



Multibor
Suite

Podolog

Professional Station

www.multibor.eu

Multibor - Podolog Suite :: Program Control

Type	Display	Name	Tool
Natural nails	H1	Removal of cuticle	Diamond tapered cylinder, max ø5mm
	H2	Lateral nail folds	Diamond cylinder, max ø5 mm
	H3	Eponychium treatment	Diamond ball, max ø3.3 mm
	H4	Removal of pterygium	Diamond flame, max ø3.3 mm
	H5	Free edge of the nail	Diamond disc, max ø5 mm
	H6	The natural nail polishing	Mounted natural Buffs, max ø25 mm
Gel & Acryl	A1	Sawing in the cuticle zone	Diamond point, max ø3.3 mm
	A2	Gel and acryl correction	Carbide, max ø7 mm
	A3	Free edge of the nail simulation	Diamond disc, max ø5 mm
	A4	Surface preparation	Diamond cylinder, max ø5 mm
	A5	Correction of the inside nail	Carbide cone, max ø3 mm
	A6	Nail Art	Diamond, max ø5 mm
	A7	The artificial nail polishing	Mounted natural Buffs, max ø25 mm
Pedicure	P1	Free edge of the nail simulation	Diamond tapered inverted cylinder
	P2	Removal of cuticle	Diamond tapered cylinder, max ø5mm
	P3	Eponychium treatment	Diamond ball, max ø3.3 mm
	P4	Removal of pterygium	Diamond flame, max ø3.3 mm
	P5	Lateral nail folds	Diamond cylinder, max ø5 mm
	P6	The natural nail polishing	Silicone, max ø10 mm
	P7	The step's skin grinding	Abrasive, silicone, max ø13 mm
	P8	For toes abrading	Abrasive, silicone, max ø9 mm
MULTIBOR Pedicure Bits	E1	Very rough heels primary treatment	127R
	E2	Rough skin intensive abrading	127G
	E3	For a basic step's cracks treatment	h130R, G, B
	E4	On the edge of step cracks treatment	b100R, G, B
	E5	Removing of corns and rough skin on toes	50R, 50G
	E6	Final foot polish	127B
	E7	Lateral nail folds soft abrading	90B, 50B
	E8	Removal of a corn callus	Carbide ball ø2 mm

Please note the following:

The programs for "MULTIBOR Pedicure Bits" and program for the "Pedicure" are different. If you work with replaceable sand caps based on rubber or with sintered ceramics, please select the "Pedicure" only. If you try to activate the "MULTIBOR Pedicure Bits", there is a risk that your tool bends or breaks down/

PROFESSIONAL TOOLS

Before getting started, please read this User Guide carefully.

Attention! The device has sufficient means of electronic protection, but no automation is able to provide 100% safety against unjustified, inept or destructive steps by the User.

Please remember! Before you switch on the rotation, make sure that nothing stands in its way, the engine is free, there is a tool in the collet clamp, the collet clamp is locked, and the collet holds the tool firmly.

Caution! Mechanical defects in the entire device or in separate parts thereof and absence of its components as well as damaged or burnt engine or its power cable shall deprive the User of the opportunity of free repair and shall not impose any warranty obligations upon the Manufacturer.

Please handle the device with due care and use it as prescribed. Do not allow for excessive workload and do not use it for operations the device is not intended for, and it will then serve you very well for years!

Should you have any questions regarding the use of the device or should you put the device into such modes of operation where from you don't know the way out, please contact the Service Center.

Service Center



www.multibor.eu

Introduction

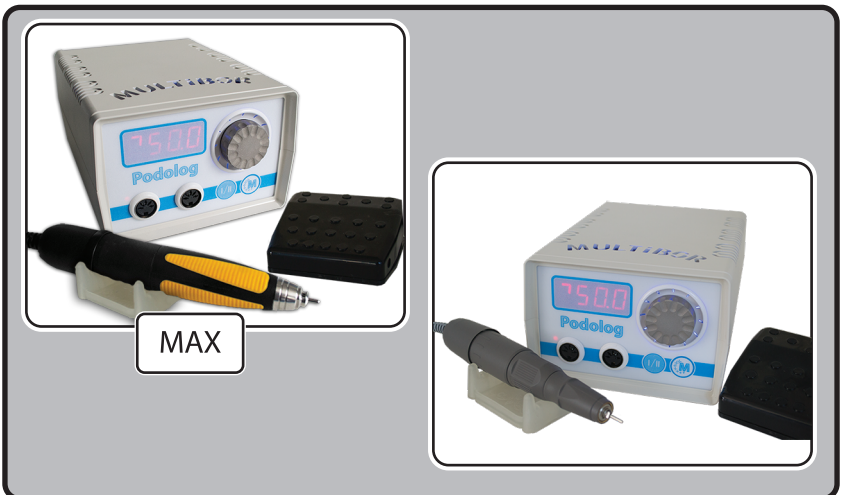
Multibor — Podolog Suite is a series of devices from the **Podolog** lineup developed under the **Multibor-Suite** technology intended for intensive operation with significant workloads while providing the entire range of services in the fields of machine-assisted manicure and pedicure as well as for incrementing, modeling, and correction of artificial nails.

The lineup of devices comprises the following models:

- Multibor – Podolog
- Multibor – Podolog MAX

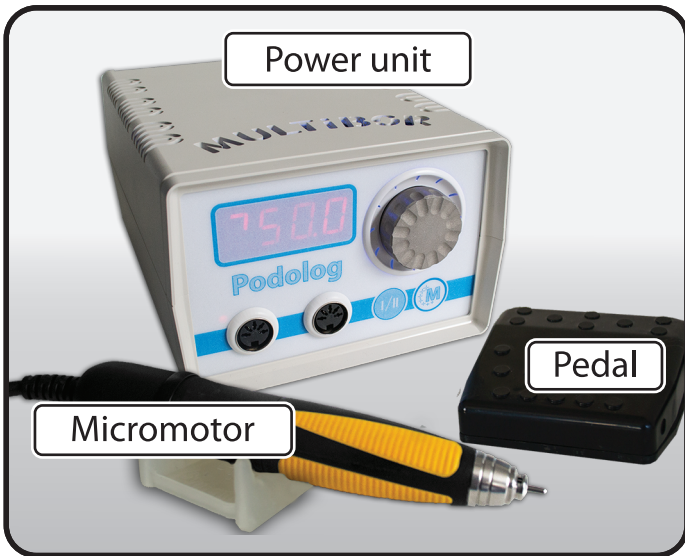
These models have different technical properties and configurations.

Multibor — Podolog Suite is a milling cutter for masters of nail care (hereinafter, the 'Milling Cutter'). This is a microprocessor unit with separate programs for different types of operations and for different types of tools with automatic selection of preset programs and with digital adjustment for optimal mode of operation.



Delivery Set

- Power unit
- Handheld milling cutter (micromotor)
- Micromotor pad
- Pedal (available in specific models)
- User Guide
- Packaging



Safety Precautions

In order to ensure safe operation of the Milling Cutter, please learn the safety precautions specified in this User Guide. Do not try to use the Milling Cutter in a manner not specified in this document. Do not try to use the Milling Cutter for operations not specified in this document.

ATTENTION! Disregarding these safety precautions may damage the Milling Cutter or may result in its ignition or in electric shock for you.

ATTENTION! Plug the Milling Cutter in the electric mains thru standard three-pin sockets with grounded terminals only.

Nine Simple Rules:

1. Never use electric mains where voltage and frequency are different from the parameters specified on the casing of the Milling Cutter.
2. Do not try to plug or unplug the Milling Cutter with wet hands.
3. Always insert the plug deeply to the end.
4. Never pull the power cable to withdraw the plug out of the wall socket.
5. Avoid damage to and do not modify and do not stretch the power cable and the connection cable. Do not put any items onto them. The connection cable remains under big workload while in use, therefore it would quickly break down if used improperly (e.g. knots and loops in the cable, constant bending at sharp angles, abrupt moves).
6. Do not switch the Milling Cutter on if the power cable or connection cable is looped or knotted.
7. Do not plug the Milling Cutter in a wall socket, which is used to provide power to some other equipment (via extension cables, T-junctions, etc.)
8. Use high-quality and properly operating tools (caps, milling tools, etc.) only. Shank ends must be plain-shaped and all parts of the tools must be firmly fixed to each other. Do not use any worn tools as it may result in their destruction.
9. When selecting the operation modes for the Milling Cutter, do not go beyond the maximum permitted limits for a specific tool as it may result in destruction of the tool and in breakdown of the Milling Cutter.

Make sure there is some free space around the wall socket, so that you can quickly unplug the device if necessary. In the event of smoke, unusual fumes or strange noise near the Milling Cutter, switch it off immediately, unplug it and refer to the Service Center. Do not place any items onto the power unit. If any external items or fluids get into the Milling Cutter, unplug it off immediately and contact the technical

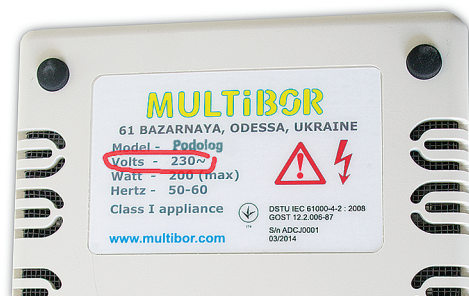
ATTENTION! It is prohibited to disassemble or modify any components of the Milling Cutter. Several parts of the power unit bear high voltage. It is not allowed to perform any maintenance procedures not specified in this User Guide.

Do not use any flammable spays near the Milling Cutter.

Do not keep any flammable fluids near the Milling Cutter.

Do not place the Milling Cutter in locations with high humidity or dust or smoke contents and in locations under direct sunlight as well as in the vicinity of heating equipment.

The voltage and frequency of the power supply mains are shown on the device!



Description and designation of the major components

Power Unit

This is a microprocessor-based power supply unit for direct current micromotors able to quickly adjust their operation modes. The power unit is designated for the operation jointly with the handheld milling cutter.

The controls and signal functions of the power unit have several unique features based on the unique technologies by Multibor Company, and namely:

- **Multibor Click-Click** manipulator
- **Multibor Magic Button** switch



Thru the 'Multibor Click-Click' (hereinafter, the 'Manipulator'), it is possible to:

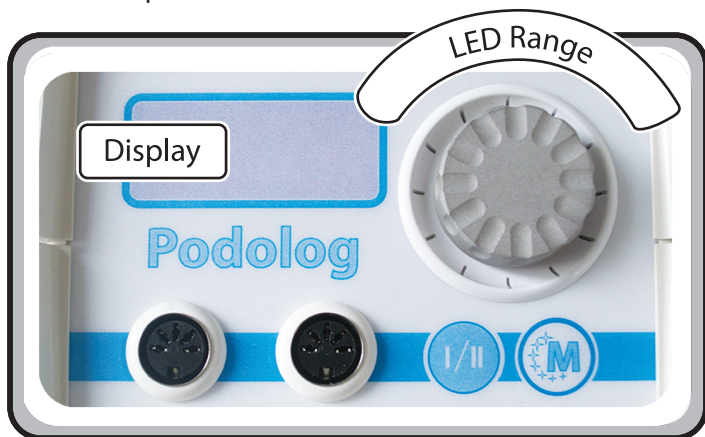
- switch the rotation on or off
- increase or decrease the rotation speed
- change the rotational direction: 'Reverse' function
- select a control program from the list

Thru the 'Multibor Magic Button' (hereinafter, the 'M-button'), it is possible to:

- activate the program control mode
- deactivate the program control mode

Attention! When in the program control mode, such parameters as output power, maximum torque, protection operating level and the like are automatically selected and adjusted by the processor in accordance with the preset algorithms and thus cannot be altered by the user.

The light warning system comprises the Display and the range with 12 light emission diodes (LED Range) (like a clock face) located around the Manipulator.



The light warning system is further assisted by the audible warning system.

Handheld Milling Cutter

The handheld milling cutter has the shape of a monoblock unit. The unit looks like a ball pen conveniently sitting in one's hand and making it possible to easily set and use the standard tools.

The manufacturer supplies the handheld milling cutters certified under ISO 9001 and guarantees the high-quality performance of the device only with them.

Setting and changing the tools

The tools are set by turning the clamp control grip on the handheld milling cutter up until a click is heard:

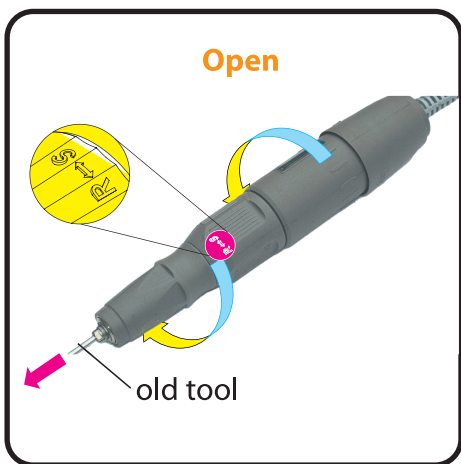
Leftwards - the tool clamp is open

Rightwards - the tool clamp is locked

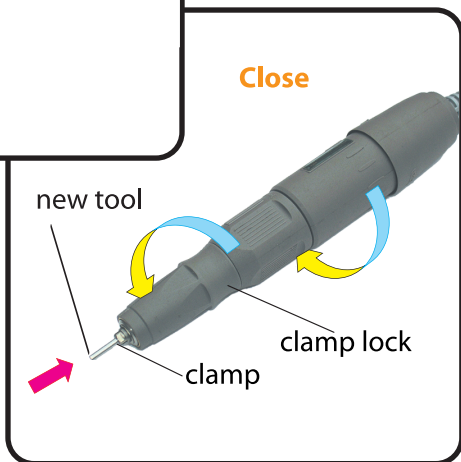
The shank end of a tool must be set into the clamp deeply until locked. Another manner of tool setting leads to vibration, to accelerated wear of the clamp and of the handheld milling cutter, and to damage to the tool. Such operation of the Milling Cutter along with the usage of unbalanced tools (vibration while operating the handheld milling cutter) results in the loss of the warranty rights for the user.

Changing the tools

1. Switch off the tool rotation
2. Wait until the tool rotation stops completely



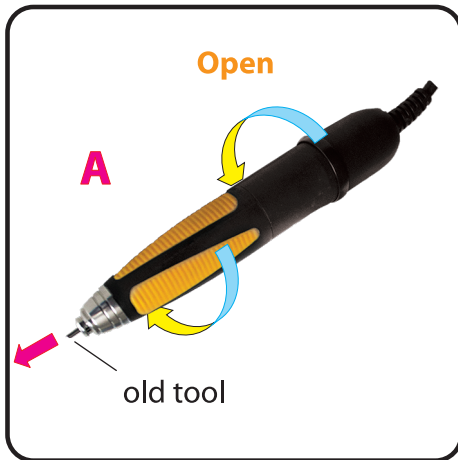
3. Use your hands to move the clamp lock into the 'R' direction.



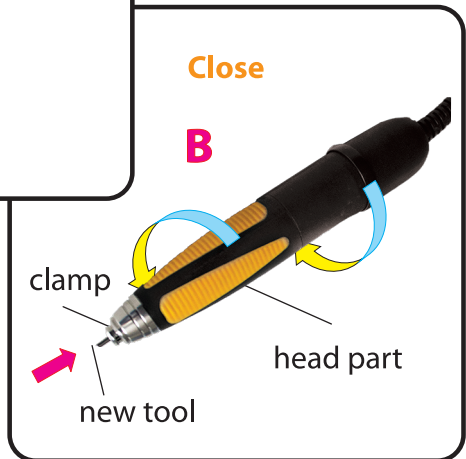
4. You must hear a distinctive click
5. Extract the old tool
6. Set the new tool into the clamp
7. Use your hands to move the clamp lock into the 'S' direction until a distinctive click is heard

Changing the tools in the MAX configurations

1. Switch off the tool rotation
2. Wait until the tool rotation stops completely



3. Use your hands to turn the upper part (orange color) into the "A" direction over 2 clicks. One click is not enough since this is an intermediate position



4. Click twice until locked in
5. Extract the old tool
6. Set the new tool into the clamp
7. Turn the clamp lock into the "B" direction over two clicks

Pedal

The pedal is intended for activating and deactivating the rotation function with the help of a foot. Depending on the configuration option, the pedal may sometimes not be a part of the equipment supplied. However, users can purchase the pedal as a separate piece of equipment.

Preparing for work

1. Unpack the Milling Cutter. If the device is brought from a cold place to a warmer place, it should be unpacked not earlier than after two hours.

2. Place the power unit onto a plain, rigid, and stable surface such as a working desk. Select a position of the power unit in such a manner that its front panel can be seen in full and its controls can be easily accessed. Place the pod in the immediate vicinity of the power unit.

3. Connect the power cable plug of the handheld milling cutter to the relevant jack at the front panel of the power unit.

Attention! The plug has a ping and the jack has an inlet. This is the key to the correct connection; the relevant ping should get into the relevant inlet.

4. Check if there is a tool or a standard temporary cover in the collet clamp of the handheld milling cutter.

5. Never forget to make sure that the collet clamp is locked and that the collet holds the tool firmly and does not let it fall out.

6. Take the tool with your fingers carefully and turn the shaft of the handheld milling cutter a few times. Make sure that the tool can rotate together with the collet and that the rotation is done freely without external noise and vibration.

7. Put the handheld milling cutter onto the pod in such a manner that it does not block your access to the front panel of the power unit.

Attention! It is not recommended to put the handheld milling cutter as well as any other tools and caps onto the upper lid of the power unit. Use the pod instead.

8. Plug the power cable in the wall socket.

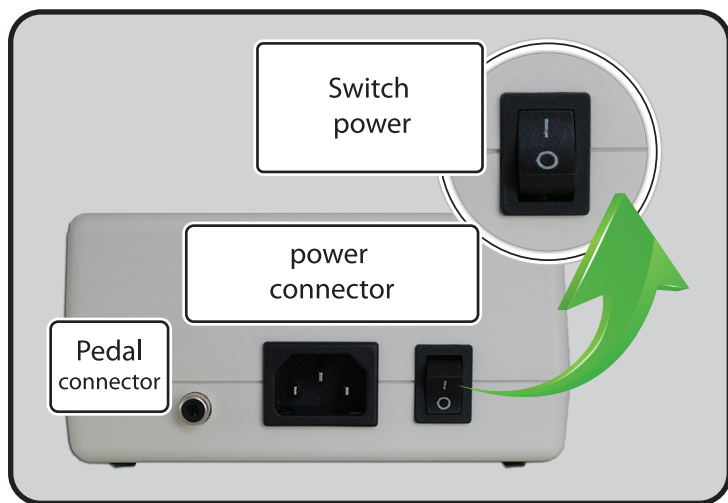
9. The milling cutter is now ready for work.

Work Sequence

Power Up

Attention! When powered up, the milling cutter will maintain the same operation mode and the same adjustments that were in effect at the power down moment. There is no need to recall and set the operation modes again. This memory is independent from any operation mode.

Switch the power unit on, having set the power supply switch at the back panel from the '0' position to the 'I' position.



This will activate the self-test of the Milling Cutter and it will be indicated in the form of 'running lights' at the LED Range and in the form of 'running eights' at the Display. As the 'running eights' fade away in combination with the 'running sequence of lights' and as a single audible signal is heard, it tells us that the self-test is completed and that the equipment is ready for work if the following conditions are fulfilled:

1. The 'MULTIBOR' sign at the upper lid of the casing is illuminated with constant blue light
2. No breakdown alarm is heard
3. No 'Pedal is out of order!' indication is shown at the Display

Pedal is out of order!



Such signal may be caused by mechanical or electrical faults in the pedal itself as well as in its power cable or control circuit.

For example:

1. Foreign items are on the pedal when it is powered up
2. The contacts in the pedal have stuck together and thus always remain in the short-circuit position.
3. The pedal power cable has been worn out to the end, broken down or destroyed

In order to fix the problem caused by such a signal, the following steps must be taken:

1. Remove the foreign items from the surface of the pedal
2. Press the pedal a few times to check the mechanical intactness of contacts
3. Disconnect the pedal from the power unit and continue working without the pedal

power unit malfunction



A fault in the electronic components of the power unit may cause such a signal to go on.

In case such signal is on, the following must be done:

1. Stop the operation
2. Unplug the milling cutter
3. Contact the Service Center

Modes of Operation

Indications and Alarms in Different Modes

The handheld milling cutter can operate in two equivalent modes:

Manual mode

Program mode

For each of the modes, each type of indication is shown at the display by means of a relevant combination of characters, digits, and segments, and is also backed up by specific audible signals

In any mode, prior to switching on the tool rotation, its direction is shown by an arrow on the Display.



If the arrow goes upwards and to the right, the tool will rotate clockwise.



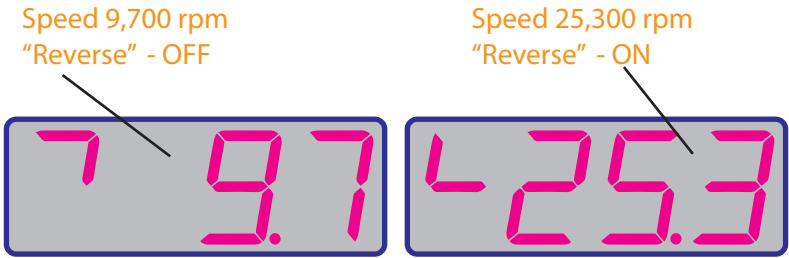
If the arrow goes downwards and to the left, it means that the "Reverse" function is activated and the tool will rotate counterclockwise.



Manual Mode

Switching between the manual and program modes is performed by pressing the 'M-button' and is followed by an audible signal. Switching between the modes is only possible when the tool rotation is off.

In the Manual mode, the display shows only two or three digits, which mean the tool rotation speed in thousands of revolutions per minute (rpm).



The rotation direction is shown by the "running arrow" in the first section of the indicator on the Display.

Attention! The weight and mechanical balance of a tool have significant influence on the vibration of the milling cutter. There is a risk of damaging a tool at the speeds exceeding 30,000 rpm. The milling cutter has two levels of rotation adjustment in order to decrease the probability of accidents.

1. Fast and abrupt adjustment done literally during a single revolution of the Manipulator for the speeds of up to 30,000 rpm only. In this case, a short audible signal indicates that the first level speed is reached.
2. The increase of the speed exceeding 30,000 rpm will be done slower. Actually, the Manipulator needs to be rotated for a longer time while the speed increases slower.

1. To switch on the rotation, press the center of the Manipulator once



- 2. To increase the rpm rate, rotate the Manipulator clockwise
- 3. To decrease the rpm rate, rotate the Manipulator counterclockwise
- 4. To alter the rotational direction (the reverse function), press the center of the Manipulator twice at a run same as you double-click on a computer mouse



5. To switch off the rotation, press the center of the Manipulator once again
You can change the rpm rates and the rotational directions on the go.

Program Control Mode "Programs"

Press the 'M-button' to select operation modes under the preset programs.

While in the 'Programs' mode, the display shows a character to indicate a specific program and a digit to indicate the program's number.

Program H6
"Reverse" - OFF



Program P7
"Reverse" - ON



Select a desired program by rotating the Manipulator.
Press the center of the Manipulator for one time to start the rotation.

Attention! The rpm rates and the programs cannot be changed on the go. Stop the rotation to change a program. While a program is in operation, it is only possible to change the rotational direction by pressing the center of the Manipulator for two times at a run same as you double-click on a computer mouse.

Very important! Follow the safety precautions!
It is allowed to unlock the clamp or to change a tool only after the rotation is fully stopped.



Take care of your eyes!
Safety glasses required

Multibor - Suite technology

The quality and the speed of performance of the procedures depend both on the skills of a master and on the correct combination of the equipment and materials as well as on the output power of the milling cutter, the shapes and sharpness of the caps, the tool rotation speed, and the pressure on the nail plate or the foot of a client. The Multibor-Suite technology combines the technical capabilities of the equipment, the specifics of usage of the tools for machine-assisted nail care, the present-day requirements of a client, and the skills of a master. Your milling cutter operates according to the Multibor-Suite technology in the Program Mode. This enables you to use the table for correct operation of the device in accordance with a pre-selected program for a specific procedure. The processor will further automatically select the required speed, the output power, and the torque, and it will also supervise and control all required changes in the course of the operation, smoothly adapting to your manner of performing the procedure.

The additional opportunities of Multibor-Suite

It is only the MULTIBOR Suite Podolog device family that has two control channels and two connections for two engines, which can be controlled in turns. This feature would for instance be useful for chiropodists.

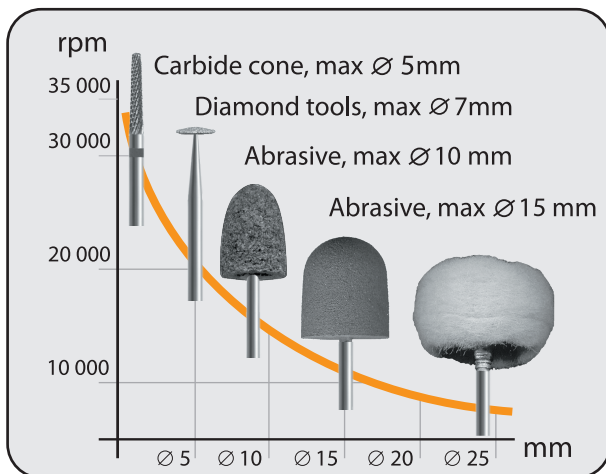
Thru the usage of the additional engine of the NAIL type jointly with the "Natural Nail" or "Pedicure" programs, it can select the operating modes for complex podiatric cases.

Besides, MULTIBOR Company can supply the Podolog-type devices with additional therapeutic engines required for the operation with the Omnicut heads under the mechanical nail care technology with cuticles trimmed.

Attention! The Omnicut head is not included in the package.
This tool should be purchased separately.

Multibor - Power Control Processor technology

The power control processor precisely controls the correlation of the selected rpm rate with the output power required to perform a specific procedure or a type of work. When the nail care master presses the tool firmer to the surface being treated, the Milling Cutter does not stop and does not decrease the preset rpm rate; on the contrary, it keeps those parameters as they are, while overcoming the resistance of the surface being treated. However, any type of work has its own precisely limited range of the output power applied. When the nail care master approaches the permitted limits of the output power in the course of work, the power control processor sends an audible warning signal. The nail care master should then change the working pressure or else the power control processor would switch off the power supply to the motor. This enables the nail care master to 'limit the working pressure' and to use the power reserve more precisely, thus making it possible to prolong the technological lifespan of the Milling Cutter and to keep it from overheating under 'hard operation modes' and sustained workloads. The graph shown below will assist you with better understanding when you need to select the required speed of rotation depending on the diameter of the tool applied.



Emergency Protection

In order to preclude incorrect steps and to protect the equipment from damage, the Milling Cutter has an emergency protection system. When the emergency protection system is activated, an audible signal is heard and an error message is shown at the display.

Overload



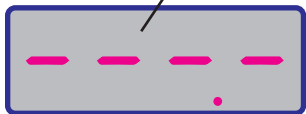
The 'Overload' indication means that the tool applied is being used at a speed or with a power rating not allowed for such a tool.

To deactivate the 'Overload' emergency mode, the following must be done:

1. Switch off the rotation
2. Select the correct speed (Manual Mode)
3. Select the correct program (Program Mode)
4. Select the correct tool (any of the modes)
5. Resume the operation

In the event of the micromotor overheating, switch off the Milling Cutter for 30 minutes and then resume the operation.

No Motor



The 'No Motor' signal means that there is no power supply to the handheld milling cutter.

This may be caused by a number of reasons:

- No connection to the handheld milling cutter
- No electric contact in the output jack of the power unit
- Damaged power cable of the handheld milling cutter
- Breakdown of the brushes in the motor of the handheld milling cutter

It is allowed to independently deactivate the 'No Motor' emergency mode only if the handheld milling cutter is not powered up.

In all other cases, please refer to the Service Center to correct any faults.

The 'Open Collet' signal means that there has been an attempt to switch on the rotation without a tool or with an open collet clamp.



In order to deactivate the 'Open Collet' emergency mode, the following must be done:

1. Switch off the rotation
2. Insert a tool
3. Lock the collet clamp
4. Resume the operation

Pedal Operation

Connect the relevant plug of the pedal to the relevant jack at the back panel of the power unit and place the pedal in a location suitable for work. Press and hold the pedal with your foot to start the rotation of a tool. Release the pedal to stop the rotation.

Attention! The pedal only reacts to closure and opening of the electric contacts. No changes occur to the rotation speed of a tool.






Maintenance

Very important! All types of preventive maintenance must be performed only when the Milling Cutter is disconnected from the power supply and unplugged from the wall socket! An accidental switch-on of the Milling Cutter during maintenance may result in injury, electric shock or damage to the device.

Prior to any operation of the Milling Cutter, always check the casings of the power unit and of the handheld milling cutter, the connection cables, and the power cable. If any damage is found, contact the Service Center for replacement.

WARNING! Operation of the device is prohibited until the damaged parts are duly replaced!

Table of alarms

Display	Name	Operation
	power unit malfunction	<ol style="list-style-type: none">1. Stop the operation2. Unplug the milling cutter3. Contact the Service Center
	Pedal is out of order	<ol style="list-style-type: none">1. Remove the foreign items from the surface of the pedal2. Disconnect the pedal from the power unit and continue working without the pedal
	No Motor	<ol style="list-style-type: none">1. Check the connection of the motor2. Please refer to the Service Center
	Open Collet	<ol style="list-style-type: none">1. Switch off the rotation2. Insert a tool3. Lock the collet clamp4. Resume the operation
	Overload	<ol style="list-style-type: none">1. Switch off the rotation2. Select the correct speed, program or tool3. Continue operation

