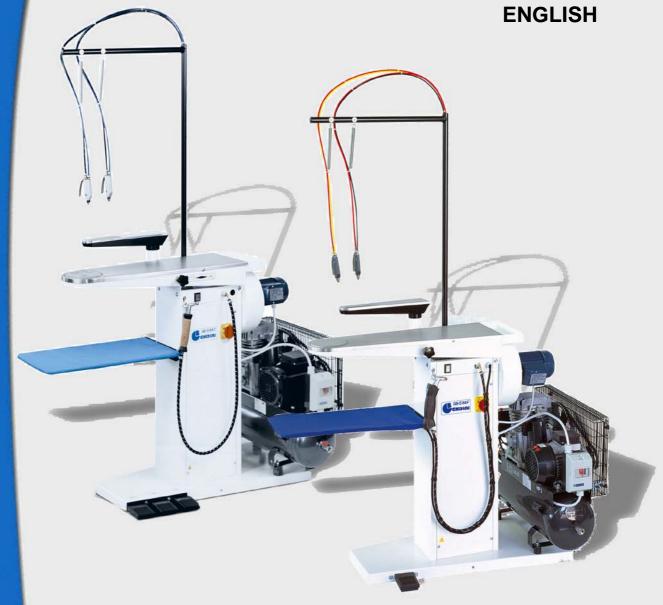


GB-S 88 C B GB-S 88 F GHIDINI

User's and Maintenance Manual





| Manufacturer | GHIDINI BENVENUTO s.r.l. | |
|---------------|--------------------------|--|
| Product | Spotting table - GB-S 88 | |
| Year | 2006 | |
| Certification | (| |

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1 INTRODUCTION

The present user's and maintenance manual refers to the spotting table "GB-S 88".

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 spotting table GB-S 88, featuring both a stainless steel board and arm with vacuum, is a machine designed for the spotting of any washable or dry-cleaned garment.

The spotting table can be supplied in two versions: GB-S 88 F (cold spotting table) and GB-S 88 C (steam spotting table) along with several options: compressor (F and C), vacuum unit (F and C), water spray gun (F and C), one or two cold spotting guns (C), steam-air gun assembly (F).

3 MACHINE IDENTIFICATION

A tag placed on the back of the machine indicates type, serial number, year of construction, supply voltage and pressures, as well as the electric consumption.

4 TECHNICAL FEATURES

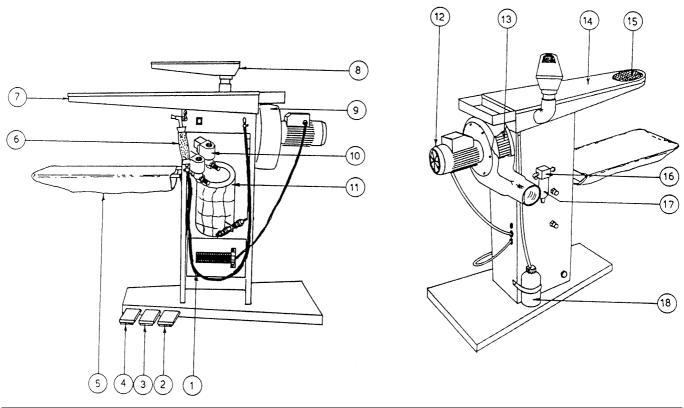
| TECHNICAL FEATURES | | | | |
|---|-----------------------------|--|--|--|
| Power supply (without compressor) | 230 V - 1ph – 50/60 Hz | | | |
| Power supply (with compressor) | 230/400 V – 3ph – 50 Hz | | | |
| Steam supply | 4 bar min. – 6 bar max. | | | |
| Compressed-air supply | 5 bar min. – 8 bar max. | | | |
| Steam working pressure | 5 bar | | | |
| Air working pressure | 6 bar | | | |
| Steam consumption | 3 ÷ 5 Kg/h | | | |
| Air consumption | 150 NI/min | | | |
| Motor power vacuum unit | 0,6 Hp | | | |
| Sound intensity level | < 70 dB(A) | | | |
| Working temperature | + 5 ÷ + 80 °C | | | |
| Working humidity | 90 % max. | | | |
| Storing temperature | - 20 ÷ + 50 °C | | | |
| Net overall dimensions (without compressor) | 1190 x 740 x 1015/1900h mm. | | | |
| Net weight (without compressor) | 44 Kg | | | |
| Gross overall dimensions (without compressor) | 121 x 59 x 102 mm | | | |
| Gross weight (without compressor) | 53 Kg | | | |
| Net overall dimensions (with compressor) | 1270 x 900 x 1015/1900h mm. | | | |
| Net weight (with compressor) | 78 Kg | | | |
| Gross overall dimensions (with compressor) | 130 x 80 x 110 mm | | | |
| Gross weight (with compressor) | 118 Kg | | | |

<u>WARNING:</u> The machine must not be supplied with other voltages and pressures than those indicated on the table.

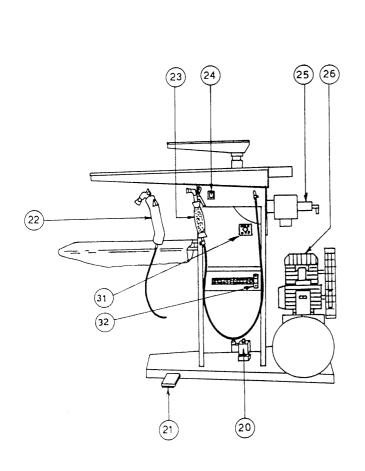
5 MACHINE COMPONENTS

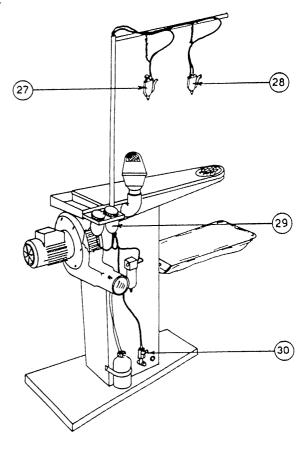
The machine features the following main components:

GB-S 88 C



GB-S 88 F AC





| Pos. | ARTICLE | DESCRIPTION | Pos. | ARTICLE | DESCRIPTION |
|------|---------|--|------|---------|---------------------------------------|
| 1 | 07A002 | Steam silicone hose Ø12 x 5 | 17 | 35H016 | Air filter bucket |
| 2 | 43B009 | Pedal for hot air | 18 | 221002 | Receptacle for liquids |
| 3 | 43B009 | Steam pedal | 20 | 39A003 | Air solenoid valve |
| 4 | 43B009 | Vacuum pedal | 21 | 43B009 | Vacuum pedal |
| 5 | 274205 | Cloth for garment tray | 22 | Z07C01 | Steam-air gun |
| 6 | E-35 | Gun | 23 | Z07F02 | Air gun |
| 7 | 162037 | Board | 24 | 43A002 | Switch |
| 8 | Z14C00 | Spotting shape | 25 | 383245 | Central vacuum unit valve |
| 9 | 340017V | Wheel box for vacuum unit | 26 | E-40 | Compressor |
| 10 | 39B003 | Solenoid valve | 27 | Z07G01 | Water spray gun |
| 11 | Z04E00 | Tank for condensation separator/heater | 28 | Z07H01 | Spotting gun |
| 12 | 42A002 | Vacuum unit motor V230-50/60Hz 0,6 Hp | 29 | Z19P01 | Containers for spotting solvents |
| 13 | 42H002 | Fan Ø180 x 70 | 30 | 37A005 | Water cock |
| 14 | 163108 | Board plate | 31 | 43A038 | Quadrupole disconnecting switch 40 A |
| 15 | 173109 | Grid for board point | 31 | 43A041 | Three-polar disconnecting switch 40 A |
| 16 | 35B006 | Complete air filter | 32 | 43F017 | Fuse holder |

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 for the installation of 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 the installation on means of transport. Use the specially designed holes on the bedplate for its correct fixing.

In order to guarantee a correct use and operation, as well as 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 on 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-magnetic circuit breaker. Put the cable into the cable holder, and then tighten. Connect the cable to the feeder line terminals on the control panel, as shown on the drawing of the present manual.

Check the rotation direction of the motors; if not correct, invert two of the three input phases with each other.

6.4 COMPRESSED AIR CONNECTION (only for machines without compressor)

The connection to the central compressed air supply must be carried out by means of a G 1/4" Gas threading placed on the back of the machine.

Use a pipe having an internal Ø of at least 6mm and with a network pressure of maximum 10 bar (otherwise mount a pressure reducer). Install an on-off valve allowing the disconnection of the supply.

The machine features a filter, and a condensation separator (low-boy) with an exhaust valve placed underneath the bucket. The valve discharges the condensation automatically in case of lack of pressure, please be reminded therefore to shut off the air supply at the end of your work. In case of high work pace, check periodically the condensation level inside the filter bucket. If necessary, carry out the discharge manually, by opening the valve placed underneath the same.

6.5 CONNECTION TO A CENTRAL VACUUM UNIT (only for machines without vacuum unit)

Connect a 1½" pipe from the outlet of the central vacuum unit to the 1½" inlet of the machine.

6.6 WATER CONNECTION (only for machines with water spray gun)

Connect the water pipe to the G 1/4"-fitting of the machine. Install an on-off valve and a filter on the water inlet, which has to be closed at the end of work or in case of servicing on the machine.

6.7 STEAM SUPPLY CONNECTION (only for machines with steam-air gun)

• In case of a connection to a **central steam supply**, proceed as follows:

Connect a pipe with a G 3/8" gas threading to the top part of the steam outlet of the central unit and place an on-off-valve close to the machine. Afterwards, connect a pipe with an internal diameter of at least 10 mm to the steam intake (G 3/8" gas threading) of the machine.

For the condensation return, provide a pipe with exactly the same features of the steam pipe, and install an onoff valve followed by a check valve. For the connection to the check valve, use a pipe with an internal diameter of at least 10 mm. The steam pressure must be of max. 6 bar.

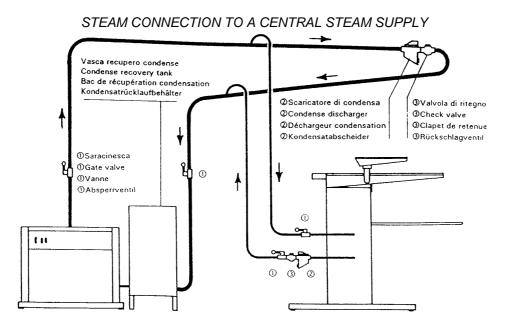
• In case of a connection to a **small steam generator**, proceed as follows:

The steam intake of the machine with a G 3/8" threading for the connection to the steam generator is placed on the right-hand side of the machine. The steam network pressure must be of max. 6 bar.

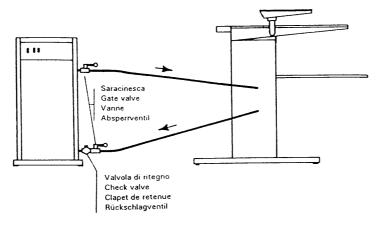
It is advisable to install a pipe having an internal \emptyset of at least 8 mm. Install an on-off valve on the piping in order to exclude the machine from the steam generator. Connect the condensation return to the machine (with a G 3/8" threading), by using also in this case a pipe with an internal \emptyset of at least 8 mm. Install on this piping a check-valve and an on-off valve, in order to exclude the machine from the installation. Connect eventually to the small steam generator.

Do not bend the pipes at right angles, but at least with a 50 mm radius. Make sure that the pipes have an even incline, especially the one for the condensation return.

Do not use traps, fittings or gate valves with a smaller diameter than the pipe, itself. The piping must not exceed 2.5 meters. The hole of the condensation return has to be at least 150 mm higher than the water level inside the boiler.



STEAM CONNECTION TO A SMALL GENERATOR



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 INSTRUCTIONS FOR USE

7.1 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.
- Use always suitable pipes for 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.

7.2 PRELIMINARY STEPS BEFORE EACH PUTTING INTO OPERATION

- Check if the machine is intact.
- Machines with steam-air gun:
 - o Check the connection to the steam network.
 - o Open both the steam and the condensation return gate valve.
 - Check, if the steam circuit is running regularly, by pressing and releasing several times the steam button.
 - Some condensation may come out at the beginning. Pressing the steam button repeatedly will facilitate a quicker steam discharge.
 - Pay attention to the danger of burns during these operations.
- Turn on the main switch of the machine.
- Machines with compressor:
 - o Make sure that the air cock is open and that there is no air left inside the tank.
 - o Turn on the power supply switch of the compressor.
 - o Pull the button on the upper cover of the pressure switch upwards.
 - Warning: To stop the compressor, do not cut off the power supply, but push the pressure switch button down, in order to discharge the excess air inside the cylinder automatically and to facilitate the next starting. For operations in an ambient temperature below 0°C, the compressed air inside the tank must completely be discharged prior to every starting.
- Machines without compressor:
 - o Make sure that the air cock is open and connected to the central compressed air supply.
- Machines with water spray gun:
 - Open the water cock.
- Fill the tanks of the spotting device with the spotting products.

7.3 USE

- Place the spotting arm into the most comfortable position for the spotting operation. Put the part of the garment to be treated on the reticular area (grid) and push the relevant vacuum pedal. The garment will be fixed to the arm, thanks to the suction pressure of the vacuum unit.
- Draw the spotting gun up to 10 mm closer to the garment and press the lever completely down. At that distance, the air-product mixture is able to remove any kind of particle from the fabric. The spotting gun can also be used for drying: by pressing the lever just halfway down, only air will come out.
- Per GB-S 88 **C** (**steam** spotting table):
 - Bring the air/steam gun close to the part of the garment to be treated. Press the steam pedal and point the steam jet onto the spot, by rotating the gun from the external part of the spot to its centre. Once the stain is dissolved, dry the treated part by pushing simultaneously the vacuum pedal and the air-button on the gun.
 - o Draw the spotting gun up to 10 mm closer to the garment. Dry the previously treated part with rapid movements from left to right, and vice versa.
- Per GB-S 88 **F** (cold spotting table):
 - The use of the steam-air gun on the cold spotting table is the same as for the steam-spotting version, with the only exception that instead of pressing the pedal for steam or air, you have to use the push-buttons on the gun.

The a.m. sequence is not binding at all. The best results are obtained only through experience and practice.

8 TROUBLESHOOTING AND SOLVING

The following diagnostic table indicates the main irregularities which can occur, their probable causes and 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 | | | |
| | Main switch turned off | Make sure that the main switch is turned | | | |
| The machine doesn't turn on | | on | | | |
| | Blown fuses | Check the fuses | | | |
| No steaming | Steam intake cock closed | Open the cock of the steam intake | | | |
| Lack of compressed air: | Lack of air supply | Check the presence of air on the pressure | | | |
| Lack of compressed air. | | gauge placed on the reducer. | | | |

9 PRECAUTIONS

Read carefully the instructions and the risks related to the use of a spotting table. 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 machine, 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 and electronic equipment or basic structure 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

Prior to any intervention, close the on-off valve of the steam supply, wait until all the pipes are cooled down and check that there are no residual pressures inside any branch of the hydraulic circuit, as they could cause steam spurts, in case of disassembly of fittings or other components.

Pressure

Prior to any intervention, check that there are no residual pressures inside any branch of the pneumatic circuit

Noise

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

10 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.

11 HAZARDOUS USE

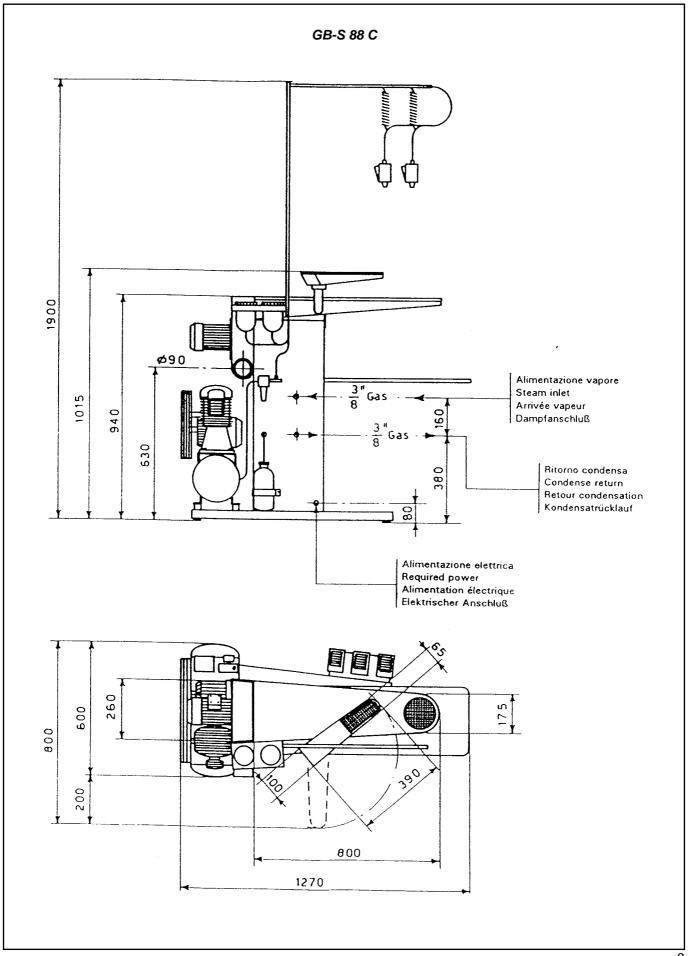
The conformity verification according to the essential safety rules and to the provisions of the machine directive has already been carried out by filling out the specially provided checking lists, included in the technical file. The checking lists are of two kinds:

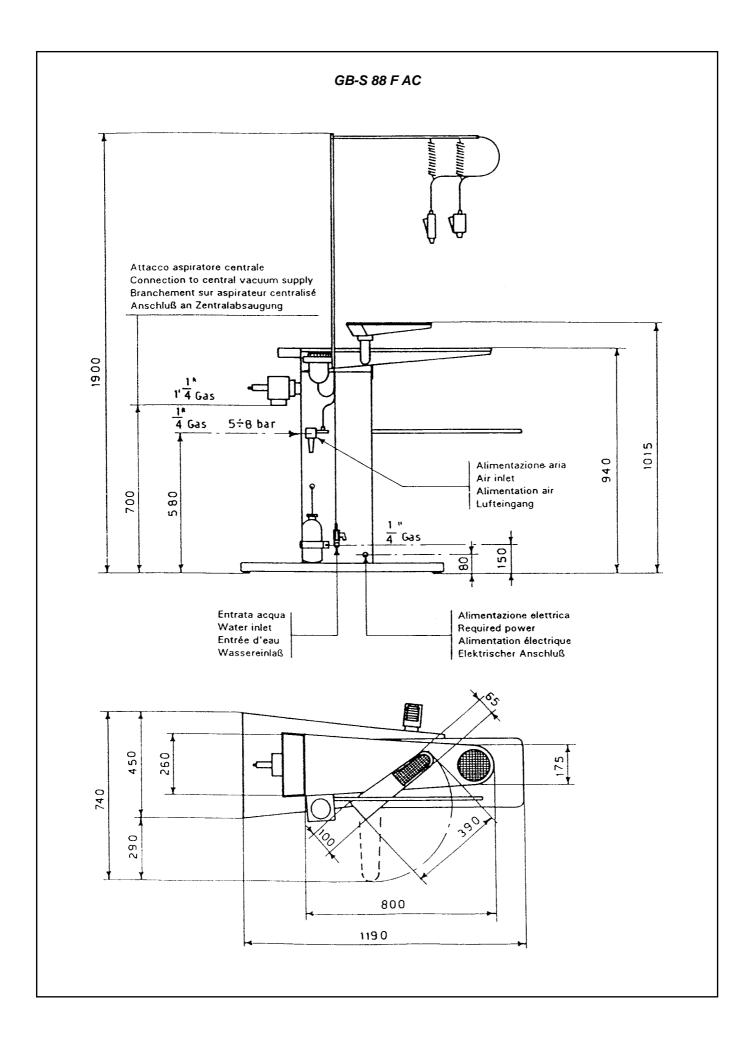
- List of dangers (drawn from EN 1050 referring to EN 292)
- Application of the main safety features (Machine Directive- appendix. 1, part 1)

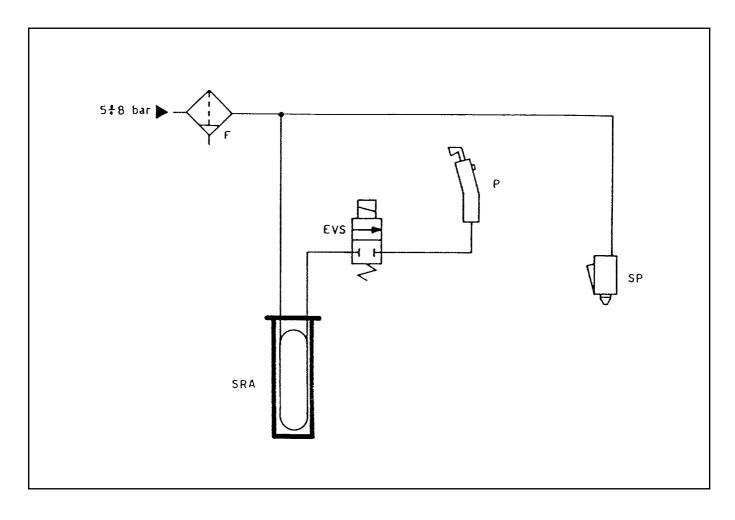
The dangers described in the following have not been completely removed, but they have been deemed to be acceptable:

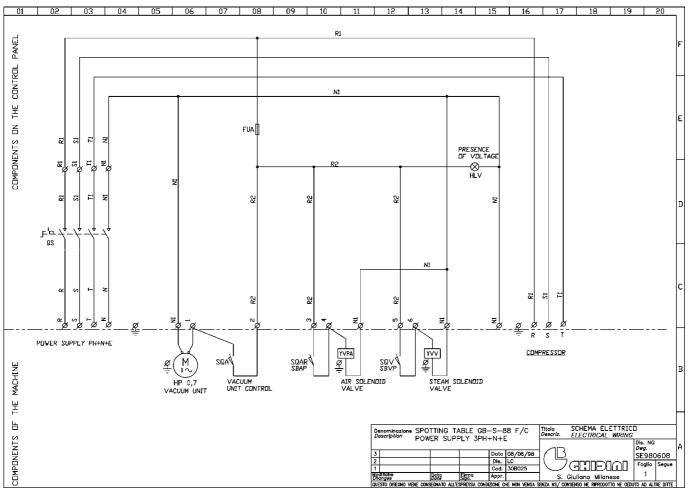
- During the maintenance operation there could be some steam jets at low pressure, (maintenance operation must therefore be carried out by using suitable protection devices)
- The user must provide for a protection against direct and indirect contacts.

12 OVERALL DIMENSIONS AND DRAWINGS









13 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:

| OPERATION | WORKING HOURS |
|---|---------------|
| Cleaning of the grid on the vacuum boards by means of a brush | 150 |
| Replacement of the air/steam gun tube | 1500 |
| Cleaning of the water filter | 1500 |
| Replacement of the air filter | 2000 |
| Cleaning of the condensation return filter | 500 |
| Tightening of the bolts on the compressor head | First 3 |
| Check of the oil level inside the compressor | First 3 |
| Replacement of the compressor oil with API CC SAE 40 or similar | First 100 |
| Condensation discharge of the compressor | 40 |
| Cleaning of the vacuum filter on the compressor | 1500 |
| Replacement of the compressor oil with API CC SAE 40 or similar | 1000 |

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.

<u>Make sure that the power supply and the hydraulic system are disconnected prior to any maintenance service.</u>

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 50/60Hz (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. During the shipment and storing of the machine, pay particular attention to the upside indication on the packaging (wooden crate or pressed cardboard). 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 reserves 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 reserves 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 and 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: | GHIDINI Company | |
|---------------|---|--|
| | <u>Via Tolstoj, 24 – 20098 S. Giuliano Milanese (MI)</u> Address | |
| | +39 -02 -98.24.06.00 Phone number | |

Declares that:

The machine:

Spotting table - GB-S 88

- 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 February 2006
Date

