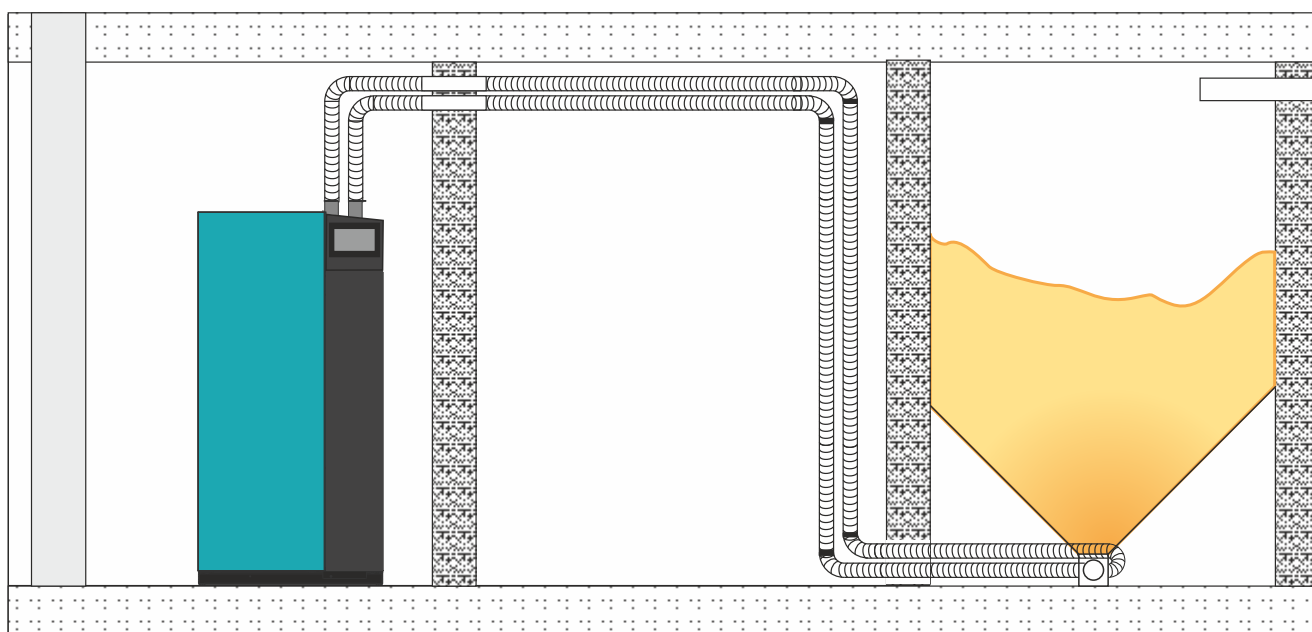


ENG

TECHNICAL INSTRUCTIONS

Only for authorized technician

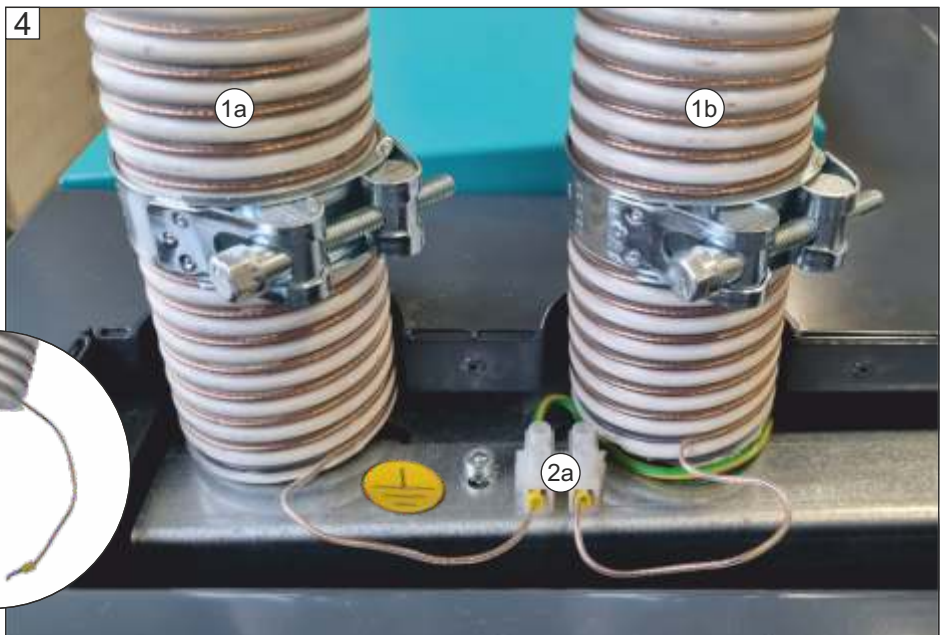
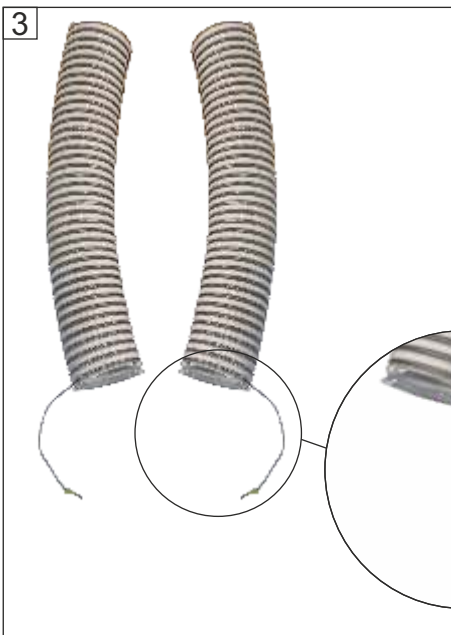
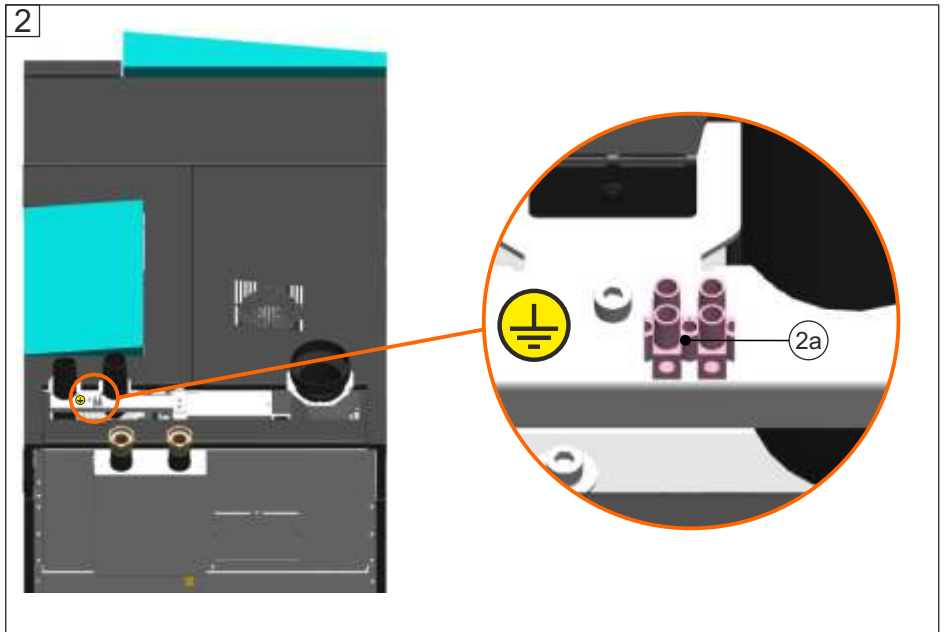
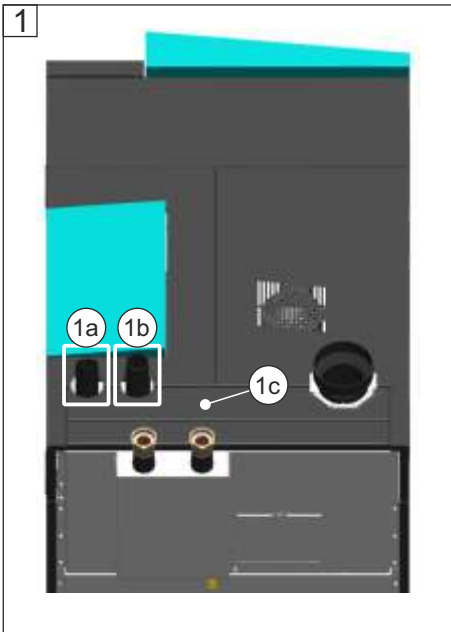


SUCTION SYSTEM - PelTec-Compact



IMPORTANT!

Before turning on the boiler, it is necessary to earthing the PVC pipe for the pellet inlet and the PVC pipe for the air outlet.



1. PVC pipe for pellet inlet (1a) and air outlet (1b) must be earthing. It is necessary to remove the top cover (1c) to access the earthing connector (2a).
2. The connector (2a) has two inlets, each for one pipe.
3. With the two PVC pipes, it is necessary to separate part of the wire.
4. Earthing the wires as shown in Figure 4.

The pipes on the vacuum suction system are fixed using the hose clamp.

FILLING THE PELLET TANK

The pellet tank of the PelTec-Compact boiler can be filled in two ways: using a vacuum suction system or manually.

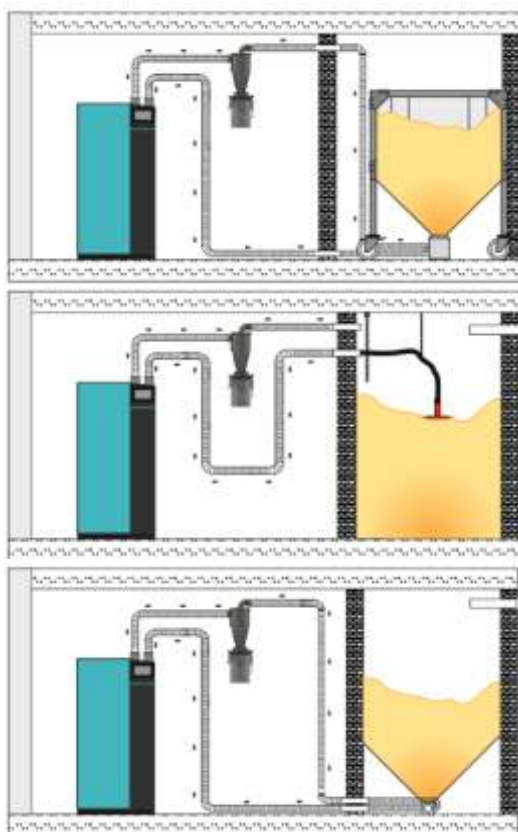
If you want to use a vacuum suction system, follow the instructions below.



10.1.2.4.1. SUCTION TYPE

Select the type of installed system: Pellet tank, Mole, Feeder screw. Factory setting is OFF.

Installation -> PIN -> Boiler -> Boiler components -> Suction system -> Suction type

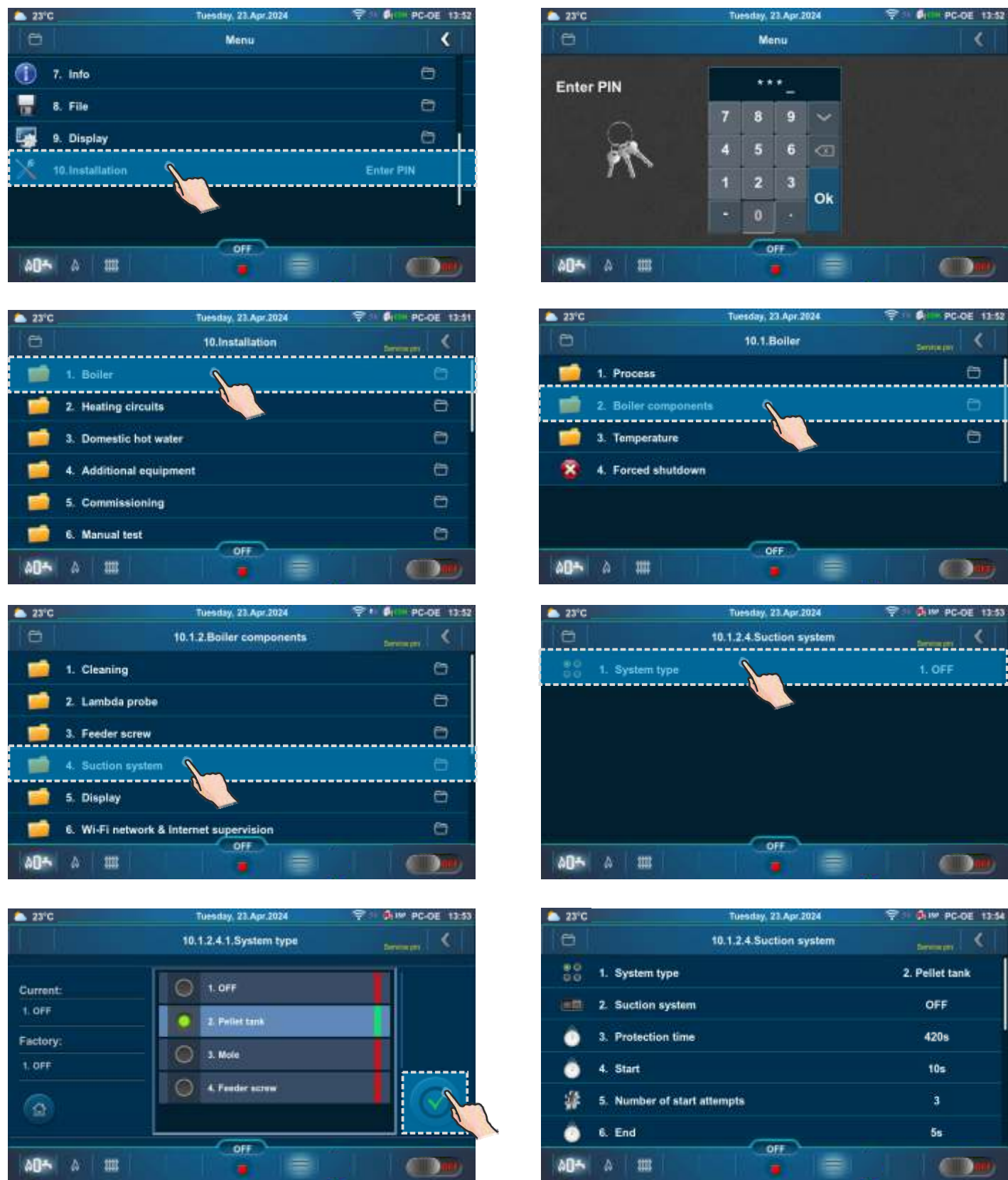


-> Pellet tank

-> Mole

-> Feeder screw

Suction system



Factory: OFF
Possible selection: OFF, Pellet tank, Mole, Feeder screw

10.1.2.4.2. SUCTION SYSTEM

To filling pellets (suction system), it is necessary to adjust the settings in the installation menu.

Enable the "Suction system" option (must be shown ON) and confirm the selection.



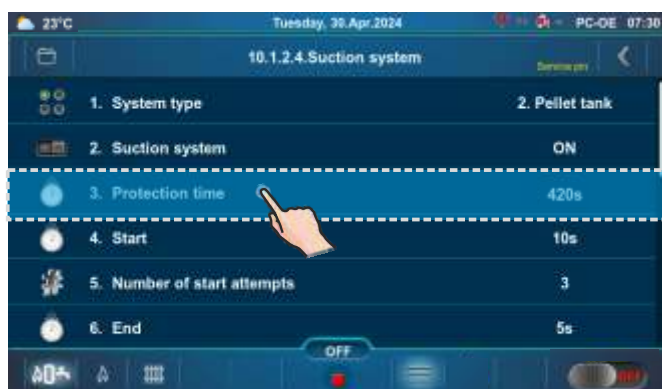
Factory: OFF

Possible selection: OFF, ON

The pellet tank is filled with pellets until the fuel level sensor (CMSR50), on the side of the tank, is covered (all LEDs are light). When the fuel level sensor is covered, the vacuum turbine stops and 100% is displayed on the tank image. From that moment, the pellet screw feeder operating time starts to count down and the percentage of pellets in the tank starts to decrease. When the percentage of pellets in the tank drops to 0% (i.e. when the tank is almost empty, so that the pellet screw feeder does not empty) the vacuum turbine starts working again until the fuel level sensor is covered with pellets again.

10.1.2.4.3. PROTECTION TIME

If the fuel level sensor in the pellet tank is not filled with pellets within the protection time, the control unit turns on the turbine 5 more times for 60 seconds in order to fill the tank up to the sensor. If the tank is still not full, i.e. the sensor is not filled with pellets, the control unit assumes that there is no fuel in the large pellet tank, stops the vacuum turbine and issues an error. Check the pellet level in the large tank, and check for blockages in the supply pipes or vacuum system parts.



Factory: 420 sec

Possible selection: 1-600 sec

10.1.2.4.4. START

When the fuel level drops to 0% or when someone manually starts the vacuum refill (and the fuel level sensor is free), for the first time (Start), only the vacuum turbine works, without the screw feeder motor or the mole, in order to empty any pellets in the supply pipe.



Factory: 10 sec
Possible selection: 0-20 sec

10.1.2.4.5. NUMBER OF START ATTEMPTS

When the vacuum suction system starts working and the pellet level sensor is blocked, the suction system tries 3 times (factory setting) to unblock the pellet level sensor. If the suction system fails to unblock the pellet level sensor even after the 3rd time, the error “Fuel level sensor visibility error” is displayed.



Factory: 3
Possible selection: 1-10

10.1.2.4.6. END

When vacuum suction system stops working (because tank is full, pellet level sensor is covered with pellets), suction system works for end time (without screw or mole) to clean the suction system pipes from pellets. If in big storage isn't screw or mole, *End* time can be set to 0 sec.

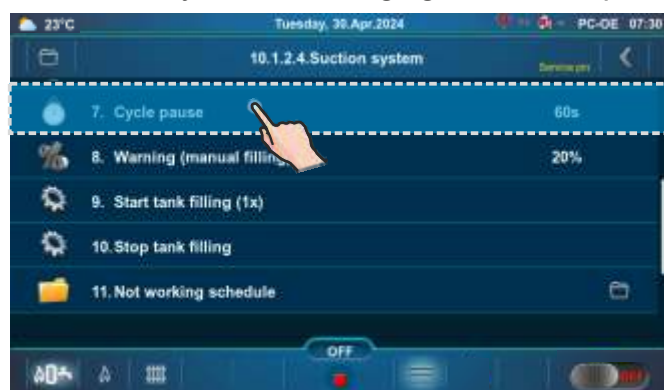


Factory: 5 sec

Possible selection: 0-60 sec

10.1.2.4.7. CYCLE PAUSE

If the vacuum refill system is stopped manually by using the X button on the screen below the hopper image or by using the *Stop tank filling* menu, the time set in the cycle pause (factory default 60 seconds) begins to count down to eliminate the problem and after this time the vacuum refill system automatically starts working again to fill the pellet tank.



Factory: 60 sec

Possible selection: 1-300 sec



10.1.2.4.8. WARNING (MANUAL FILLING)

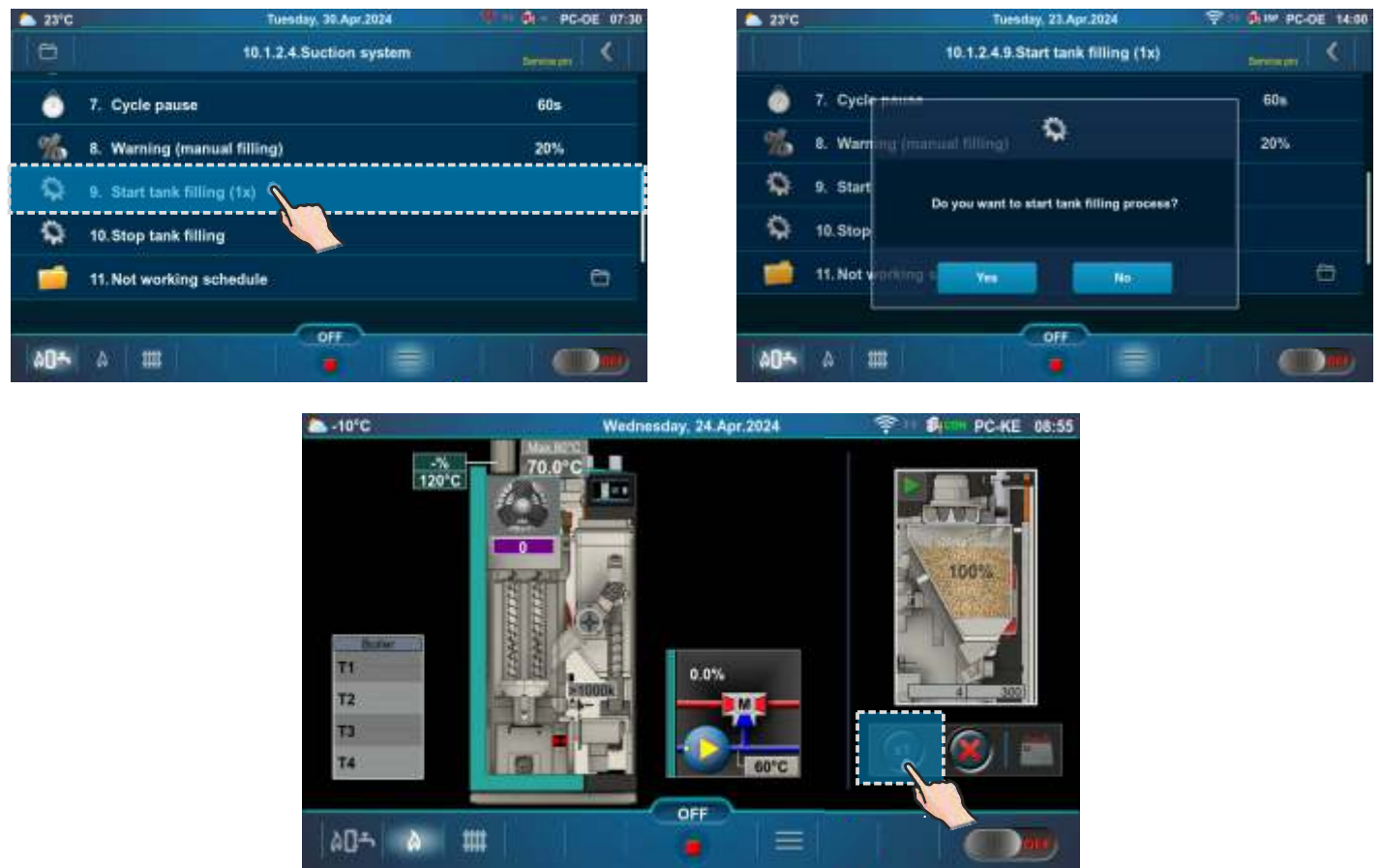
When the vacuum refill system is switched off, i.e. the pellet tank is filled manually and when the level in the pellet tank reaches the level selected in this menu, a warning about the fuel level appears on the screen. If there is a "boiler supervision" of the boiler and the sending of warnings and errors by e-mail is configured, an e-mail with a warning is automatically sent. When this warning appears, the boiler is still working, but it is necessary to fill the tank with pellets, because when the pellet level drops to 0%, the boiler stops working until the tank is refilled with pellets and the 100% button is pressed.



Factory: 20 %
Possible selection: 1-80 %

10.1.2.4.9. START TANK FILLING (x1)

If you want to refill the pellet tank before the tank reaches 0% fuel level, you can start a one-time fill of the vacuum suction system by pressing the *Start tank filling* menu or the x1 button on the screen below the tank image.



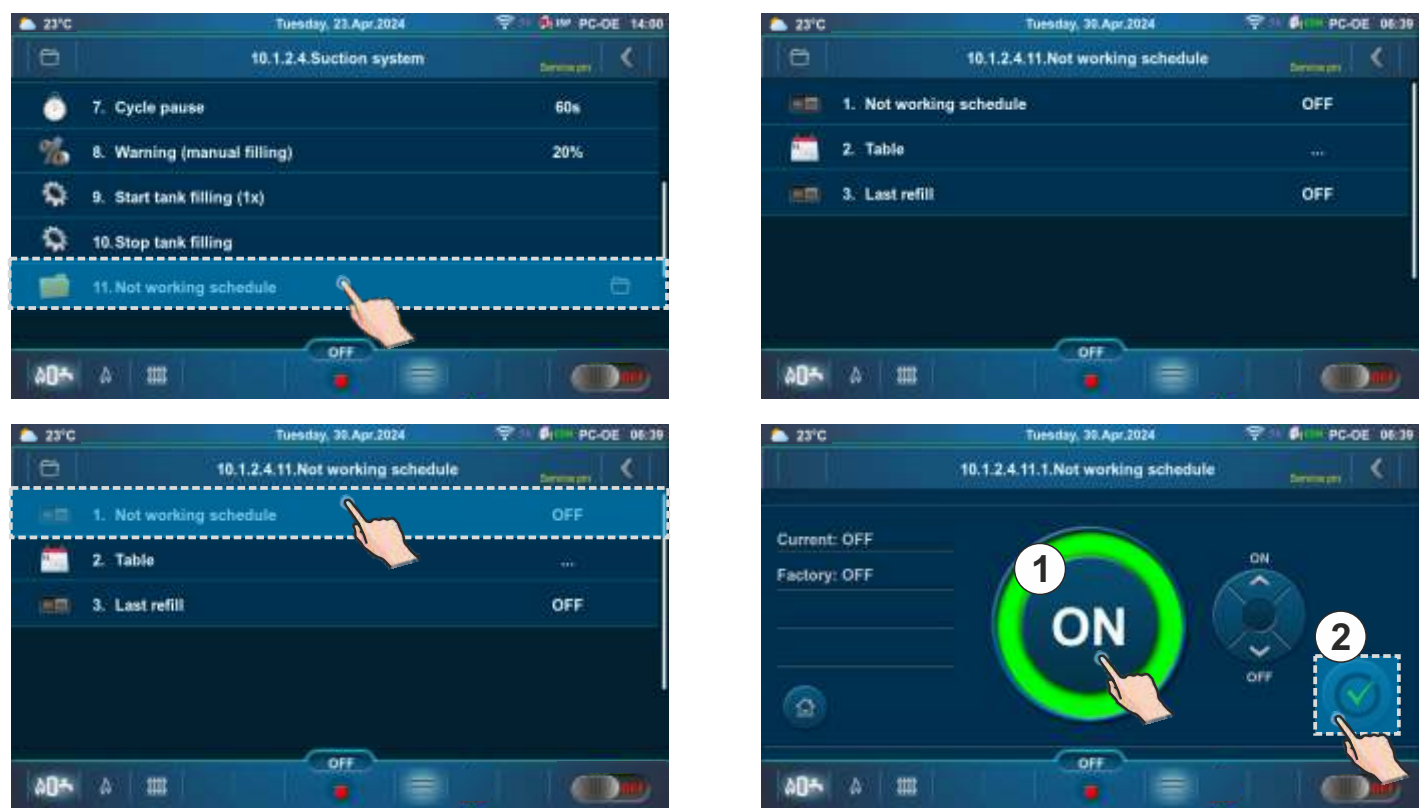
10.1.2.4.10. STOP TANK FILLING

If you want to manually stop the work of the vacuum suction system which is running before the tank is filled with pellets (and the fuel level has not reached 100%), it is necessary to press the *Stop tank filling* menu or press X on the screen below the tank image.



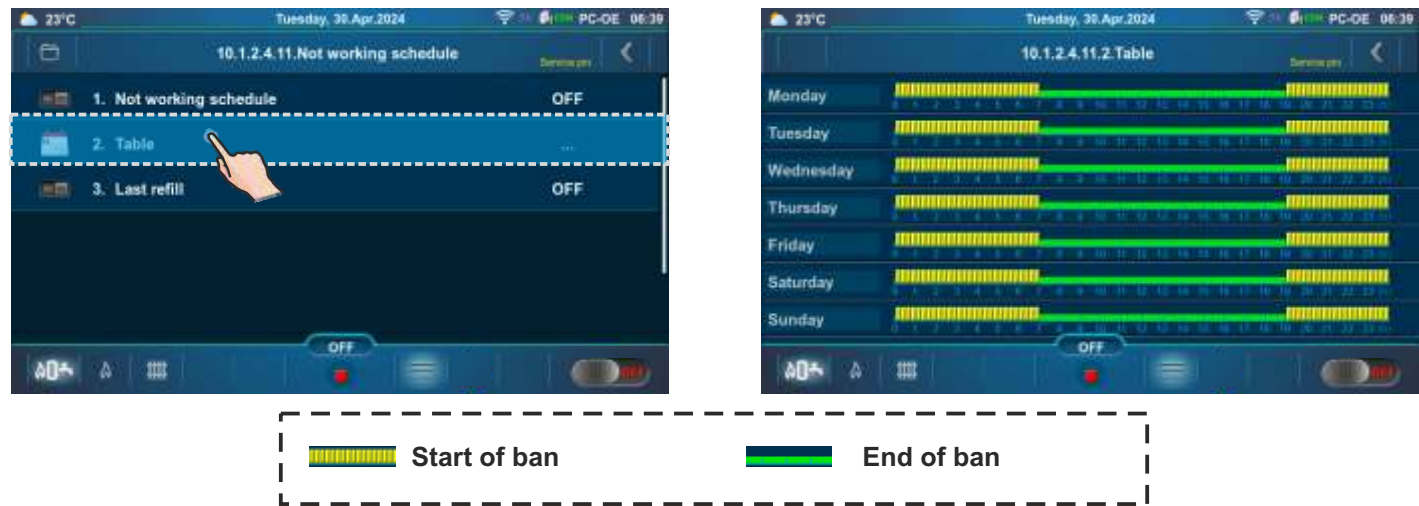
NOTE: After the suction system is switched off, the pause cycle time begins (factory setting 60 seconds), after which the suction system is switched on again to fill the pellet tank. If you want to deactivate the suction system for a longer time, you must deactivate the suction system in menu 10.1.2.4.2. or 4.7.1.

10.1.2.4.11.1. NOT WORKING SCHEDULE



Factory: OFF
Possible selection: OFF, ON

10.1.2.4.11.2. TABLE

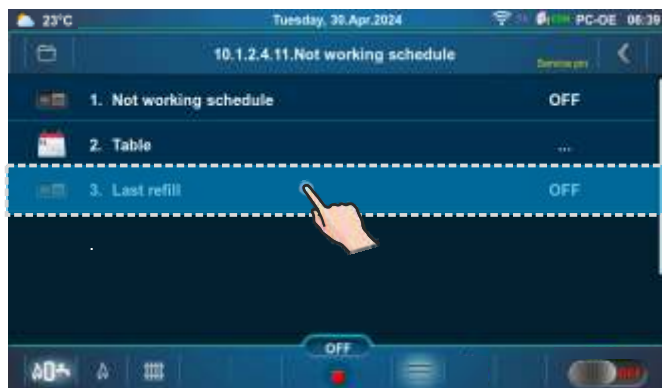


According to the data in the table, suction system is banned from 0:00 to 7:00 and from 19:00 to 24:00 every day of the week. This means that suction system only during the period from 07:01 to 18:59. Table can be adjusted according to the needs in the same way as the table "Schedule" (see in technical manual for PelTec-Compact_controller).

NOTE: Always adjust the duration of the "Not working schedule" to the actual operating needs of the boiler so that the boiler does not run out of pellets during the time of the "Not working schedule"!

10.1.2.4.11.3. LAST REFILL

If the not working schedule table is enabled and *Last Refill* is enabled, before the set not working schedule table begins, if the tank is between 0% and 90% full of pellets, the vacuum system will fill the tank up to 100% to ensure the proper functioning of the boiler during the not working schedule time for filling new pellets.

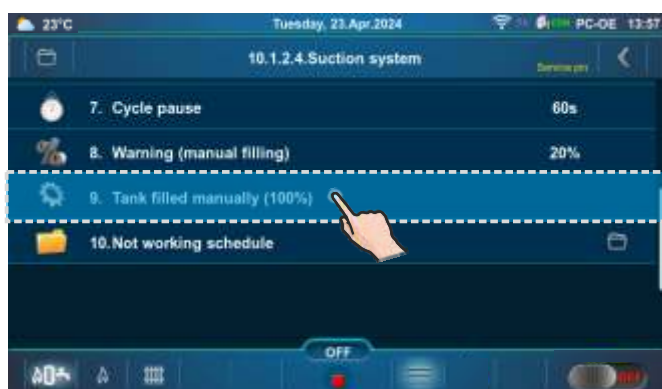


Factory: OFF

Possible selection: ON, OFF

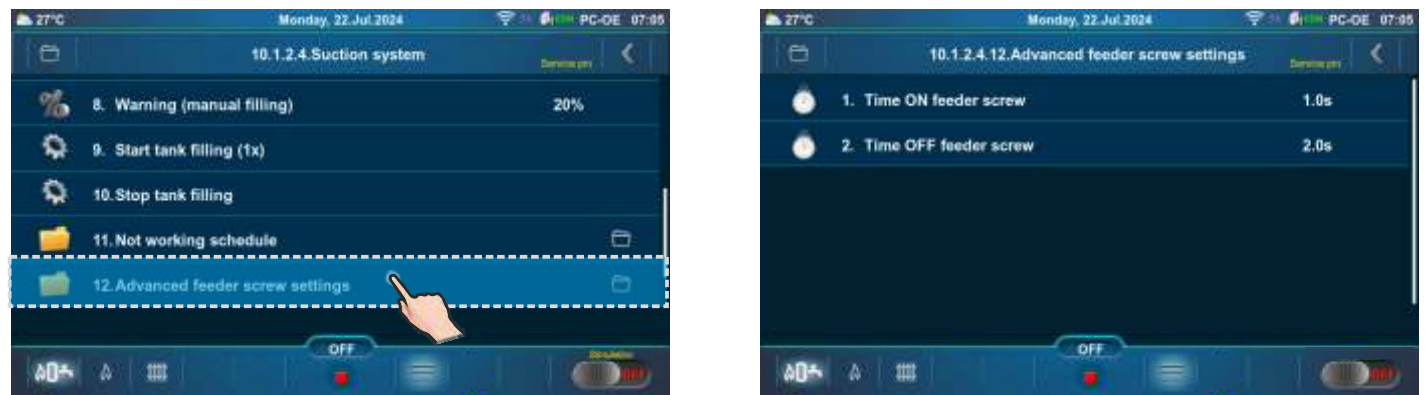
10.1.2.4.9. TANK FILLED MANUALLY (100 %) (ONLY WHEN THE SUCTION SYSTEM IS OFF)

Once the pellet tank is manually filled, after filling the tank with bags of pellets, you must press the 100% button (button under the tank image) or the *Tank filled manually 100 %* button. (menu 10.1.2.4.9. or 4.7.3.) so that the controller receives the information that the tank is full of pellets.



10.1.2.4.12. ADVANCED FEEDER SCREW SETTINGS

If another screw feeder, not from the boiler manufacturer, is used in the "Feeder screw" configuration, it is necessary to check the operation and if the vacuum refill cannot work well (if it is being filled), it is necessary to adjust the *Time ON feeder screw* and *Time OFF feeder screw* times of the screw feeder.



10.1.2.4.12.1. TIME ON FEEDER SCREW



Factory: 1.0 sec
Possible selection: 0-15 sec

10.1.2.4.12.2. TIME OFF FEEDER SCREW



Factory: 2.0 s
Possible selection: 0-15 s

NOTE:

Depending on the size of the pellets and the length of the pellet supply pipe, when starting up the screw feeder of the large vacuum pellet tank, it is necessary to check whether the pellets are not collected and overfilled big pellet tank transporter box. If this happens, it is necessary to reduce the operating time of the conveyor so that fewer pellets enter the box and so that the vacuum turbine has enough time to take them to the boiler. On the other hand, if the screew feeder supplies too few pellets to the screw feeder box, it is possible that the vacuum turbine does not supply enough pellets and the protection time of the vacuum turbine is exceeded, and the boiler tank is not filled with pellets. Then the screw feeder operating time should be carefully increased, taking care not to overfilled big pellet tank transporter box, so that the vacuum turbine can fill the boiler tank with pellets in the Protection Time.

ERRORS/INFORMATIONS

	ERROR - E	DESCRIPTION
E32	EMPTY PELLET STORAGE CLOGGED PELLET DELIVERY PIPE	Boiler status: Boiler works normally. The problem (stoppage) occurs in the operation of the additional equipment for Vacuum supply of pellets (Pellet suction system). Troubleshooting: Check the pellet level in the big tank/room, check if the flexible tubes are blocked, check if the turbine net is full of dust, check the equipment for taking pellets from the big tank.
E33	FUEL LEVEL SENSOR VISIBILITY ERROR	The pellet level sensor is clogged even though there are no pellets in the tank, clean the pellet level sensor. If, despite cleaning, the sensor still shows a clogged state (red LED), replace the sensor.
E34	COMMUNICATION ERROR WITH CMVAC	Boiler status: Boiler works normally. The problem occurs in the operation of the additional equipment for Vacuum supply of pellets (Pellet suction system). Troubleshooting: Check the UTP Ethernet cable and its connections to the boiler controller and the suction system.
E52	OVERFILLED BIG PELLET TANK TRANSPORTER BOX	Boiler status: Boiler in the OFF phase, further everything is related to error E22. Possible cause: The pellet feeder screw of the big pellet tank filled the feeder screw (transporter) box with pellets, check if the pellet pipe between the big pellet tank and the boiler is not blocked. Check the amount of dust in the feeder screw (transporter) box and clean it. If during feeder screw operation there are too many pellets (in unit of time) in the feeder screw (transporter) box, call an authorized service technician.

	INFO - I	DESCRIPTION
I4	SUCTION SYSTEM REFILL	If the suction system in the standard cycle fails to fill the pellet tank to the level of the sensor, it will make several more filling attempts, each lasting 60 seconds. For each of them, I4 is displayed.

Company assumes no responsibility for possible inaccuracies in this book originated typographical errors or rewriting, all the pictures and diagrams are principal and it is necessary to adjust each actual situation on the field, in any case the company reserves the right to enter their own products such modifications as considered necessary.

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