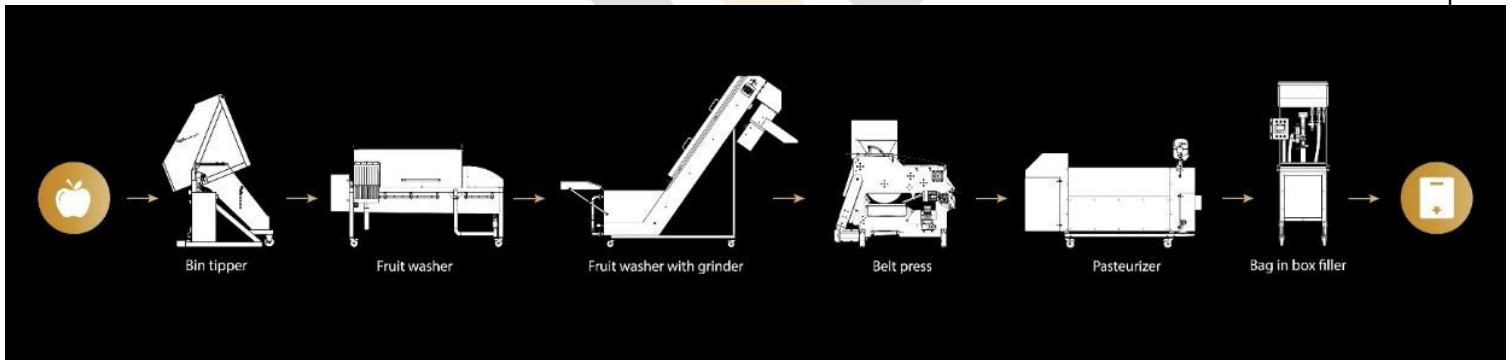


PNEUMATIC PRESS 1000L TS/CB

without compressor, with touch screen

Original Instruction Document

2024-01-02



INFORMATION ABOUT MANUFACTURER

Manufacturer: UAB ProFruit Machinery

Representator: director Pijus Lopata

Address: Razes g. 27, Peskojai v., LT-92385 Klaipėda county, Lithuania

Company code: 305202037

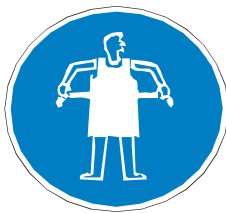
VAT code: LT100012484812

E-mail address: info@pro-fruit.com

Website: www.pro-fruit.com

1.1. Warning signs

There are special warning and prohibition signs put on the machines which are meant to inform the user about danger and keep everyone – people and machinery – safe at all situations. The meaning of each sign is described below.



Water-repellent apron.



Protective gloves



Protective footwear



**Control console
High voltage**



**Hot surface
Risk of getting burned**

2. GENERAL REQUIREMENTS

General instructions:

- Ambient air temperature +8...+35° C.
- Relative humidity (when temperature +25 °C) up to 70%.
- Atmospheric pressure, kPa 84-107.
- The Law on Occupational Safety and Health of the Republic of Lithuania, the General Provisions and Safety Instructions for the Use of Work Equipment and the Laws on Occupational Safety and Health of the European Union must be observed while using the machine.

Pneumatic press

Pneumatic press is a technical device allowing pressing of whole or crushed grapes. All the components are shaped and tested in practice, which allows reliable and durable functioning of the machine. It is almost entirely made of stainless still to give the device perfect hygiene conditions.

There are two possible filling processes:

- Manual: in this case grapes in bunches are used.
- Central: Axial filling. In this case grapes must be destemmed or crushed.

The process of pressing, leaching and loosening takes place by means of a membrane pressing the mass to the walls of the drum. Must drains through perforated drum walls into the juice collecting trough. The process repeats in set intervals (manual functioning) or programmed intervals (automatic functioning). Between single intervals the air pressure under the membrane is lowered so that the pomace loosens, the rotation of the drum stirs the substance while the higher pressure squeezes the material again in order to obtain better efficiency.

The press is emptied by sucking out the air from under the membrane. The drum should be rotated with the hutch upwards so that it can be opened. Afterwards the lid is opened and the contents come out of the drum. To empty the drum completely, the alternative left and right rotation is used.

Capacity of the drum	1000L
Tension	400W/50Hz
Max working pressure	1,5 bar
Engine power	1,1 kW
Dimensions	

Attention! It is mandatory to wash off the device before starting it for the first time.

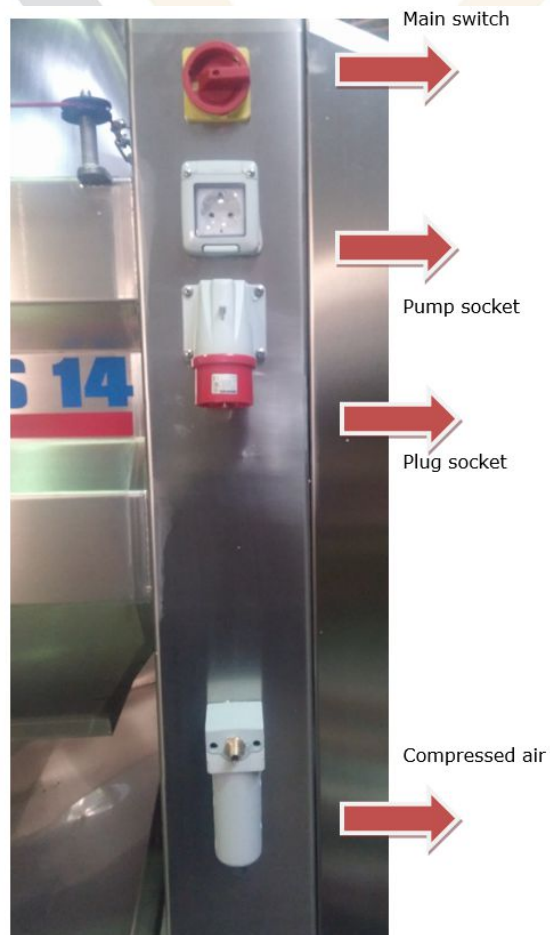
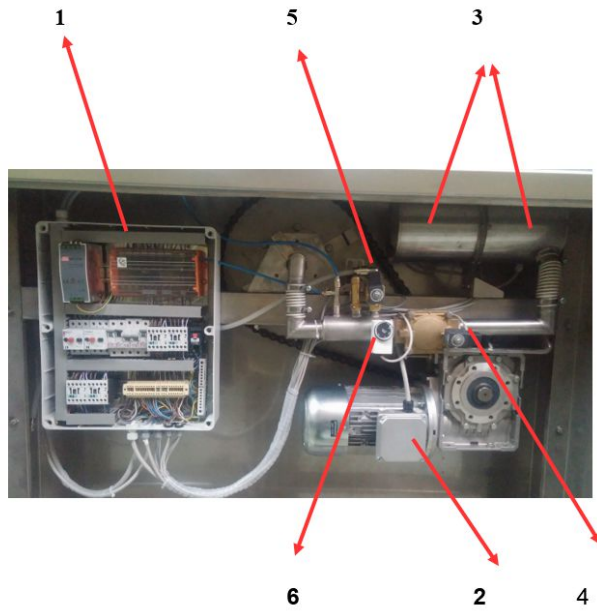
It is important to eliminate any manufacturing residues and the dust which has built up on the surface, taking care not to wet the electrical parts and keeping the power supply cable disconnected.

Machinery specification and drawings



- Drum
- Wheeled base
- Power train
- Electric control set
- Juice collecting trough

1. Electrical box
2. Drum motor
3. Blowers motors
4. Elmg.valve P1-vakuuum
5. Elmg.valve P2-filling air
6. Presostat P3-max.pressure allowed



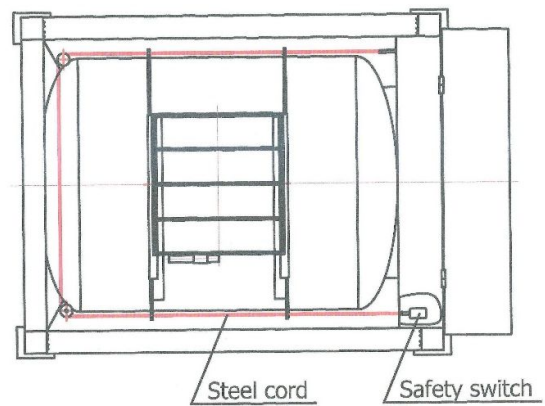
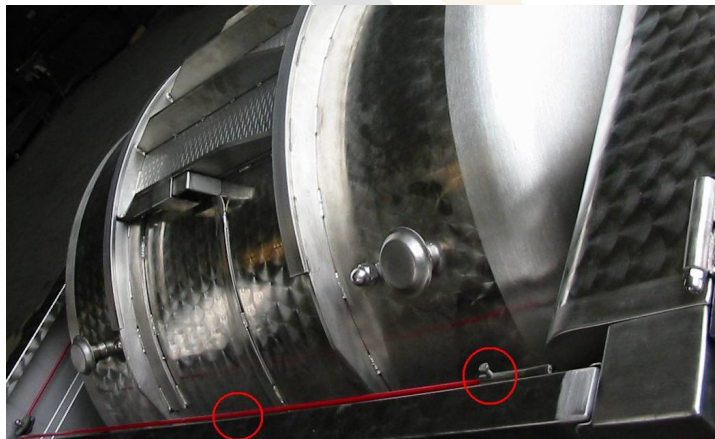
Working space

Working place should be spacious enough to allow access to the machine during the process of filling, emptying and cleaning.

If the press is placed by the wall, the control panel can be situated by either side of the machine.

Safety measures

- The floor must be clean and not slippery.
- The press is equipped with a switch (joystick) installed on the control panel.
- The rotating part of the press is additionally secured with a safety switch which is switched on by a steel rope tightened around the drum (see picture below).



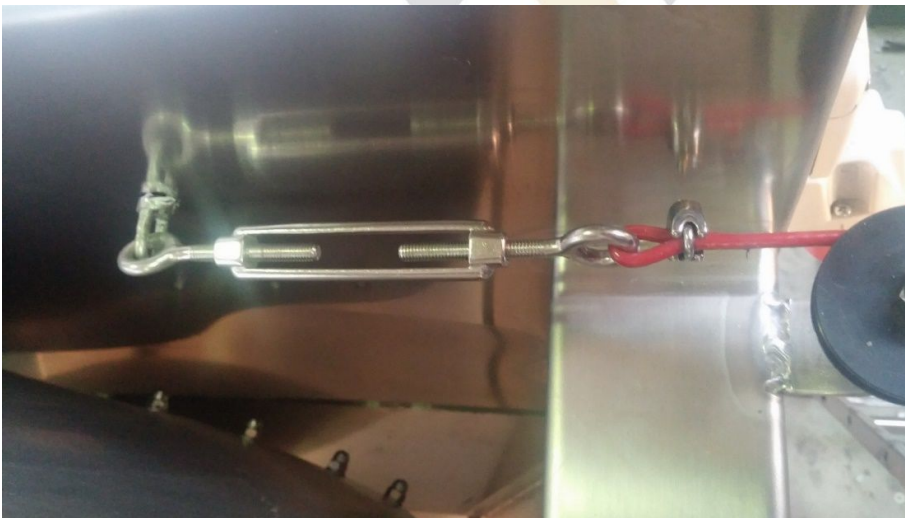
Safety switch (2): it is installed under the control panel and the power train box so that it is protected against must splashes. The switch is connected to the steel rope by a brace and installed over wheels and supports between the drum and the sides. If the rotating drum grabs the user, the steel rope tightens and switches off the machine.

Emergency stop button (turn clockwise)



Emergency cord. You have to pull it.

If the button is not stay out please adjust the cord stretcher



Safety lid-red (1): power train, wiring and pneumatic set are protected by a metal lid which prevents access to the moving and live parts of the press.

Sound signal: When the press starts to rotate, the sound signal is present.

Assembly, connection and installation of the machine

Before connecting the machine to the mains please carry out the following operations:

- Make sure that the socket is provided with ground protection circuit
- and that both the mains voltage and the frequency, match the specification on the machine plate.
- Check that the connection of the machine to the mains meets the safety regulations in your country.
- Check if driving parts are protected.
- Check if all the protective devices are installed.
- Check if all the starting switches work correctly.
- Check if the wiring is in perfect condition.
- Check if the surroundings of the machine is clean and not slippery.

CHECK-OUT OF PHASSES (FOR THREE-PHASE MAINS ONLY)

- Check the rotation direction of the drum with **I** switch (left-right must be correct)
- In case they rotate in the wrong way, please reverse 2 phases on the plug
- If the press have the compressor incorporated its rotation is the same of the drum (adjusted in the factory)

9

Instructions for using the machine.

- Clean the machine and put it on a flat and even surface.
- Connect the press to the network (380V (1).
- Connect the pneumatic wiring as well. Air pressure should not be lower than 4 bar. Pneumatic wiring is connected by a coupler (2). If a pump for must is needed there is a socket (380V) on the side of the press (3).

OPERATING THE MACHINE

In using the program is press adjusted to the usage of every individual person. That means also that the programme can be adjustable depending on which sort of grapes will use.

There are different operating systems:

Automatic system: the machine functions in an independent way. There are three different programmes according to the duration of the process (short, medium and long).

Manual system: All the functions and parameters must be set manually.

Fermentor

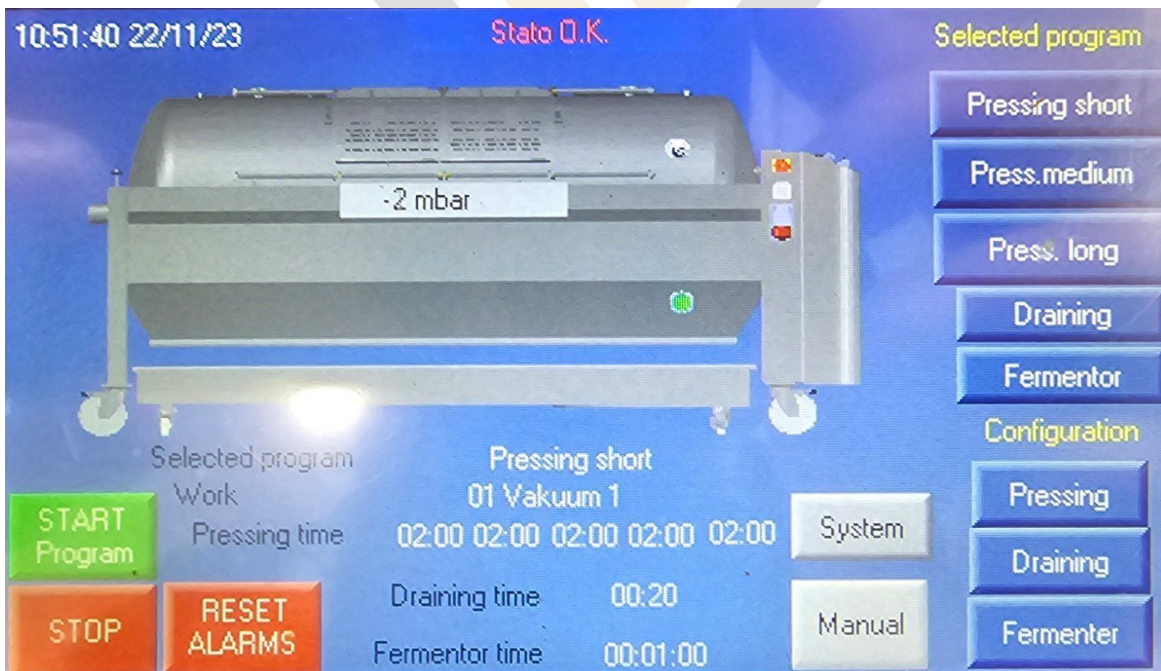
Draining

The workplace of operator

- The pneumatic press is controlled by one person.
- The workplace of an operator is in front of the control panel.

AUTOMATIC PROGRAMME

All these programmes are already setted in computer and adjusted to long working experiences of pressing grapes.



Picture 1

By using automatic programme every individual person can adjust level of pressing grapes. As we can see on picture nr. 1 (upper right corner- **SELECTION PROGRAMME**), we can on base of experiences and needs selected programme adjust by time.

When we select suitable programme for pressing grapes, we press the key **START** programme (Picture 1) and pressing will start working.

By using automatic programme are all programmes programmed like this, that we can come to pressure 1,4 bar gradually.

Also automatic programme can be set and change by consumer wishes.



Picture nr. 2

In inferior right corner (pict. 2) you can for each system set next functions: **PRESSING**, **STRAINING**, **FERMENTOR**.

First we press the key **PRESSING** (pict. nr. 2) and we open the window with desired settings (Pict. 2).



Picture 3

First we press **V – setting changing** (Picture 3). In this window we can change pressure of pressing, inversion of the drum, repetitions, and time of each pressing. Every consumer can adjust all settings by their own wishes.

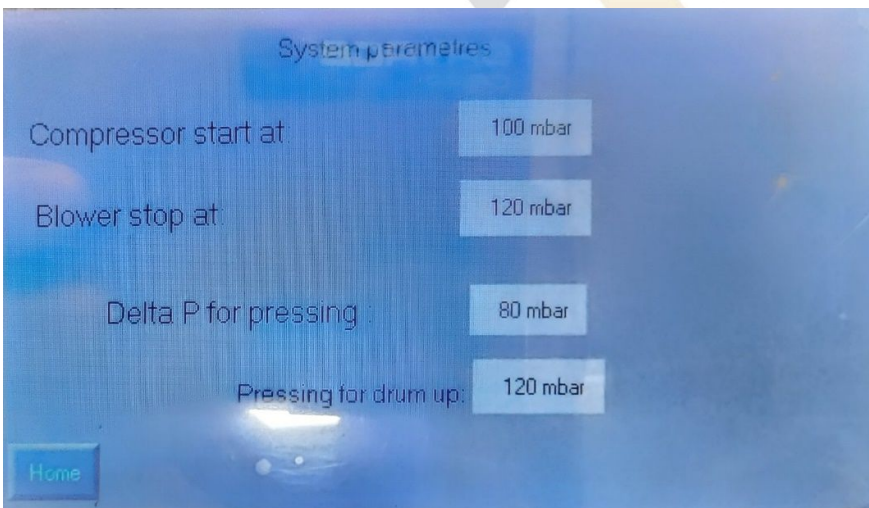
After pressing individual key in window number 3, we open one more window (Pict. 4) in which we scribe desire number of pressure, number of turning and time.



Picture 4

When we finished with all settings, we press key ESC-for going out of window to first window
Picture nr. 1

System



Compressor starts on:

This means the pressure to start the compressor or external air.

Blower stops on:

This means the pressure to stop the blower. The blower start to fill the

pressure into the drum. Recommended pressure to stop the blower is 100Mbar

Delta P for adding pressure:

This means the delta pressure for correct the loss of air.

Pressure to turn on lower switch when blowing:

This means the pressure to turn the drum when made the exhaust

MANUAL PROGRAMME

Manual programme does not attend any function automatically. All commands we have to make independent.

- Press key MANUAL (Pict. 5), after that it will open window (Pict. 6)

Forward



Settings

Pressing

Draining

Fermenter

Back

Manual

Picture 5



Picture 6

- On start we press the key START POSITION (Pict. 6). By pressing this key , it will go in the right position for pressing grapes (doors turn down). By using manual system we have on choice to turn the drum of the press as we want. That means also for regime and time of pressing.

WARNING!!!

By using manual system of pressing, we must be careful that doors on the drum of press are always turn down. Only in case when we assume that we compress enough for the individual level of pressing, we can turn the drum of press.

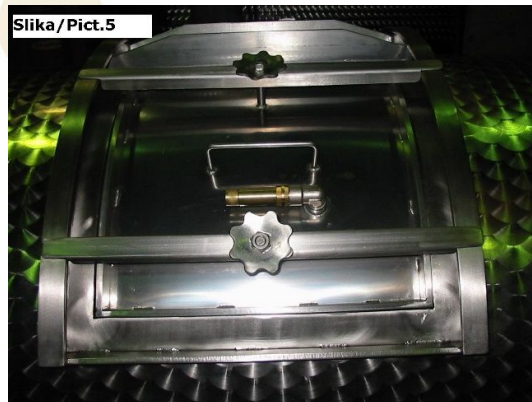
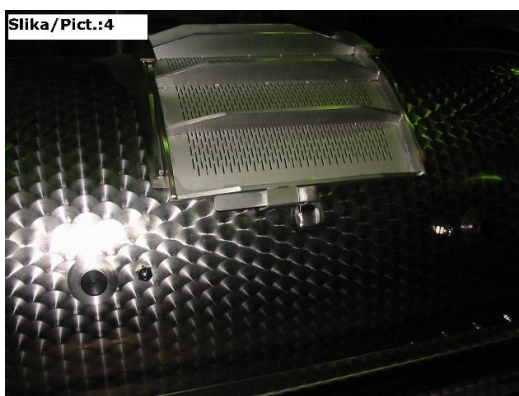
**NOTE: Before starting the press make sure that the door is properly closed with the latch!
Before starting the press make sure that the wheels are blocked!**

- To escape of the manual programme, we press the key ESC (Picture 6).

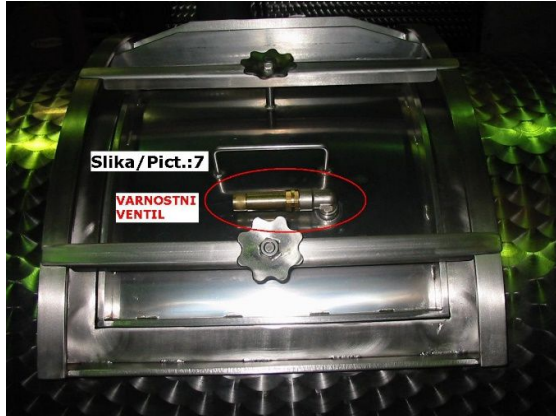
FERMENTOR

HOW WE PREPARE PRESS FOR FERMENTING?

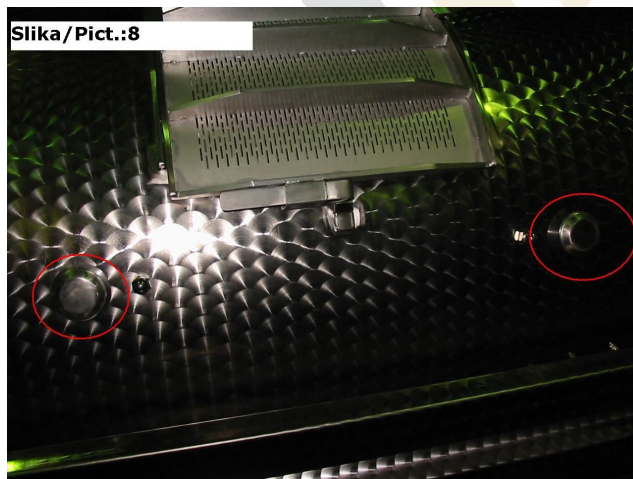
1. Perforated doors (Slika/Pict.:4) we change with doors for closed system (Slika/Pict.5)



2. Then we check if we have secure valve (Slika/Pict.7)



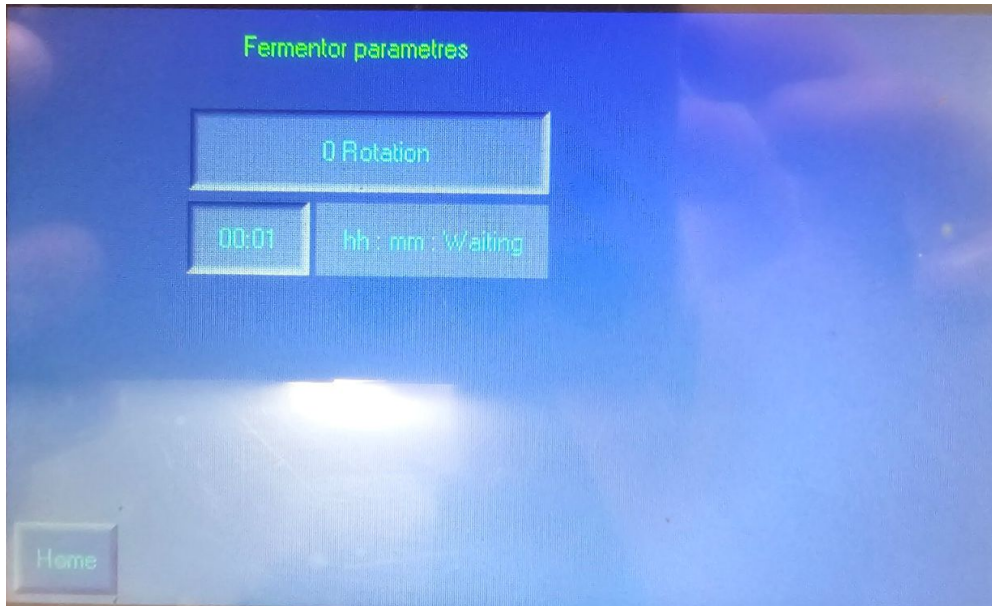
3. Drainage on the drum we closed. We change the covers form stainless steel material with plastic covers (Slika/Pict. 8).



Function fermenter is completely adjustable for pressing and cooking black grapes.

-On the main window (SETTINGS- Pict. 2) we choose the function FERMENTOR (Pict. 2).

-We have opened new window for setting FERMENTOR (Picture 7).



Picture 7

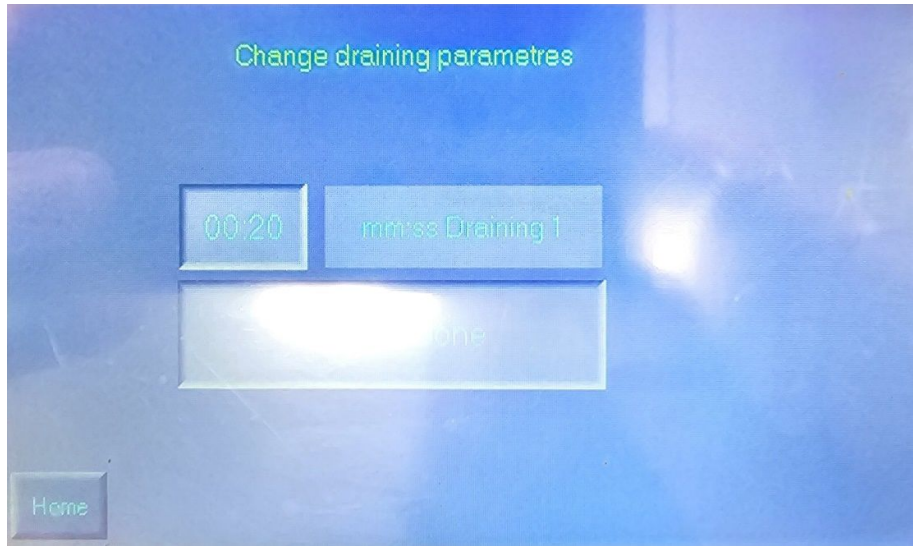
- With pressing the key “CHANGING SETTINGS FOR FERMENTOR” (Pict. 7), There are three available programmes: short, medium and long.

DRAINING

Function draining, we can use before starting to press grapes. It helps us to get more space in the drum. When we drain the must out of the drum, we get more space and with that we also economize a lot of time.

With pressing the letter **V - changing settings** (Picture nr. 8), we can change the time of draining, turning and repetitions.

For exit we press the key **Home** (Picture nr. 8), we come to the main menu, where we press the key under the **Select program – Draining** (Picture nr. 1).



Picture 8

Working process: membrane compress the mass of grapes to the opposite side of the drum, where is perforated plate trough which goes out the must of the grapes to the must collector. This process is working manually or automatically, as is already defined in program.

17

Between all this intervals of compressing we can reduce the air under the membrane. We pump the air a little bit out and the mass become softer. We mix the mass with rotating the drum a few times and again start pressing.

WHILE USING THE MACHINE:

- do not remove the safety equipment.
- do not open the safety lid.
- keep away from the rotating drum.
- do not start the machine while somebody is standing close to it

AFTER HAVING FINISHED:

- switch off the machine.
- clean the machine and its surrounding.

Washing and lubrication

- After each use the machine must be cleaned properly with water. The use of detergent for stainless steel containers is also possible.

Membrane cleaning:

- For cleaning tarps use a special cleaner, made just for tarps and tents. These concentrated formulas are generally safe for all tarps and are excellent at removing road grime, grease and oils, insects, and even rust marks from some fabrics.

- Another milder option is a dish washing soap. Clean carefully around rings and grommets, and ensure the areas are dry before storing.

- Dilute the cleaner with warm water as directed, and let it sit on the tarp for 10-15 minutes to loosen the top layer of grime.

- Apply additional cleaner and scrub.



- Using a wide push broom is a great way to scrub your tarp without sacrificing your back muscles. Using a power washer is also an option, but use on the lowest setting possible to minimize any risk of tears. Repeat the soaking/scrubbing as needed. Pay special attention to cleaning around any grommets, rings, and fabric insets. If you'll be storing your tarp after the cleaning, be sure it's completely dried before folding. Any moisture left can result in mold and mildew forming.

- Keep in mind, these are cleaning tips for tarps which are generally made of a tough PVC-coated polyester.

- Use lubricant for open gears OZ -20 (JUS.B. H3. 273/274) to lubricate the toothed gear.

- Use Li-soap based grease VM-3 (JUS B.H3.634) to lubricate the axles through the nozzles.

Membrane characteristics

		 HEYTex® Technical Textiles	 HEYTex® flexitank
Trägergewebe base fabric tissu de base	(DIN ISO 2076)		Markenpolyester trade mark polyester polyester de marque
Garnfeinheit (K/S) yarn (W/F) titre (ch/tr)	(DIN EN ISO 2060)		2200/2200 dtex
Bindung weave armure	(DIN ISO 9354)		P 2/2
Fadendichte threads nombre de fils	(DIN EN 1049-2)		9,2/9,7 pro cm 23,4/24,6 per inch
Gewebegewicht basecloth weight poids du tissu de base	(DIN EN 12127)		ca. 445 g/m² approx. 13.1 oz/lyd ²
Beschichtungsmaterial coating material type d'enduction			TPU-Ether
Flächengewicht total weight poids total du tissu enduit	(DIN EN ISO 2286-2)		ca. 1300 g/m² approx. 38.3 oz/lyd ²
Reißfestigkeit tensile strength résistance à la déchirure	(DIN EN ISO 1421)		5500/5000 N/5cm 627/570 lbs/inch
Weiterreißfestigkeit (K/S) tear resistance (W/F) résistance à la déchirure amorcée (ch/tr)	(DIN 53363)		750/600 N 168.7/135 lbs
Schweißnahthaftung welding adhesion adhérence de la soudure	(IVK 3.43)		mind. 250 N/5cm at least 28 lbs/inch au minimum 250 N/5cm
Knickverhalten flex-resistance résistance à la pliure	(DIN 53359 A)		min. 100.000 Knickungen at least 100.000 bends au minimum 100.00 pliures
Kältebeständigkeit cold resistance résistance au froid	(DIN EN 1876-1)		-30 °C -22 °F
Einsatzmöglichkeit possible application utilisation possible			z.B. Weinpressemembrane e. g. wine press membrane p. ex. membranes pressoirs de vin

Die in den Materialdatenblättern angegebenen technischen Daten sind Erfahrungswerte aus laufenden Produktionen und stellen keine Beschaffenheitsvereinbarung dar. Sie beziehen sich auf die gelieferte Ware im Ursprungszustand ohne Ver- und Bearbeitung durch den Kunden. Das Zurverfügungstellen der Daten erfolgt nur zu Informationszwecken und dient lediglich als Anhaltspunkt. Es befreit den Kunden nicht davon, vor Ver- und Bearbeitung des Produkts eine selbständige Prüfung auf Eignung für den vom Kunden vorgesehenen Einsatzzweck und der daraus folgenden Haftung vorzunehmen.

The technical data given in the Material Data Sheets are empirical values from current production and do not constitute any agreement concerning the nature and quality of goods. They refer to the goods supplied in the original state without any processing by the customer. The data are provided for information only and constitute just reference values. The customer is not released from conducting his own comprehensive tests concerning suitability for the use intended by the customer and any liability resulting from this before processing the product.

Les données techniques indiquées dans les fiches signalétiques sont des valeurs empiriques constatées lors des productions courantes, elles ne représentent pas un accord sur la nature des matériels. Elles se rapportent à la marchandise livrée dans l'état d'origine, sans transformation et façonnage par le client. La mise à disposition des données est faite à titre d'information, et sert uniquement de point de repère. Elle ne dégage pas le client de procéder avant la transformation et le façonnage du produit à un contrôle autonome de qualification pour l'usage prévu par le client, et la responsabilité qui en découle.

Datum : 24.08.2010 Änderungsstand : 7

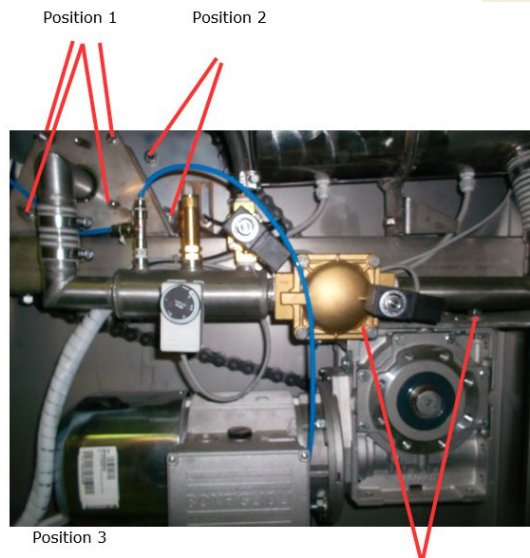
Conditions for using the machine

- The machine, its workplace and ground must be kept clean, neat, and properly lit at all times when using it.
- A higher than **1,5 m** room or a using area is required.
- The area around the machine needs to be empty so machine would not be bothered with any interference.
- The machine is operated by one person who has passed his training with the machine and is familiar with all the instructions and risks.
- Flat, stable and solid ground is needed for machine, the ground must hold **600 kg** weight. This stable ground is always obligatory: when using the machine, during transportation, assembly, dismantling, testing, foreseeable failure or non-usage periods.
- When transporting, lifting or storing the machinery the client is obligated to assure its safety and proper fastening.

Every season, before using the press you must check following:

- tightening of the drum screws (see picture-position1) If the screws is not tight enough the limit switches will be damaged, because the drum comes out.

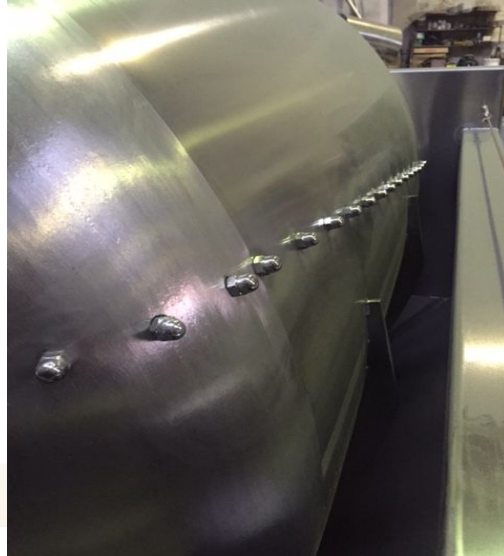
20



- tightened of the wheel screws (see picture-position 2)
- the chain tension and adjust with 4 gear motor screws(position 3)
- tightened of the 4 screws (see picture -position 4)
- tightened all membrans screws. For this job you need two persons one inside, one outside (see picture-position 5)
- check also the correct work of position sensor



Position 4



Position 5



The distance between coulise and limit switch must be around 3mm

Safety requirements

- if some machinery failure, obstacle, accident, emergency or any other dangerous situation happens it is obligatory to stop, shut down the machinery immediately or operate equipment depending on the situation in order to avoid or eliminate dangers.
- The machinery can be operated only by a person who has passed his training for machinery and is familiar with all the machinery instructions and risks. The person must also be in proper physical and mental state and not be affected by any substances that could interfere with normal functioning (such as pharmaceuticals, drugs, alcohol etc.).
- It is prohibited to do any activity with the machine during its working process (such as washing, transporting etc.).
- It is prohibited to wet or pour any liquids onto the central control box and engines.
- Every time before using the machine the operator must carefully inspect the machine, check if all the parts and electrical buttons are in place and working properly as well as examine if the equipment meets all the safety requirements and is prepared for normal work.
- The main control panel and engines can be fixed, repaired or changed only by the manufacturer or its approved repairing company. All the engineering and electrical works must also be performed by the manufacturer or its approved repairing company.

Warnings

- It is prohibited to use things that could damage the machine or its parts. It is prohibited to press fruits and vegetables that are not suitable for pressing with pneumatic press, that are not properly processed (not mashed, contain thick particles) and are dangerous to the machine, environment and/or the other people. All the products that the client wants to press with this machine must be previously discussed with the manufacturer. If the manufacturer advises not to press some of them and the client still uses it, all the machinery warranty service is automatically terminated and the client takes all the responsibility for the actions and consequences.
- Pneumatic press manufactured and most suitable **to press berries**. If the machine is used for other products, the efficiency of the machine can differ. Depending on the fruits, additional action may be required in order to ensure the smooth work process (i. e. to use slower pressing mode, pay closer attention to the washing of the machine, etc.)

- It is forbidden for any people to touch, lean on or have contact in any way with the working machine, its parts, the products that are being processed or other dangerous parts because of the risk of injury. Only actions that are necessary for a proper work with the machine are allowed.
- All machinery parts, buttons and operational details must be used according to their purpose.
- Any arbitrary adjustment, repair or other mechanical modification of the machine by a non-manufacturer will result in termination of the warranty service.
- It is prohibited to climb or put things on the machine at all times.
- The machine can only be washed, lifted, transported or otherwise operated after it was switched off completely.
- The machine only works properly when all its parts are properly attached.
- The manufacturer produces and prepares the machine based on all machinery requirements and the client's needs. Changing and mechanically adjusting any machinery settings without manufacturer or its approval is prohibited.

Residual risks

- The risk of sound and hearing damage due to the noise made by the device still remains even in compliance with all safety requirements.

Precautionary directions

- Before using the machine, the operator must inspect the machine for defects and meet all safety requirements. If discrepancies are found, do not use the machine until they have been eliminated.
- It is recommended to remain attentive around the machine and to keep a distance from the machine and its parts when it is not necessary.
- If the situation requires contact with parts of machinery that are hazardous to health or dangerous to environment, additional precautions must be taken: consultation with the manufacturer, usage of other equipment or tools, wearing protective gloves and other actions depending on the situation.
- It is recommended to wear clothing and footwear that is non-slip, water resistant and is appropriate for work. To reduce the risk of sound during work, it is recommended to use sound-insulating headphones.

- It is recommended to follow all additional safety requirements in order to stay safe and prevent any injuries.

Transportation of machine

- **Lifting the machine:** the press is wheeled, so that it can easily be moved from room to room. When loading the press on a vehicle, special supports should be used.
- When lifting the machine with a forklift truck special supports should be used in order to prevent damage or dropping the machine.
- The machine can be connected to the network by an authorized technician of the manufacturer or the user of the machine with good technical knowledge.

Machine operation in case of risk

- In the event of accident or emergency operate the machine depending on the situation: stop, shut it down, return to a safe or less dangerous position immediately and eliminate the danger.
- If the machine breaks down, switch off the machine and evaluate the failure. If the failure cannot be eliminated by yourself (such as removing the dirt, other obstacles) or it is dangerous, contact the manufacturer for warranty service, if the warranty service has expired, apply for repair.
- In case of jammed machine assess the situation, inspect the jammed part of the machine and try to solve it if there is no danger. Depending on the situation try restarting the machine or contacting the manufacturer for warranty service or repair.

Adjustment and maintenance of machine

- Inspect machine parts before every use, regularly check machinery.
- Wash the machine regularly (after each shift).

Troubleshooting

Troubleshooting must only be carried out by an authorized and qualified person, with the right and appropriate skills and training for the job.

Disturbances / error	Possible reason(s)	Remedy
Machine does not function	Phase missing Phase swapped	Have an electrician to check this
Machine not starting	The safety switch on the crusher head is activated	Check if there is enough water in the heating tank.
Liquid does not flow into the filling valve		Check if there is enough juice in the tank and valves are open
Scales does not work		Check if there is electricity or batteries connected.
Temperature is not rising.		Check if there is enough electricity power supply.