



User manual



GO1473 - GO1474 GO1475

GO1473 - FOCUS 5kW 3PH GO1474 - FOCUS 3.5kW LIGHT GO1475 - FOCUS 5kW 1PH

USE AND MAINTENANCE MANUAL **EN**

	CAFFTY INCTRICTIONS	_
ı	SAFETY INSTRUCTIONS	
2	CONNECTION	
3	MAINTENANCE	
4	REGULATORY INFORMATION	
5	DISPOSAL	
6	PRODUCT IDENTIFICATION	
7	PRODUCT SPECIFICATIONS	
8	DESCRIPTION OF DEVICES	
8.1	Description GO1473 - GO1475	
8.2	Description GO1474	
8.2.1	Instructions for Touch control keypad (TC)	
>_	1 COLOR DISPLAY USAGE SPECIFICATION	
CONTROL DISPLAY	2 HOME PAGE	
	2.1 Temperature Panel	
	3 BUTTON PANEL AND CENTRAL PANEL	
2	3.1 Power button	
Z	3.2 Temperature tool button	
	3.3 Timer button	
동	3.4 Diagnostic/Wifi	
8	4. DIAGNOSTIC/WIFI SUBPAGE	
~	4.1 Wireless connection button	
<u> </u>	4.2 Register button	
COLOR TOUCH	4.3 Diagnostic button	
	5. ERRORS	
8.2.2	Autotuning Test instructions (TC)	
8.3	TC alarm lights	
9	WIRING DIAGRAMS	
	6.1 Wiring diagrams GO1473 - GO1475	
	6.2 Wiring diagrams GO1474	
10	HYDRAULIC CIRCUIT	
11	APPLICATION OF THE WARRANTY	
11.1	Return of products to Govoni	
11.2	Recommendations regarding product transport	
11.3	Recommendations for packaging and transport.	
11.4	Warranty duration and limits	
12	REPLACING THE INDUCTOR	
13	MAINTENANCE	
13.1	General recommendations	
13.2	Preventive maintenance	
13.3	Routine maintenance	
13.4	Special maintenance	
14	EXPLODED	
14.1	Exploded view GO1474	
14.2	Exploded view GO1473	
15	MACHINE LOGBOOK	
16	CONFORMITY	21

1. SAFETY INSTRUCTIONS



This manual describes the operation of the unit and the precautions to be taken for your safety.

Read it carefully before use and keep it in a safe place for future reference. These instructions must be read and understood before use.

Do not undertake any modifications or maintenance other than those specified in the manual. The manufacturer shall not be held liable for physical or material damage due to improper use of the equipment

In case of problem or doubt, please consult a qualified person to use the unit correctly. The safety instructions must be observed.

The manufacturer declines all liability in the event of improper or hazardous use. Any use not mentioned in this manual is strictly forbidden and potentially dangerous. The product is semi-automatic and requires the presence of an operator.

This machine should only be used for the purpose for which it was expressly designed, that is: to generate heat inside ferrous materials.

Any other use not expressly covered in this manual is strictly prohibited as considered improper and therefore dangerous. The machine is semi-automatic and therefore requires the presence of an operator.

The operator has the direct responsibility for compliance with all safety standards not only where he is concerned but also for any persons who may be exposed to machine risks.

Do not use the unit if the power cord or plug is damaged.



Caution! Very hot surface. Risk of burns.

- Overheated objects and equipment can cause burns.
- Do not touch hot objects with bare hands.
- Wait for the objects and equipment to cool down before using them.

In case of burns, rinse with plenty of water and seek medical advice immediately.



- Machine use should only be entrusted to adult, suitably trained personnel in full compliance with current regulations and the instructions contained in the manual.
- Remove any jewelry and/or metal object before using this unit.
- Keep the machine in a suitable place, protected from weathering.



Danger from gases and vapors.

- Keep away from fumes and do not breathe vapors.
- When working indoors, ventilate the room and/or use an air extractor to evacuate vapors and gases.
- Induction heating of certain materials, adhesives and fluids can produce vapors and gases. Breathing these gases and vapors may be dangerous to your health.
- If ventilation is insufficient, use a certified respirator.
- Read the product technical and safety data sheets (MSDS) and the manufacturer's instructions for adhesives, metals, coatings, detergents, and pickling agents.
- Do not use the heater on degreasing or spraying parts. Heat can react with vapors to form highly toxic and irritating gases.
- Only work in a confined space if it is well ventilated or using a certified vacuum cleaner. Vapors and gases resulting from heating can replace the oxygen in the air and cause sickness or death. Verify the quality of the air you breathe.
- Do not overheat metals, such as galvanized steel, lead-coated steel, or cadmium-coated steel, unless the coating is removed from the surface to be heated, air is well ventilated, and, if necessary, wear a certified respirator. Castings and all metals containing these elements can release toxic vapors when heated.
- Refer to the MSDS for temperature information



Caution! Electrical hazard.



Caution! Strong magnetic field. Persons having active or passive implants must be informed.



Do not approach the inductor at the head and vital parts level during operation.





Persons with pacemakers or biomechanical equipment should not use the device. Risk of disturbances/interference in the operation of pacemakers/biomechanical equipment in the vicinity of the device.



Wear the following PPE during use



2. CONNECTION



This unit must be connected to a properly grounded electrical outlet

3. MAINTENANCE



- Maintenance must be carried out by qualified personnel.
- Warning! Disconnect the machine cable from the power supply before performing any maintenance on the unit.
- Never use solvents or other aggressive cleaning products.
- Clean the surfaces of the unit with a dry cloth.

4. REGULATORY INFORMATION



Device in compliance with European directives



Dispositivo in conformità con le direttive UK



EAC (Eurasian Economic Community) mark of conformity

5. DISPOSAL



This material is subject to separate waste collection. It must not be disposed of with household waste

6. PRODUCT IDENTIFICATION

A label is located on the back of the machine bearing the "CE" conformity mark:

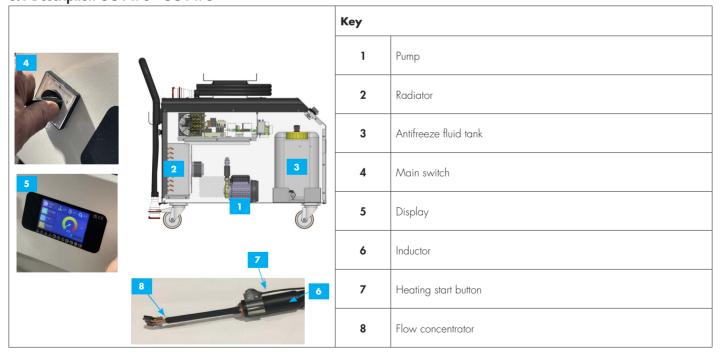
- Name and address of manufacturer
- Date of manufacturing
- Model
- Type of product
- Operating voltage

7. PRODUCT SPECIFICATIONS

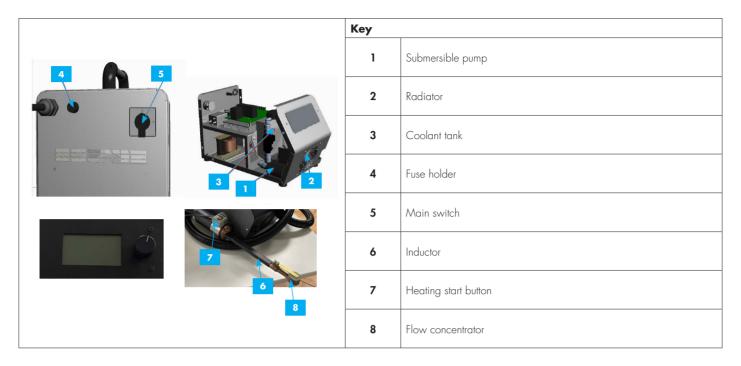
	GO1473	GO1474	GO1475
	GOVONI GOVONI	S CAIS S COSION S	GODON GOVONI
Rated power	5 Kw	3.5 Kw	5 Kw
Rated voltage	400V 3PH	230V 1PH	230V 1PH
Mains voltage frequency	50 Hz - 60 Hz	50 Hz - 60 Hz	50 Hz - 60 Hz
Electrical intensity	I max 16 A	I max 16 A	I max 16 A
Heater frequency	15 KHz - 30 KHz	15 KHz - 30 KHz	15 KHz - 30 KHz
Insulation class	IP 21	IP 23	IP 21
Coolant tank capacity	20 LT	1 LT	20 LT
Electrical cable length	8 m	2 m	8 m

8. DESCRIPTION OF DEVICES

8.1 Description GO1473 - GO1475



8.2 Description GO1474



8.2.1Instructions for Touch control keypad (TC)

• Turn the main switch 4 to ON position. The machine checks the system and prepares to work, then wait a few seconds.

1. COLOR DISPLAY USAGE SPECIFICATION

The color display matches with the cards of GO1470, GO1471, GO1472, GO1473, GO1474, GO1475 machines. It is equipped with wireless connection and advanced diagnostics and operation of power cards.

2. HOME PAGE

This screen shows the first page with the meaning of the buttons and indicators.

In particular, at the top you have the temperature panel, on the left the button panel and in the center a panel where what has been selected through the buttons is shown.



2.1 Temperature Panel

In this panel are shown:

- 1. the fluid temperature;
- 2. the board temperature;
- 3. the transformer temperature.



If you click on any of these, the temperature display changes from degrees Celsius to Fahrenheit and vice versa.



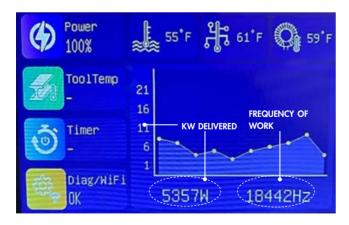
3. BUTTON PANEL AND CENTRAL PANEL

3.1 Power button

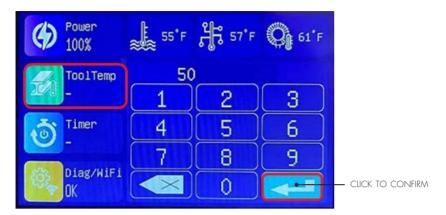
By selecting the Power button, you can increase and decrease the delivery power through the two buttons "-" and "+".



During the delivery of the machine, however, the central panel will show the power delivered.



3.2 Temperature tool button



By clicking on ToolTemp, you can set the target temperature of the laser sensor (where available, if not present an error will be presented).

Write the target temperature on the numeric keypad and click on the enter key to confirm.

At this point instead of ToolTemp the current temperature will be shown with respect to the selected target (50 in this case). The machine will then heat up until the target temperature has been reached.

To remove the temperature control mode, simply clear the temperature inserted in the keypad and click enter to confirm.

3.3 Timer button



By clicking on Timer, you can set a delivery countdown.

Write the target timer on the numeric keypad and click on the enter key to confirm.

At this point under the Timer button will be shown the number of seconds selected.

At this point the card will dispense for a maximum of the selected timer, and the remaining seconds will be updated on the display. To remove the timer mode, simply erase the timer inserted in the keypad and click enter to confirm.

3.4 Diagnostic/Wifi



4. DIAGNOSTIC/WIFI SUBPAGE

The DIAG/WIFI button shows the status of the wireless connection. It can be a dash in case no connection has been set, it can be "search..." when the connection is in progress or "OK" when the connection is established. By clicking on this button, you can change the page and go to the setting/diagnostic page.



On the subpage you will find the wireless connection settings and two information and diagnostic buttons.

4.1 Wireless connection button



On this page you can set the wireless connection parameters.

By clicking on the Wifi SSID text box you can specify the wireless SSID (network name) to which you want to connect (do not click enter if you have not yet entered the password).

Once you have set the SSID, click on the "Password" text box to enter the network password (do not click enter if you have not yet entered the SSID).

Once the SSID and password have been successfully set click on "Enter" to confirm. At this point the card will begin the connection procedure.

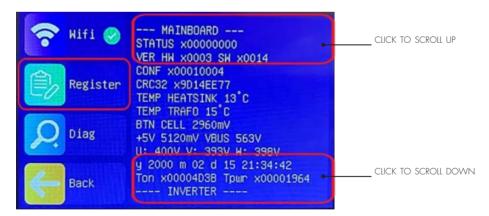


Notice how the indicator next to the Wifi button has changed from a red X to two orange arrows, which indicate a connection in progress. In this case, you cannot change the password or SSID until the connection has been established or rejected. Note that the password you entered has been covered with asterisks to prevent it from being read.

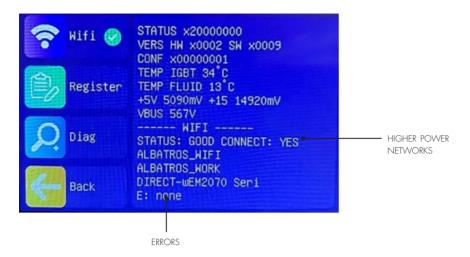


In this picture you can see that the connection was successful.

4.2 Register button



The register page contains all the information about the mainboard and the associated inverter. To scroll through the display, press and hold in the top or bottom area.

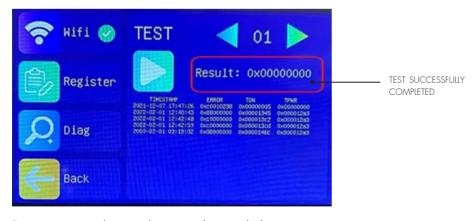


At the bottom there is also an area reserved for the wireless connection, with status indication.

4.3 Diagnostic button



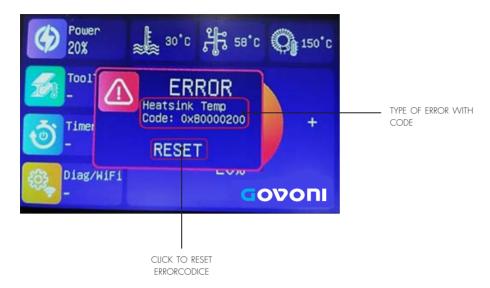
On this page there are both the history of machine errors and the possibility of performing diagnostic tests of the machine.



Diagnostic tests that can be carried out include:

- 01 IGBT 1
- 02 IGBT 2
- 03 Autotuning
- 04 Original configuration reset

5. ERRORS



Machine errors are indicated by a messagebox that shows both the name of the type of error and its code in hexadecimal, which is useful for notifying assistance.

To reset the error and continue working, simply press reset.

Place the flow concentrator on the part to be heated (Figure 1) and press the heating start button (7): In case of use of
any alternative flow concentrator different from the serial version the machine can operate by using the adaptive inductance
field reading (autotuning)

CORRECT



NOT CORRECT



Figure 1

8.2.2 Autotuning Test instructions

When using special induction heads outside the standard range, the unique Autotuning function developed by GOVONI allows the machine itself to quickly auto-configure the electronics to the specific induction heads inductance, to maintain maximum efficiency.

Proceed with Autotuning as follows:

- Press Diag/WiFi button
- Press Diag button
- Scroll the right arrow to TEST 03
- Press PLAY icon and wait for the end of the test.
- Press Back button to return to the main page

To reset the original configuration with the standard inductor head:

- Select TEST 04
- Press PLAY icon and wait for the end of the test.
- Press Back button to return to the main page.

NOTE: If the machine is used for long periods of time, it is advisable to leave it switched on for a few minutes before switching it off, so that the liquid in the tank can cool down more quickly.



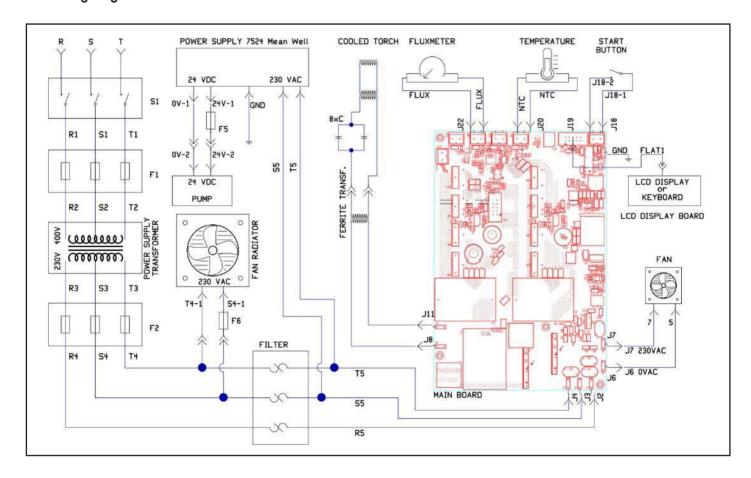
The machine has been designed to minimize the risks due to electromagnetic fields. Additional risks exist and it is recommended to keep a minimum safety distance of 30 cm between the inductor and the operator's head or bust.

8.3 TC alarm lights

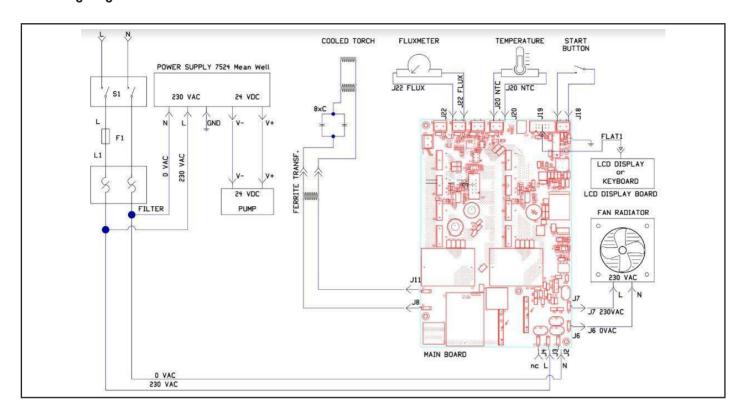
The display will show the error code in case of fault detection. Please contact customer service with the code shown on the display.

6. WIRING DIAGRAMS

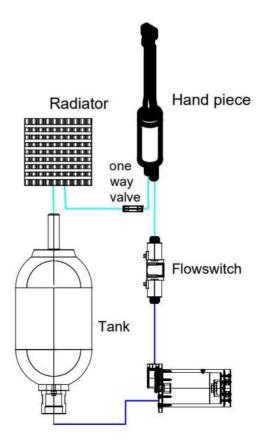
6.1 Wiring diagram GO1473 - GO1475



6.2 Wiring diagrams GO1474



10. HYDRAULIC DIAGRAM



11. APPLICATION OF THE WARRANTY

11.1 Return of products to Govoni

If the reseller declares the malfunctioning of a product, they are required to submit the following information to:

- product serial number
- a description of the problem with the product
- photo of encountered defects, if possible

The reseller can send defective products to Govoni, however they shall bear all shipment costs. The company Govoni does not accept the return of products ex works.

Products shall be repaired and resent with a customer's successive order. In case of request for sending in advance of order shipment, shipment costs shall be borne by the reseller.

If products are in warranty, spare parts and repair costs shall be borne by Govoni. If products are not in warranty, Govoni shall issue a repair quote which the customer then accepts or

refuses. For all products in warranty returned for replacement or repair and which do not bear any defect or malfunctioning, a debit document shall be issued for the check carried out on the product.

The warranty does not apply in the case of products resent without being appropriately packaged and thus at risk of damage during shipment. Please take care as hauliers tend not to handle packages with due care!

11.2 Recommendations regarding product transport

The company Govoni only accepts carriage paid and not ex works returns.

The reseller is exclusively liable for damage caused to a product due to inadequate packaging, even if the package is accepted by our warehouse. Since it is not possible to open each package upon arrival, Govoni Srl shall accept goods with reservation from haulier if there is visible damage to packaging material.

11.3 Recommendations for packaging and transport

If possible, organise goods on pallets. This is considered the best solution to avoid damage to products during shipment. If required, that goods are packaged in cardboard using bubble wrap so that packaging absorbs shock that may occur during shipment.

Place packaged product in very thick cardboard and ensure that all sides are wrapped in bubble wrap or other material that can ensure protection of products as much as possible during shipment.

11.4 Warranty duration and limits

A product remains in warranty for one year from date of purchase. The warranty does not apply to the following cases: an external cause (mechanical shock, lightening, sudden changes in voltage)

- damage incurred during transport or storing
- a product installed in a manner that does not comply with manufacturer specifications
- a product containing too much dust in inner parts
- a product exposed to rain or humidity
- a product which has been modified by the client
- deteriorations caused by ill use of equipment
- use of unsuitable accessories or consumables
- natural wear of different parts of equipment
- freezing caused by insufficient or unsuitable use of the coolant

The guarantee does not apply to normal wear of accessories or consumables (ferrite).

If the equipment is modified or repaired by unauthorised personnel, the warranty shall be void

CAUTION: The inductor must not be bent or altered in shape in any way. If the inductor is modified, the warranty shall be automatically rendered void.

12. REPLACING THE INDUCTOR



Inductor replacement should be performed only by authorised personnel and only after cutting off power to the machine.



Wear protective gloves during maintenance and/or repairs.

Electrically isolate the machine by disconnecting it from the mains.

When replacing the inductor, verify that there are no significant liquid leaks from the manipulator. If there are any significant leaks, top up liquid in the corresponding tank.

Tightening should not exceed 5Nm when fastening the inductor. Tighten using a suitable torque wrench.

13. MAINTENANCE

13.1 General recommendations

- Machine maintenance must be carried out by qualified, authorised personnel who are aware of its operating procedures.
- Never perform any cleaning, lubrication or maintenance with the machine running.
- Before any maintenance work, set the main switch to "O" to cut off power, unplug it from the mains to prevent electrical shock or other hazards resulting from mishandling.
- Never wear rings, watches, jewellery, loose or dangling clothing such as ties, torn garments, scarves, unbuttoned jackets or jackets that zip open that can get tangled during work.
- It is instead advisable to use suitable clothes for accident prevention, for example: non-slip shoes, anti-noise headphones, goggles, appropriate gloves, etc.
- Never use gasoline or flammable solvents to clean the machine. Use water and, if necessary, commercial non-toxic solvents.
- After operations have been completed, always refit any protections that were removed before re-starting the machine.

13.2 Preventive maintenance



Meticulous inspections carried out regularly are necessary in order to detect and eliminate faults quickly before they can cause any major damage.

Any time you need to use the Inductor IT series, first check the efficiency of safety devices, the conditions of connections and if there are any anomalies by performing some no-load tests and on ferrous scrap material. Check daily for wear and legibility of warning signs.

13.3 Routine maintenance

Machine operating safety can only be guaranteed if repairs are performed using only original or however approved replacement parts and if maintenance instructions are followed correctly.

At the end of each use, with the machine disconnected from the electrical mains, proceed with a general cleaning of the machine, quickly removing dust or dirt deposits in general as this could reduce ventilation and alter machine function and durability.

Before each use, verify the functionality of control devices, safety devices and the conditions of electrical connecting cables.

Replacing the flow concentrator

In the event of flow concentrator (ferrite, Figure 1) wear



Figure 1

Remove the screws fastening the brass tab, extract the flow concentrator, carefully clean the copper part and replace the worn concentrator with a new one fastening it with the appropriate tab and the respective screws (Figure 2).



Figure 2

13.4 Special maintenance

Replacing the antifreeze fluid



After a working period of about 1 year, it is advisable to replace the antifreeze fluid both to increase the service life of the machine components and for a working cycle that is efficient in terms of time.

Proceed as follows to replace the antifreeze fluid:

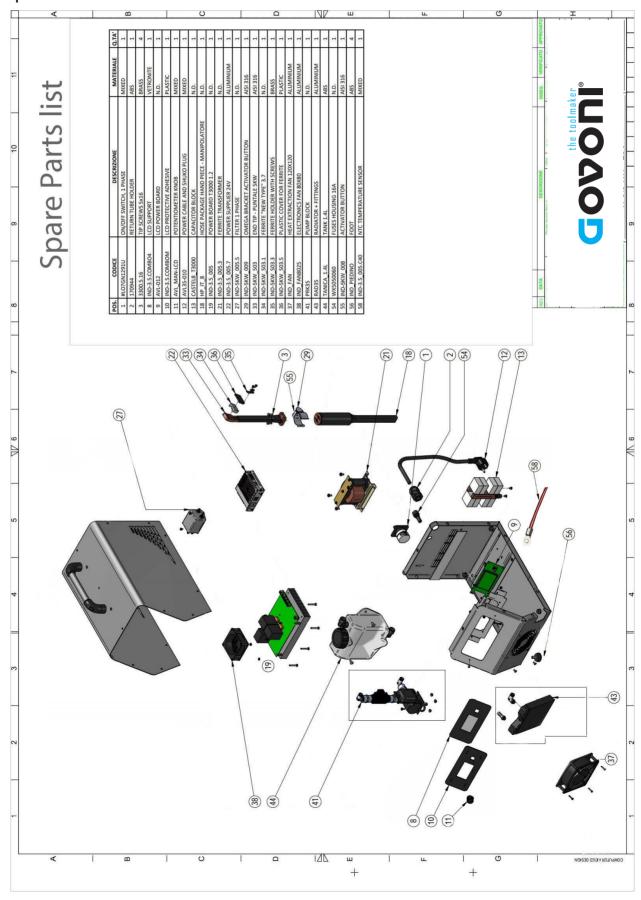
Remove the front panel of the machine to access the fluid tank, remove the closing cap of the fluid tank (together with the meshed rubber hose), place it inside an empty container (same capacity as the machine tank), start the machine, wait for the machine to be emptied and turn off the machine. Fill approx. 20 L of ready to use induction liquid.

Close the tank with the cap, start the machine and wait a few seconds for the circuit supplying the inductor to charge. It is evident that the tank level has decreased, so add more liquid to the specified level.

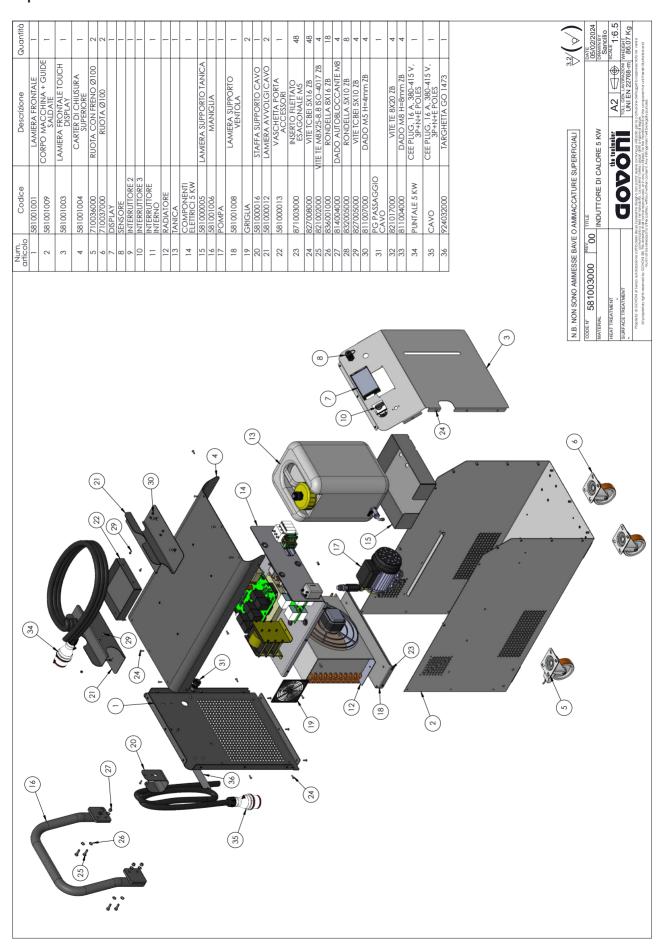
Note: Contact the manufacturer or an authorized dealer whenever there are any breakages requiring the removal of machine

14. EXPLODED VIEW

14.1 Exploded view GO1474



14.2 Exploded view GO1473



15. MACHINE LOGBOOK

MACHINE LOGBOOK INDUCTOR

It is advisable to use the following diagram to record Inductor HDi series maintenance and any work performed on the tool over time

This will allow the user to have appropriate information about the machine's operating cycle on hand at all times.

NOTE

A correct record of inspections and maintenance in the Machine Logbook is expressly stipulated by the Manufacturer and, in addition to being good practice, is set forth as an obligation of the user.

Serial nr.	Ye	ar of mar	nufacturina	

DATE	INSPECTION AND MAINTENANCE	any replacements	OPERATOR SIGNATURE

16. CONFORMITY



Via degli Orsi n. 97 – Loc. Beni Comunali 40014 – Crevalcore (BO) Tel.: + 39 051.982688, + 39 051.980798

Fax: + 39 051.6801371 e-mail: <u>info@govoni.it</u> <u>www.govoni.it</u>



DICHIARAZIONE DI CONFORMITA' CE

(Direttiva Macchine 2006/42/CE, Allegato II, Parte A)

Il Costruttore GOVONI SRL, con sede legale sita in

Via degli Orsi n. 97 – Loc. Beni Comunali - Crevalcore (BO)

DICHIARA

che il:

Macchinario:	INDUTTORI DI CALORE
Modello:	GO1470-GO1471-GO1472-GO1473-GO1474-
	GO1475
Anno di costruzione:	2024
Numero di matricola:	
Funzione:	INDUTTORI DI CALORE PER RISCALDARE I METALLI

risulta conforme alle prescrizioni della:

- Direttiva Macchine 2006/42/CE

Il fascicolo tecnico è costituito presso la sede aziendale di cui in intestazione.

Crevalcore (BO) - 01/02/2024

(Legale Rappresentante GOVONI SRL)



Via degli Orsi n. 97 – Loc. Beni Comunali 40014 – Crevalcore (BO) Tel.: + 39 051.982688, + 39 051.980798

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DECLARACION DE CONFORMIDAD CE

(Directiva de máquinas 2006/42/CE, Anexo II, Parte A)

El abajo firmate **GOVONI SRL**, con sede legale sita in

Via degli Orsi n. 97 – Loc. Beni Comunali - Crevalcore (BO)

DECLARA

che el:

Maquinaria:	INDUCTORES DE CALOR
Modelo:	GO1470-GO1471-GO1472-GO1473-GO1474-GO1475
año de construcción:	2024
número de matrícula:	
función:	INDUCTORES DE CALOR PARA CALENTAR METALES

cumple los requisitos de la:

- Directiva de máquinas 2006/42/CE

El Expediente Técnico está constituida en la sede de la empresa a la que se refiere el encabezamiento.

Crevalcore (BQ) - 01/02/2024

(Persona jurídica autorizada GOVONI SRL)



Via degli Orsi n. 97 – Loc. Beni Comunali 40014 – Crevalcore (BO) Tel.: + 39 051.982688, + 39 051.980798

Fax: + 39 051.6801371 e-mail: info@govoni.it www.govoni.it



DECLARATION OF CONFORMITY CE

(Machine Directive 2006/42/CE, Annex II, Part A)

The undersigned GOVONI SRL, with registered office in

Via degli Orsi n. 97 – Loc. Beni Comunali - Crevalcore (BO)

DECLARE

That the:

Machine:	HEAT INDUCTORS
Model:	GO1470-GO1471-GO1472-GO1473-GO1474-GO1475
Year of construction:	2024
Serial number:	
Function:	HEAT INDUCTORS FOR HEATING METALS

relates in conformity with the following normative documents:

- Directive Machine 2006/42/CE

The technical dossier is established at the registered office referred to in heading.

Crevalcore (BQ) - 01/02/2024

Sig.

(signature of authorised person GOVONI SRL)



Via degli Orsi n. 97 – Loc. Beni Comunali 40014 – Crevalcore (BO)

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EG-KONFORMITÄTSERKLÄRUNG

(EG Richtlinie 2006/42/EG, Anhang II, sub. A)

Der Hersteller GOVONI SRL, mit Sitz in

Via degli Orsi n. 97 – Loc. Beni Comunali - Crevalcore (BO)

ERKLÄRT

hiermit daß:

Maschine	WÄRMELEITUNGEN
Modell	GO1470-GO1471-GO1472-GO1473-GO1474-
	GO1475
Baujahr	2024
Abzeichen-Nummer	
Funktion	WÄRMEINDUKTOREN FÜR DIE ERWÄRMUNG
	VON METALLEN

Konform ist den einschlägigen Bestimmungen der

- EG Richtlinie 2006/42/CE

Die Erstellung der technischen Unterlagen erfolgt am in der Überschrift genannten Firmensitz.

Crevalcore (BO) – 01/02/2024

(gesetzlichen Vertreter GOVONI SRL)

NOTES	

NOTES



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