




<i>Manufacturer</i>	GHIDINI BENVENUTO s.r.l.
<i>Product</i>	Steam generator – SUPER
<i>Year</i>	2007
<i>Certification</i>	

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1 INTRODUCTION

The present user's and maintenance manual refers to the steam generator "SUPER".

It is possible to receive the latest release from our Technical Commercial Department or by visiting our website www.ghidini-gb.it.

The present user's and maintenance manual contains important information for the operator's health safeguard and safety.

This manual has to be read and kept carefully, in order to be always at the operator's disposal in case of need.

Ghidini s.r.l. cannot be held liable for any damage to things or injury to persons caused by improper use of the machine in contrast with these instructions.

Any possible modifications effected on the components of the machine or its different use without prior written authorization by Ghidini s.r.l., relieve the latter of injury to persons and / or damages to things, voiding any warranty bindings, as well.

2 GENERAL DESCRIPTION

The steam generator Super is an equipment designed for the steam production. For its operation, the machine has to be connected to an external power and water supply.

The machine is provided with an automatic level control and water feeding.

Thanks to its front control panel, the generator results to be very user-friendly and efficient.

3 MACHINE IDENTIFICATION

A tag placed on the side of the machine indicates type, serial number, year of construction, and supply voltage.

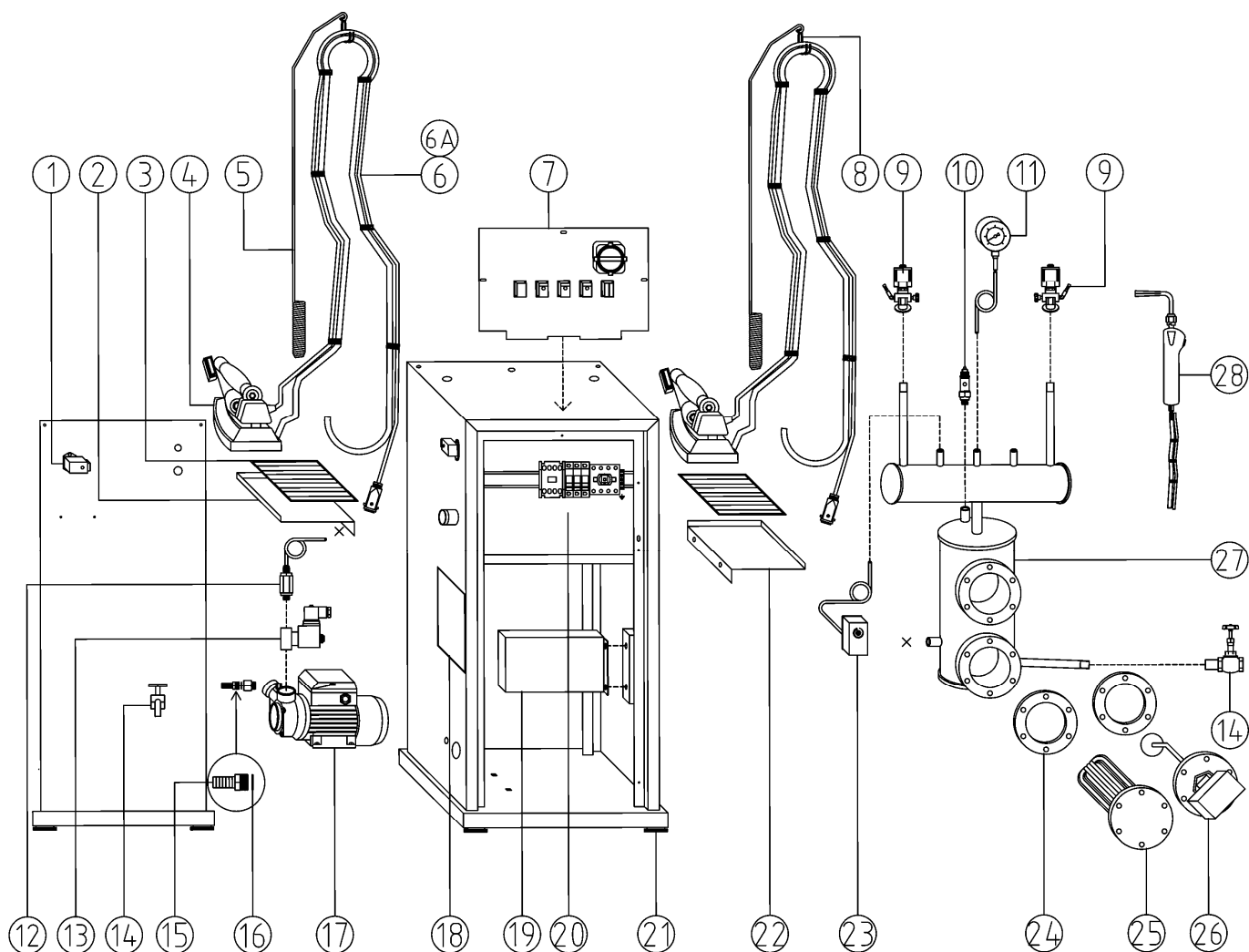
4 TECHNICAL FEATURES

TECHNICAL FEATURES	
Power supply	230/400V – 3Ph – 50/60 Hz
Boiler capacity	4,9 L
Steam pressure	2,8 bar
Boiler heater	3,3 – 3,9 – 4,8 Kw
Iron heater	0,83 Kw
Sound intensity level	< 70 dB(A)
Working temperature	+ 5 ÷ + 80 °C
Working humidity	90 % max.
Storing temperature	-20 ÷ +50 °C
Net dimensions	390 x 550 x 1000 mm.
Net weight	57 Kg
Overall dimensions (packaging included)	670 x 470 x 1030 mm
Gross weight (packaging included)	61 Kg

WARNING: The machine must not be supplied with different voltages and pressures than those indicated on the table.

5 MACHINE COMPONENTS

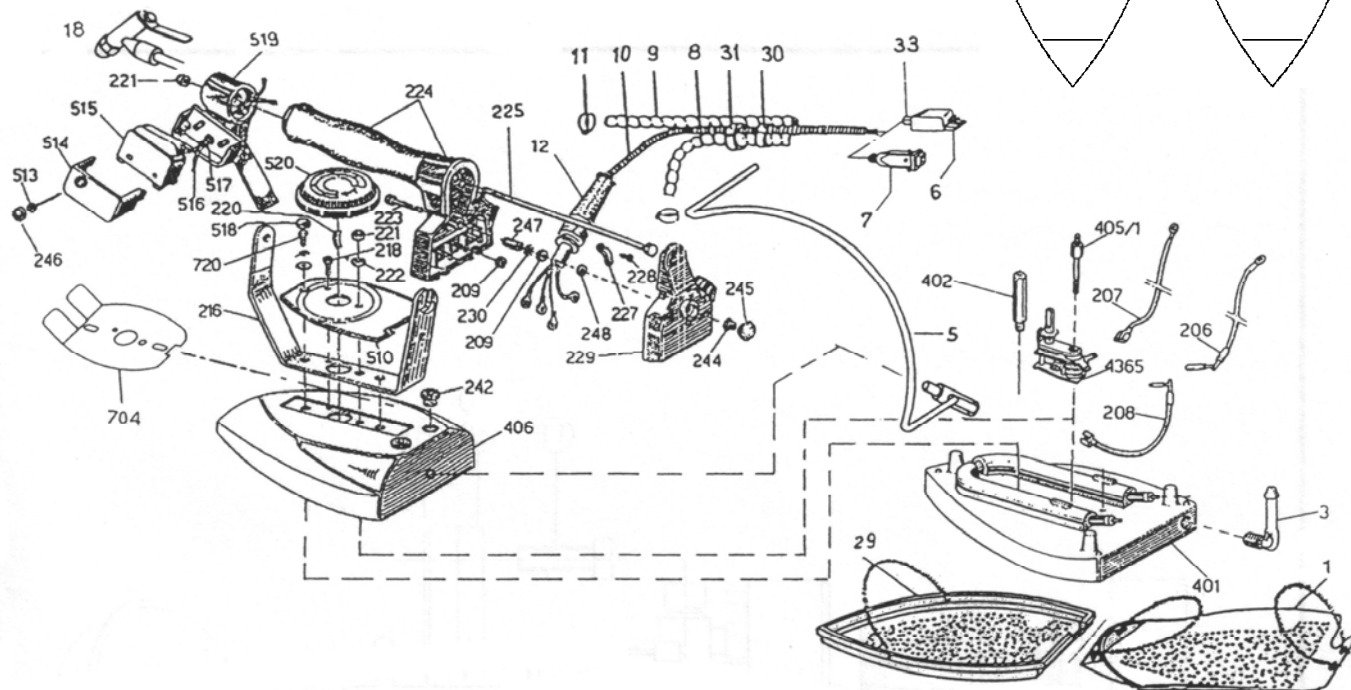
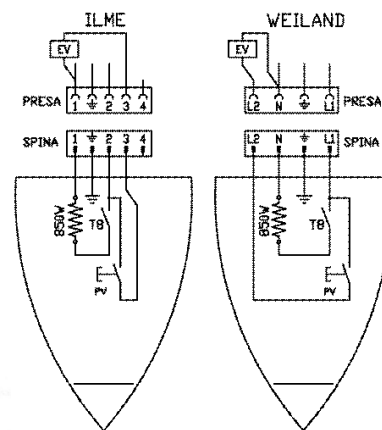
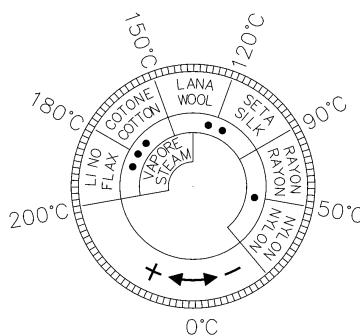
The main parts of the machine are:



Pos.	ARTICLE	DESCRIPTION	Pos.	ARTICLE	DESCRIPTION
1	43G007	Socket by Ilme	17	42B031	Complete pump 230V-60Hz (option)
2	162145	Left-hand iron rest (option)	17	42B030	Complete pump 230V-50Hz (option)
3	25A001	Silicone iron rest	18	264358	Identification tag
4	Z01L15	Steam iron type U	19	172102	Protective cover for heaters
5	534269	Antenna for iron cable	20	162014	Lower panel
6	Z23C00	Electric cord	21	22K029	Square rubber foot
6A	07A001	Steam hose	22	162144	Right-hand iron rest (option)
7	175021	Control panel	23	45G012	Pressure switch 2 ÷ 5,5 bar
8	534270	Hook for antenna	24	244236	Flange gasket Ø135
9	39B012	Complete solenoid valve 230V - 50/60Hz	25	212060	Boiler heater 3,3Kw
10	38S001	Safety valve		212061	Boiler heater 3,9Kw
11	35A004	Pressure gauge		212063	Boiler heater 4,8Kw
12	38W001	Check valve	26	49A001	Automatic level control with micro switch 43D014
13	39B017	Complete solenoid valve 230V - 50/60Hz		49A002	Automatic level control with micro switch 43D013
14	37B002	Gate valve for boiler exhaust	27	201013	Boiler
15	36E006	Hose holder Ø12	28	Z07A00	Steam gun (option)
16	174356	Water filter			

STEAM IRON TYPE "U" art.: Z01L15

TECHNICAL FEATURES	
Power supply	220V 50 Hz
Iron heater	0,830 Kw
Working temperature	+ 5 ÷ + 80 °C
Working humidity	90 % max.
Storing temperature	- 20 ÷ + 50 °C
Net weight	1,8 Kg



Pos.	ARTICLE	DESCRIPTION	Pos	ARTICLE	DESCRIPTION
4365	45A005	Thermostat with thermal fuse	224	222056	Handle
720	184453	Fixing screw for body	223	184457	Fixing screw for handle
704	253297	Hand protection plate	222	514057	Fixing nut for body
520	224217	Hand wheel	221	514056	Nut for handle rod
519	173236	Micro-switch support	220	534288	Hand wheel spring
518	22K038	Cap for body screw	218	184455	Fixing screw for body
517	224217	Sheathing	216	172057	Handle support
516	304284	Micro-switch wires	209	514055	Nut for terminal board
515	43D009	Micro-switch complete of wires and sheathing	208	304282	Electrical wiring for thermostat heater
514	43K007	Micro-switch case	207	304281	Electrical wiring for thermostat terminal board
513	184451	Micro-switch screw	206	304280	Electrical wiring for heater terminal board
510	264350	Plate	33	224255	Cable holder for plug
406	253255	Body	31	224260	Wire clamp
405/1	174020	Thermostat column	30	224215	Small spring
402	174019	Body column	29	Z23E01	Stiffened Teflon shoe
401	253254	Plate with heater	18	25A002	Water atomizer
248	184449	Isolating washers	12	224210	Cable holder
247	174018	Earth spacer	11	51X005	Clip
246	22K037	Micro-switch cap	10	Z23C00	Electrical cord
245	22K036	Nut cap	9	07A002	Silicone hose
244	514058	Nut for rear cover	8	07A001	Rubber hose
242	224245	Rubber cap for wire holder	7	43H009	Plug by Ilme
230	184448	Indented washer	6	43H002	Plug by Wieland
229	222133	Rear cover	5	174009	Jointed iron hanger
228	184450	U-bolt screw	3	364297	Cable hose
227	174353	Fixing U-bolt	1	Z23E00	Teflon shoe
225	183255	Handle rod			

6 MACHINE UNPACKING AND INSTALLATION

WARNING: The unit must be installed, opened and repaired by fully qualified technicians only.

6.1 UNPACKING

Find the most suitable place where to put the machine, then remove the packaging. Make sure that the machine has not been damaged during the transport and the storage.

The packaging material does not require any special precautions for its disposal, for it is not dangerous or polluting at all. Please refer to the local regulations for its disposal.

6.2 MACHINE INSTALLATION

The machine has not to be anchored to the floor, except for installations on moving means. In this case, use the holes on the bedplate for a proper fixing.

For a correct use and operation, as well as for an easy maintenance, leave enough free space around the machine.

Do not place the machine in dangerous and/or explosive/inflammable places.

6.3 ELECTRICAL WIRING

The electrical wiring must be carried out as indicated in the drawing. Check that the supply voltage and the frequency correspond to those indicated on the rating plate. The dimensions of the supply cable must suit the machine absorption and comply with the current regulations.

It is advisable to install a switch with fuses or a thermal circuit breaker. Put the cable in the relevant cable passage hole, then tighten. Connect the cable to the terminals of the feeder line on the control panel, as shown on the drawing of the present manual.

6.4 WATER FEEDING AND BOILER EXHAUST

Connect the water pipe to the hose holder Ø12 of the machine. Install an on-off valve, as well as a filter on the water feeding pipe, which has to be closed every evening, in order to avoid water eddies in the boiler. Connect the gate valve of the boiler exhaust (thread G 1/2") to the drain.

WARNING: After having carried out all the connections, make sure that pipes and cables are protected against any possible hits and are suitably fixed and isolated.

7 PRECAUTIONS

Read carefully the instructions and the risks related to the use of a steam generator. The operator has to know its working functions and must clearly understand its dangers with the help of the manual.

Main electrical supply

Prior to carrying out any inspection or service on the steam generator, it is necessary to disconnect it from the main electrical supply. Make sure, that nobody can reconnect it during the technical service.

Every installed electrical or electronic equipment must be earthed.

Inflammability

Adopt all the necessary precautions to avoid any direct contact of the machine with hot materials or flames. Put fire extinguishers near the machine for an immediate intervention in event of fire.

Pressure / Steam

Before each intervention, switch the boiler first off, let the pipes cool down and check that there are no residual pressures in any branch of the hydraulic circuit, as they could cause steam or product spurts, in case of disassembly of fittings or other components.

Noise

The machine's noise level is not very high, as it remains under 70dB (A).

8 HAZARDOUS USE

The conformity verification according to the essential safety rules and to the machine directive has already been carried out by filling out the specially provided checking lists, included in the technical file.

The checking lists are of two kinds:

- List of dangers (drawn from EN 1050 referring to EN 292).
- Application of the main safety features (Machine Directive– appendix. 1, part 1).

The dangers described in the following have not been completely removed, but they have been deemed to be acceptable:

- During the maintenance operation there could be some steam jets at low pressure, (maintenance operation must therefore be carried out by using suitable protection devices).
- A protection against direct and indirect contacts with the steam must be provided for by the user.

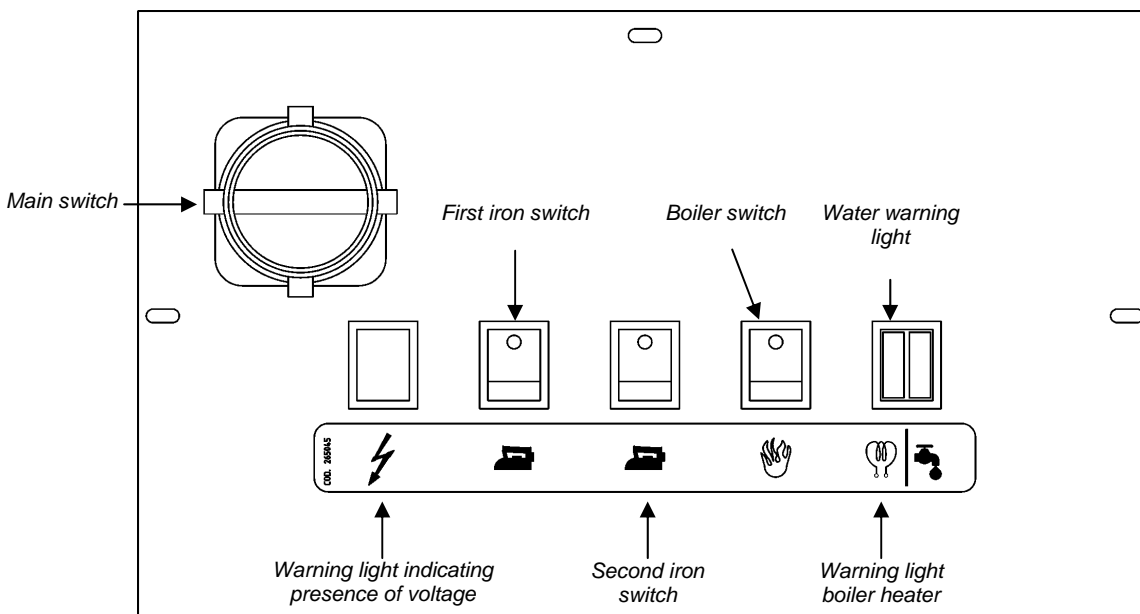
9 INSTRUCTIONS FOR USE

9.1 PUTTING INTO OPERATION

- The whole unit can be used, opened and repaired by qualified technicians only.
- It is forbidden to use the machine if flooded by liquids or in particularly aggressive or explosive/inflammable places.
- Do not ignore the dangers for the operator's health and follow the hygienic and safety regulations.
- Always use suitable pipes according to the working pressure.
- Check that the electrical wiring is carried out correctly according to the current regulations, and that the fuse blocks are closed and complete of fuses.
- Check that control and safety devices of the boiler (pressure gauge, pressure switch, and safety valve) are intact.
- Check that the gate valve of the boiler exhaust valves is correctly closed.
- Check that the direction of the motor rotation correct.

9.2 USE

- Open the on-off valve on the water-feeding pipe.
- Switch on the boiler.
- Switch on the iron you intend to use.
- The warning light of the water-feeding device will switch on automatically (the water starts pouring into the boiler).
- As soon as the water has reached the right level (check also the water level control), the relevant warning light switches off automatically, whereas the boiler heater starts working, indicated by the corresponding warning light.
- After a few minutes the boiler reaches the working pressure of 2.8 bar (check the pressure on the pressure gauge) and the relevant warning light switches off automatically.
- The boiler is now ready to supply steam.



10 TROUBLESHOOTING AND SOLVING

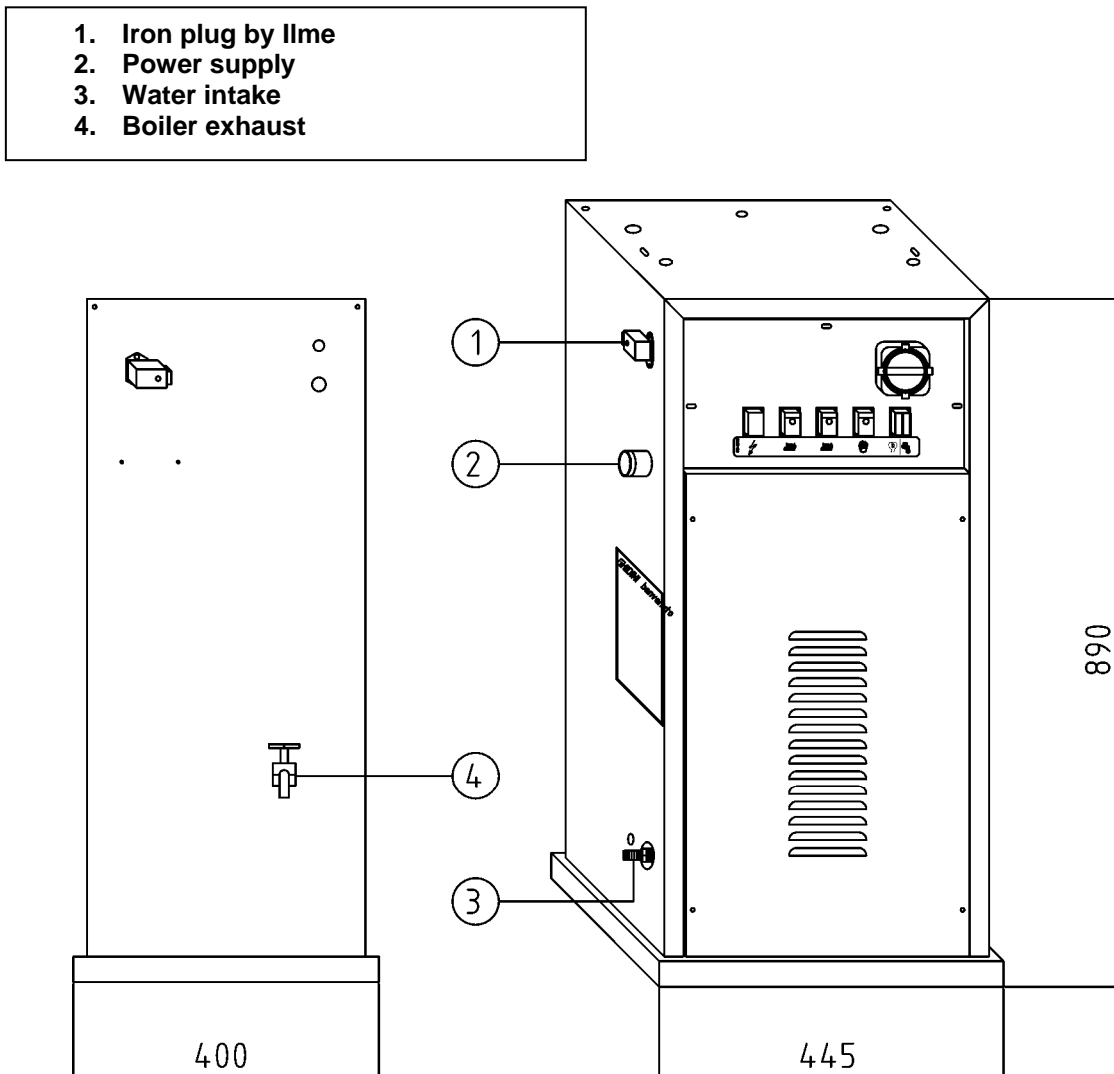
The following diagnostic table indicates the main irregularities which can occur, the probable causes and their possible solutions

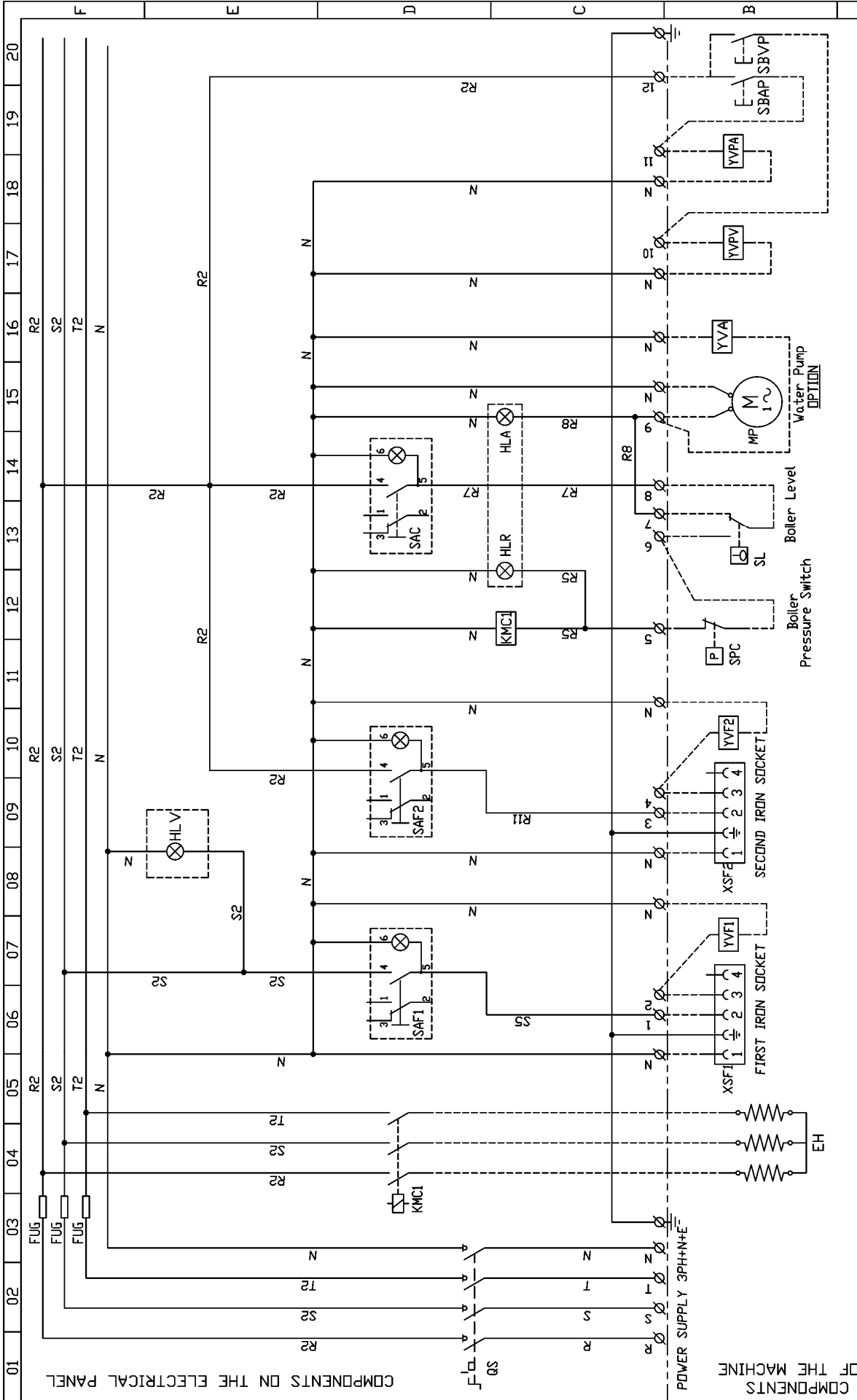
In case of doubts and/or of problems, which can't be solved, do not attempt to disassemble parts of the machine for the troubleshooting, but contact our Technical Department or the Ghidini-reseller, instead.

DIAGNOSTIC TABLE		
PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
The machine does not work:	The main switch is turned off	<i>Turn on the main switch</i>
	Blown fuses	<i>Check the fuses</i>
The water warning light is switched on and the pump keeps on running:	No water pours into the boiler	<i>Check that the water cock is open</i>
		<i>Check the presence of pressure inside the water mains.</i>
		<i>Make sure that the water filter is not obstructed.</i>
The heater warning light is always switched on and the boiler doesn't reach the working pressure	Leak on the boiler exhaust.	<i>Check if the gate valve of the boiler exhaust is well closed.</i>
	Burnt out heater or covered with scale.	<i>Check the heater condition.</i>

AT WARNING: if the safety valve is released, switch the boiler immediately off and contact a qualified technician. Do not block the exhaust and do not underestimate the problem, as there could be risk of explosion.

11 OVERALL DIMENSIONS AND DRAWINGS





COMPONENTS ON THE ELECTRICAL PANEL

COMPONENTS OF THE MACHINE

POWER SUPPLY 3PH+N+E

Boiler Pressure Switch

Boiler Level Switch

Water Pump (OPTION)

SECOND IRON SOCKET

FIRST IRON SOCKET

SBAP-SBVPi Steam-air gun (OPTION)

Denominazione Description		SUPER POWER SUPPLY 3PH+N+E	
3	Date	29/06/99	
2	Dis. LC		
1	Cod.	303013	
	Modifiche Changes	Disegn. <i>[Signature]</i>	Appr. <i>[Signature]</i>

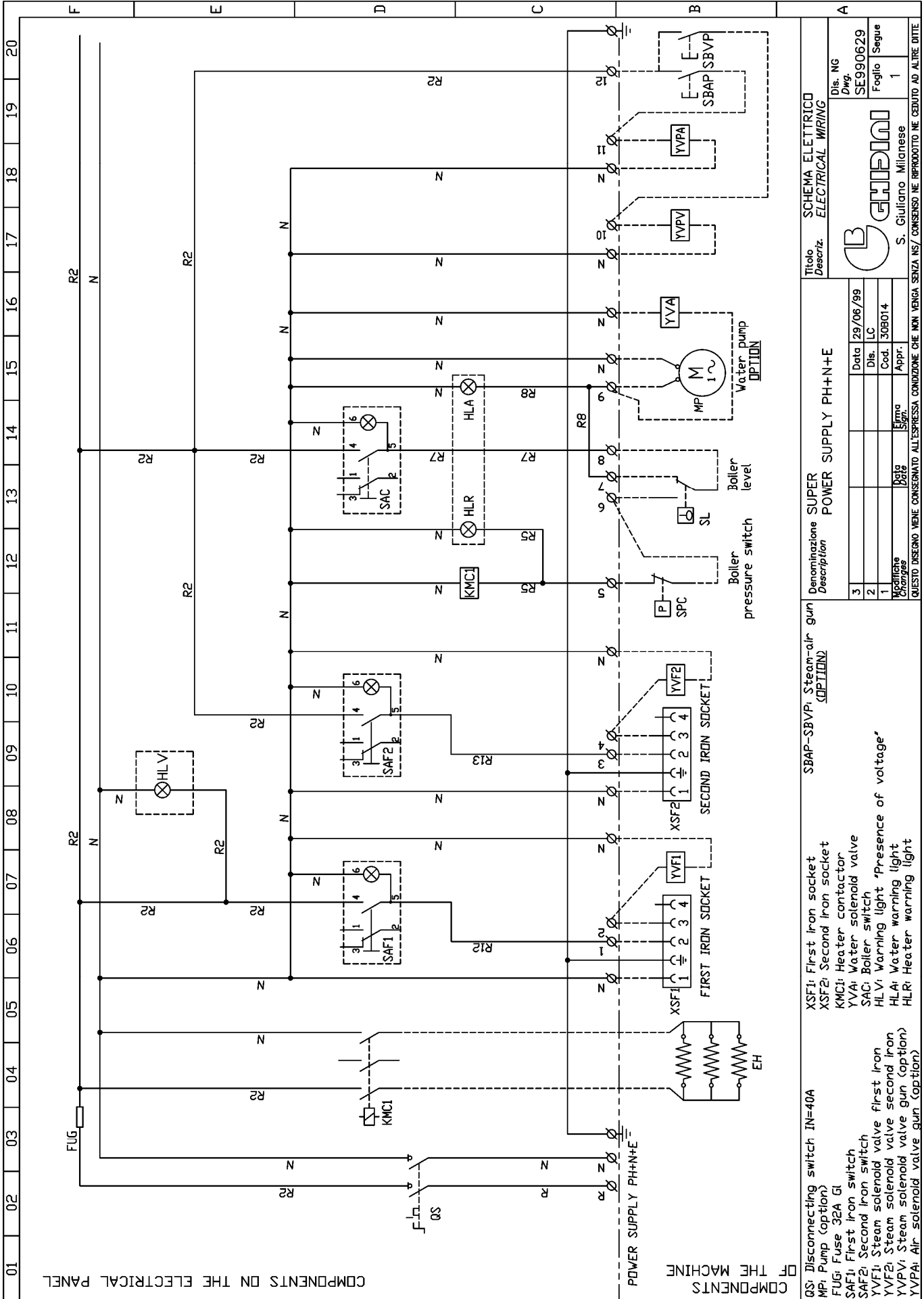
TITOLO: SCHEMA ELETTRICO
DESCRIZIONE: ELECTRICAL WIRING

Dis. NG
Dwg. SE990629
Foglio Segue
1

GHIARDINI
S. Giuliano Milanese

QS: Disconnecting switch IN = 40A
MP: Pump (OPTION)
FU6: Fuse 16A GI
SAF1: First iron switch
SAF2: Second iron switch
YVF1: Steam solenoid valve first iron
YVF2: Steam solenoid valve second iron
YVAF1: Steam solenoid valve gun (option)
YVAF2: Steam solenoid valve gun (option)
YVPV: Air solenoid valve gun (option)

KMC1: Heater contactor
YVA: Water solenoid valve
SAC: Boiler switch
HLV: Warning light 'Presence of voltage'
HLA: Water warning light
HLR: Heater warning light
XSF1: First iron socket
XSF2: Second iron socket



COMMENTS ON THE ELECTRICAL PANEL

COMPONENTS OF THE MACHINE

QS: Disconnecting switch IN=40A MP: Pump (option) FUG: Fuse 32A GI SAF1: First iron switch SAF2: Second iron switch YVFI: Steam solenoid valve first iron YVFP: Steam solenoid valve second iron YVPA: Air solenoid valve gun (option) YVPA: Air solenoid valve gun (option)		SBAP-SBVP: Steam-air gun (OPTION) XSF1: First iron socket XSF2: Second iron socket KMC1: Heater contactor YVA: Water solenoid valve SAC: Boiler switch HLV: Warning light 'Presence of voltage' HLA: Water warning light HLR: Heater warning light		Denominazione: SUPER SUPPLY PH+N+E Description: POWER SUPPLY PH+N+E		Titolo: SCHEMA ELETTRICO Descriz.: ELECTRICAL WIRING	
3	Date: 29/06/99	Dis. LC	Dis. NG	Dis. NG Dwg. SE990629		Foglio Segue 1	
1	Cod. 309014	Appr.	Modifiche Data Data Firma Appr.				
QUESTO DISEGNO VIENE CONSERVATO ALL'ESPRESSIONE CONDIZIONE CHE NON VENGA SENZA NS/ CONSENSO NE RIPRODOTTO NE CEDUTO AD ALTRE UTILE							

12 MAINTENANCE PROCEDURES

In case of irregularities or malfunctioning, please contact the service technician for the relevant checks.

Periodically, it is necessary to carry out the following operations:

OPERATIONS	Working hours
Empty the boiler (*)	150
Clean the water filter	500
Clean boiler and heater	1500
Check the automatic level control	1000

(*): Empty the boiler when it reaches a pressure of 1 bar, in order to remove every possible lime residue and dirt. When the machine is switched off, open gradually the exhaust valve of the boiler. We recommend to carry out this operation before the machine starts working and not in the evening at the end of the work, because the new water, streaming into the boiler, is high in oxygen and increases therefore the corrosion process inside the drum.

This machine does not require special equipment for check and/or maintenance operations. It is however advisable to use suitable tools and personal protections in compliance with the Italian law by decree 626/94, which have to be in good conditions (Presidential Decree 547/55), in order to avoid any damages to persons or machine components.

Make sure that the power, and hydraulic supply are disconnected prior to any maintenance service.

13 DISPOSAL

During the maintenance on the machine, or in case of its scrapping, please dispose carefully and correctly of any polluting components, according to the local regulations. In case of scrapping, the identification rating plate and any other document have to be destroyed.

14 HOW TO ORDER SPARE PARTS

Upon the spare parts request, please quote always:

Machine type, serial number, quantity of the requested spare parts, article number (these data can be read on the rating plate or supplied by the technical information of the machine and by the user's and maintenance manual).

For electrical components with a different voltage and frequency than V 230-380 50 Hz (data available on the rating plate of the faulty component), specify the right voltage and frequency after having mentioned the article number.

The technical data, the descriptions, and pictures included in this manual are not binding.

The manufacturer reserves the right to make any necessary modification without notice or having to up-date the present manual.

15 HANDLING AND TRANSPORT

Before its shipment, the machine is carefully packed in a wooden cage or carton box. During the shipment and storing of the machine, pay particular attention to the upside indication on the packaging. Upon receipt, please check that the packing is intact and store the machine in a dry place.

16 WARRANTY

All Ghidini products are guaranteed for a maximum period of 12 months from delivery date as far as material and construction defects are concerned.

The warranty is extended as follows:

In case of malfunction of the equipment, please contact your Ghidini reseller, specifying the noticed defect, type, serial number and furthermore the operating conditions of the machine. After having received the equipment or component and after an accurate analysis, Ghidini reserve the right, whether to repair or to replace the product. If the machine is still under guarantee, the Ghidini reseller will carry out the service or replacement at Ghidini's charge.

In case the returned goods are not defective, Ghidini reserve the right to charge the customer with the met expenses (shipment, etc.).

The present warranty will be declared void, if the machine has been damaged due to improper use, negligence, normal wear, chemical corrosion, installation not according to the provided instructions and to the manufacturer's warnings.

Any modification, tampering and alteration on the machine or its components, carried out without prior written authorization by Ghidini, relieve the latter of any responsibility and annuls any warranty obligation.

The components subject to normal wear and the perishable ones are not under warranty, as well as everything which has not been previously explicitly indicated, or damages or expenses arising from defects of the same product.

The validity conditions of the guarantee provided by Ghidini are considered implicitly accepted upon purchase of the machine. Any possible changes to or derogations from the present guarantee are only valid prior written authorization by Ghidini.

17 CONFORMITY DECLARATION

Manufacturer:	<u>GHIDINI</u> Company
	<u>Via Tolstoj, 24 – 20098 S. Giuliano Milanese (MI)</u> Address
	<u>+39 -02 -98.24.06.00</u> Phone number

Declares that

The machine:	<u>Steam generator SUPER</u>
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- * has been designed in compliance with the DIRECTIVES OF THE EUROPEAN COMMUNITY COUNCIL referring to machines (98/37/EC) and to low voltage (BT 73/23/CEE).
- * has been designed, as far as enforceable, in compliance with the following harmonized regulations and technical specifications:
EN 292-1/2, EN 1050, EN 982, EN 11200, EN 60947, EN 894-1/2.

Managing director	Roland Fleischmann
Product manager	Name

GHIDINI S.R.L.
Company



Signature	September 2007
	Date

