

SANDBLASTER  
**IDEA PRO D.O.S.**

 **USER AND MAINTENANCE MANUAL**



## 1. DESCRIPTION

**IDEA PRO (DOS)** is a sandblasting unit designed for deinvesting and finishing operations in the Dental, Jewellery and Goldsmith branch.

The main features of the machine are: the ergonomic layout of the working chamber, the high safety of use, and the trouble-free structure of the electrical and mechanical installation. The **IDEA PRO** sandblaster is equipped with useful accessories and ensures a fast, practical and accurate work. The basic version consists of 2 **MODULO DOS** sandblasting tanks, featuring a pressure discharge system, a new system for the stop of the blasting jet, as well as the D.O.S. (**Dry Oxide System**) patented system to dry up abrasive media. The unit can thus operate with **three different abrasive media**, each of one suited for a different application and requiring different pressure levels. Further two sandblasting tanks can be added, **thus enabling the use of five different abrasive media**.

**The sandblasting process originates toxic dust which must not be inhaled; for this reason, it is absolutely forbidden to operate the machine if a proper and functioning suction system has not been previously connected to the sandblaster.**

DENTALFARM ranges also include **PRO-3** and **PRO-3 Shake** suction units, which can be easily connected to any sandblasting machine. Other electric suction systems, also centralized ones, can be used in combination with IDEA sandblasters. For any further info please contact the Technical Service.

## 2. TECHNICAL REFERENCE REGULATIONS AND TEST PROCEDURES

The appliance is mass-manufactured by DENTALFARM in compliance with technical and safety rules in force, as provided for by the Machinery Directive 2006/42 EEC and its amendments or integrations.

Careful inspection and full routine testing are carried out singularly on each machine, which is furtherly tested by an automatic test installation assuring compliance with the fixed limits.

### WASTE DISPOSAL

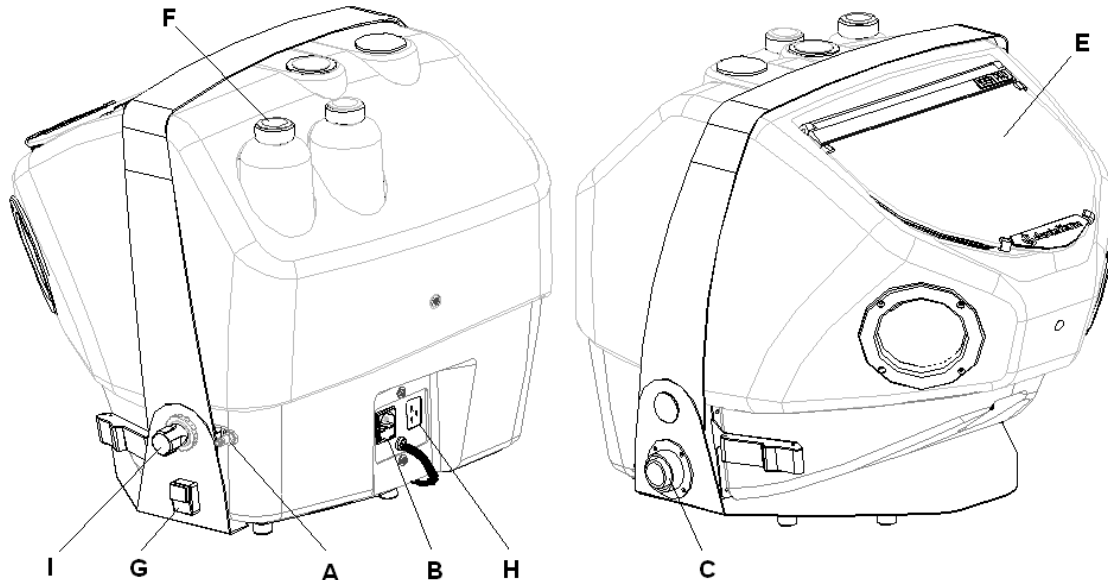
According to International regulations, this unit has been classified as AEE (electric and electronic device, whose correct operation depends on electric currents and electromagnetic fields) and as a consequence, at the end of its lifetime, it can not be treated as normal waste material but it must be disposed separately, complying with Directive 2002/96/EEC.



### 3. INSTALLATION INSTRUCTIONS



Installation of this machine is quite easy but must be carried out paying utmost attention in order to avoid any mistake which may originate problems, inconveniences and even damages during operation.



1. Place the machine on a proper workbench, which must be stable and strong enough to hold the machine safely. Keep a sufficient distance (10/15 cm) on the right side of the machine for pneumatic connections and for granting access to the switch and the pressure gauge.
2. Put the foot control on the ground in a convenient place.
3. Insert the quick clutch fitting on the male intake (A) located on the right side of the unit and connect the pneumatic feeding pipe (polyethylene or rilsan, with diameter  $\varnothing$  8x6) to the pipe-fitting. It is also possible to use a  $\varnothing$  12x6 elastic feeding pipe, by using the fitting supplied with the unit.
4. Connect the electric feeding cable to the pre-fitted electric socket on the unit (B) and plug into an approved 220v AC - 50Hz network socket with ground connection.
5. Connect the suction unit pipe to the intake (C) located on the left side of the unit. Suction can be started automatically by connecting the motor cable to the corresponding socket (H) (eventually contact us to request the proper IEC socket - code NEA042) – **Caution: max absorption 1000W**
6. Lift the window (E) and fill up the hopper (at least 6 kg) with corundum abrasive of the type suited to the metal to be blasted (refer to table below and respect corresponding types, pressure values, and recommended nozzles).

Name	Code	Description
<b>CROMCOR</b>	<b>AP-036</b>	Brown corundum, grainsize 36 (500 $\mu$ ) for chrome-cobalt (may be used with nozzle $\varnothing$ 3,5 – white cap – upon request)
<b>OROCOR</b>	<b>AP-046</b>	White corundum, grainsize 46 (350 $\mu$ ) for non-precious alloys (may be used with standard nozzle $\varnothing$ 3,0)
<b>SUPERCOR</b>	<b>AP-060</b>	White corundum, grainsize 60 (250 $\mu$ ) for precious alloys (may be used with standard nozzle $\varnothing$ 3,0)
<b>OROBLAST</b>	<b>AP-300</b>	Glassbeads, 200 $\mu$ – for satin-finishing of any metal (may be used with standard nozzle $\varnothing$ 3,0)

7. **Microblasting tanks (MODULO DOS) are identical in layout, but can feature different components (calibrated dosing system) and external nozzles which vary according to the abrasive mixture they can dispense;** it is therefore necessary to observe the indications written on the identifying labels. Should you need to use an abrasive compound of different grain, it is possible to request the needed components and to replace them.


We remind you of the possibility to install a third and a fourth tank on this machine, but this operation needs a modification of the rear panel (request the correct configuration).

8. To start working: unscrew the upper caps of the tanks (F), verify the conditions of use on the labels and, by means of the funnel, pour the compound into the tank, so that the level does not exceed 2/3 of the total volume; then close the tank.

**Strictly observe the following parameters, based on the size of the external blasting nozzle as well as on the size of the internal dosing nozzle.**

TREATMENT	DOSING NOZZLE	RECOMMENDED PRODUCT	NOZZLE DIAMETER	PRESSURE
Surface roughness on metals for composites	<b>(large)</b>	<b>AP-060</b> Orange label ( <b>AL<sub>2</sub>O<sub>3</sub> 60 - 250μ</b> )	<b>2,0 mm</b> (RMN046)	4/5 BAR
Surface roughness on metals for composites	<b>(medium)</b>	<b>AP-120</b> Pink label ( <b>AL<sub>2</sub>O<sub>3</sub>120 - 105μ</b> )	<b>1,2 mm</b> (RMN043)	3/4 BAR
Surface roughness on metals for ceramic or resin	<b>(medium)</b>	<b>AP-150</b> Green label ( <b>AL<sub>2</sub>O<sub>3</sub>150 - 95μ</b> )	<b>0,8 mm</b> (RMN044)	3/4 BAR
Surface roughness on metals for ceramic	<b>(medium)</b>	<b>AP-180</b> Red label ( <b>AL<sub>2</sub>O<sub>3</sub>180 - 80μ</b> )	<b>0,8 mm</b> (RMN044)	3/4 BAR
Sculpture on ceramic	<b>(small)</b>	<b>AP-270</b> Yellow label ( <b>AL<sub>2</sub>O<sub>3</sub>270 - 50μ</b> )	<b>0,5 mm</b> (RMN045)	2/3 BAR
Satin-finishing on any type of metal	<b>(medium)</b>	<b>AP-090 MICROBLAST</b> White label	For more precise jet <b>0,8mm</b> For faster effect <b>1,2 mm</b>	3/4 BAR 4/5 BAR

A longer nozzle with Ø 0,8 mm size (RMN044L) is available on request to carry out cleaning operations on ceramic prosthesis without metal support.

<b> CAUTION:</b>	Very fine abrasives are highly sensitive to moisture and must be stored in a dry place, after the can has been accurately sealed and the antimoisture packet has been duly introduced into the can (if needed, replace them periodically). When filling the abrasive containers, check the condition of the abrasive product; if the moisture rate is too high (bad flowability and presence of clots), it is recommended to wait for at least an hour to allow the heating system to dry up the abrasive media completely. It is also of utmost importance to check the condition of the compressed air which in no way must contain evidence of moisture or of any polluting agents (oil, grease or rust).
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## 4. INSTRUCTIONS FOR USE

- Press the switch (G) to give light to the blasting chamber and supply power to the operating controls.

### **CAUTION:**

May we remind that the sandblasting process will start only provided that the suction system is operating – as a consequence, the suction system **MUST** always be **active and efficient BEFORE** you start to work.

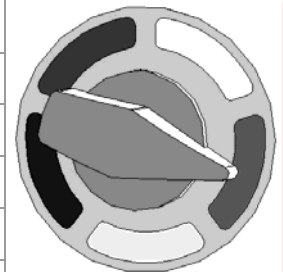


Once the window is closed, verify the efficiency of the suction unit: gloves should be lightly inflated. If needed, at first startup of the unit, modify the air outflow so that the chamber does not remain under vacuum conditions; check the correct outflow by rotating the knob of the adjusting valve (L) located under the devesting projector (M).

**Periodically check the filtering elements of the suction unit.**

- Lift the window to introduce the pieces to be treated into the working chamber.
- Adjust the working pressure by means of the pressure adjusting device (I) located on the right side of the machine: pull the knob and turn it rightwards (to increase) or leftwards (to decrease). To lock the knob, push the knob back down.
- Turn the selector switch knob to choose the type of blasting procedure you prefer – references marked on the label are herewith specified.

POSITION OF POINTER	SELECTED FUNCTION
YELLOW	DEVESTING
GREEN	MICROBLASTING FROM THE GREEN TANK
WHITE	MICROBLASTING FROM THE WHITE TANK
RED	MICROBLASTING FROM THE RED TANK ( IF PRESENT )
BLUE	MICROBLASTING FROM THE BLUE TANK ( IF PRESENT )



- Press the foot control: when **removing investment**, air gets to the projector and mixes up with abrasive coming from the working chamber, thus delivering the air-abrasive mixture necessary to carry out the treatment; in case of **microblasting**, air enters the selected tank putting it under pressure, it gets mixed with abrasive micrograins and will then be dispensed by the micropjector nozzle.
- Once the work is finished, wait a couple of minutes before opening the window and switch the light off so that the suction system can fully clean the chamber from dust.

### **NOTE**


The abrasive used for finishing operations (the one used in MODULO tanks) cannot be re-used and will fall inside the working chamber, thus mixing up with corundum. This will not affect your work (except if microbeads are being used), but the abrasive shall be replaced more frequently.

The microprojectors are ideally positioned in the middle of the working chamber to facilitate use with both hands (in the standard configuration, they are curved rightwards; if needed, they can be turned to the opposite side). We recommend to put back them in place on their holders at the end of the work, to avoid them being hit by the blasting jet of the steady projector.

The window is made of anti-scratch polycarbonate material, resisting to the rebounding abrasive grains; nevertheless, we recommend to use proper protection screens (code 1000535) to preserve it at its best. Use a soft cloth to clean the window from outside and to remove dust from inside.

## 5. MAINTENANCE

**Many of the components of any sandblasting machine are subject to wear:** this is caused by the circulation of abrasive media; the instructions for a careful maintenance of the machine as well as the operations to replace the damaged or worn out parts are specified here below.

 <b><u>CAUTION:</u></b>	<p><b>Before carrying out any maintenance operation inside the working chamber or technical repair of the connections, remove the feeding cable both from network socket and from the rear of the machine; in such a way, both the electric and pneumatic installation of the unit will be fully disconnected.</b></p> <p><b>Should you have any doubts or difficulties, get in touch with our Technical Service to avoid any risks or damages.</b></p>
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### **Replacement of the plastic protection screens of the window**

Remove the 4 fixing clips, pull out the worn screen, clean accurately the surface with a moistened cloth and place a new protection screen.

### **Replacement of the polycarbonate window**

Although the window is anti-scratch, it can be damaged by an extensive use (or because of unproper maintenance). Replacement is very simple: locate the screws which fix it to the upper profile and unscrew them.

### **Replacement of gloves**

The gloves are made of highly resistant rubber, but are subject to the natural ageing of rubber and to the action of sweat (produced by hands). This cause them to dry up. To replace them, unscrew the flange screws and fit a new pair of gloves into the proper seat. (Please consider position of the thumb finger with respect to the fixing holes).

### **Replacement of the devesting nozzle**

The devesting nozzle, even if it is made of tungsten carbide, known as a very hard material, will inevitably wear out, due to the continuous flow of abrasive and will therefore need to be replaced periodically. Remove the nozzle cap and insert a new group, paying attention to appropriately fit it into the plastic body.

### **Replacement of MODULO nozzle**

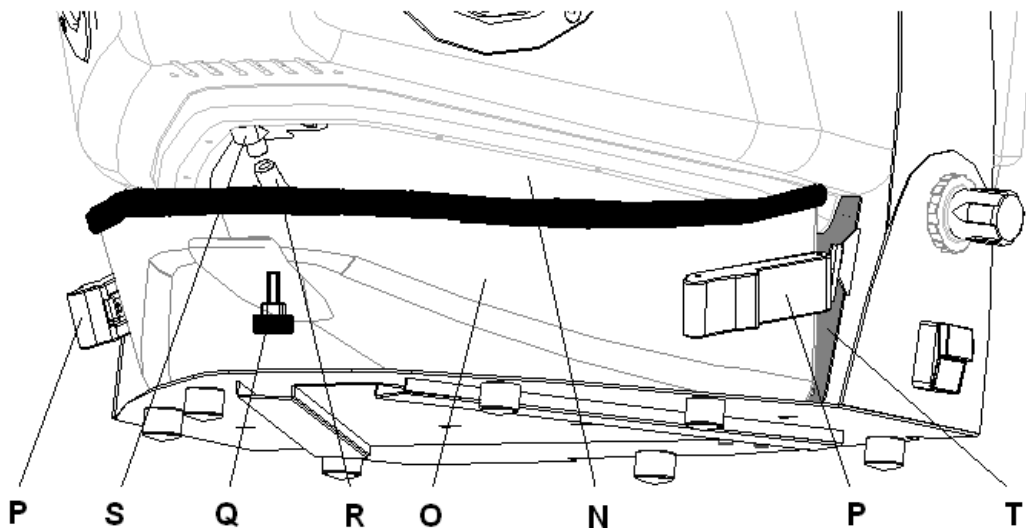
Nozzles of the microblasting tanks are also subject to wear and need to be replaced. To do this, unscrew the ring nut and assemble the new nozzle.

### **Cleaning of the 5my filter**

A 5my filter, mounted under the base of the container, prevents fine dust from damaging internal components. Remove the inspection cap every 2-3 months and blow the filter with compressed air to clean it from dust sediment.

### **Replacement of abrasive media**

When abrasive compound is worn out and has lost its cutting properties because of the presence of dental investment and fine sand used in the tanks, it will be necessary to replace it. By means of a brush, remove dust sediment from the outer parts of the grid (N) and gather them into the center so that they can fall into the hopper (O). Remove bigger parts which will not go through. Open the closing mechanisms (P) on the side of the lower grey tank. Unscrew the knob (Q) located in the front part. Let the tank slide down, disconnect suction pipe (R) from the fitting (S) under the grid, then remove the entire tank. Empty this into a proper container (abrasives are not special waste, but it is polluted with investment and metals, so it is highly recommended to dispose of it separately). Before repositioning the tank, clean the whole seat and the joint (T) from dust sediment. Connect the suction pipe, push it through, close the lever locks and then lock the front knob.



### **Replacement of parts of MODULO tank being subject to wear (pipe, pipe-fittings, microprojector body)**

The polyurethan pipe, the blue connection fitting and the microprojector body where abrasive flows will inevitably wear out and need to be replaced regularly. To replace the microprojector body, follow the same instructions specified for the nozzle (firstly, remove the ring nut, then unscrew the body from the handle); to replace pipes or pipe-fittings, turn the unit, unmount the rear panels (first of all the lower one, the darker one, then turn the larger one upwards); remove the fixing nuts which fix the microprojector holder and work under the container. It is also possible to disconnect each MODULO tank for easier operation, simply unscrewing the nuts fixing it to the metallic housing.

### **Replacement of MODULO tank internal components**

Should it be necessary to replace the MODULO tank internal components like joints, air injectors, abrasive outlet pipe, because of wear, or faulty functionality, or to adapt them to other kinds of abrasive, please contact our Technical Service.

### **Removal of a MODULO tank for repair or maintenance purposes**

The new MODULO tanks have been studied to facilitate your task during removal.

- Remove rear panels
- Disconnect electric supply from electric plug
- Unscrew the the metallic ring nut which fixes the feeding pipe and disconnect the pipe
- Unscrew the plastic ring nut which fixes the microprojector and disconnect the microprojector pipe
- Unscrew the two nuts fixing the MODULO tank to the holder, and unclutch the tank.

### **Procedure for the installation of an additional Modulo tank**

Installing an add-on tank is possible, but this requires competent know-how as well as the replacement of the rear carter by means of an appropriate version corresponding to the number of desired tanks.

- Disconnect the feeding pipe and the quick clutch of compressed air
- Unscrew the two screws fixing the lower rear carter and remove this
- Turn the rear carter upwards
- Fix the new MODULO tank by means of two nuts (orient it so that the blue plastic fitting is directed towards the middle of the machine)
- Uncap the proper pipe-fitting on the selector switch and connect the air inlet pipe
- Unscrew the two nuts fixing the microprojector holder and remove this
- Operating from inside the chamber, drill the membrane of the rubber joint and lead the free end of the microprojector pipe through it
- Connect the microprojector pipe to the blue fitting under the newly installed tank
- Connect the electric wire of the D.O.S. to a free electric plug.
- Place all rear protections and test the unit.



## 6. TROUBLESHOOTING

Problem: <b>THE MACHINE DOES NOT START</b>	
Possible cause	Remedy
Lack of tension	Check: - magnetothermic switch - socket supply switch - fuses of the feeding board
Lack of power distribution in the machine	Check: - socket connection - network fuse Should this malfunction repeat, contact our TECHNICAL SERVICE.

Problem: <b>NO LIGHTING</b>	
Possible cause	Remedy
Bad electrical connection	Check that the electrical plug is correctly plugged in.
Power switch is damaged	Check connections and operation (some dust could have oxidized contacts so that they seized up). Try to blow with compressed air and replace if needed.
LED circuit or transformer are faulty.	Contact Technical Service for replacement

Problem: <b>NO AIR IS COMING OUT</b>	
Possible cause	Remedy
Bad pneumatic connection	Check connection to the compressor.
Internal pipes are clogged	Check connections and condition of pipes up to their end (nozzles).
Air filter is clogged	Check and disassemble, if needed, the moisture collection glass and replace the internal filtering element.

Problem: <b>THE BLASTING JET IS UNSTEADY (devesting)</b>	
Possible cause	Possible cause
Compressor is not efficient enough	Compressor is not efficient enough
Working pressure is not suitable for the metal to be treated.	Working pressure is not suitable for the metal to be treated.
Abrasive not suitable	Abrasive not suitable
Abrasive is exhausted	Abrasive is exhausted
Nozzle is not suitable or is worn out.	Nozzle is not suitable or is worn out.

Problem: <b>NO ABRASIVE IS DISPENSED, ONLY AIR COMES OUT (devesting).</b>	
Possible cause	Remedy
Nozzle is worn out.	The nozzle is $\varnothing$ 3,0 mm, in case of excessive wear and alteration of the diameter, replace it.
Nozzle is not properly positioned, so abrasive is not dispensed.	When in correct position, the nozzle and its cap must be entirely fitted in the projector body.

Problem: **NO AIR COMES OUT FROM THE PROJECTOR (devesting)**

Possible cause	Remedy
The internal dosing nozzle is clogged.	Remove the cap and clean the injector.
Solenoid valve is clogged.	Close air inlet, remove the coil and the core and clean; eventually get in touch with our Technical Service.
Selector switch is dirty or blocked	Get in touch with Technical Service

Problem: **NOZZLE CAP COMES OUT DURING WORK (devesting)**

Possible cause	Remedy
Both piping and nozzle are clogged.	Close up the end of the nozzle and press the foot-control; the operating air flow will thus be inverted, eliminating any obstruction from inside the pipes. Should this irregularity repeat too often, remove abrasive from the hopper and filter it or replace it.
Abrasive is worn out and too dusty.	Replace the abrasive, as this could be mixed with fine particles or investment residuals which will not go through the nozzle spraying hole.

Problem: **INTERNAL AIR LEAKAGE**

Possible cause	Remedy
Condensate discharge on the filter.	The condensate discharge is carried out by the lifting of a ball cock. A sufficient level of pressure must be provided for the valve to close.
Internal pipes are disconnected	Check the state of the piping. Polyethylene pipes might not be perfectly calibrated; try to cut out a small portion from the end of the pipe and insert it into the pipe-fitting; if needed, replace the pipe.

Problem: **THE BLASTING JET of the MODULO TANK IS UNSTEADY**

Possible cause	Remedy
Nozzle is clogged or worn out.	Unscrew nozzle fixing nut, clean both the hole and microprojector components (especially the thread) - re-assemble. If necessary, replace the damaged parts.
Microprojector feeding pipe is worn out, bent or clogged	If the pipe is worn out or bent, replace it. If it is clogged, disassemble the nozzle and let air come out.
The abrasive mixture is too rich in aluminium oxide, i.e. loss of sharpness	Abrasive tank is overfilled, discharge it. Pipe bending under the containers may collect abrasive at the end of the work, when the valve releases pressure; it is possible to limit this reaction reducing bending of the pipes at the minimum.
Damp aluminium oxide causing bad flowing.	Wait till the electric resistance of the heating system properly puts the abrasive into the correct temperature to allow evaporation of moisture. If this does not help, empty the tank, possibly disconnect it from the machine and turn it upside down, blow with clean air in order to dry up all the internal pipings, then heat and dry up the abrasive product and fill in again.

Compressed air filled with condensation or oily particles.	Fine abrasive compounds are particularly sensitive to moisture and, as mechanic pickling agents, they hold the polluting agents. Therefore it is important to protect the efficiency of the product installing adequate filtering and drying systems on the air installation.
Grainsize of the aluminium oxide is not compatible with the abrasive metering system inside the container.	Verify compliance with the indications printed on the tank label and with the comparative tables (abrasive grainsize / nozzle diameter / internal dosing system).
The blasting jet is not efficient	Unsufficient pressure. The 5my filter is clogged, unscrew the inspection cap and clean it. The solenoid valve is dirty: get in touch with Technical Service.

**Problem: NO ABRASIVE COMING OUT, INTERNAL LEAKAGE.**

<b>Possible cause</b>	<b>Remedy</b>
Worn pipe-fittings or punched microprojector pipe.	The components of the circuit located after the tank - in which the abrasive circulates - are subject to wear. It is recommended to prevent any possible break by replacing these components each 6-12 months, according to the workload.

**Problem: ABRASIVE TANK IS NOT UNDER PRESSURE**

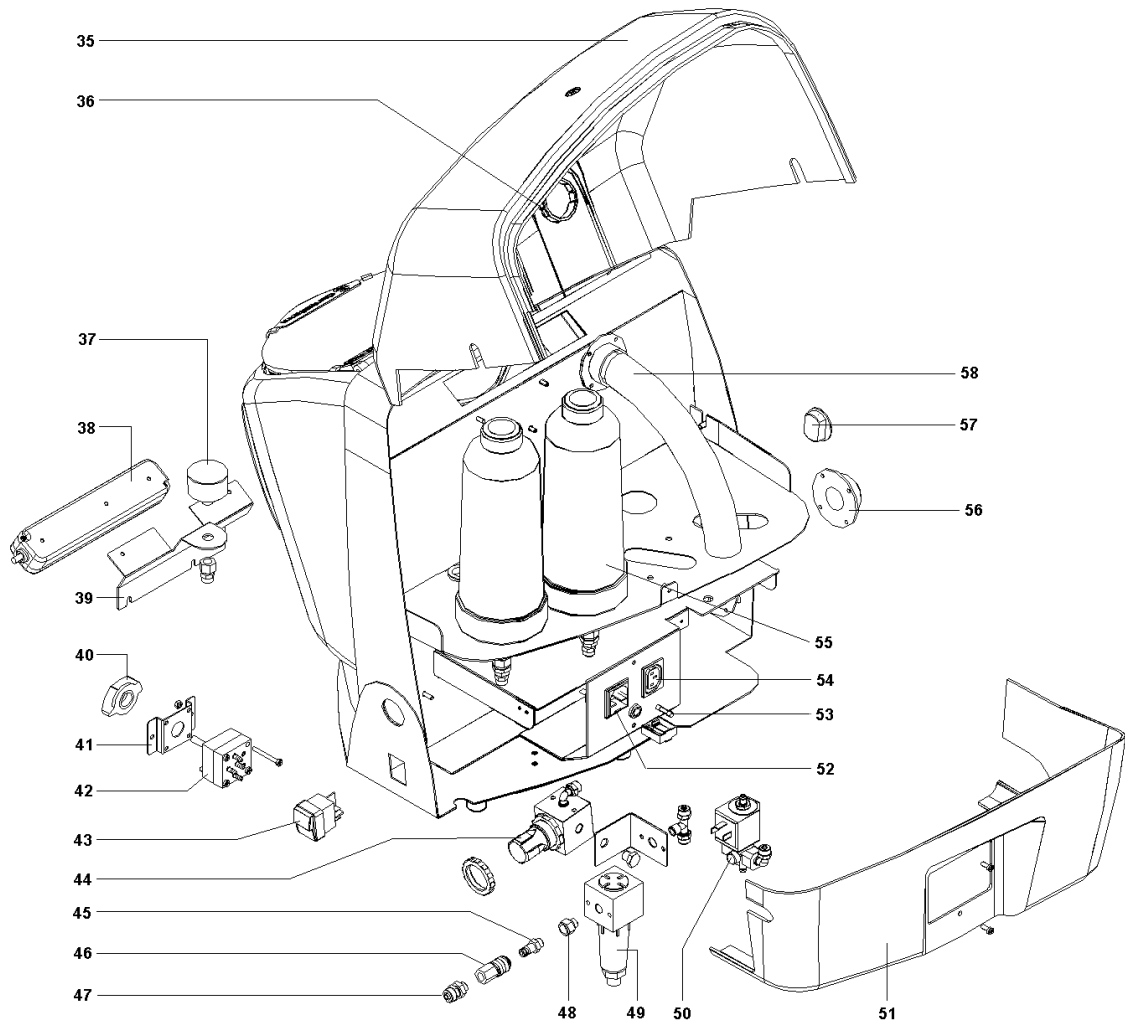
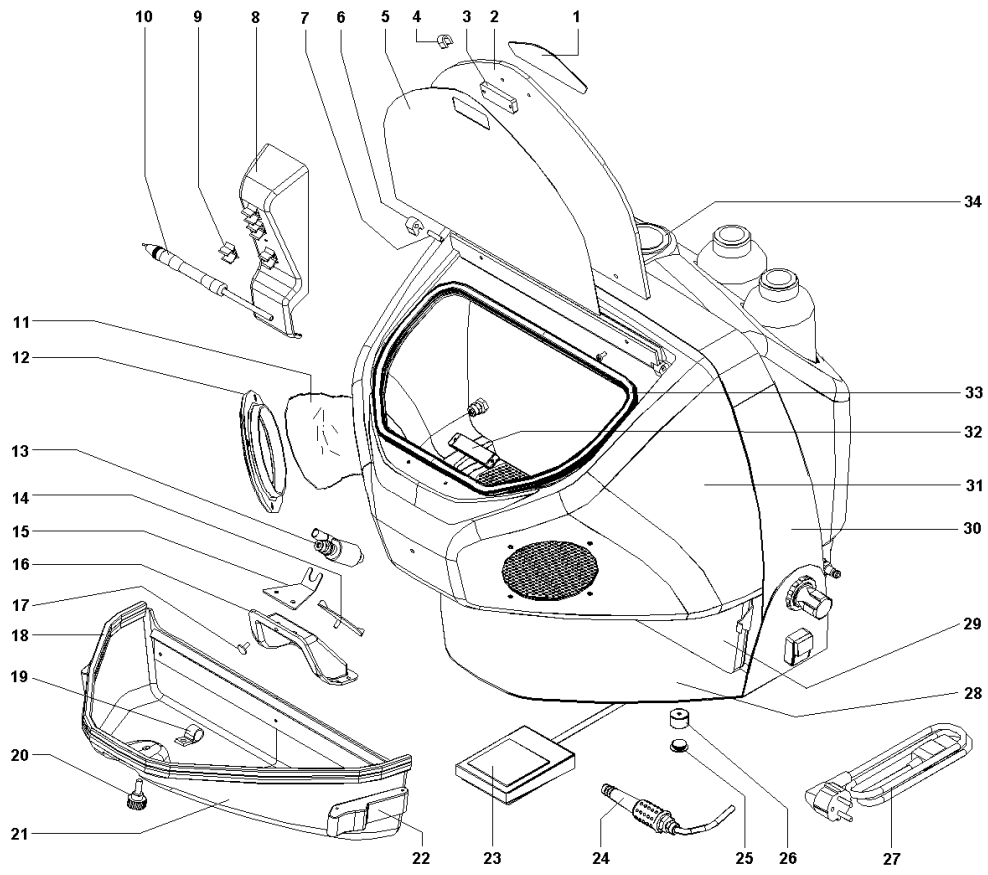
<b>Possible cause</b>	<b>Remedy</b>
Joints are not perfectly airtight	Check whether cap is correctly tightened and container is tight at its base. Disconnect the container from the machine, disassemble and clean it.

**Problem: ABRASIVE TANK IS COLD**

<b>Possible cause</b>	<b>Remedy</b>
Heating resistance is not working	Check electric connections of the tank. Get in touch with Technical Service for replacement.

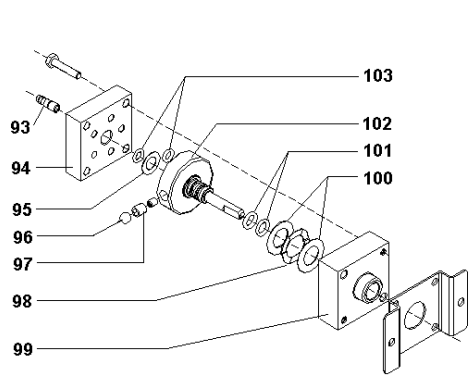
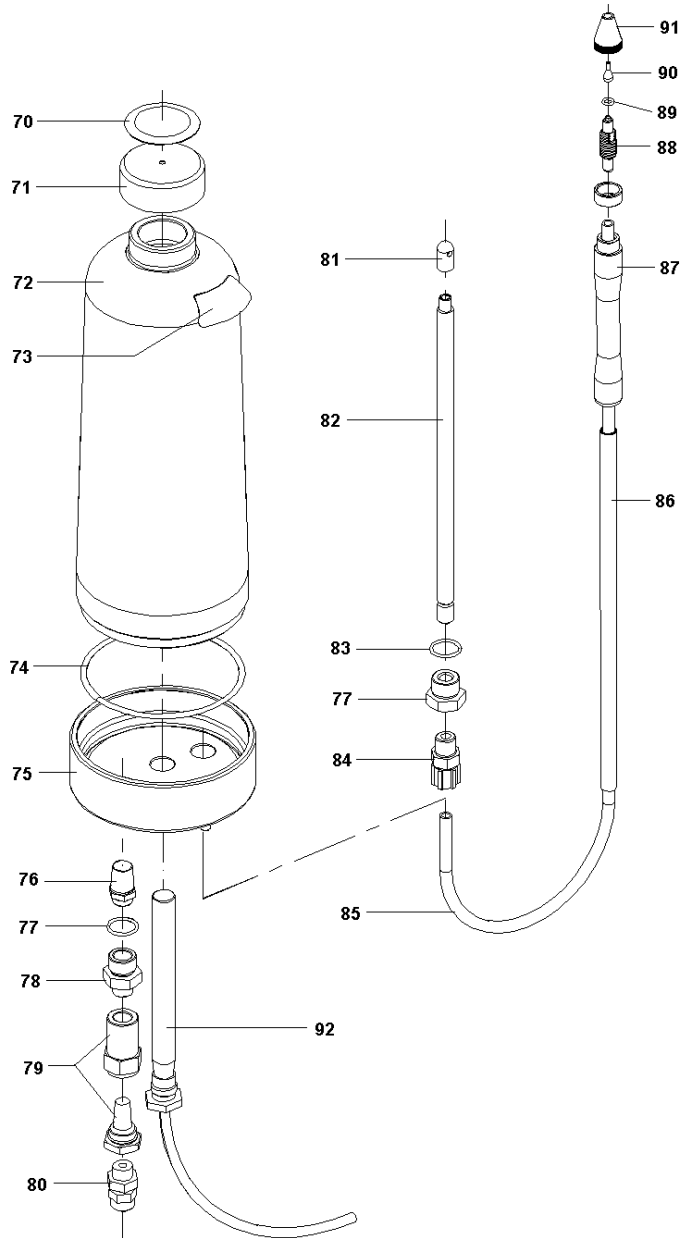
## 7. EXPLODED DRAWING AND SPARE PART LIST IDEA PRO DOS table 1

#	code	description
1	<b>1076037</b>	IDEA LOGO LABEL ON WINDOW
2	<b>1076015</b>	POLYCARBONATE WINDOW IDEA
3	<b>1076032</b>	PLATE ON WINDOW IDEA
4	<b>RCB042</b>	PROTECTION SCREEN 4 PCS FIXING CLIPS
5	<b>1000535</b>	PACKAGE OF 6 PROTECTION SCREENS IDEA/IDEA PRO
6	<b>1076022</b>	PAWL FOR HINGE IDEA
7	<b>NVT052</b>	CYLINDRIC PIN 5x20
8	<b>1076014</b>	PIPE PROTECTION SLEEVE IDEA
9	<b>NEA123</b>	CLIP FOR COMPONENTS
10	<b>1000605..</b>	COMPLETE MICROPROJECTOR (specify colour and nozzle)
11	<b>RCS130</b>	PAIR OF GLOVES
12	<b>1039017</b>	GLOVE FLANGE
13	<b>RS521</b>	COMPLETE DEVESTING PROJECTOR
14	<b>1072033</b>	COVER ON SUCTION HOLE
15	<b>1076006</b>	PROJECTOR HOLDER IDEA PRO
16	<b>1076007</b>	AIR INTAKE CARTER IDEA
17	<b>1076019</b>	FRONT FIXING SCREW IDEA
18	<b>NVG035</b>	PERIMETRAL JOINT
19	<b>NEA115</b>	PLASTIC RING D. 14
20	<b>NVT155</b>	MALE GRADUATED KNOB 6x16
21	<b>1076011</b>	ABRASIVE HOPPER IDEA PRO
22	<b>NVT192</b>	FLEXIBLE LEVER CLOSURE
23	<b>NEC050</b>	ELECTRICAL FOOT CONTROL
24	<b>NPS001</b>	AIR BLOWER
25	<b>NVG057</b>	HEMISPHERICAL BUMPER D.18
26	<b>1076039</b>	ADJUSTABLE FOOT
27	<b>NEV013</b>	ELECTRIC CABLE WITH 3x1 PIN/PLUG
28	<b>1076001</b>	COMPLETE HOUSING IDEA PRO
29	<b>1076041</b>	HOPPER JOINT IDEA PRO
30	<b>1076005</b>	SIDE COVER IDEA
31	<b>1076010</b>	WORKING CHAMBER IDEA PRO
32	<b>NEC046</b>	RECTANGULAR MAGNETIC UNIT 50x16x2,5
33	<b>5406019</b>	WINDOW JOINT
34	<b>NEA124</b>	FAIRLEAD D.=50
35	<b>1076013</b>	HIGH REAR COVER IDEA
36	<b>NEA125</b>	FERRULE WITH HEAD D.=46
37	<b>NPS040</b>	MANOMETER 0-6 1/8
38	<b>1000534</b>	COMPLETE LED LIGHTING UNIT
39	<b>1076002</b>	MANOMETER AND LIGHTING UNIT SUPPORT IDEA
40	<b>NVT141</b>	GRADUATED KNOB
41	<b>1073016</b>	SUPPORT FOR 5-WAY SELECTOR SWITCH
42	<b>1000531</b>	COMPLETE 5-WAY SELECTOR SWITCH
43	<b>NEC018</b>	PROTECTED BIPOLAR SWITCH
44	<b>NPS031</b>	PRESSURE REDUCER 1/8
45	<b>NPR304</b>	MALE QUICK CLUTCH 1/8
46	<b>NPR303</b>	FEMALE QUICK CLUTCH 1/8
47	<b>NPR119</b>	STRAIGHT MALE PIPE-FITTING 8x6 1/8
48	<b>NPR206</b>	REDUCTION FITTING M/F 1/8 1/8
49	<b>NPS012</b>	AIR FILTER 1/8
50	<b>NES030</b>	3-WAY SOLENOID VALVE-220v
51	<b>1076012</b>	SMALL REAR COVER IDEA PRO
52	<b>NEA046</b>	SOCKET + DOUBLE FUSE HOLDER
53	<b>NEA071</b>	RAPID FUSE 5x20 6,3 A
54	<b>NEA047</b>	FEMALE SOCKET
55	<b>100072U</b>	COMPLETE TANK
56	<b>1201007</b>	FILTER FIXING FLANGE
57	<b>1076024</b>	FIXING PIN IDEA
58	<b>NEV060</b>	OREGON PIPE D.=30

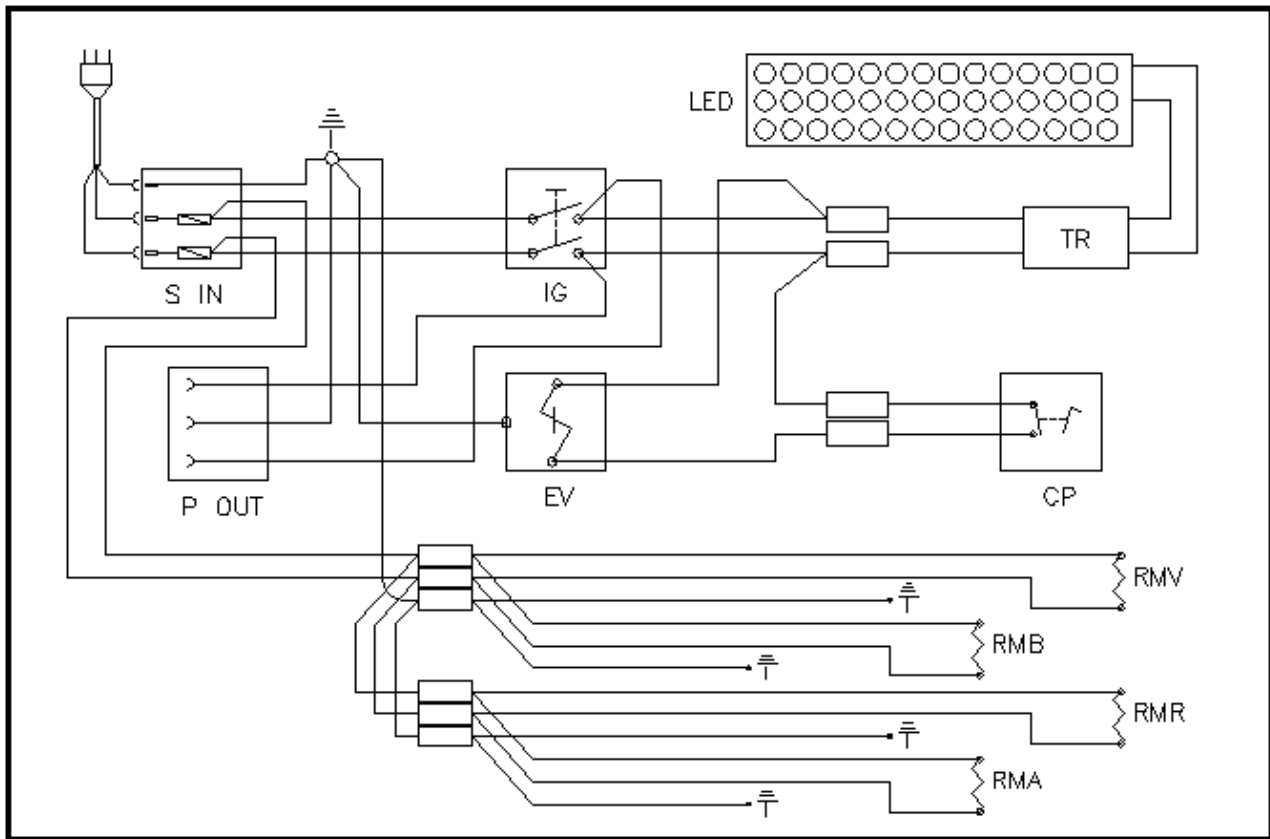


## EXPLODED DRAWING AND SPARE PART LIST IDEA PRO DOS table 2

pos.	codice	descrizione
70	<b>1076033..</b>	RESIN LABEL FOR TANK (specify colour)
71	<b>NVT165</b>	G1 FEMALE CAP
72	<b>1072003</b>	COMPLETE ABRASIVE TANK
73	<b>1076100</b>	MODULO IDENTIFYING LABEL IDEA
74	<b>NPOR3300</b>	OR JOINT 3300
75	<b>1072001P</b>	NYLON/GLASS TANK BASE
76	<b>NPV020</b>	SINTERED AIR INJECTOR
77	<b>NPOR2043</b>	OR JOINT 2043
78	<b>1072004A</b>	FITING FOR AIR BLOWER AND FILTER
79	<b>NPV025</b>	LINE FILTER
80	<b>NPR111</b>	STRAIGHT MALE PIPE-FITTING 6x4 1/8
81	<b>1072007</b>	TERMINAL CAP ON ABRASIVE PIPE
82	<b>1072006</b>	ABRASIVE OUTLET PIPE (specify grainsize in use)
83	<b>1072005</b>	ABRASIVE PIPE PIPE-FITTING
84	<b>NPR111P</b>	STRAIGHT MALE PLASTIC PIPE-FITTING 6x4 1/8
85	<b>NPV042</b>	EXTRAFLEX POLYURETHANE PIPE 6x4
86	<b>NEV030</b>	SHEATH D.= 6
87	<b>1067005</b>	MICROPROJECTOR HANDLE (specify colour)
88	<b>1067006</b>	MICROPROJECTOR BODY
89	<b>NPOR2012</b>	OR JOINT 2012
90	<b>RMN043</b>	TUNGSTEN CARBIDE NOZZLE D.=1.2mm
	<b>RMN044</b>	TUNGSTEN CARBIDE NOZZLE D.=0,8mm
	<b>RMN045</b>	TUNGSTEN CARBIDE NOZZLE D.=0,5mm
	<b>RMN046</b>	TUNGSTEN CARBIDE NOZZLE D.=2,0mm
	<b>RMN047</b>	TUNGSTEN CARBIDE NOZZLE D.=1,5mm
91	<b>1067007</b>	NOZZLE LOCKING RING NUT
92	<b>NES013</b>	SELF-ADJUSTED RESISTANCE 220V PTC
93	<b>1049019</b>	HOSE CONNECTOR
94	<b>1073014</b>	5-WAY SELECTOR CAP
95	<b>NVT047</b>	PS RING 8/14/0.2
96	<b>NVT020</b>	STEEL BALL 1/4
97	<b>1027076</b>	SPRING ON SELECTOR BALL
98	<b>NVT049</b>	COMPENSATION RING LMKAS22
99	<b>1073012</b>	5-WAY SELECTOR BODY
100	<b>NVT034</b>	PS RING 15/22/0.2
101	<b>NPOR2025</b>	OR JOINT 2025
102	<b>1073013</b>	5-WAY SELECTOR DISTRIBUTOR
103	<b>NPOR2018</b>	OR JOINT 2018
104	<b>NVG011</b>	TRANSPARENT RESIN PIPE 8x12
105	<b>NPV040</b>	TRANSPARENT POLYURETHANE PIPE 6x4
106	<b>NPR118</b>	RING NUT 6x4 M10
107	<b>1058019</b>	PROJECTOR BODY D.=1,5
108	<b>RS022</b>	NOZZLE UNIT D.=3.5mm WHITE
	<b>RS023</b>	NOZZLE UNIT D.=3.0mm YELLOW



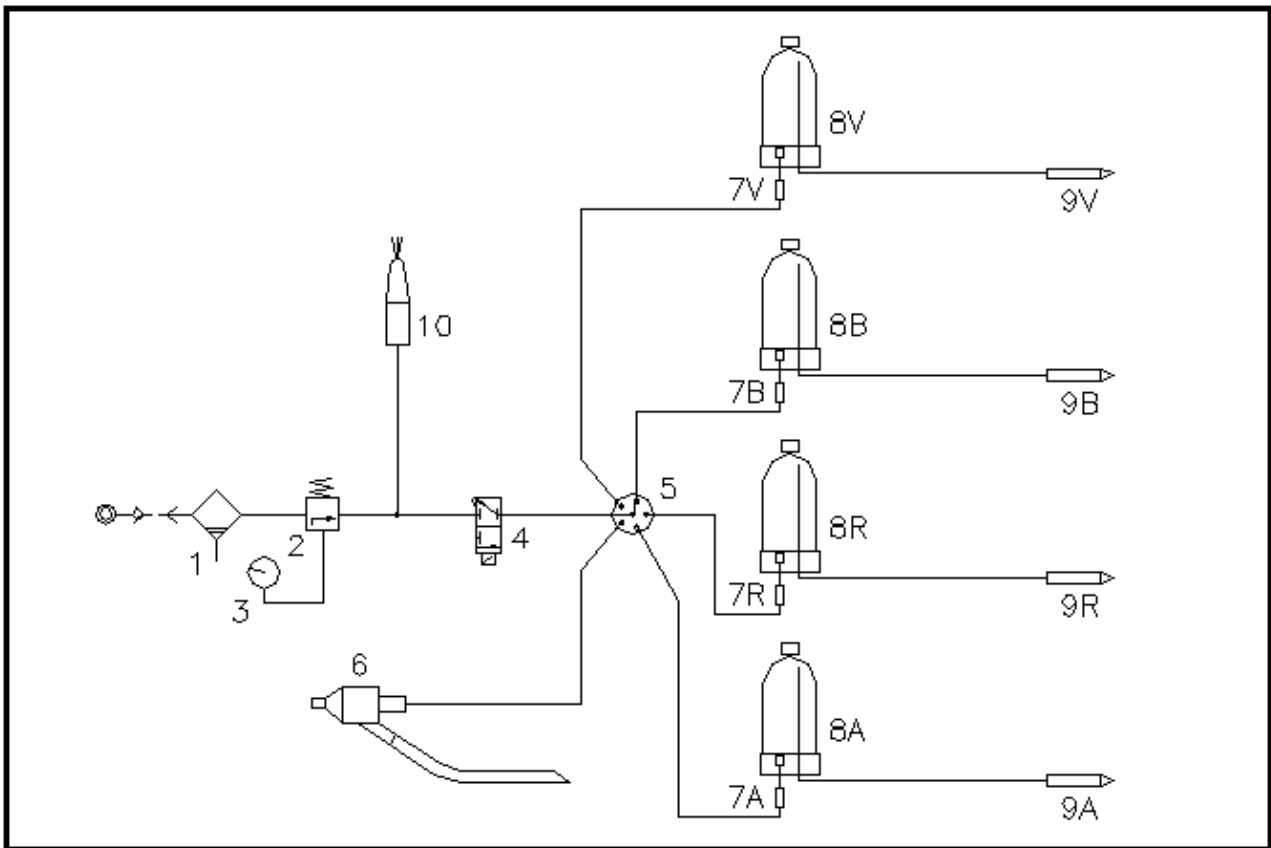
## 8. WIRING DIAGRAM



NO.	DESCRIPTION
S IN	PLUG AND FUSEHOLDER UNIT
IG	MAIN SWITCH
TR	ELECTRONIC BALLAST
LED	LED CIRCUIT
EV	3-WAY-SOLENOID VALVE – MANUAL BLASTING
CP	ELECTRIC FOOT CONTROL
P OUT	FLUSH-MOUNTED SOCKET for DUST EXTRACTOR
RM	HEATING ELEMENT for D.O.S. SYSTEM



## 9. PNEUMATIC CIRCUIT



NO.	DESCRIPTION
1	AIR FILTER
2	PRESSURE REDUCER
3	PRESSURE GAUGE
4	3-WAY-SOLENOID VALVE – MANUAL BLASTING
5	SELECTOR SWITCH
6	BLASTING PROJECTOR
7	5 MY FILTER
8	MICROBLASTING TANK
9	MICROPROJECTOR
10	AIR BLOWER

## 10. TECHNICAL DETAILS

Height	480 mm
Width	450 mm
Depth	400 mm at base – 500 mm overall
Net and Gross weight	18,0 kg – 22,0 kg
Voltage	230 V - 50 Hz (different tensions available on demand)
Absorption	60 W - 1,4 A
Lighting	42 LED circuit with electronic transformer
Dust filtering system	Pre-fitted for connection to PRO-3 and PRO-3 SHAKE extractors; fully compatible with traditional extractors

Devesting pressure	min 2,5 BAR – max 6,0 BAR
Air consumption	120 l/min at 4 BAR
Blasting nozzle	Ø 3,0 mm, made of tungsten carbide
Abrasive grainsize min - max	mesh 80 (200µ) – mesh 36 (500µ)


Microblasting pressure	min 1,5 BAR – max 6,0 BAR
Air consumption (Ø0,8mm)	15 l/min at 2 BAR
Air consumption (Ø2,0mm)	120 l/min at 4 BAR
Standard nozzles	1 x Ø 0,8 mm + 1 x Ø 1,2 mm, made of tungsten carbide
Abrasive grainsize min - max	mesh 270 (50µ) – mesh 60 (250µ)

### **DENTALFARM s.r.l.**

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