expires, the work time will start again and the specified cycle will be repeated until it is switched off with the b1 (STOP) button. In order to protect the pump, the pump is blocked at the factory after 3 minutes.

• Select the Cooling / Heating temperature operating mode, with switch b4.

a. Heating - It is necessary to enter the desired temperature and the hysteresis temperature. When the current temperature is lower than the set value minus the hysteresis values:

Temp.°C < Temp.Set°C – Hist.°C,

the heater at the base of the machine turns on. After the desired temperature is reached, the heater is turned off. The heater is switched on again when the above condition is met.

b. Cooling - It is necessary to enter the desired temperature and hysteresis temperature. When the current temperature is higher than the set value increased by the hysteresis values:

Temp.°C > Temp.Set°C + Hist.°C,

cooling is switched on, that is, the EMV valve on the duplicator opens. After the desired temperature is reached, the valve closes. The valve opens again when the above condition is met.

• Shutting down the machine.

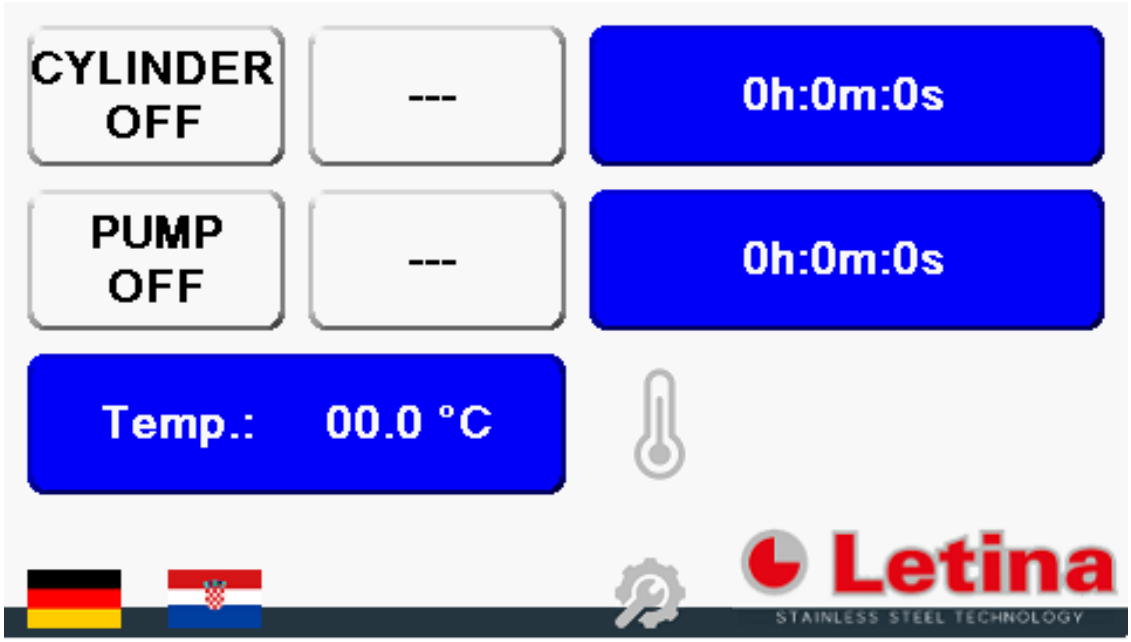
a. Press button b1 (STOP).

b. Set switches b3 (Cylinder), b5 (Pump), b4 (Cooling/Heating) to neutral position "0".

c. Turn off the main switch Q0

d. Disconnect sources of electrical power, compressed air, cooling

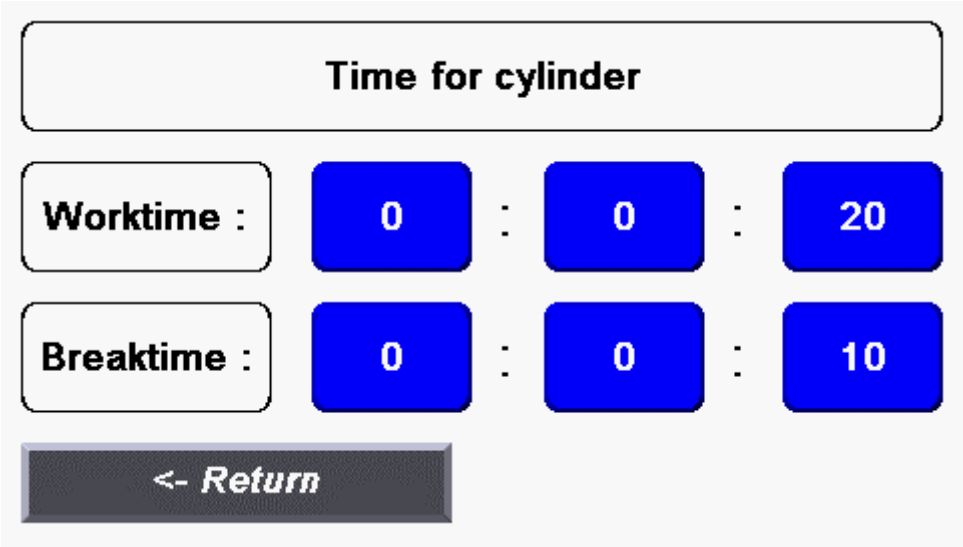
11.Instructions for working via touch screen



First top row

home screen is intended to display information about the cylinder. The selected operating mode with switch b3 (MANUAL, AUTOMATIC, STOP) is shown in the left field. The central field shows the cylinder status (RUN, PAUSE, ---). In the right, blue field, the remaining time of operation or pause for automatic operation mode is displayed. By clicking on the blue field, a new window opens in which the user can set the desired working times and cylinder breaks. The set minimum working time is 20 s, and the pause time is 10 s. The user can enter the time value by pressing the blue field, where the numerical keyboard for entering the parameter opens. Times are defined in the format:

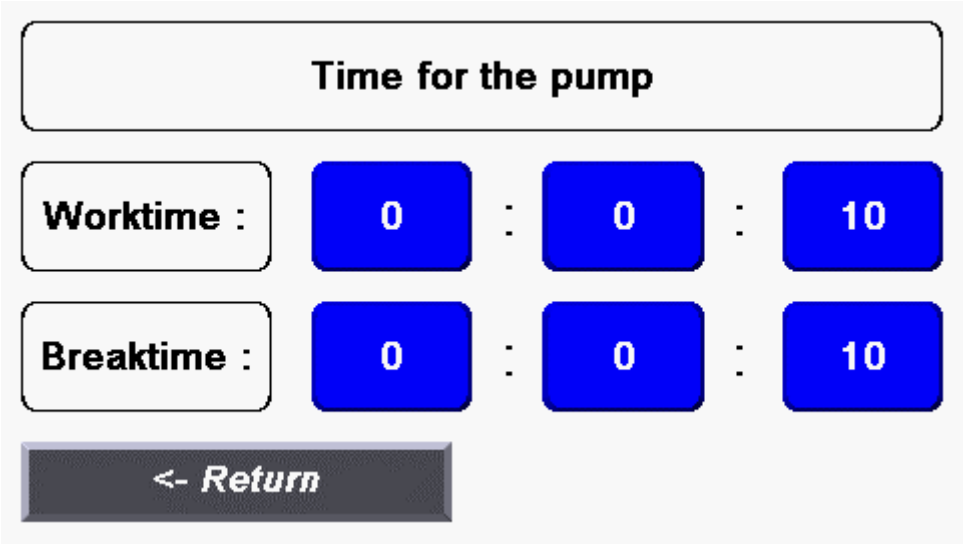
Hours (H) : Minutes (M) : Seconds (S)



Second middle row

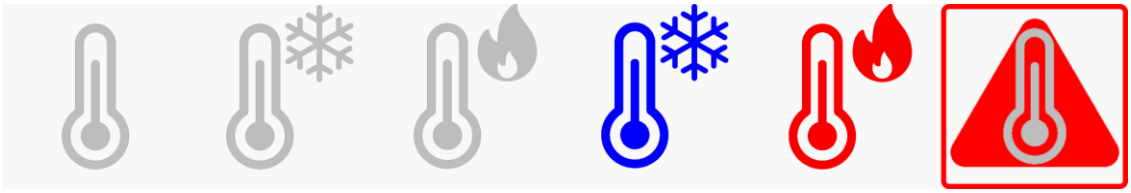
home screen is intended to display information about the pump. The selected operating mode with switch b5 (MANUAL, AUTOMATIC, STOP) is shown in the left field. The central field shows the pump status (RUN, PAUSE, ---). In the right, blue field, the remaining time of operation or pause for automatic operation mode is displayed. By clicking on the blue field, a new window opens in which the user can set the desired operating times and pump breaks. The set minimum working time is 10 s, and the pause time is 10 s. The user can enter the time value by pressing the blue field, where the numerical keyboard for entering the parameter opens. Times are defined in the format:

Hours (H) : Minutes (M) : Seconds (S)



Third bottom row

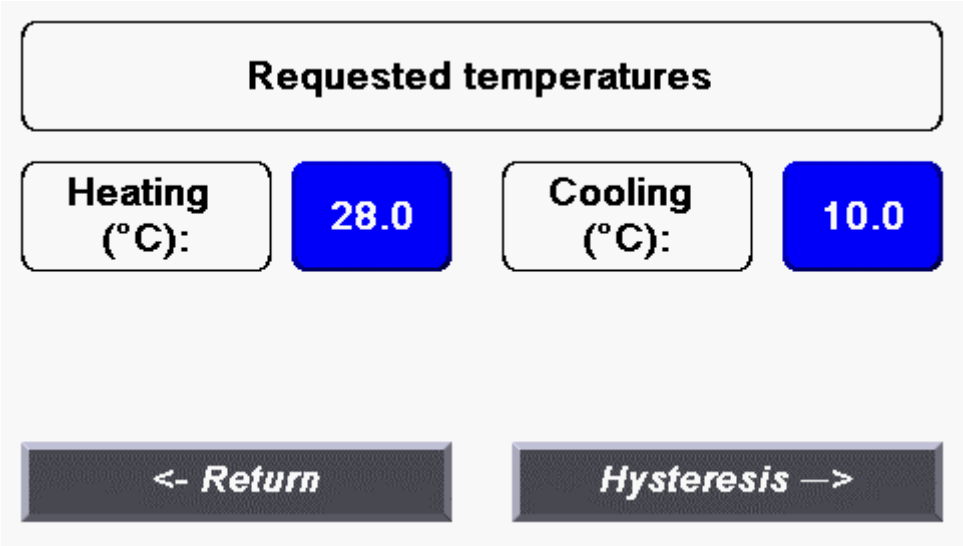
home screen displays information about the temperature of the machine's contents. The thermometer symbol shows the system status. When the red icon appears, heating is on. When the blue icon appears, it is cooling.



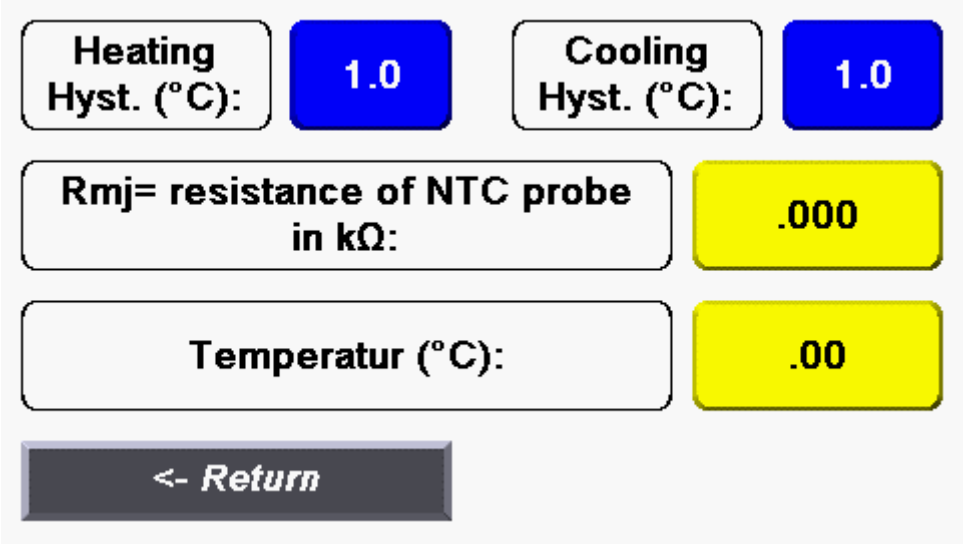
Statuses: Neutral Cooling mode Heating mode Cooling Heating Probe error

IMPORTANT : The temperature operation mode is selected manually with switch b4 (HEATING / COOLING), while after the set temperature, the automatic system will turn on or off the selected system.

The blue field shows the current temperature in °C. Pressing the blue field displays the screen for setting the cooling or heating temperature. This display shows the set heating and cooling temperatures. By pressing the blue field, a keyboard appears for entering the desired temperature.



Next, pressing the "Hysteresis" button opens a new screen. Current hysteresis values are shown. By pressing the blue field, a keyboard appears for entering a new value. The smaller the hysteresis, the more often the system will turn on. It is possible to enter values from 1°C to 10°C. Informatively, the resistance of the probe and the current temperature can be read on this screen.



Menu at the bottom of the home screen

gives the possibility to select the desired language. By clicking on one of the displayed flags, the language of all screens is selected. The "settings" icon is intended for authorized personnel when setting the initial parameters of the machine. Entry is password protected. The „settings“ icon can be accessible by pressing the button „F4“.

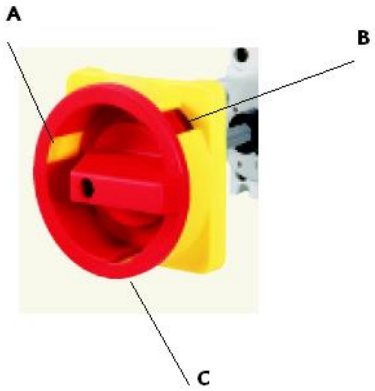
12.Cleaning and maintenance

In order for the machine to be functional for many years, keep it clean and dry, free of dust and dirt. Use neutral detergents for washing. Do not use agents that can scratch and damage the surface of the machine or its parts.

To clean the exterior, use a wet cloth and diluted detergent.

IMPORTANT: Do not use a water jet to clean the outside of the machine. The water jet can reach sensitive electrical and electronic parts, which can cause malfunction and potential danger.

ATTENTION! Before any intervention on the machine (eg maintenance, cleaning, moving), turn off the main switch and unplug the machine. During the intervention, disable the main switch on openings A or B or C (see picture below).



13.Attachments:

EC DECLARATION OF CONFORMITY

We,

Letina intech d.o.o.
Neumannova 2, 40000 Čakovec, Croatia

***Letina intech d.o.o. is subsidiary company of Letina inox d.o.o.**

Declare under our sole responsibility that product: **Wineficator Romat**

Type: **VIP, VIPS**

Models: **VIP2400, VIP3200, VIP4000, VIP4200, VIP5200, VIP6200, VIP5100, VIP6300, VIP7500, VIP8900, VIP10500, VIP13900, VIP12300, VIP13300, VIP16200, VIP14100, VIP16400, VIP18600, VIP15500, VIP18000, VIP20400, VIP25300, VIP18300, VIP21200, VIP24000, VIP29800, VIPS1250, VIPS1700, VIPS2200, VIPS1850, VIPS2600, VIPS3400, VIPS3300, VIPS4250, VIPS5250, VIPS3900, VIPS5100, VIPS6300, VIPS4600, VIPS6100, VIPS7450, VIPS6950, VIPS8650, VIPS11950, VIPS7900, VIPS9850, VIPS13750, VIPS8900, VIPS11150, VIPS15600, VIPS9600, VIPS12000, VIPS17000 , VIPS22000, VIPS13900, VIPS16750, VIPS19600, VIPS25300**

The designated product is in conformity with the following directives:

2014/30/EU - Electromagnetic compatibility (EMC)

2014/35/EU - Low voltage (LVD)

2006/42/EC - Machinery (MD)

2011/65/EU - ROHS Directive

by applying following standards:

EN IEC 61000-6-4:2019	*EN IEC 61000-6-2:2019*	*EN 61000-4-2:2009*
EN 61000-4-3:2006+A1:2008+A2:2010	*EN 61000-4-4:2012*	*EN 61000-4-5:2014+A1:2017*
EN 61000-4-6:2014	*EN 61000-4-8:2010*	*EN 61000-4-11:2004+A1:2017*
EN IEC 61000-3-2:2019+A1:2021	*EN 61000-3-3:2013+A1:2019*	*EN 60204-1:2018*
EN 61326-1:2013	*EN 61204-1:2006+A1:2009*	*EN ISO 12100:2010*
EN 953:1997+A1:2009	*EN 13849-1:2008*	*EN 1672-2:2005+A1:2009*

Conformity assessment has been performed by

KONČAR – Institut za elektrotehniku d.d., Notified Body No. 2494.

Year of affixing of CE marking: **2022.**

Also, the designed products is in conformity with the following Regulation:

1935/2004/EC - Regulation on materials and articles intended to come into contact with food

by using the following product material: **W.Nr1.4301 IIId**

Test results can be found at:

Letina intech d.o.o., Neumannova 2, 40000 Čakovec, Croatia

Place and date of issue:
Čakovec, 21.07.2022.

General Manager
Željko Benc

Letina
LETINA INTECH d.o.o.
Neumannova 2, HR-40000 Čakovec

Letina

STAINLESS STEEL TECHNOLOGY

CE

Letina intech d.o.o.
Neumannova 2, HR-40000 Čakovec, Croatia
tel: +385 (0)40 328100 **fax:** +385 (0)40 328200
e-mail: letina@letina.com **web:** www.letina.com
OIB: 32033415378 **VAT:** HR32033415378
IBAN: HR5024840081106765375 Raiffeisenbank Austria d.d. Zagreb
IBAN: HR8623400091111113699 Privredna banka d.d. Zagreb