

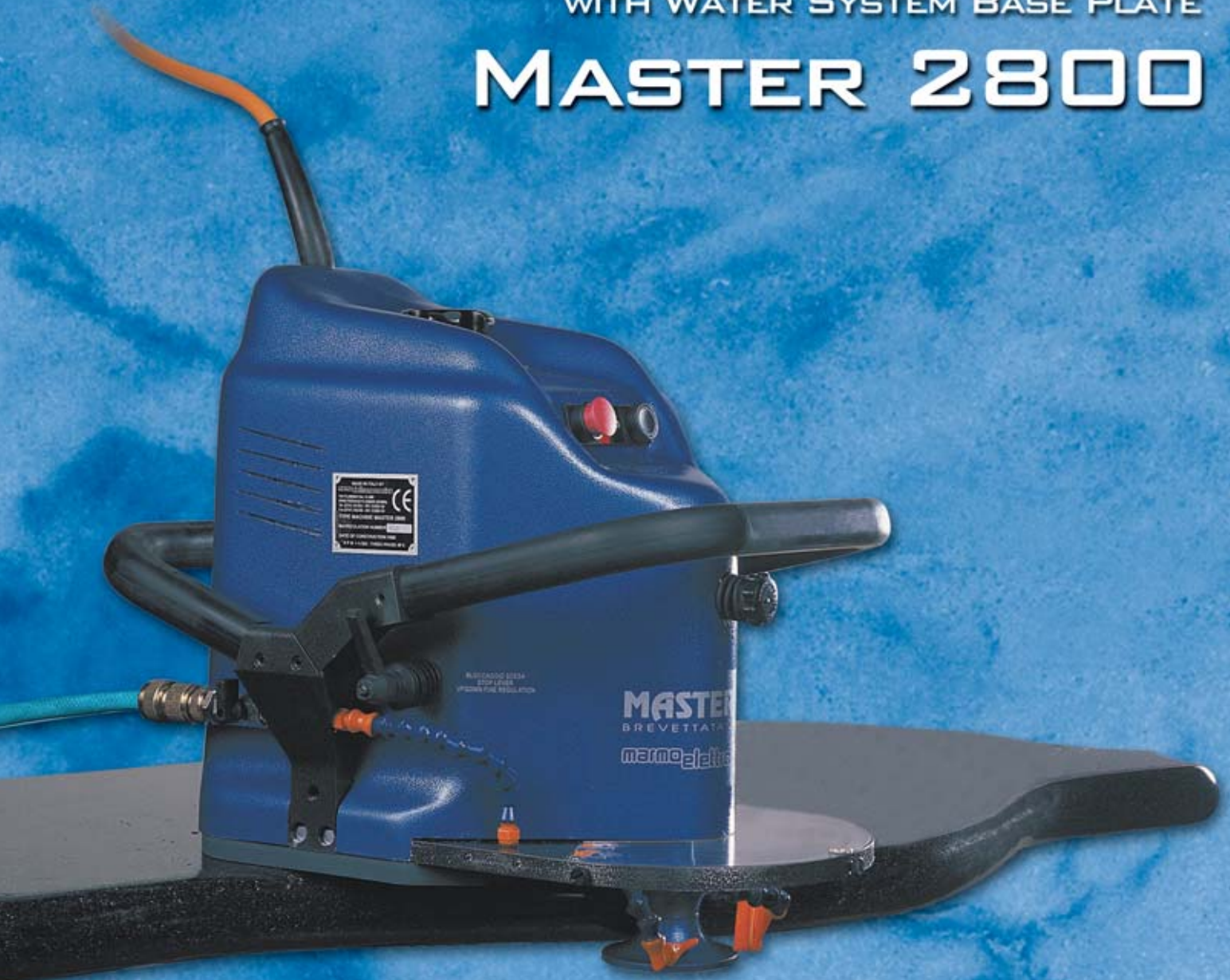
marmoelettromeccanica



UTENSILI DIAMANTATI • DIAMOND TOOLS • Outils DIAMANTES • UTENSILIOS DIAMANTADOS • DIAMANTWERKZEUGE

PORTABLE CONTOURING MACHINE
WITH WATER SYSTEM BASE PLATE

MASTER 2800



OPERATOR'S MANUAL
VER. 1 1/2007



UNI EN ISO 9001:2000

Registration No.: IT - 37274 - Certificate No.: 9181/00001

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Dear client,

thank you very much for the trust you have shown in us by buying our **MASTER 2800**. We would like to provide you with some information as well as some advice about your new machine. All our machines, electrical conversion unit, etc, are designed and built according to EC norms and regulations, they are made to function perfectly and to last without causing you any problems; the quality is unsurpassable and all checks and controls are carried out with the utmost care. **MASTER 2800** is the result of both years of experience and technological innovations resulting in the creation of this highly professional product. This machine can achieve a high degree of productivity and quality which are up to the same standard as that of larger machines. Please use the instruction leaflet carefully and accurately to ensure excellent results. However, if for any reason you encounter difficulties, both our sales office and our technical assistance force is at your complete disposal; we can provide you with speedy repair services and we would like you to know that we are with you all the way. We would like to remind you also that all our machines are accompanied by an "CE" declaration of conformity which testifies that the machine conforms to required safety standards. Every machine must be accompanied by this declaration of conformity.

We would like to warn you that it is very important to keep this document in a safe place because the machine must always be accompanied by this document even if it is resold.

Thank you very much for taking the time to read this welcome message and we would like to remind you once again that we are at your complete disposal for any further information.



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INTRODUCTION

The **MASTER 2800** is an electrical contouring machine used to work on marble and granite. The electrical supply is very low tension for safety reasons (SELV of 48V efficient value of alternate current) and is supplied via the use of a safety electrical conversion unit which complies with the norm CEI EN 60742.

Principal characteristics:

- Versatile when working with different kinds of profiles.
- Simple to operate and to use.
- Safe to use.
- Easy to transport.
- Robust.

The **MASTER 2800** has been designed and built in accordance with the machinery directive 89/392/EEC and the subsequent variations 91/368, 93/44 and 93/68.

DOCUMENTS

The instructions booklet, the electrical layout, the guarantee and the declaration of **CE** conformity must accompany the machinery at all times.

Compliance with the suggestions and warnings mentioned in this booklet is important in order to ensure that the machine works properly and in order to ensure that there is no need to request assistance under guarantee. Safety measures must be strictly observed in order to avoid any accidents.

MANUFACTURER'S DETAILS

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All rights are reserved to MARMOELETTROMECCANICA S.r.l. even when protection is requested.



The information provided in this manual has been carefully compiled and checked in order to be as precise as possible, but MARMOELETTRROMECCANICA S.r.l. reserves the right to make changes or modifications as necessary when improvements have been made to the products themselves.

TECHNICAL DATA

Model:	MASTER 2800 CE
Electrical Tension:	48 V
Electrical supply:	3 ~
Nominal Power:	1500 W o 1,5 KW
Number of nominal revs	4800 min ⁻¹ /rpm
Weight without tool	28 kg
Maximum Diameter of tool	150 mm

STANDARD ACCESSORIES SUPPLIED WITH MACHINE

- 50 MESH 1/2 MF Filter.
- Water Guard.
- Apron.
- T-handle for attachment of 5mm wheels.

TRANSPORT and STORAGE

In order to avoid any risk of deterioration, the machine must be transported and stored in its original box and stored in a dry place.

If stored as indicated, the machine will remain in perfect working order for a long time.

When storing the machine or when moving the machine in its original box (weight KG 44), all manual operations must be carried out in such a way as to avoid and reduce any risk of damage to the operator's back (see paragraph 1.4 – manual movement of machine).



SECTION 1: SAFETY

1.1. General Information

It is advisable that all users of the **MASTER 2800** read all of this booklet carefully before using the machine. This instruction manual provides advice regarding safety in the workplace which is very important in order to avoid any danger to the health of the operator.

There are several plates on the machine which indicate the tension, correct rotating direction of the parts and general warnings; the instructions on these plates must be carefully observed and respected.

Before using the machine you must check very carefully that the shaft has been placed in the correct direction of movement with respect to the cover of the machine. Otherwise the tool might become loose from the fitting while working and will consequently stick out.

If the machine should break down or if it does not work properly, turn it off and do not tamper with it. If it has to be repaired, please contact our assistance centre.

The **MASTER 2800** is a portable electrical contouring machine to be used exclusively when processing and grinding marble and granite.

MARMOELETTROMECCANICA S.r.l. will not be held responsible for damage caused by improper or unreasonable use.



WARNING!!! The **MASTER 2800** works on alternate threephase 48 volts electricity supply, therefore it must not, by any means, be connected directly to the mains electrical supply; it should only be connected to the central conversion unit MEM 3000 which transforms the voltage at an entrance voltage of 48 volts.

Before turning the machine on, it is important to:

- Carefully check that the safety devices are in perfect running order. Never use the machine if the ON/OFF buttons or the speed button do not work perfectly.
- Check that the mobile parts work perfectly, that they are not blocked or that they are not damaged. ***Check that the spindle lock pin is in the correct position of off.***
- Check that all of the components have been mounted correctly and ensure that everything is in perfect working order for the machine.



Furthermore, during use of the **MASTER 2800**, you must:

- Avoid using the machine near flammable liquids or in dangerously explosive environments.
- Prevent other people from standing near the place of operation.
- Avoid wearing wide garments or jewellery which might be caught up in the parts in movement. If you have long hair, it is advisable to wear a suitable hairnet or to tie it up.
- Use suitable blockage devices in order to prevent the piece of material you are working on from moving; use for example the **H50 BI-SUCTION CUPS** which are produced by us. In this way you will be able to work more safely and you have both hands free to work with.
- Ensure that there is adequate light in the workplace.
- Stand in a safe and balanced position.
- Avoid moving or lifting the machine in such a way that you might damage your back; set up your workplace and organise it in such a way as to reduce the need to have to strain your back; use the **WORKING TABLE** equipment (see paragraph 1.4).
- Abide by and always follow the instructions for the changing of the tools which are subject to wear.
- Do not use utensils on the machine to do jobs which this machine is not designed to do.
- Avoid lifting the machine and holding it by the electricity cable which would cause the cable to be unplugged from the mains electricity supply.
- The electricity cable must not come into contact with surfaces which are extremely hot, with oil or sharp edges or corners.
- Use outside or outdoors by attaching the correct type of extension lead
- Turn the machine off before transporting it in order to avoid any accidents
- Take care and concentrate while working avoiding unreasonable behaviour or improper use of the machine.

Finally, it is important to:

- Keep the machine in a dry, safe environment where it must be kept out of the reach of children.
- Make sure you clean the tools very well after use in order to guarantee efficient, safe work and ensure that the tools are cleaned following the specific guidelines for their maintenance.
- Check the electricity cable and the plug periodically and if there should be any damage, contact qualified technicians only for their replacement.
- Check the electricity extension lead of the central conversion unit and change it when it is damaged.



1.2. Regular safety check-up

This machine has been designed and built in accordance with the principle of integration of safety measures with that of technical requirements. This machine can be dangerous if used by incompetent workers or if it is used for jobs that it was not designed for.

Therefore it may:

- be dangerous for the operator;
- cause damage to the machine or any other inconvenience;
- cause the machine to break down.

In order to ensure perfect functioning and safety of the machine, always make sure that the machine is repaired exclusively by qualified personnel and that original spare parts or tools are used to replace old ones. Any spare parts, accessories or tools that are not supplied by the producer of the machine have not been tested or approved by the same. The attachment or use of such products may create technical difficulties to the machine and therefore make it less safe.

1.3. Use of personal protection measures

Even though the **MASTER 2800** has been designed and built very carefully and special attention has been given to ensuring that there is no danger, it is advisable for the operator to wear (DPI) individual protective devices such as : goggles, gloves, protective shoes and earphones if there is any danger of damage to your hearing. These measures are necessary so that the health and safety regulations prescribed by the specific law are observed.



1.4. Manual movement of the machine

By manual load movement, we mean the operations of transport and lifting of a load by one or more operators, including the picking up, setting down, pulling, pushing and moving of one load that might cause back problems.

The use of the **MASTER 2800** entails moving loads especially when putting the machine on the slab at the beginning or when the tool has to be changed.

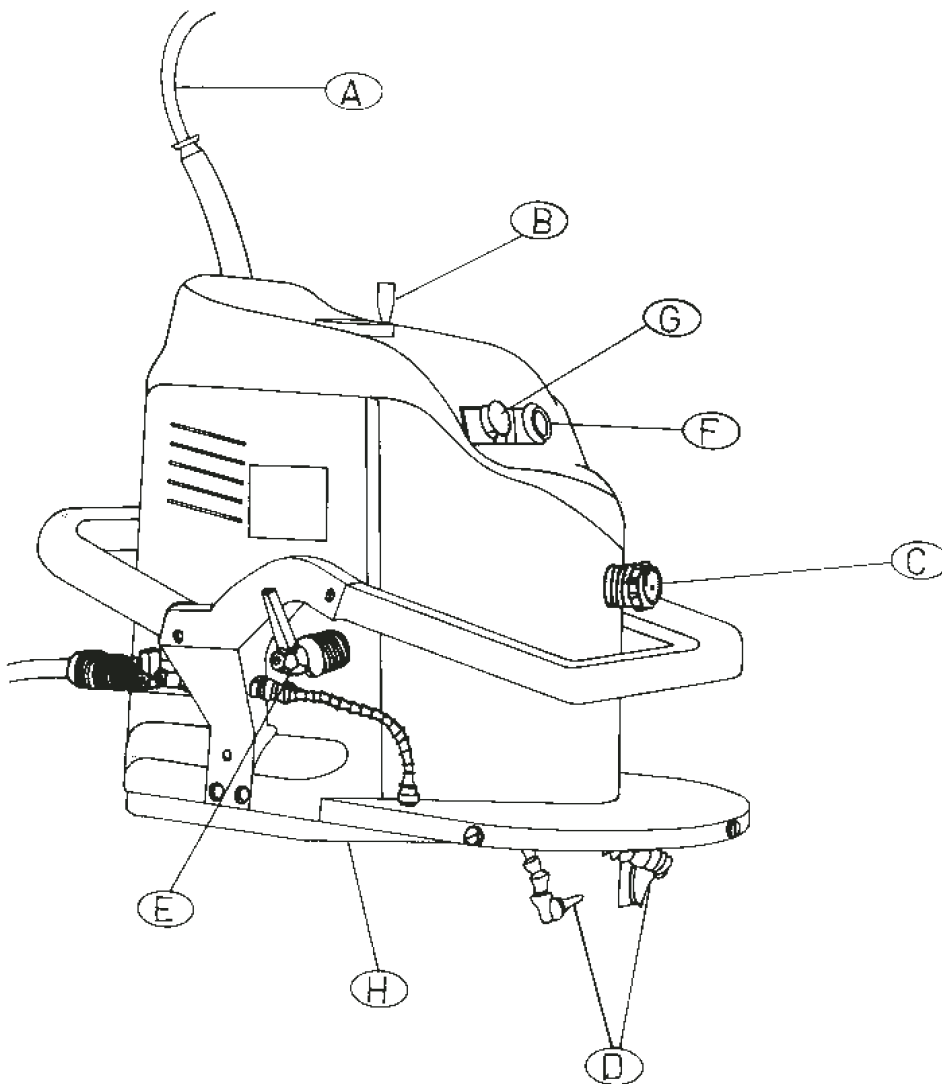
Under these circumstances, it is important to carry out these operations by taking the necessary precautions while moving the machine thus avoiding:

- lifting from the ground or placing above the shoulders (do not put the machine on the ground or on shelves that are too high or too low). In fact it is preferable to move the machine within the area of the shoulder and the knuckles (hand in fist position held along the sides),
- lifting and moving the machine by rotating the bust just once,
- keeping the machine too far from the body while carrying it or moving it,
- placing it on worktops which are too high causing you to arch your back too much,
- lifting it from the ground with a bent back,
- moving the machine by hand for long trips or up stairs,
- moving the machine with only one hand,
- picking the machine up too quickly.

SECTION 2: DESCRIPTION OF THE MACHINE

Your **MASTER 2800** is equipped with the **WATER SYSTEM** which is a new gliding base plate. This revolutionary gliding system is patented by **MARMOELET-TROMECCANICA S.r.l.** and it allows the machine to glide with a rather clever film of water flowing between the slab and the machine. The **WATER SYSTEM PLATE** permits you to work on narrow strips of up to 10 cm. too and at practically no maintenance costs and very quickly too.

! WARNING!!! Make sure that there is water before starting to work with the **MASTER 2800** on the marble or granite slab - this avoids causing any damage to the **WATER SYSTEM** plate and scratching of the surface of the slab.

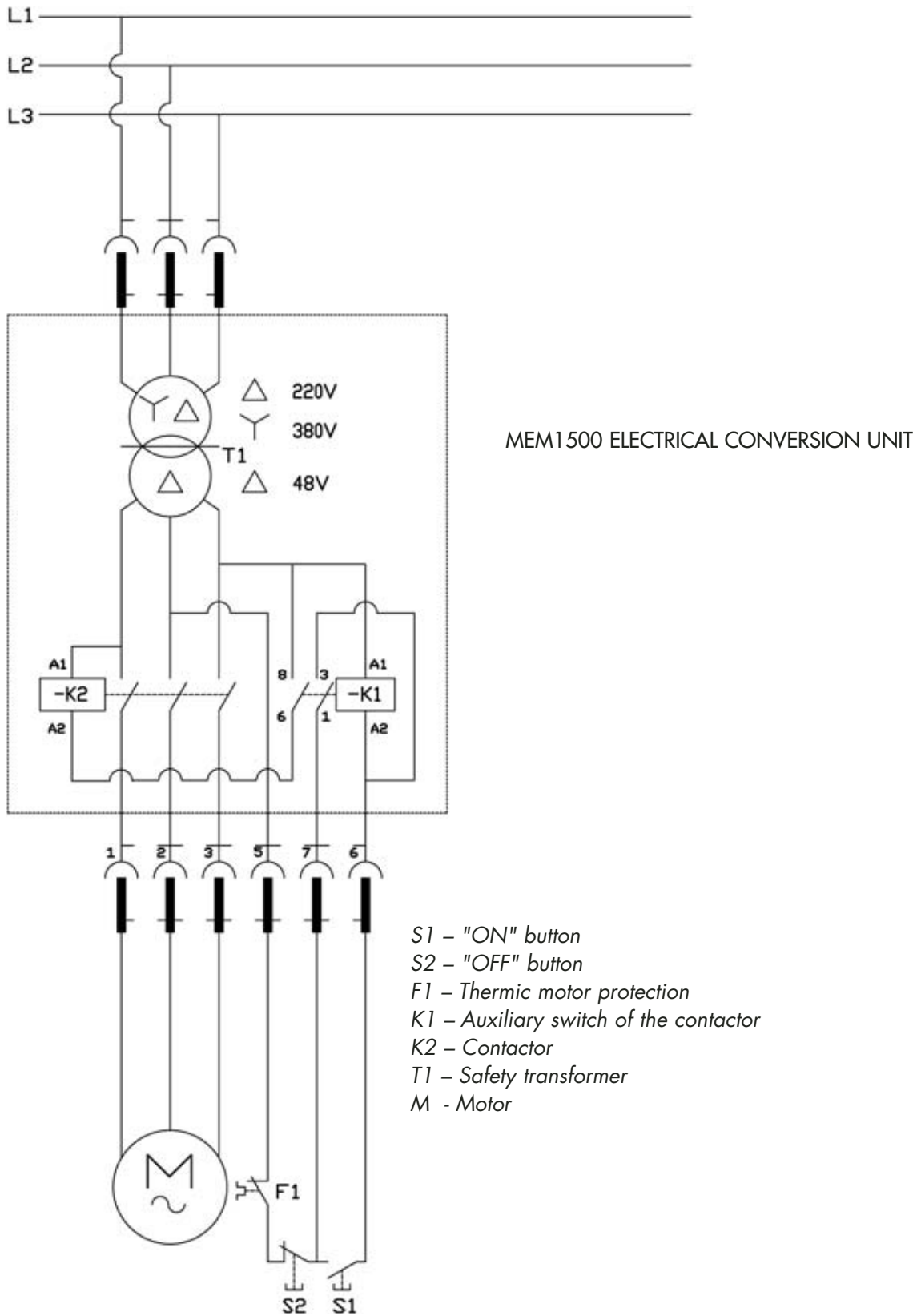


2.1. Detailed description

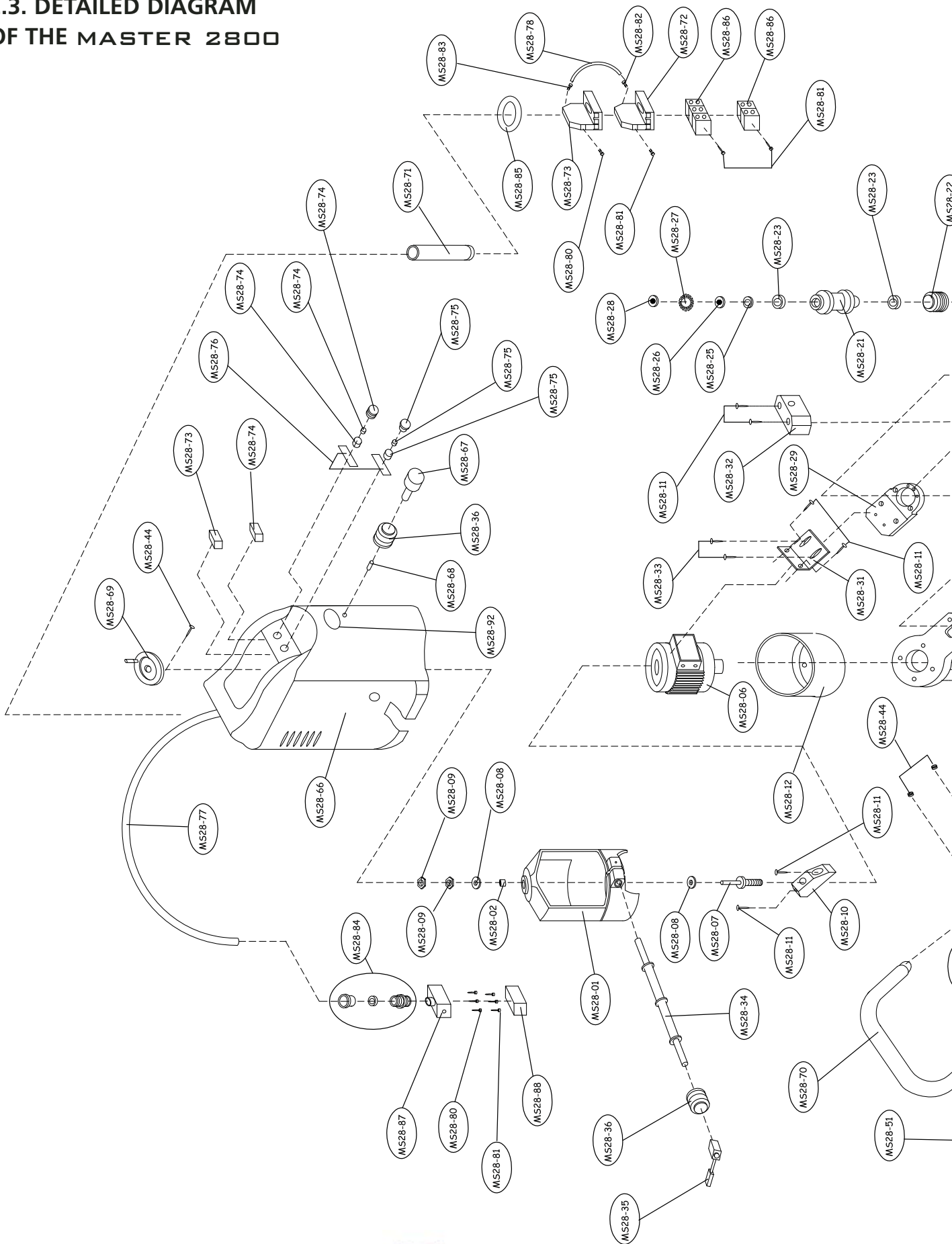
- A. Electrical cable:** the 48 volt current has to travel 6 metres long; the cable must always be connected to the central conversion unit by a special plug.
- B. Adjustment handle for positioning the tool correctly:** release the spring handles so that you can regulate the position of the tool to the slab in function of its thickness
- C. Spindle lock pin:** by a clockwise movement, turn the pin in order to block the spindle and change the wheel. Then, make sure that said pin is released before switching the machine on again.
- D. Water spray system:** the machine is equipped with 4 adjustable water jets and a system for washing the surface which ensures that the bits cool down and that dust does not build up.
- E. Spring handles:** the spring handles, when turned clockwise, block the position of the tool with respect to the slab during operation.
- F. ON button:** this is a special black switch which ensures that the machine cannot be accidentally turned on. This switch is marked with "ON".
- G. Stop button:** red stop switch is marked with "OFF" gives you the possibility to quickly turn off the machine even in an emergency.
- H. WATER SYSTEM:** this gliding base plate, thanks to a rather clever film of water flowing between the slab and the machine, allows the machine to glide on the surface of a slab.

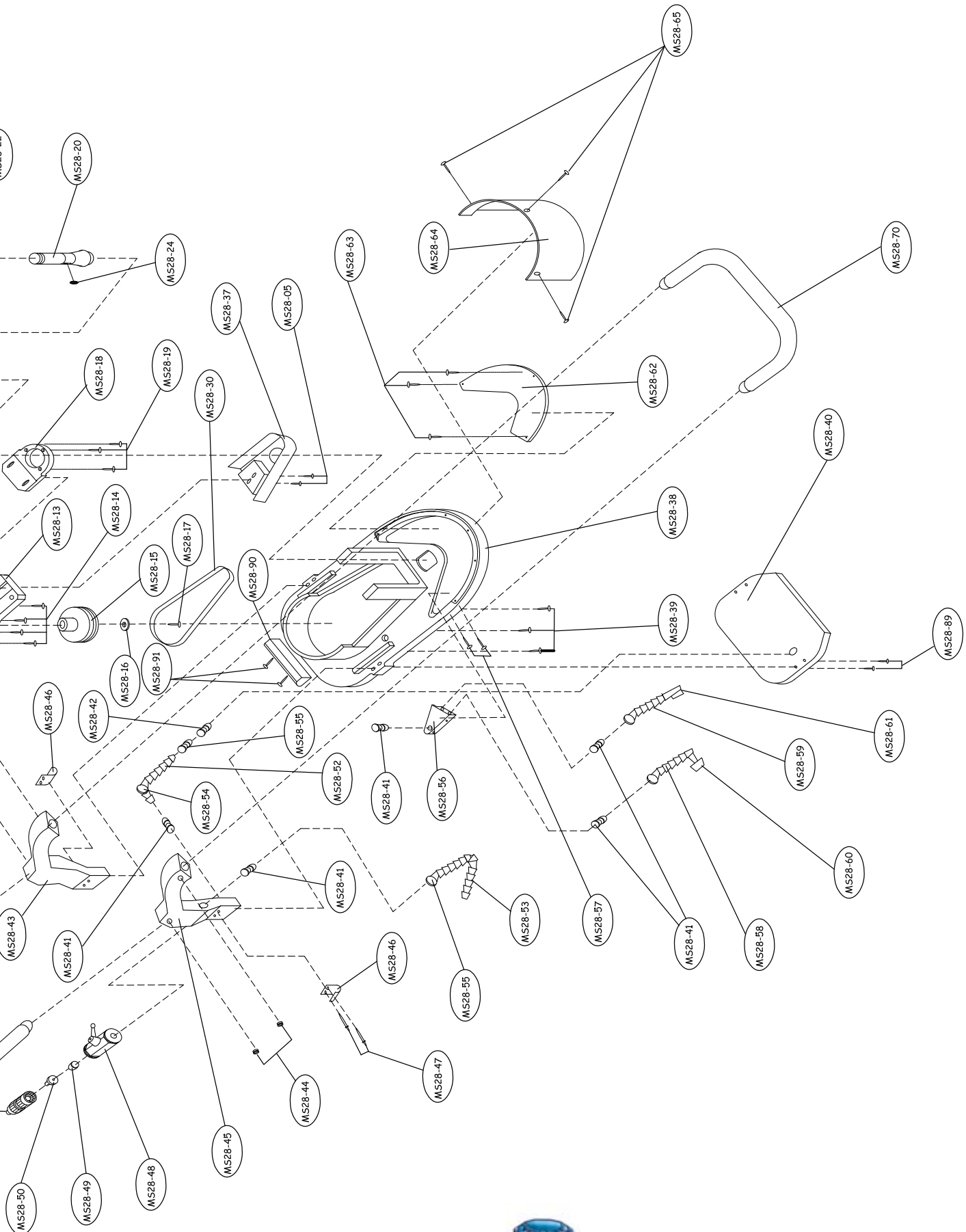


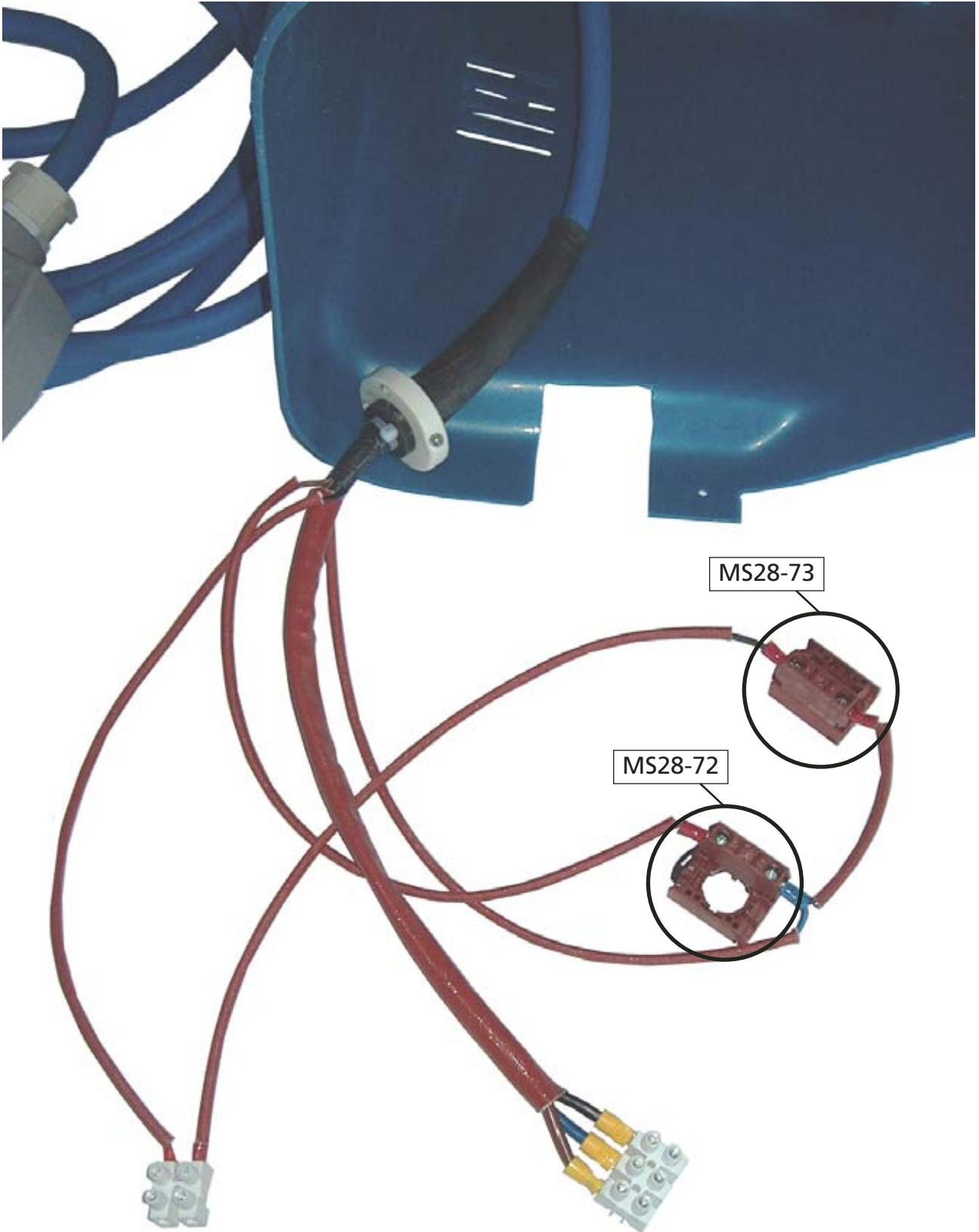
2.2. ELECTRICAL DIAGRAM



2.3. DETAILED DIAGRAM OF THE MASTER 2800









MASTER 2800 - List of codes on detailed diagrams

PROG.VE	Qty.	DESCRIPTION	CODE
MS28-01	1	MOTOR MOVEMENT BELL	MS28CAMPANASC
MS28-02	1	ROLLER BEARING	MS28CUSCINRUL
MS28-03	1	M10 INOX BOLT NUT	DADOM10INOX
MS28-04	1	BRACKET FOR BOLT NUT BLOCKAGE	MS28STAFFABLO
MS28-05	1	SCREWS TCCEI M4X8	VITETCCE48
MS28-06	1	ELECTRIC MOTOR	MOTOREHP14
MS28-07	1	MOTOR COURSE REGULATING PIN	MS28PERNOREGO
MS28-08	2	SPINDLE BLOCKING PIN	MS28RONDBLOCC
MS28-09	2	SPINDLE BLOCKING NUT	MS28DADOBLOCC
MS28-10	1	MOTOR PUSHING PLUG	MS28TASSPINGI
MS28-11	8	SCRES TCCEI M6X16	VITETCCE616
MS28-12	1	MOTOR SUPPORT BELL	MS28CAMPANSUP
MS28-13	1	MOTOR SUPPORT BRACKET	MS28STAFFAMOT
MS28-14	4	SCREWS TCCEI M6X20	VITETCCE620
MS28-15	1	MOTOR PULLEY	MS28PULEGMOTO
MS28-16	1	WASHER FOR MOTOR PULLEY	MS28RONDMOTOR
MS28-17	1	SCREWS TPSIC M4X20	VITETPS420
MS28-18	1	SPINDLE SUPPORT LOWER BRACKET	MS28STAFFASUP
MS28-19	6	SCREWS TCCEI M5X16	VITETCCE516
MS28-20	1	SPINDLE	MANDRINOMS
MS28-21	1	SPINDLE BEARING JACK	BOCLAPRMANMS
MS28-22	1	PULLEY PIPE	PULEGGIACONMS
MS28-23	2	BEARING 62052RS	CUSCINETTO 03
MS28-24	1	TAB INC.6X6X25	LINGUETTA
MS28-25	1	SPRING WASHER	MOLLATAZZA
MS28-26	1	METAL BLOCKING RING KM5	GHIERABLOC
MS28-27	1	SAFETY WASHER MB5	RONDELLA MB5
MS28-28	1	SELF-BLOCKING METAL RING KMA	GHIERABLOC1
MS28-29	1	SPINDLE SUPPORT UPPER BRACKET	MS28STAFFAMAN
MS28-30	1	TRANSMISSION BELT	CINGHIAJ8PANT
MS28-31	1	SUPPORT BRACKET	MS28SQUADRETT
MS28-32	1	SPINDLE BLOCKING SUPPORT	MS28SUPPBLOCC
MS28-33	2	SCREWS TCCEI M5X35	VITETCCE535
MS28-34	1	MOTOR SUPPORT BLOCK AXIS	MS28ASSEBLOCC
MS28-35	1	SPRING HANDLE M8F	MANIGLIAM8E
MS28-36	2	BELLOWS	SOFFIETTO12
MS28-37	1	BELT SAFETY PROTECTION	MS28MS35PROT
MS28-38	1	BASE PLATE	MS28PIASTRABA
MS28-39	4	SCREWS TCCEI M5X30	VITETCCE530
MS28-40	1	WATER SYSTEM PLATE	MS28PIASTRAWS
MS28-41	6	THREADED CONNECTION 1/4 M LOCLINE	ATTACFIP69/22
MS28-42	1	EXTENSION 1/4 M-F	PROLUNG35MM
MS28-43	1	RIGHT HANDLE SUPPORT	MS28SUPPMANIC
MS28-44	4	CONIC SCREW TP M8X8 TUBE	GRANOPPIAT88



PROG.VE	Qty.	DESCRIPTION	CODE
MS28-45	1	LEFT HANDLE SUPPORT	MS28SUPPMANSX
MS28-46	2	STEEL COMPANION PLATE	RISCONTROACC4
MS28-47	7	SCREWS TB M4X8	VITEBUTTON48
MS28-48	1	1/4 MM MIGNON TAP	VALVOLA1/4MM
MS28-49	1	THREADED REDUCTION 1/2-1/4	RIDUZFILETTA
MS28-50	1	ADAPTOR FOR TAP	ADATTATO6683
MS28-51	1	CONNECTION FOR TUBES	RACCORDTUB215
MS28-52	1	YIELD TUBE FOR WS	TUBOLUBIP698
MS28-53	1	YIELD TUBE FOR LUBRIFICATION	TUBOLUBIP6911
MS28-54	1	LOCLINE CURVE 1/4 MF	CURVETTIP6919
MS28-55	2	LOCLINE 1/4 SLEEVE	MANICOTT49429
MS28-56	1	LOCLINE SUPPORT	MS28SUPLOCLA
MS28-57	2	SCREWS TCCEI M4X20	VITETCCE420
MS28-58	1	CM14 LUBRICATION TUBE	TUBOLUBIP6911
MS28-59	1	CM7 LUBRICATION TUBE	TUBOLUBIP699
MS28-60	1	COMB SPRAY SPATULA NOZZLE	UGELLO49449WS
MS28-61	1	COMB SPRAY CURVE	CURVPETIP6916
MS28-62	1	LEXAN COVER	MS28COPERTLEX
MS28-63	3	SCREWS TPS+M4X10	VITETPS410
MS28-64	1	WATER SPLASH COVER	MASCHERA IP693
MS28-65	3	SCREWS FOR SPLASH COVER	POMELNEIP69/5
MS28-66	1	FIBREGLASS MOTOR HOUSING	MS28CARENMOTO
MS28-67	1	SPINDLE BLOCKING PIN	PERNOBLOCMAND
MS28-68	1	INOX SPRING	MOLLAINOXLS
MS28-69	1	TOOL POSITIONING HAND WHEEL	GAMMVPR80MR
MS28-70	2	FRONT/BACK HANDLE	GTTMANANPO102
MS28-71	1	BLACK FAIRLEAD	PASSACAVALO
MS28-72	1	BLOCK FOR N.A. BUTTON	CONTATTO1NA
MS28-73	1	BLOCK FOR N.C. BUTTON	CONTATTO1NC
MS28-74	1	START BUTTON	PULSANTE73
MS28-75	1	STOP BUTTON	PULSANTE74
MS28-76	2	ON/OFF PLATE	TARGHETTANEU
MS28-77	MT6	EXTRA-FLEXIBLE CABLE	CAVOFLES153AR
MS28-78	CM170	SILICON ø 4 TUBE	TUBSILICON4
MS28-79	CM10	ELECTRIC CABLE 1,5MM	CAVOFLES115BL
MS28-80	6	TAG WITH YELLOW DOT	CAPICPUNT60GL
MS28-81	4	TAG WITH RED DOT	CAPICPUNT15RO
MS28-82	3	TAG WITH RED ROD	CAPICFORCM4RO
MS28-83	1	TAG WITH BLUE ROD	CAPICFORCM4BL
MS28-84	1	CABLE PRESS PG 21	PRESSACAVALO
MS28-85	1	METAL STRAP	FASCETTAI2032
MA28-86	1	SCREW-ON TERMINAL BOARD	MORSETTIEP6
MS28-87	1	COVER	CUSTODIAMOB
MS28-88	1	PLUG	FRUTTOSPINA
MS28-89	4	SCREWS TCCEI M6 X 35	VITETCCE635

PROG.VE	Qty.	DESCRIPTION	CODE
MS28-90	1	UPSETTING SUPPORT FOR MASTER 2800	SUPPORTORI28
MS28-91	2	TCCEI SCREW M5X25	VITETCCE525
MS28-92	1	ROTATION SENSE INDICATOR	TALLSROT
MS28-93	1	"BASSO-DOWN" STICKER	ADESIVOBASSO
MS28-94	1	"ALTO-UP" STICKER	ADESIVOALTO
MS28-95	1	"MASTER 2800" STICKER	ADESIVO28

SECTION 3: ISTRUCTIONS FOR SETTING UP MACHINE

3.1. Electricity supply

Under no circumstances should the **MASTER 2800** be connected directly to the electricity supply. You must connect it to the very low tension electrical conversion unit **MEM 1500** (SELV - Safety extra low voltage) manufactured by us.

Before connecting the unit to the electricity supply, please ensure that the rating on the plate affixed to the machine corresponds to the rating of the mains power supply and that the electrical charge of the socket, which should be the interlock type, (CEI 23-12), is suitable for the power of the machine.

ANY PROBLEMS ARISING FROM AN INCORRECT VOLTAGE IS NOT COVERED BY OUR GUARANTEE.

The electrical connection should be made exclusively with cables, plugs and sockets that comply with the EC Norms and in accordance with the EC directives of low tension 73/23 and subsequent modifications; in particular it is necessary to use cables with no interruptions and the cable section of the plug should be adaptable to the absorption power of the machine.

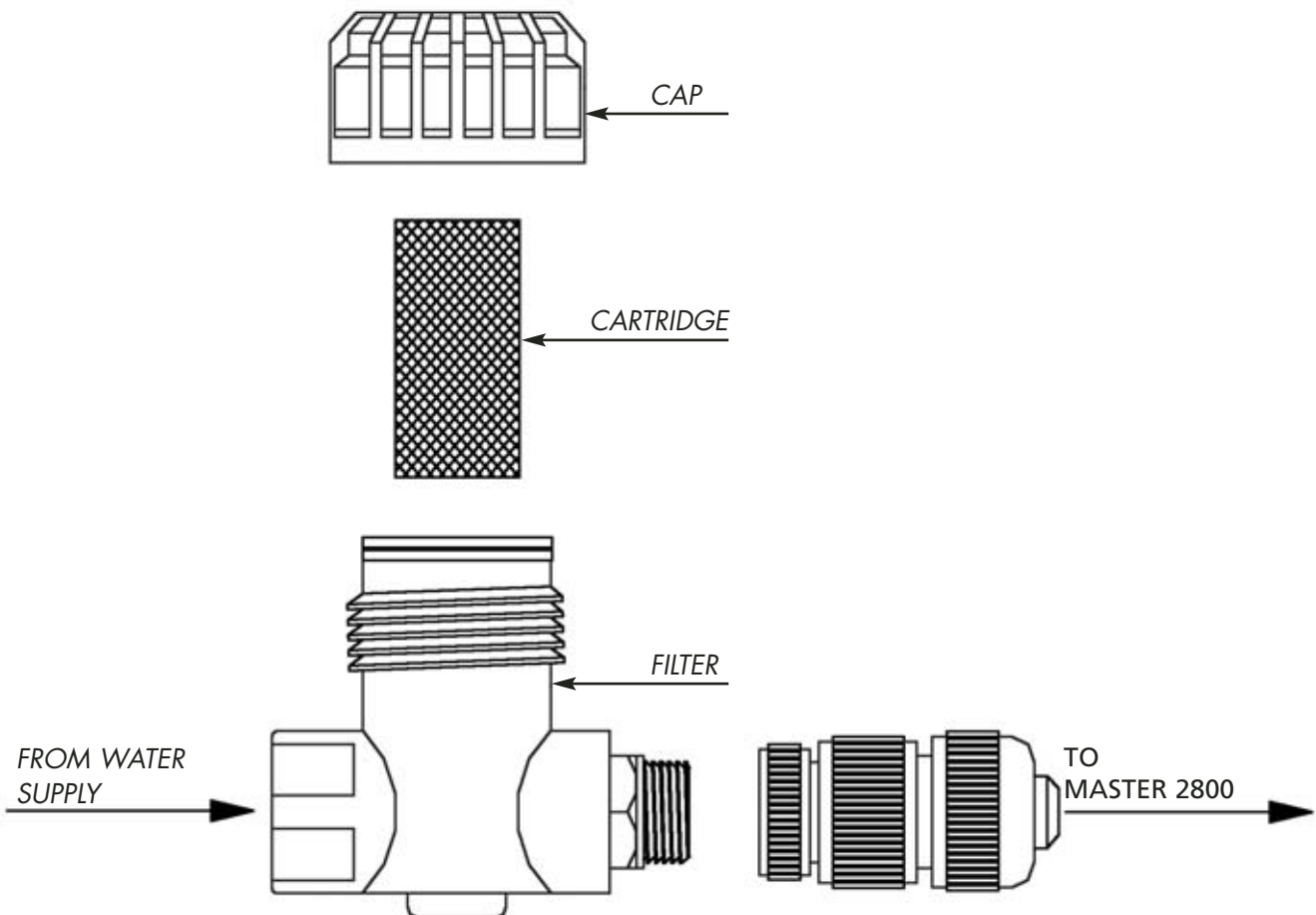
It is forbidden to use multiple adaptors and plugs; **MARMOELETTROMECCANICA S.r.l. CAN NOT BE CONSIDERED RESPONSIBLE** for incorrect installation that might cause damage to people and things.

Our clients are reminded also of the necessity to verify, before using the machine, the rotating direction of the spindle of the **MASTER 2800**; the rotating direction should correspond to the indicator marked on the cover of the machine. Otherwise it is necessary to exchange two of the three wires in the power supply plug.

3.2. Water supply

In order to avoid that the holes of the WATER SYSTEM plate get clogged up with foreign bodies present in the water supply of the **MASTER 2800**, we advise you to use the 50 MESH _ MF. filter. The filter should be placed between the water supply and the water tap of the **MASTER 2800**.

Mesh 1/2 MF Filter 50



SECTION 4: USE AND MAINTENANCE

4.1. Use

Before starting to work with your machine, observe the following instructions carefully:

- connect cable (A) to electrical conversion unit, after making sure that the data on the plate correspond to that of your electrical supply;
- check position of multi-lubrication system nozzles (D) making sure that water pressure is at least 3 ATM.
- Carefully clean the marble slab surface and the gliding plate of the **MASTER 2800** in order to avoid any damage caused by foreign bodies;
- position the wheel correctly according to the thickness of the slab using the adjustment handle (B); to do so make sure that the spring-handles (E) are unscrewed;
- in order to change the wheels, screw lock spindle pin (C), turning clockwise; before starting to work make sure it is off;
- to avoid dangerous overheating we recommend that you unwind the cable from end to end;
- do not leave the machine plugged in while not in operation, switch it off at the mains;
- ensure that the suction grates used for cooling do not get clogged up.

4.2. Maintenance

- Before cleaning or carrying out maintenance, disconnect the machine from the electricity mains.
- It is advisable to grease the spring handles periodically; make sure they are blocked during operation.
- To ensure the correct functioning of **MESH 1/2 MF FILTER 50**, it is advisable to clean the filter cartridge periodically. To do this, unscrew the cap to remove the cartridge; clean it with water under pressure or compressed air.
- In order to avoid that the small holes of the **WATER SYSTEM** get clogged up, use an air pistol periodically to blow air on them.

4.3. Environmental protection warnings

When using your machine, It is important to follow current legislation when disposing of waste by products in order to respect and protect the environment.

Make sure you send any waste packaging, the machine itself at the end of its life cycle (scrap) and the worn out tools to an ecological recycling centre, via a waste disposal group which is as homogenous as possible to the original type of material.

Furthermore, we would advise you to recycle or treat the used water before disposing of it in waterways or in sewage disposal units.

SECTION 5: AERIAL NOISE AND VIBRATIONS OF THE MACHINE

5.1 Aerial noise

The **MASTER 2800** machine, made to rectify, shaping and polishing stone materials, has made fonometric measurements by the production premises, in order to ascertain noise values. Measurements were made with a fonometer of claim 1 (norm IEC 651 group 1) put at 1,5 m.

The pondered level of acoustic pressure A made by the machine motor is $Leq=70,4$ dB (A).

5.2 Vibrations

The **MASTER 2800** machine, after the valuation tests for the HAV vibrations according to D. Law. 187/05, showed not to exceed the following limits established by the norms:

Daily levels and limit exposure to vibration transmitted to the hand-arm system and to all body.

Vibrations transmitted to the hand-arm system

Daily exposure level
 $A(8)= 2,5 \text{ m/s}^2$

Daily exposure limit value
 $A(8)= 5 \text{ m/s}^2$

Vibrations trasmitted to all body

Daily exposure level
 $A(8)= 0,5 \text{ m/s}^2$

Daily exposure limit value
 $A(8)= 1,15 \text{ m/s}^2$

SECTION 6: USE OF TOOLS

6.1. INSTRUCTION FOR USE OF TOOLS ON THE MASTER 2800 – FROM GRINDING TOOLS TO POLISHING TOOLS ON TOROIDAL PROFILES OF GRANITE



WARNING!!! Before starting to work with your **MASTER 2800** please check that the rotating direction of the spindle corresponds to the indications on the machine; if otherwise, please invert two of the three wires in the plug.

Furthermore, the operator must not change the position of the spindle between one sequence and the next once the spindle has been positioned correctly for the POS. 1 tool; this would deform the **LONGLIFE** wheels (polishing wheels).

If this is done, **MARMOELETTRROMECCANICA**, will not cover any damages. Finally, we would like to remind you that the **LONGLIFE** polishing wheels need to be run in for a short period; for this it is advisable to use a metre of discarde material before starting.



WARNING!!! IT IS FORBIDDEN to use dirty water with the **LONGLIFE** tools. Before starting work, check that the water supply has a filter which will keep the water clean.

POSITION 1 - ZENITH/CROMOLINE/SALDOBRASA

BLUE Diamond grinding wheel with **ROTATING TOUCHER**:

Move the machine towards the slab and press against it slightly. Move the machine a few centimetres both to the left and then to the right until the wheel itself idles: this means that the rotating toucher has touched the slab and at that stage, the first phase has been completed.

POSITION 2 - ZENITH/CROMOLINE

GOLD Diamond grinding wheel with **ROTATING TOUCHER**:

Continue by using the same care as for the Position number 1; this phase of operation is terminated when the rotating toucher touches the slab and the wheel is idle; after using Position 2 you will be able to see that the waves or irregularities left over from the Position 1 have disappeared and that the profile is homogenous.

POSITION 3 - **BIPOWER**

The Pos. 3 **BIPOWER** wheel will both rectify the profile and prepare it for the polishing phase. It is used by moving it from left to right and viceversa a minimum of 2/6 times, depending on the thickness of the slab and on how detailed the profile shape is. We recommend that you make quick, constant passes giving a little push but

avoiding any breaks in the operation so that there are no undulations.

N.B.: When Pos. 3 Bipower has already been used to complete quite a number of metres, it will be necessary to do a few extra passes in order to obtain a perfect profile.

POSITION 4 (4 extra) - **LONGLIFE**

Pass this wheel from minimum 4 passes to a maximum of 6 passes from left to right and viceversa pushing a little. Avoid any breaks during the operation in order to avoid any undulations.

POSITION 5 (5 extra) - **LONGLIFE**

Pass this wheel from a minimum of 6 passes to a maximum of 8 passes from left to right and viceversa pushing a little.

POSITION 6 (6 extra) - **LONGLIFE**

Pass this wheel from a minimum of 8 passes to a maximum of 12 passes from left to right and viceversa pushing a little.

NB: THE NUMBER OF PASSES THAT ARE REQUIRED MAY DEPEND ON THE MATERIAL, THE CLIENT'S REQUIREMENTS AND THE STATE OF WEAR OF THE WHEEL ITSELF.

POLYPASTE BOTTLE

POLYPASTE is a highly-concentrated solution (type of wax) of chemical polishing components, which easily remove the opaque layer left by atmospheric agents. It is particularly indicated to be used after the traditional polishing systems. Put **POLYPASTE** on a wool cloth, polish the slab till complete drying of the paste.



The **ZENITH/CROMOLINE POS.1 BLUE** wheels with **ROTATING TOUCHER** can be transformed into the following different profiles by simply changing the **ROTATING TOUCHER** (*n.b.: pos. 2 cannot be transformed*):



! **WARNING!!!** Such transformations can be made only on the **POSITION 1** grinding wheels, by simply ordering the relative **ROTATING TOUCHER** and using the code that you will find in the price list; if you decide to do this, you must purchase the wheels of the successive grain in order to proceed to the finishing stages and you must start from position 2

6.2. INSTRUCTIONS FOR USE OF THE WHEELS – GRINDING TO POLISHING STAGES OF TOROIDAL PROFILES ON MARBLE – WITH THE MASTER 2800

! **WARNING!!!** Before starting to work with your **MASTER 2800** please check that the rotating direction of the spindle corresponds to the indications on the machine; if otherwise, please invert two of the three wires in the plug.

Furthermore, the operator must not change the position of the spindle between one sequence and the next once the spindle has been positioned correctly for the **POS. 1** tool; this would deform the **LONGLIFE** wheels (polishing wheels).

If this is done, **MARMOELETROMECCANICA**, will not cover any damages. Finally, we would like to remind you that the **LONGLIFE** polishing wheels need to be run in for a short period; for this it is advisable to use a metre of waste material to do this.

! **WARNING!!!** IT IS FORBIDDEN to use dirty water with the **LONGLIFE** tools. Before starting work, check that the water supply has a filter which will keep the water clean.

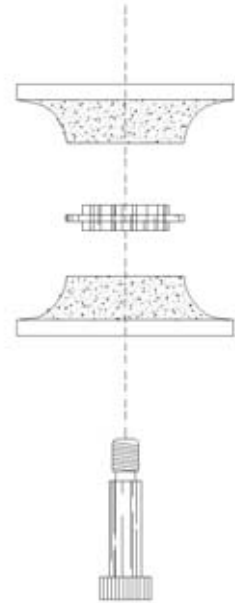
POSITION 1 - ELETTROLYTIC

GREEN Diamond grinding wheel with **ROTATING TOUCHER**:

Move the machine towards the slab and press against it slightly. Move the machine a few centimetres both to the left and then to the right until the wheel itself idles: this means that the rotating toucher has touched the slab and at that stage, the first phase has been completed.

POSITION 2 - ELETTROLYTIC BRONZE Diamond grinding wheel with ROTATING TOUCHER

Continue at 6000 rpm by using the same care as for the Position number 1; this phase of operation is terminated when the rotating toucher touches the slab and the wheel is idle; after using Position 2 you will be able to see that the waves or irregularities left over from the Position 1 have disappeared and that the profile is homogenous.



POSITION 3 - BIPOWER

The Pos. 3 **BIPOWER** wheel will both rectify the profile and prepare it for the polishing phase. It is used by moving it from left to right and viceversa a minimum of 2/6 times, depending on the thickness of the slab and on how detailed the profile shape is. We recommend that you make quick, constant passes giving a little push but avoiding any breaks in the operation so that there are no ondulations.

N.B.: When Pos. 3 **BIPOWER** has already been used to complete quite a number of metres, it will be necessary to do a few extra passes in order to obtain a perfect profile.

POSITION 4 (4 extra) - LONGLIFE

Pass this wheel from minimum 4 passes to a maximum of 6 passes from left to right and viceversa pushing a little. Avoid any breaks during the operation in order to avoid any ondulations.

POSITION 5 (5 extra) - LONGLIFE

Pass this wheel from a minimum of 6 passes to a maximum of 8 passes from left to right and viceversa pushing a little.

POSITION 6 (6 extra) - LONGLIFE

Pass this wheel from a minimum of 8 passes to a maximum of 12 passes from left to right and viceversa pushing a little.

NOTA BENE: THE NUMBER OF PASSES THAT ARE REQUIRED MAY DEPEND ON THE MATERIAL, THE CLIENT'S REQUIREMENTS AND THE STATE OF WEAR OF THE WHEEL ITSELF.

POLYPASTE BOTTLE

POLYPASTE is a highly-concentrated solution (type of wax) of chemical polishing components, which easily remove the opaque layer left by atmospheric agents. It is particularly indicated to be used after the traditional polishing systems. Put **POLYPASTE** on a wool cloth, polish the slab till complete drying of the paste.

SECTION 7: SAFETY

OIL WATER SYSTEM

1. IDENTIFICATION

BRAND NAME:	OIL WATER SYSTEM
FUNCTION:	PROTECTION FOR WATER SYSTEM PLATE
SUPPLIER:	MARMOELETTROMECCANICA S.r.l. Via Flaminia Km 41,400 00068 Rignano Flaminio (Roma) - ITALY Tel. +39 0761-50.51 - Fax +39 0761-50.83.88

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances of dangerous content, as per DM dated 28.4.97

Aqueous emulsion of polydimethylsiloxane with aminoalchilic groups

Non classified EEC product

SYMBOL: Xi Irritant

R-phrases R36 Irritating to eyes

Concentration in product < 10% (Non scheduled symbol, non scheduled R-phrases)

3. IDENTIFICATION OF DANGER

The following information refers to this product as it stands. Observe usual standard norms of good practice in industry to ensure safe use of product.

4. FIRST AID MEASURES

SKIN CONTACT: wash with soap and water.

EYE CONTACT: wash immediately with running water for at least 15 minutes. If irritation should persist, consult your doctor.



IF INGESTED: if the harmed party is conscious, make them vomit. Consult a doctor immediately.

IF INHALED: the product does not emit irritating or harmful vapours if used correctly.

5. FIREPROOFING MEASURES

DANGER OF FIRE: the product is not flammable. In case of fire, cool down the containers exposed to it.

EXTINGUISHING AGENTS: CO₂, foam, atomised/spray water.

DO NOT USE: -----

PROTECTIVE EQUIPMENT: no specific protective measures required.

COMBUSTION PRODUCTS: CO_x, SiO₂.

6. MEASURES TO BE TAKEN IN CASE OF INCIDENTAL RELEASE

INDIVIDUAL PRECAUTIONS: no specific precautions required.

ENVIRONMENTAL PRECAUTIONS: avoid discharge into waterways and drains.

CLEANING METHODS: absorb by using cloths, sand, fossil meal. Wash with abundant water.

7. MANIPULATION AND STOCKING

MANIPULATION: while pouring avoid any bubbling which might cause incidental sprays/spillage.

STOCKING: keep in hermetically sealed containers. Protect from frost



8. EXPOSURE CONTROL/INDIVIDUAL PROTECTION

PRECAUTIONS:	none in particular.
RESPIRATORY PROTECTION:	not necessary.
EYE PROTECTION:	use protective goggles while pouring.
SKIN PROTECTION:	use normal working attire.
HAND PROTECTION:	use rubber or PVC gloves.

9. PHYSICOCHEMICAL CHARACTERISTICS

APPEARANCE AT 20 °C:	milk white liquid
SMELL:	odourless
pH:	8
pH sol. 1%:	7.5
BOILING POINT:	100° C
IGNITION POINT:	fireproof
AUTO IGNITION:	-----
EXPLOSIVE PROPERTIES:	non-explosive
VAPOUR PRESSURE:	not available
DENSITY AT 20° C:	1 Kg/dm ³
WATER SOLUBLE PROPERTIES:	complete
FAT SOLUBLE PROPERTIES:	insoluble
VAPOUR DENSITY:	not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	do not expose to temperatures lower than 0° C. for prolonged periods of time.
SUBSTANCES TO AVOID:	strong acids, strong oxidants.
PRODUCTS OF DANGEROUS DECOMPOSITION	measurements carried out at temperatures higher than 150° C show that small quantities of formaldehyde separate themselves via incomplete oxidating decomposition.



11. TOXICOLOGY INFORMATION

EFFECTS ON MAN:	none we are aware of.
EFFECT ON EYES:	may cause irritation.
EFFECT ON SKIN:	if contact is repeated and prolonged, it may cause irritation to particularly hazardous subjects.
EFFECT IF INGESTED:	practically non-toxic LD 50 > 5000 mg/kg.
EXPOSURE PATHWAYS:	cutaneous, ingestion.

12. ECOLOGICAL INFORMATION

Use according to good practice; avoid dispersing the product in the environment, see points 3, 6 and 13.

13. WASTE DISPOSAL CONSIDERATIONS

Dispose of any excesses, waste and empty containers according to all relevant local and national regulations.

14. REGULATION INFORMATION

LABELLING AS PER DM 28.4.97

SYMBOL: not required.

R-phrases: not required.

S-phrases not required.

DANGEROUS COMPONENTS: -----

15. OTHER INFORMATION

Product to be used exclusively for professional purposes. This information should be made readily available to all workers who have to use this product for professional purposes.

*The information and recommendations outlined here are based on the knowledge to date. They refer exclusively to the product in question and they do not constitute any form of guarantee of particular quality. The user must ensure suitability and completeness of such information in relation to the specific use that he must make of it. **This chart substitutes all previous editions.***

POLYPASTE

1. IDENTIFICATION

BRAND NAME:	POLYPASTE
FUNCTION:	CERA LUCIDANTE PER MARMI E GRANITO
SUPPLIER:	MARMOELETTROMECCANICA S.r.l. Via Flaminia Km 41,400 00068 Rignano Flaminio (Roma) - ITALY Tel. +39 0761-50.51 - Fax +39 0761-50.83.88

2. COMPOSITION/INFORMATION ON INGREDIENTS

Natural waxes

Solvents



3. IDENTIFICATION OF DANGER

The product is flammable if placed close to a source of ignition heat.

4. FIRST AID MEASURES

SKIN CONTACT:	wash with abundant soap and water.
EYE CONTACT:	wash immediately with running water for at least 10 minutes and consult your doctor.
IF INGESTED:	visit the doctor and show him the safety card
IF INHALED:	the product does not emit irritating or harmful vapours if used correctly.

5. FIREPROOFING MEASURES

This product may generate inflammable mixtures or burn only if heated to a temperature that is equal to or higher than inflammability.

RECOMMENDED EXTINGUISHING AGENTS:	water, foam, chemical powders depending on the materials involved in the fire. Spray the fire with water.
FORBIDDEN EXTINGUISHING AGENTS:	none in particular
COMBUSTION RISK:	avoid inhaling the fumes
PROTECTIVE EQUIPMENT:	use equipment to protect respiratory tract

6. MEASURES TO BE TAKEN IN CASE OF INCIDENTAL RELEASE

INDIVIDUAL PRECAUTIONS:	no specific precautions required.
ENVIRONMENTAL PRECAUTIONS:	no specific precautions required.
CLEANING METHODS:	no specific precautions required.

7. HANDLING AND STOCKING

HANDLING:	avoid skin contact. While working do not eat or drink.
STOCKING:	keep containers well sealed, store in well aired environment

8. EXPOSURE CONTROL/INDIVIDUAL PROTECTION

PRECAUTIONARY MEASURES:	work in well-aired environment or where there is an adequate system of ventilation.
RESPIRATORY PROTECTION:	no particular precaution necessary when used in a normal way.
EYE PROTECTION:	use protective goggles when product may be close to eyes.
SKIN PROTECTION:	use normal working attire.
HAND PROTECTION:	use protective gloves.

9. PHYSICOCHEMICAL CHARACTERISTICS

APPEARANCE:	white and/or black solid
SMELL:	fragrant
IGNITION POINT:	approx. 45° C
AUTO IGNITION:	> 200° C
DENSITY AT 20° C:	1.2
WATER SOLUBLE PROPERTIES:	insoluble

10. STABILITY AND REACTIVITY

CONDITONS TO AVOID:	this product is stable when used under normal circumstances
SUBSTANCES TO AVOID:	none in particular

11. TOXICOLOGY INFORMATION

EFFECT ON EYES:	may cause irritation if it comes into contact with the eyes.
EFFECT ON SKIN:	if contact is repeated and prolonged, it may cause irritation to the skin.
EFFECT IF INHALED:	high concentration of vapour may cause headaches.
EXPOSURE PATHWAYS:	inhalatory and cutaneous.

12. ECOLOGICAL INFORMATION

Use according to good practice; avoid dispersing the product in the environment.

13. WASTE DISPOSAL CONSIDERATIONS

Dispose of any excesses, waste and empty containers according to all relevant local and national regulations.

14. TRANSPORT INFORMATION

Road and ferry transport (adr/rid): class: 3
 Classification code: f1
 Onu adr_number: 1299
 Adr_packing_group: II°

Sea transport (imdg/imo): 3.2
 Imdg: onu_number: 1299
 Imdg_packing_group: II°

Transport emergency card: 30g35



15. REGULATION INFORMATION

DM 28.1.92 (Classification and labelling)

SYMBOLS:



R-phrases: R 10 Flammable.
R 21 Harmful in contact with skin.
R 22 Harmful if swallowed.

S-phrases: S 15 Keep away from heat.
S 20 When using do not eat or drink.
S 44 If you feel unwell, seek medical advice immediately.

16. OTHER INFORMATION

Product to be used exclusively for professional purposes. This information should be made readily available to all workers who have to use this product for professional purposes.

The information and recommendations outlined here are based on the knowledge to date. They refer exclusively to the product in question and they do not constitute any form of guarantee of particular quality. The user must ensure suitability and completeness of such information in relation to the specific use that he must make of it.

This chart substitutes all previous editions.



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UTENSILI DIAMANTI • DIAMOND TOOLS • OUTILS DIAMANTS • UTENSÍLIOS DIAMANTADOS • DIAMANTWERKZEUGE

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