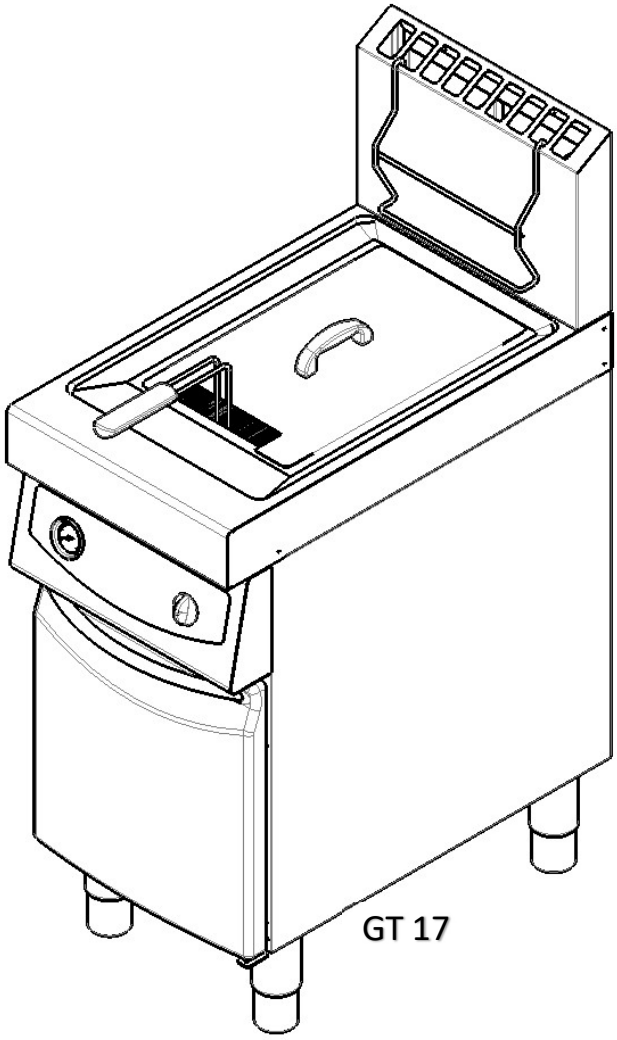
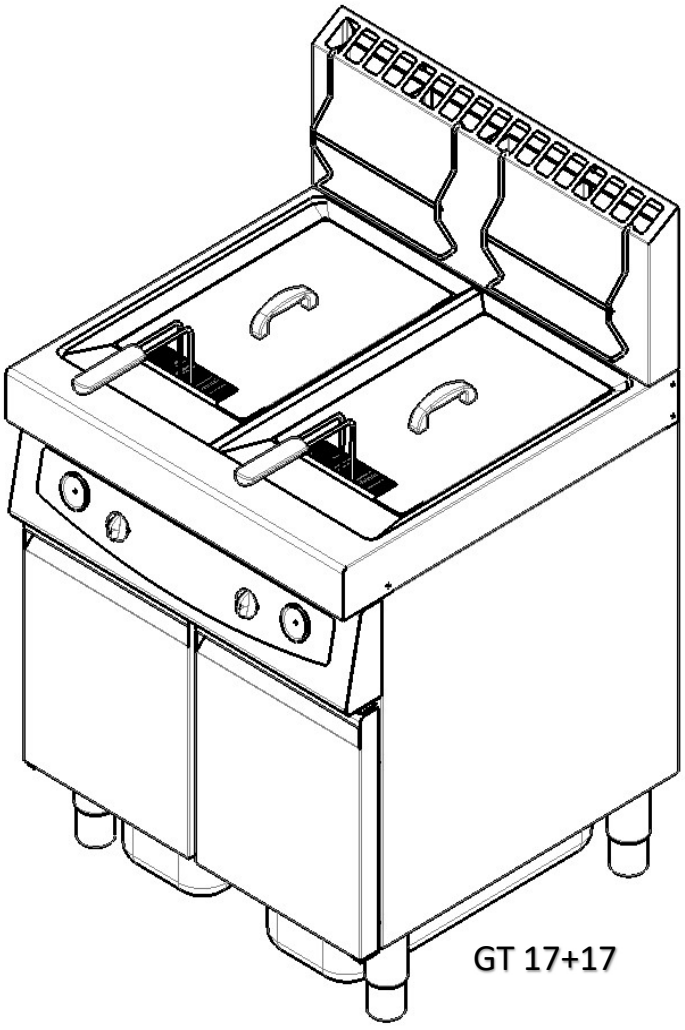
PIZZA AND CATERING EQUIPMENT PROFESSIONALS

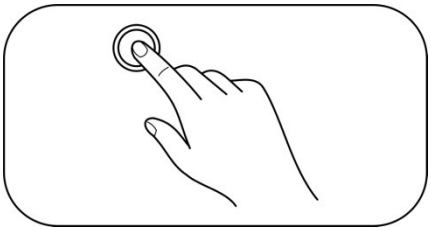
GT 17 – GT 17+17

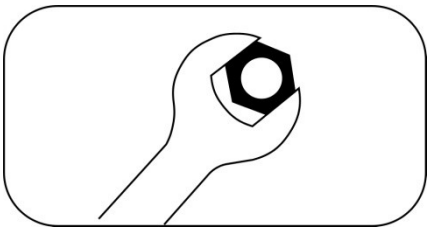


GT 17



GT 17+17





IT – EN – DE – FR – ES – PT

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The company cannot be held liable for any accident or anomaly caused by any non-observance of the instructions and safety rules provided in this manual by either the user or the technician responsible for installing the appliance.

THE MANUFACTURER CANNOT BE HELD LIABLE FOR ANY LOSS ARISING FROM ANY INACCURACIES IN THIS MANUAL AS THE RESULT OF PRINTING OR TYPING ERRORS. THE MANUFACTURER ALSO RESERVES THE RIGHT TO CHANGE THE SPECIFICATIONS OF THIS PRODUCT WHERE USEFUL OR NECESSARY WITHOUT THIS AFFECTING ITS MAIN CHARACTERISTICS.

KEY TO SYMBOLS USED

 Read the instructions

 Caution: risk of personal injury or damage to the machine

 Equipotential clamp

 Wet floor

 Hot surfaces

HEALTH AND SAFETY

• This type of electrical appliance is designed for commercial and professional use, namely in restaurant, canteen, hospital and commercial kitchens, such as those of bakers, butchers, etc.; however it is not intended for continuous mass production of food.
• Before installing and starting the deep fryer, you must read the instructions in this manual carefully, especially those concerning the health and safety standards. This deep fryer is intended for professional use and must only be used by properly trained personnel.
• The appliance must be installed by professional experts in accordance with the manufacturer's instructions and in compliance with existing health and safety laws.
• This device must be used solely for the purpose for which it was specifically designed, i.e. the frying of food in a basket submerged in hot oil. Any other use is to be considered improper, dangerous and not recommended.
• This deep fryer MUST NOT be used for cooking with water or for any other use other than that for which it is designed and built. The fryer may only be switched on with the tank filled with water for the washing operations described in §7.2
• Make sure the oil does not go below the minimum level during cooking, as this is a fire hazard.
• Do not to use the same oil repeatedly. Replace with fresh oil (prolonged use of the same oil lowers its flash point and increases its tendency to boil up suddenly).
• Take particular care when cooking foods that are bulky or are dripping/have not been dried, as they could cause the hot oil to bubble up suddenly when immersed.
• The A-weighted sound pressure level in airborne noise emissions is lower than 70dB(A).
• Do not use direct jets of water, or water at high pressure or steam cleaners to clean this appliance.
• Always place a warning sign reading "wet floor" near the machine whenever the surrounding area becomes wet underfoot  .
• Do not obstruct the combustion or ventilation air flow. Leave enough space around the appliance for sufficient air flow to the combustion chamber.
• To prevent fire, keep the area around the machine free and without flammable substances.
• In the event of fire, never use water to put out the fire. RISK OF EXPLOSION!!!
• Do not touch the areas marked with the  symbol unless wearing suitable protection (e.g. heat-resistant gloves), since there is a risk of serious burns.
• Take particular care with frying oil during use and even after turning off the appliance, as the temperature stays high and thus dangerous for a long time.

Always use proper personal protective equipment (PPE) during installation, handling, use of and cleaning the equipment.

Please see applicable regulations on workplace health and safety.

1. Introduction

This machine is accompanied by the following technical documentation:
• “USE AND INSTALLATION” manual including wiring diagram;
• Declaration of conformity to EC Directives.
The warnings contained in this manual provide important information for the safe installation of this appliance. The manufacturer strongly advises that this manual be kept carefully and close at hand so that technicians and users may refer to it whenever necessary.
This appliance is only suitable for fixed installation.

 The packaging materials (plastic bags, metal staples, etc.) must be kept out of the reach of children, as they pose a health hazard.
See the serial plate fitted on the inside of the door for details of the required voltage and connection types.

 This device must be used solely for the purpose for which it was specifically designed, i.e. the frying of food in a basket submerged in hot oil. Any other use is to be considered improper, dangerous and not recommended.

 The appliance must only be used by fully trained personnel
• do not remove the fryer from its original position;

  • Read these instructions before using the appliance
• do not use corrosive, acidic, flammable or abrasive products to clean the appliance, including steel wire pads or brushes;
•  do not use direct jets of water, or water at high pressure or steam cleaners to clean this appliance.
• the fryer must be switched off using the main ON/OFF switch on the wall at the end of use each day.
The manufacturer cannot be held liable for any damage, loss or injury caused by:
• non observance of these instructions;
• maintenance, adjustments or repairs carried out by professionally unqualified personnel;
• alterations or applied devices that in any way alter the original functioning of the appliance. Only qualified personnel may dismantle the control box after switching the appliance off at the mains on a wall.
This deep fryer complies with the following standards:
- accident prevention and fire standards
- gas plant installation standards
- hygiene standards

2. Installation

 This deep fryer must be installed by qualified expert personnel, working for the manufacturer, an authorised fitter or the gas company.
The specialists responsible for installing the machine and its electrical connections are charged with training the user and operators on how the machine works and explaining any safety measures that may be required. The installer must also demonstrate how to use the machine and leave the user copies of all the written instructions accompanying the machine.
It must be installed and connected in accordance with the current applicable laws and standards.

 Before installing and starting the deep fryer, you must read the instructions in this manual carefully, especially those concerning the health and safety standards.

 This deep fryer is intended for professional use and must only be used by properly trained personnel.

 Before making the connections, check that:
- All the removable parts are in their correct positions. You will need to recalibrate certain parts that may have lost their original calibration during transport.
- The deep fryer must be perfectly level; use the legs provided to adjust it.
The dimensions of the machine and its points of connection to the mains electricity and gas supply can be seen in the annexe a showing the overall dimensions.

2.1. Installation site

The deep fryer is a type A product, therefore the installation site must conform to the ventilation and aeration requirements of chapter 12.
To ensure proper operation and maintenance, keep the area around the machine free. Check the position and ergonomics of the installation site according to the food loading/unloading operations to be conducted.

Place the appliance on a level, completely stable surface that is not subject to vibrations and can support its weight.
Assess the environmental electromagnetic conditions before using the appliance.

It is the user's responsibility to ensure the environmental electromagnetic conditions remain compatible with the appliance. The ambient temperature should be no higher than 40 °C; if installing next to equipment that generates heat, ensure there is no direct contact between them.

2.2. Installation of the appliance

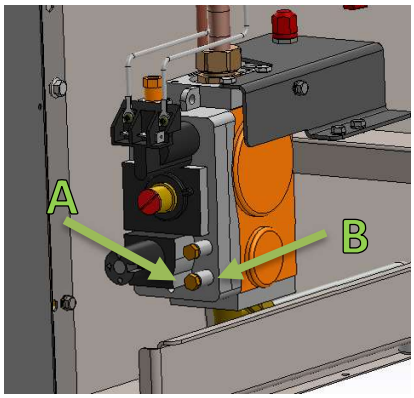
Remove the packaging from the components of the appliance, taking care not to damage them; the appliance is tested in the factory before
forwarding. Carefully check that no damage has been caused to the packaging or the product during carriage. If any damage is found, contact Elframo S.p.A. or your local reseller.
Take all necessary precautions when handling the equipment regarding its weight and dimensions; where suitable PPE.
Install at a minimum distance from walls and other equipment of 5 cm to the sides and 10 cm to the rear..

2.3. Gas connection

Before connecting the deep fryer, make sure the pressure of the mains gas is suitable for the deep fryer to work properly and that the right type of gas is used (see the serial number plate).
The deep fryer is fitted with a ½" G gas fitting with one end ready to hold a sealing gasket.
Check the pressure of the gas supply, making sure that there is no flow resistance in the distribution circuit; fit a stabiliser or gas pressure regulating valve as appropriate to ensure that the pressure entering the deep fryer is no higher than that on the ratings plate.
A quick-closing valve should be installed upstream of the appliance in an easy-to-access place. Stiff pipes or flexible tubes can be used to install the deep fryer. If using a flexible
tube, make sure it is the right type and is approved for this use.
Always use 3-piece couplings when making the necessary connections, to facilitate disassembly. Pipes should be made of galvanised metal or copper, and installed in a visible position. Flexible hoses may be used, provided they are stainless steel.
After connecting the pipes, check seal tightness using a foam spray

2.4. Checking the gas pressure

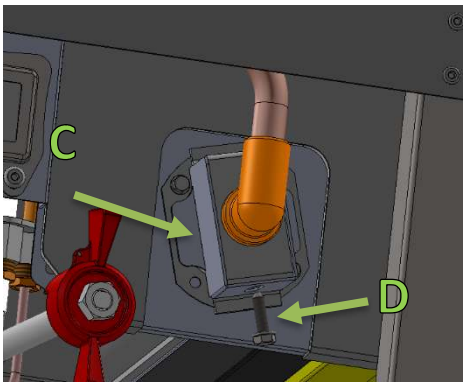
Use a U-tube manometer to measure the gas pressure, or an electronic manometer with a minimum resolution of 0.1 mbar
- Open the door at the front of the machine
- Remove the gas valve protection
- Undo seal screw **"A"** and check the supply pressure by connecting rubber holder **"B"** to the pressure gauge.
- Switch on all the gas devices in the installation area
- Turn on the burners and check that the pressure corresponds to the level shown in chapter 10 (respective category)
- Switch off the machine and all the devices that were switched on previously
- Remove the manometer; tighten screw **"A"** on the pressure fitting and make sure gas is not leaking



2.5. Primary air control

Check that square "**C**" controlling the primary air is placed at distance **h** to suit the type of gas installed (see the following table).
To adjust the primary air: undo screw "**D**", move square "**C**" to the required distance **h** and then tighten fixing screw "**D**".

Model settings table		**GT 17**	**GT 17+17**
LPG G30/G31	**h** (mm)	8	8
Methane Gas H G20	**h** (mm)	2	2
Methane Gas H G20 (9 mbar)	**h** (mm)	Without square	Without square

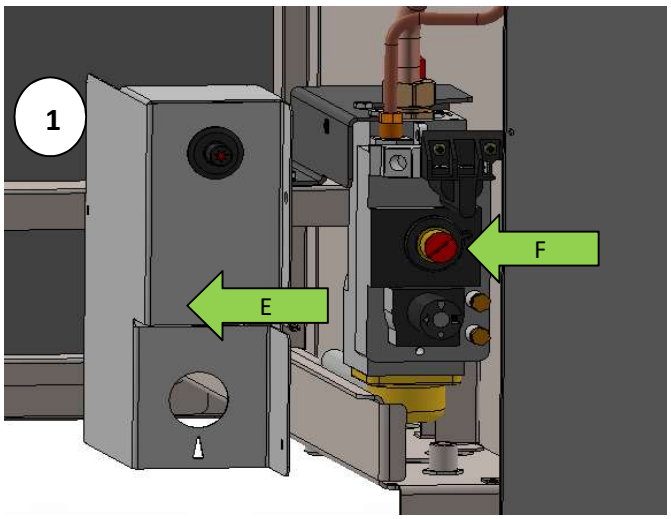


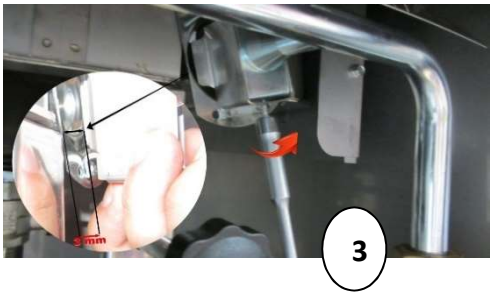
2.6. Instructions on how to convert the gas type

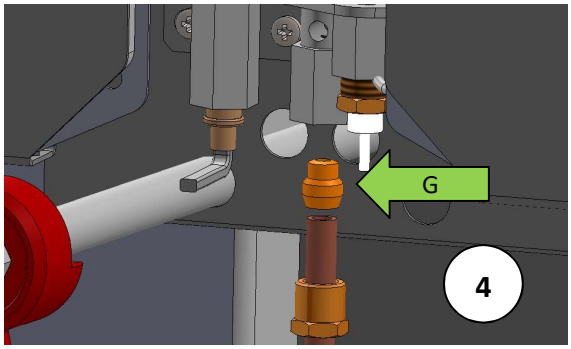
Original parts must always be used when converting the deep fryer to a different gas type and for any repairs. The machine should only be modified if converting from a 2nd family gas (UNI EN203-1:2005) to a 3rd family gas and vice-versa.

2.6.1. From G20 (natural gas) to G30/G31 (LPG):

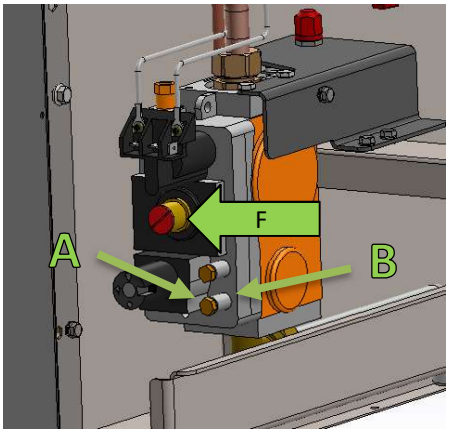
- Open the door at the front of the machine
- Remove the gas valve protection **"E"**
- Unscrew the cap covering screw **"F"**
- Tighten screw **"F"** as far as it will go (without using excessive force)
- Return the cap covering screw **"F"**
- Unscrew the existing nozzles and replace with the ones provided in the kit for G30/G31 (figure 2)
- Screw on the air control square provided in the kit and adjust, leaving a 2mm gap between this and the burner (figure 3)
- Replace the pilot nozzle **"G"** with the one provided in the kit (figure 4)
- Return the gas valve protection
- Close the front door







2.6.2. From G30/G31 (LPG) to G20 (natural gas):



- Remove the gas valve protection **"E"**
- Remove the air control square
- Unscrew the existing nozzles and replace with the ones provided in the kit for G20
- Undo seal screw **"A"** and check the supply pressure by connecting rubber holder **"B"** to the pressure gauge.
- Switch on all the gas devices in the installation area
- Undo the cap covering screw "F" (used to pressurise the gas valve)
- Light the burners
- Open screw **"F"** gradually until the pressure indicated on the pressure gauge matches the pressure shown in chapter 10
- Return the cap covering screw **"F"**
- Switch off the machine and all the devices that were switched on previously
- Remove the manometer; tighten screw **"A"** on the pressure fitting and make sure gas is not leaking
- Return the gas valve protection

Caution: adaptations to other types of gas must be carried out by persons authorised by Elframo S.p.A. with the proper equipment.
Once converted, the relevant gas conversion sticker **MUST** be affixed to the plate (in the supplied spare part package).

3. Warnings

This appliance must only be used by trained personnel for professional purposes.
It is a deep fryer and must only be used as such, filling the tank with oil/fat suitable for frying the food placed in the baskets.
This deep fryer **MUST NOT** be used for cooking with water or for any use other than that for which it is designed and built.
Only authorised fitters are allowed to position the deep fryer and convert the gas type, if required.
Before using the frying machine, clean the tank and baskets thoroughly to remove all traces of the industrial grease used to protect them.
Run a wash cycle as described in 7.2

3.1. Maximum load

The maximum recommended load (of frozen potatoes) is:

for models with half basket **500 g**
for models with full basket **1100 g**

These are maximum weights per basket.

4. Preparing the deep fryer

Fill the tank with oil up to the max level mark shown on the rear wall.
Never fill past the max mark; add more oil if the level drops below the min mark.

Never start the deep fryer without first filling the tank.

Nominal capacity:

GT 17	**17 litres**
GT 17+17	**34 litres**

Warnings:
 Make sure the oil does not go below the minimum level during cooking, as this is a fire hazard.
 Do not use the same oil repeatedly; replace it completely with fresh oil.
Prolonged use of the same oil lowers its flash point and increases its tendency to boil up suddenly. For this reason, we recommend pouring the oil in the tank into the bin in the bottom unit at the end of the day, and pouring it back into the tank the next morning. This will allow you to clean the tank at the end of every work day, preventing the build-up of food particles at the bottom of the oil collection basin and keeping the cooking oil fresher longer.
 Take particular care when cooking foods that are bulky or are dripping/have not been dried, as they could cause the hot oil to bubble up suddenly when immersed.
If there is water in the cooking oil/fat, you will see:

- small bubbles rising to the surface
- drops of water
- steam
- the oil will splatter during frying

 Take particular care if using water near the hot appliance. Do not add water to the oil or the cooking fat.
 Eliminate ice from frozen foods. Place the basket next to the fryer while filling, not next to it or on top of it. Gently lower the basket several times into the hot cooking oil or fat.
 Do not season food while it is frying

 Do not move the fryer when the tank is full of oil.

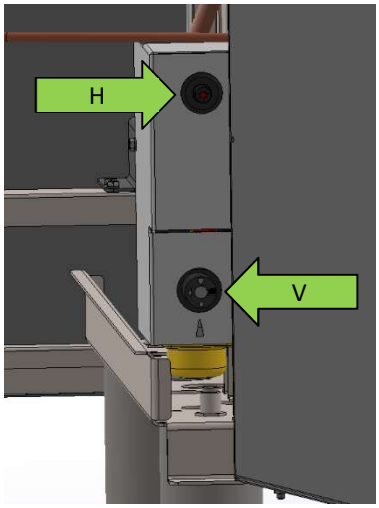
 Empty the tanks of deep fryers installed on vehicles before moving them; alternatively, use the supplied lids to cover them.

 Water coming into contact with boiling water will cause an explosion.

5. Operating

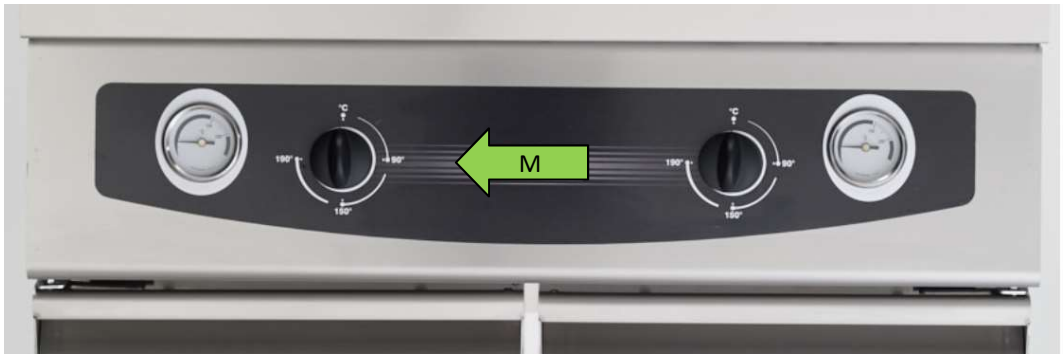
5.1. Switching on

Turn knob **"V"** to the pilot lighting position "☼" and press for about 15 seconds. At the same time, press piezo lighting button **“H”** two or three times to get a spark for the pilot light.
When you release knob **"V"**, the pilot light must stay on; if it goes out, repeat the operation.
When first switching on the fryer (with cold oil), wait approximately 30 sec before turning the thermostat knob, to allow the pilot flame to heat the thermopile sufficiently.



5.2. Lighting the main burner

To light the main burner: turn knob “M" on the thermostat to suit the required temperature.
Turn this all the way to get the max temperature (190 °C).



Holding the knob in the required position, the burner will burn at its max until it reaches the set temperature.
Once this temperature has been reached, the burner automatically adjusts to keep the temperature constant.

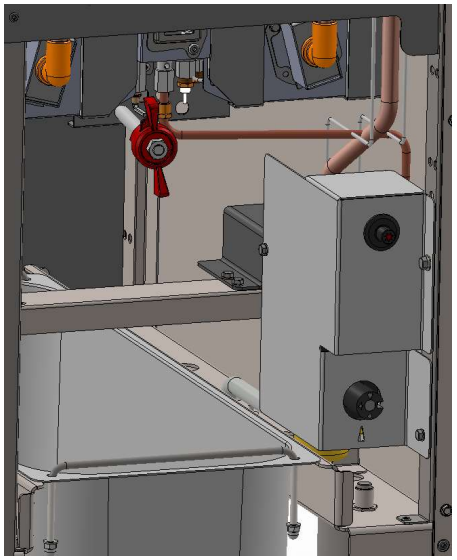
⚠ **CAUTION: After frying, when removing the basket from the oil, do not knock it against the appliance to remove excess oil; rest it gently onto the drip tray.**

5.3. Switching off

After using the fryer, switch the burners off by returning the temperature control knob **“M”** to the position **“°C”** and then turn the **“V”** knob on the gas valve to **"0"**.
Once the deep fryer is switched off, close the general gas supply cock fitted above the deep fryer.

6. Emptying the tank

CAUTION: this deep fryer must always be switched off and the oil cold before you can empty the tank.
Open the door of the machine.
Check that the bin used to collect the oil or the water used to clean the tank is positioned correctly in the bottom section.
Rotate the draining tap lever so that the oil flows into the container below.
Once the tank has drained completely, close the drain tap.
Make sure the drain tap is closed properly and that there are no leaks when the deep fryer is working.



⚠ Please comply with local regulations for disposing of waste oil.

7. Cleaning the appliance

The stainless steel parts must be cleaned every day with a damp cloth using warm soapy water or non-abrasive, non-acidic detergents and then rinsed thoroughly.
Never spray with water: the water could penetrate the appliance and damage the parts.
Never use wire pads or steel brushes to clean the steel parts, as these can leave particles of iron and cause rusting.

7.1. Periodic maintenance (every 2-3 months)

Check for leaks from the drain tap or any other point in the appliance.
If the deep fryer is not to be used for long periods, wipe the steel surface with a cloth and some Vaseline oil in order to cover it with a protective film.

7.2. Washing cycle

We recommend regularly running a “wash cycle” to degrease the tank thoroughly.
After draining the oil tank and removing any residual scraps, fill the tank with water and add some non foaming dishwasher detergent.

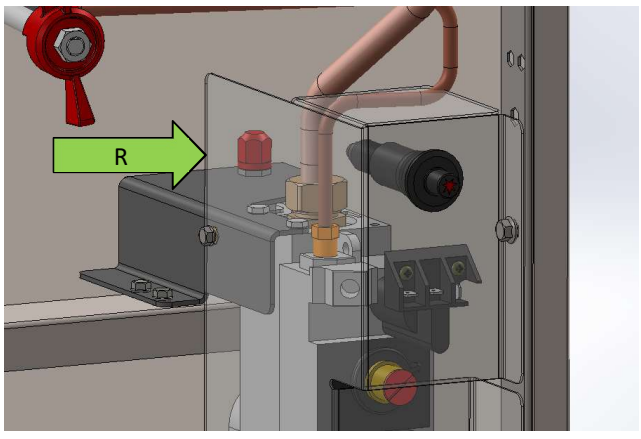
Start the wash cycle by turning the temperature control knob  to about 100 °C.
Wait until the water starts boiling and then allow it to boil for at least 10 minutes.
After 10 minutes, return the temperature control knob to the “°C” position. Wait until the water in the tank has cooled down and then drain the tank thoroughly and rinse it with clean water.

8. Troubleshooting

Below is a list of the problems that might arise, together with their respective causes and remedies.
If, after following the instructions below, the problem still persists, we recommend you contact your reseller, a qualified fitter or the manufacturer and explain your problem.

Description	Cause	Remedies
The oil does not heat up	The temperature control knob is in position "°C".	Turn the temperature control knob to 190 °C.
The pilot burner doesn't light.	The lighting electrode is not fixed or connected properly. The piezoelectric lighting device or the cable are disconnected; there is not enough gas pressure. The nozzle is clogged up. The gas valve is not properly calibrated.	Replace the parts as required; adjust the gas pressure settings or clean the injector nozzle.
The pilot burner goes out when you release the ignition button.	The thermocouple has not been heated enough by the pilot burner. The button on the gas valve has not been pressed right down and held for at least 15 seconds. The gas pressure is too low. The thermocouple or the magnetic unit in the valve are faulty.	Replace the parts as required; adjust the gas pressure settings.
The pilot burner is still on, but the main burner doesn't light.	Loss of pressure in the gas pipe. The nozzle is clogged up or the gas valve is faulty. The gas outlet holes in the burner are clogged up. The thermopile is faulty.	Replace the parts as required; adjust the gas pressure settings.
The oil does not heat up Safety thermostat activation	The oil temperature is higher than 205 °C	Wait for the oil temperature to drop to 170 °C and then reset the safety thermostat behind the gas valve, by pressing this firmly (see image under this table).
	The oil level in the tank has dropped below the min level	Top up with enough oil or fat to reach the min or max level indicated on the tank. Reset the safety thermostat at the bottom of the electrical box (see the image under this table).
The oil temperature does not correspond to the set value.	There is a problem with the thermostat	Check the electrical connections for the control thermostat; replace the thermostat if necessary
	Thermostat probe not connected correctly	Check the electrical wires connecting the probe to the thermostat. Make sure the probe is sitting correctly in its seat.

Reset safety thermostat
If, during normal use, the temperature increases too much and causes the safety thermostat to trip, thus cutting the gas supply to the pilot burner, remove protection cover **"R"** and manually reset the thermostat button.
If the problem persists, the manufacturer's technicians or an authorised fitter should be asked to check the gas valve and, where appropriate, change the temperature probe or valve.



9. Recommended times and temperatures for industrial frying

The table below shows some recommended best times and temperatures for cooking certain foods used in our kitchens.

PRODUCTS	TEMP. °C	TIME (min)
Fresh potatoes	175-180	5-6
Frozen potatoes (pre-cooked)	180	3-4
Frozen mushrooms in breadcrumbs	175-180	2-3
Fresh aubergine slices in breadcrumbs	175-180	3-4
Fresh prawns in breadcrumbs	180-185	3-4
Frozen prawns in breadcrumbs	180-185	3-4
Frozen squid in breadcrumbs	175-180	1.5-2
Fresh fish fillets in breadcrumbs	175-180	3-4
Frozen fish fillets in breadcrumbs	175-180	4-5
Pork cutlets in breadcrumbs	175-180	4-5
Veal cutlets in breadcrumbs	175-180	3-4
Fresh chicken in breadcrumbs	180-185	10-15
Frozen chicken in breadcrumbs	175-180	6-8
Frozen chicken breasts in breadcrumbs	175-180	3-4

The table below shows the critical temperatures for the various types of frying oils and fats (smoke point)

PRODUCTS	TEMP. °C
Peanut oil	198
Cottonseed oil	230
Sunflower oil	170
Maize oil	163
Coconut oil	138
Olive oil	175
Soya oil	130
Margarine	140
Butter	161
Lard	196

Seed oil data not available; probably equal to or less than those for the oils described above.

NB: as you can see from the tables above, only a few oils are capable of maintaining the cooking temperature for fried foods. We recommend finding out about the heat characteristics of oils at the time of purchase.

10. Technical data

Modelli - Models - Modèles - Modelle - Modelos - Modelos			*GT 17*	*GT 17+17*
Tipo - Type - Type - Bauart - Tipo - Tipo			*A1*	
Potenza nominale - Nominal thermal power - Puissance nominale - Nominal Wämeleistung - Potencia tèrmica nominal - Potência térmica nominal (kW)			*12*	*2x12*
Consumo gas - Gas consumption	*G30/G31*	*Kg/h*	*0,945*	*1,891*
Consommation gaz - Gasverbrauch	*G20*	*m³/h*	*1,269*	*2,538*
Consumo de gas - Consumo de gás	*G25*	*m³/h*		
	G25.3	*m³/h*		
Livello nominale della vasca - Nominal tank level - Niveau nominal de la cuve - Nennstand des beckens - Nivel nominal de la cuba - Nível nominal da cuba			*17*	*2x17*
Capacità bacinella scarico olio - Oil drain capacity - Capacité de vidange de l'huile - Fassungsvermögen Öl ablass behälter - Capacidad cubeta de descarga aceita - Capacidade do recipiente escoamento óleo			*23*	*2x23*
Marcatura iniettore bruciatore principale - Injector marking main burner - Marquage d'injecteur brûleur principal - Injektormarkierung hauptgrenner - Marcado del inyector quemador principal - Marcação do injetor do queimador principal *G20 9 mbar*			*2x220*	*4x220*
Bruciatore pilota - Pilot burner - Brûleur pilote - Leitflamme - Quemador piloto - Queimador piloto *G20 9 mbar*			*51*	*2x51*
Marcatura iniettore bruciatore principale - Injector marking main burner - Marquage d'injecteur brûleur principal - Injektormarkierung hauptgrenner - Marcado del inyector quemador principal - Marcação do injetor do queimador principal *G20 20 mbar*			*2x185*	*4x185*
Bruciatore pilota - Pilot burner - Brûleur pilote - Leitflamme - Quemador piloto - Queimador piloto *G20 20 mbar*			*51*	*2x51*
Marcatura iniettore bruciatore principale - Injector marking main burner - Marquage d'injecteur brûleur principal - Injektormarkierung hauptgrenner - Marcado del inyector quemador principal - Marcação do injetor do queimador principal *G30/G31 28-30/37 mbar*			*2x120*	*4x120*
Bruciatore pilota - Pilot burner - Brûleur pilote - Leitflamme - Quemador piloto - Queimador piloto *G30/G31 28-30/37 mbar*			*35*	*2x35*

Categoria di appartenenza - Category - Catégorie d'appartenance - Kategorie - Categorìa - Categoria

CAT/KAT	GAS/GAZ	G30	G31	G20	G25	Country
II_{2h3+}	p(mbar)	28-30	37	20	-	IT - PT IE - GR GB - ES CY

I diametri degli ugelli sono espressi in 1/100mm - The diameter of the nozzles are indicated in 1/100mm
Les diamètres des buses sont exprimés en 1/100mm - Der Durchmesser der Düsen ist in 1/100 mm angegeben
Los dìametros de las boquilas se indican en 1/100mm - Os diâmetros dos bicos são indicados em 1/100mm

11. Recommended spare parts

16100005 Sit Gas Valve

22170003 Safety thermostat

22140004 Control thermostat

12. Ventilation and aeration of the installation site (UNI 8723-2010)

1 VENTILATION

A1 appliances should be installed in areas with sufficient ventilation to prevent the build-up of harmful substances in the room where the appliance is installed.

1.1 Natural ventilation

Natural ventilation can be created by one or more permanent openings in the walls/windows/fixtures or through ventilation ducts. The net surface area of ventilation openings should be no less than 6 cm^2/kW with a minimum of 100 cm^2. Ventilation ducts should have a cross section no smaller than 9 cm^2/kW, with a minimum of 150 cm^2.

Ventilation openings may be in the masonry, doors or windows in the walls in the installation room or the combustion air room; they should conduct the air outside; they can be created by increasing the gap between doors leading outside and the floor of the installation room or the combustion air room , or they can be created in doors and window frames leading outside, provided there is free circulation of air and the net cross section can be measured.

Ventilation of the installation room can also be achieved through one or several ventilation ducts, provided they are impermeable to the fumes and gas and are not subject to sharp changes in direction.

If there is indirect ventilation of the room where gas appliances are installed, air circulation between communicating rooms can be achieved through several air passage openings, provided each of these has a net cross section of no less than 100 cm^2 and the total net cross sections of all these openings is no less than the useful net cross section calculated at 6 cm^2/kW. These openings can be made in the masonry or in the doors in walls shared with the rooms involved, or they may be created by increasing the gap between interior doors and the floor of the rooms themselves, provided there is free passage of air and the net cross section can be measured.

1.2 Forced ventilation

Forced ventilation can be achieved through systems with electric fans. The actual flow rate should be no less than 1.72 m^3/h per kW.

The air speed near the installed appliances should not disrupt the operators; in particular it should have the following characteristics:

- air speed under the hood should be between 0.25 m/s and 0.50 m/s;
- make-up airspeed lower than or equal to 0. 15 m/s up to 2 m from the standing/walking surface.

The air flow openings in the rooms and directed outside should have the following characteristics:

- they should be positioned so that non short circuits are caused in air flow;
- they should be protected by grills;
- in the case of LPG-systems, at least 1/5 of the natural aeration surface, with a minimum of 100 cm^2, should be at floor level

2 AERATION

Aeration can be achieved using one of the systems described in the paragraphs below.

2.1 Forced aeration systems

The hourly flow rate in the system should be at least 1.72 m^3/h per kW, and this refers to the total rated heat output of the user appliances in the installation room; however air exchange in the installation room can be adapted for other purposes than those related to the safety of systems fuelled by gaseous fuels.

The gas supply to the equipment must go directly fed to the systems themselves. The gas supply must be interrupted if the air flow falls below the above value. Gas should only be re-introduced manually.

2.2 Natural aeration systems

These can be achieved through permanent openings, directed outwards, in the room where the appliances are installed. In this case, the total rated heat output of the appliances should not exceed 15 kW. The net surface area of the openings or of the cross section should be no less than 100 cm2; or, the hoods are connected to a special flue or natural draught duct of suitable dimensions, in accordance with the relevant standard in the UNI EN 13384 series. In this case, the total rated heat output of the appliances should not exceed 35 kW.