

OPERATING MANUAL

FOR STEEL DRILL SHARPENERS



PMW-1300



PMW-2000



PMW-3000

This manual describes the operation and service of the family of sharpening machines for steel drills sharpeners.

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INTRODUCTION

Introduction

CONTENT OF THE MANUAL

This manual contains technical information necessary for safe operation, proper operation and maintenance of the PMW-1300, PMW-2000 and PMW-3000 series of devices used for sharpening steel drills.

In particular, the manual contains:

- Policies and instructions for safe and healthy work,
- Preparation of the machine and workplace,
- Specification of machine components,
- Operating instructions,
- Instruction for grinder blade replacement,
- The principles of keeping the machine in good working order.

COMPLIANCE WITH THE RULES

The machine complies with the relevant EU approval regulations.

The EC declaration of conformity annexed to this manual is the proof of this fact.

INFORMATION ON THIS MANUAL





Information on this manual

LABELLING OF WARNINGS

In this manual, important information is separated from the main text by means of an icon and the associated word as shown in the following table.

Icon and word indicate the seriousness of the state or situation.

It is essential that you read this information and follow the instructions.

Description	Example
Danger means that a condition or state exists which can result in death or serious injury if the instructions given are not followed.	 DANGER: No action to take. Risk of electric shock, injury or damage to the machine. Do not enter or stand in this area.
Warning means that a condition or state exists that will cause moderate injury if you do not follow these instructions.	 WARNING: Do not reach between the tool changer and spindle head.
Caution means that minor injuries or minor damages to the machine may result if the instructions given are not followed. In addition, if you do not follow the instructions in this caution, you may need to repeat the procedure from the beginning.	 CAUTION: Turn off the power supply to the machine before performing any maintenance work.
Note means that the text contains additional information, explanations or helpful hints.	 NOTE: If the machine is equipped with an optional table with a larger Z clearance, these guidelines must be followed.

SAFETY

Safety

INTRODUCTION



Steel drill sharpeners of the PMW series may only be operated by appropriately trained personnel (training confirmed by appropriate records) in accordance with the operating instructions, safety rules and procedures and instructions for safe operation of the machine.



For your own safety, please read and understand the warnings, cautions and instructions before operating the unit.

THIS IS A NECESSARY CONDITION BEFORE STARTING WORK TO ENSURE THAT ACCIDENTS AT WORK ARE AVOIDED.



Good upkeep, periodic inspections and maintenance are an integral part of ensuring safe and trouble-free operation.

SOURCES OF DANGER / RISKS ASSOCIATED WITH OPERATION

Despite the design of a safe sharpener, the machine and/or station contains potentially hazardous elements such as

- contact of body parts with rotating parts (motor, grinding disc),
- grinding dust released from the grinding disc during operation,
- electrically live components,
- high volume components,
- vibration-generating components,
- compressed air systems, if any (at the workplace).

INJURIES CAUSED BY BREAKAGE OF ABRASIVE PRODUCT

- Before use, check the grinding wheel for defects or damage.
- Do not use abrasives after the expiry date stated on the packaging.
- Do not use an abrasive product unless it can be properly identified.
- Refer to the maximum speed and operating parameters of the unit.
- The maximum speed must not be exceeded.

FUMES, DUST AND SPARKS

- The use of abrasives near flammable materials is prohibited.
- Contact with grinding waste can cause lung damage and other physical damage.
- All dry grinding processes should be carried out with adequate ventilation or extraction.
- It is recommended to use half-masks or filter masks.
- Use additional personal protective equipment against sparks. The risk at the workplace and its impact on neighbouring workstations must be assessed.
- When using abrasive tools, wear eye protection in the form of glasses or face protectors at high risk.

SAFETY

NOISE





- Hearing protection is recommended when using the device, regardless of the noise level.
- Periodically measure the noise level to determine the appropriate hearing protectors.

VIBRATIONS

- The uninterrupted impact of vibrations on hands, arms or legs can lead to problems with circulation, joints, muscles and nerves. The first symptoms are tingling and numbness. In the event of any of these symptoms, turn off the device immediately, straighten your hands and fingers. Wait until symptoms have completely disappeared.
- Do not ignore physical symptoms of vibration and consult a physician.
- When unnatural vibrations occur, stop and inspect the machine and check for damage to the mounted abrasive material.
- All fastening elements must be in perfect condition.

PERSONAL PROTECTIVE EQUIPMENT REQUIRED

In order to eliminate hazards, the operator of the device is obliged to wear personal protective equipment, such as

Dust mask	Hearing protection	Protective goggles	Gloves
			
Protection against dust generated during grinding	Protection against noise	Protection of eyes against sparks and splinters when grinding	Protection of hands against sparks, spatter and temperature during grinding



The user of the machine is responsible for the risk assessment at the workplace and must carry out a documented risk assessment at the workplace and inform his employees in an effective and confirmed manner.

The risk assessment of the machine operation indicated by the manufacturer/distributor is not a risk assessment at the workplace. The manufacturer/distributor indicates "only" aspects related to the operation of the machine as such.

Specific working conditions using the device, such as its location, lighting, access, work organisation, etc., are the responsibility of the user, because it is the user who organises the workplace.

SAFETY

WORKPLACE DESCRIPTION



Keep your workplace clean and tidy.

A mess in the workplace increases the likelihood of an accident.

- The device must be placed:
 - On a stable flat surface,
 - In a well-lit place,
 - In a dry place,
 - In a well-ventilated place,
 - Away from flammable and explosive materials.
- The workplace should be spacious and provide sufficient space for the work to be done.
- The workplace should provide systems to prevent fillings and sparks from escaping during sharpening.
- The device should be placed on a work table in a way that guarantees work safety and ergonomics of the worker's posture.

RULES FOR PUTTING MACHINERY INTO SERVICE

The equipment supplied complies with the basic guidelines for use in the EU. However, in order to ensure safe operation, the guidelines described in this manual must be observed.

SAFETY AND HEALTH INSTRUCTIONS FOR THE GRINDER

CONDITIONS FOR ADMISSION TO WORK OF A WORKER



- Not younger than 18 years old.
- Having completed at least a vocational school in a given speciality or other professional qualifications.
- Getting appropriate professional instruction, reading the instruction manual, training in occupational safety and health.
- Health condition appropriate for the performed work confirmed by a certificate issued by an authorized physician.
- Wearing the work clothes specified for the position in the company's workwear standards table.
- When operating machines with moving parts, do not work with loose (hanging) parts such as loose sleeves, ties, scarves, shawls, scarves, scarves, scarves or without headgear covering the hair.

RULES FOR WORKING WITH SHARPENER



- Do not touch moving, rotating parts of machines and abrasive tools.
- Do not accidentally switch the unit on before mounting or changing the abrasive material.
- During installation, follow the instructions of the abrasive supplier and/or the machine tool.
- Do not modify the mountings of the abrasive disc or force it onto the mandrel.

SAFETY

- When assembling the product, use the tools provided for this purpose.
- The mounted abrasive product must be subjected to a test run up to maximum speed for a minimum of 30 seconds.
- Make sure that the workpiece is correctly mounted and fixed.
- The stopping of the grinding wheel must be carried out naturally without pressing on the abrasive surface.
- Do not exert excessive force on the grinding wheel or subject it to impacts or overheating.
- During commissioning, the workpiece must not be in contact with the tool (grinding wheel).

TRANSPORT CONDITIONS FOR ASSEMBLY AND DISASSEMBLY

TRANSPORT WORK

The term "**manual handling of transport operations**" - means any form of transport or support of objects, goods or materials by one or more workers, including moving them through: raising, lifting, stacking, pushing, pulling, carrying, sliding, rolling or transporting. This type of work is carried out at workstations requiring the handling of objects of small or large weight, manipulation activities, assembly work or control of machinery or equipment.

The improvement of safety in manual handling mainly consists in:

- elimination of these jobs,
- risk assessment in positions requiring this type of work and adjusting the size of the mass transferred to the strength capabilities of the employee,
- the protection of workers' health during lifting and handling by maintaining the correct position of the various parts of the body during these activities, in particular the correct positioning of the spine,

For the sake of safety and health protection of employees working in manual transport operations, the WORKER shall:

- make every effort to reduce the amount of manual transport work in the company,
- assess the occupational risks associated with manual handling of transport operations, particularly taking into account the following:
 - the mass of moving objects,
 - working environment conditions,
 - organisation of the working environment,
 - individual predispositions of the employee,
- take appropriate measures to reduce that risk and, where possible, provide auxiliary equipment suitable for the size, weight and nature of the objects to be handled, so as to enable work to be carried out safely and comfortably,

SAFETY

When carrying out manual transport work, a number of basic rules must be observed:

- use auxiliary equipment to reduce strain on the musculoskeletal system, in particular on the spine,
- avoid large twists and unnecessary bending of the torso,
- aim to make the body position as close as possible to the natural one,
- the most advantageous height from which objects are lifted is the height of the table top, this height should be adjusted individually,
- human-object base area should be as large as possible, but should not increase the load on the lower limbs,
- Use suitable lifting methods when lifting unusual, bulky or heavy objects,
- carried items should have handles,
- Large and bulky items should be handled in teams, taking into account all the above safety precautions and recommendations on how to lift and carry items.

Permissible lifting and handling weights for different categories of workers:

Type of work	YOUNG PEOPLE Age 16-18 years old	WOMEN Age from 18 years old
Permanent work	8 kg	12 kg
Casual work	14 kg	20 kg
	YOUNG PEOPLE Age 16-18 years old	MEN Age from 18 years old
Permanent work	12 kg	30 kg
Casual work	20 kg	50 kg

If it is necessary to lift an object held more than 30 cm from the torso, the permissible weight of the object per employee should be reduced by half or it should be ensured that at least two employees perform these activities.

It is forbidden to carry by hand objects with a mass exceeding 30 kg to a height exceeding 4 m or a distance exceeding 25 m.

In the case of two-handed handling of objects, the force applied by the worker necessary to initiate the movement of the object must **not exceed a value:**

- 1) 300N - when pushing,
- 2) 250N - when pulling.

SAFETY

TRANSPORT AND STORAGE

Transportation of the device should be carried out by covered land (or sea or air) means of transport in individual factory-made individual packages. When transporting the packaging with the equipment, secure it against movement. Means of transport must ensure that direct exposure to the weather is avoided.

The device should be stored in factory packaging in indoor spaces free of vapours, chemical fumes and aggressive substances, where the air temperature is within the range of 0°C÷40°C and the relative humidity does not exceed 80%.



Family of drills sharpeners machines in factory packaging.

ASSEMBLY

After removing the device from the factory packaging, the device should be placed on the station according to the guidelines from the chapter *WORKSTATION DESCRIPTION*. Connect it to the power supply as described in the chapter *WORKING PRINCIPLES WITH ELECTRICAL DEVICES* and start working after having read the operating instructions in the scope of safety at work and operation.

STOP

If the device is not used temporarily, it should be left in the switched off state to prevent accidental start-up. Turn off the main switch and unplug the power cord. Protect the unit from dirt and dust and leave it in a position where it cannot be dropped. You must also ensure that the equipment you leave behind does not obstruct transport routes or access to personal protective equipment, first aid and fire-fighting equipment.

ACTIVITIES BEFORE STARTING WORK



- Prepare auxiliary equipment for the storage of materials, instruments, tools and waste.
- Read the executive documentation carefully.
- Schedule the sequence of the individual actions.
- Prepare the material for processing by setting it in such a way as to ensure maximum safety while maintaining the limits of the workstation.
- Check the technical condition of mechanical devices, lighting and electrical installation.
- Try to start the sharpener and check its operation.
- Prepare the necessary workshop aids, measuring instruments, work tools, sweeping brushes and the necessary personal protective equipment, e.g. glasses, masks, etc.
- Check the condition and attachment of the grinding disc (the disc must not be warped, cracked, must be properly attached), the condition of the wheel guard, the efficiency of the dust extraction system.

COVERS

- The device in the area of working sockets has a protection in the form of a plug protecting access to moving rotating elements.



- The cover (cap) protects against accidental injury caused by inserting a limb and/or other object in the socket opening that may cause other injury in contact with the rotating grinding wheel by ejecting an object.
- A trained worker, while working with the sharpener, consciously opens the covers (removing the cap) following the principles specified in this manual, with particular emphasis on safety aspects, during further work.
- The cover should be opened (the cap removed) after starting the motor driving the grinding disk.
- After the work is finished, the covers should be closed (put the cap in the working opening) and the sharpener should be left stationary in this condition.

PRINCIPLES AND METHODS OF SAFE WORKING PRACTICES

IT IS PROHIBITED TO



- Work at a station without authorisation, wearing inappropriate clothing, without appropriate personal protective equipment.
- Act in a manner that does not comply with applicable laws, regulations, instructions or instructions from your manager.
- At the workplace, store raw materials, finished products, auxiliary materials and waste in quantities greater than those resulting from technological needs, allowing for maintaining continuity of work on a given shift.
- Sharpener in motion: repair, clean, lubricate.
- Resume the operation of the sharpener without removing the damage.
- Remove the grinding disc cover and the cover from the sharpening machine.
- Take direct (contact) measurements during tool movement.
- Check the smoothness of the workpiece surface with your hand while it is moving.
- Sharpen without respiratory protection if the sharpener does not have an efficient dust extraction system.
- Do not connect the unit to the power supply unless the unit is equipped with the factory-fitted plugs.
- Perform cable extensions differently from factory-made extension cords.
- Wipe hands with rags, which were previously used to wipe tools because of the possibility of cutting hands with chips.
- Blocking of transport routes.
- Blocking access to fire-fighting equipment and first aid kits.
- Leaving the equipment in motion unattended (with the engine running).
- Permissions to work for bystanders.

IT'S NECESSARY TO:



- Progressively dispose of waste.
- Manual handling and transport of loads with a mass exceeding the established standards is not permitted.
- Use only efficient tools and workshop aids, which are undamaged and properly framed, such as hammers, files, chisels, etc.
- Fix the object firmly but do not damage it.
- When performing work, pay attention only to the activities performed, taking into account the conditions for safe working conditions for yourself and your environment.
- Maintain a proper working position.
- When working on a mechanical device, read the operating instructions of the device.
- Move the disc away from the workpiece when the machine is at a standstill.
- Only change tools when the machine is at a standstill.

SAFETY

POST-WORK ACTIVITIES

- Place the workpieces and finished parts in designated areas.
- Clean up the workstation and the tools and protective equipment.
- Switch off the device with the (main) switch.

EMERGENCY PROCEDURES



- Inform your superior immediately of any faults and/or damage to the machine.
- Machinery found to be defective during operation must be stopped immediately and be disconnected from the power supply.
- First aid must absolutely be given to the victims.
- In the event of failure of machinery presenting a risk to the environment, an easily understandable and perceptible warning and alarm signal must be given.
- Report every accident at work to your supervisor and leave the workplace in the same condition as the accident.

REMARKS



It is forbidden to place limbs, head and other objects in the processing area while the machine is in motion. This poses a risk of serious injury or death.



Improperly attached parts, tools and oversized parts and tools can be ejected from the machine, creating a lethal hazard.



It is forbidden to deactivate the safety function. This endangers the safe operation of the machine and may pose a direct risk to the health and life of the operator and/or bystanders.



Pursuant to Article 210 of the Labour Code, an employee has the right - if the working conditions do not comply with the provisions of health and safety at work and pose a direct threat to the health or life of the employee or if the work performed by him threatens other persons - to refrain from the work performed, notifying immediately the superior.

ELECTRICAL SAFETY

The tool should be powered by 230V. Do not insert the plug into an outlet with a different power supply range. This can lead to electric shock and is a danger to the worker. Do not modify the plug in any way. If in doubt, contact a qualified electrician.



It is forbidden to modify the plug and power cord by yourself. This work may only be carried out by a qualified electrician.



Use in humid and/or outdoor environments with high humidity, rain or snowfall is NOT permitted.

SAFETY



Do not use the device if the socket and/or plug of the power cord are damaged. This may result in electric shock, resulting in disability or death.



*It is forbidden to expose the device to rain or moisture.
This may result in electric shock, resulting in disability or death.*



It is forbidden to perform any electrical work inside the control systems by unqualified personnel without proper training and qualifications. This may result in loss of health or life.

PRINCIPLES OF WORKING WITH ELECTRICAL EQUIPMENT

- Use original, unmodified plugs.
- Do not use the device if the socket or plug is damaged.
- Do not expose the unit to rain or work in humid environments. Water entering the interior poses a risk of electric shock.
- Use cables with appropriate parameters to ensure that the cable is not overloaded.
- Do not use the cable to carry or drag the device.
- Do not pull on the cable to disconnect the plug.
- Route the power cord away from heat sources, oil, sharp edges and moving parts.
- It is forbidden to run cables on footpaths or other transport routes.

EXTENSION CABLES

Make sure the power outlet of the extension cord is compatible with the plug of the device.



It is forbidden to run route cables / extension cords in pedestrian and/or transport routes. This may cause damage to the cable and may result in electric shock, disability or death.

GENERAL DESCRIPTION OF SHARPENING MACHINES

General description of sharpening machines

TARGET USE

The steel drill sharpener is a device for precise sharpening of spiral drill bits at a selected angle with the possibility of making a cut correction. The operation of the device is simplified as much as possible so that after basic training the operator can perform the sharpening process.

TECHNICAL PARAMETERS OF SHARPENING MACHINES

	PMW - 1300	PMW-2000	PMW-3000
Range of diameters of drills to be sharpened	Min Ø2.5 Max Ø13.0	Min Ø3.0 Max Ø20.0	Min Ø12.0 Max Ø26.0 Option - Ø8.0 ÷ Ø11.0 - Ø27.0 ÷ Ø30.0 with chisel edge C
Top angles range	85°÷140°	85°÷140°	85°÷140°
Power supply	220÷230V 50Hz	220÷230V 50Hz	220÷230V 50Hz
Motor power	90 W	450 W	450 W
Current protection	6 A	10 A	10 A
Rotary speed of grinding disc	6000 rpm	4300 rpm	4000 rpm
Weight	10 kg	21 [kg]	25 kg
Dimensions	305 x 172 x 180 [mm]	480x260x240 [mm]	470x260x235 [mm]
Noise emissions level	68 dB	70 dB	69 dB




GENERAL DESCRIPTION OF SHARPENING MACHINES

SCOPE OF DELIVERY

The scope of delivery includes:

STANDARD EQUIPMENT

Depending on your choice of device:

PMW - 1300	PMW-2000	PMW-3000
		
Drills holder (1 pc)	Drills holder (1 pc)	Drills holder (1 pc)
Sleeves ER of dimensions: <ul style="list-style-type: none"> • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 10 • 11 • 12 • 13 	Sleeves ER (18 pcs.) of dimensions: <ul style="list-style-type: none"> • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 10 • 11 • 12 • 13 • 14 • 15 • 16 • 17 • 18 • 19 	Sleeves ER of dimensions: <ul style="list-style-type: none"> • 12 • 13 • 14 • 15 • 16 • 17 • 18 • 19 • 20 • 21 • 22 • 23 • 24 • 25 • 26
Allan key (2 pcs.) of dimensions: <ul style="list-style-type: none"> • 4 • 5 	Allan key (2 pcs.) of dimensions: <ul style="list-style-type: none"> • 4 • 5 	Allan key (2 pcs.) of dimensions: <ul style="list-style-type: none"> • 4 • 6
Grinding disc (1 pc) /the diameter of the mandrel is 12.5 [mm]/	Grinding disc (1 pc) /the diameter of the mandrel is 19 [mm]/	Grinding disc (1 pc) /the diameter of the mandrel is 19 [mm]/
Power cable (1 pc)	Power cable (1 pc)	Power cable (1 pc)

OPTIONAL EQUIPMENT

Applicable only for PMW-3000 model.

The scope of delivery of the additional accessories includes, in addition to all the standard accessories listed above:

- ER sleeves of dimensions of 8,9,10,11,27,28,30 (7 pcs)
- Grinding wheel for carbide drills (1 pc)

GENERAL DESCRIPTION OF SHARPENING MACHINES

PMW - 1300



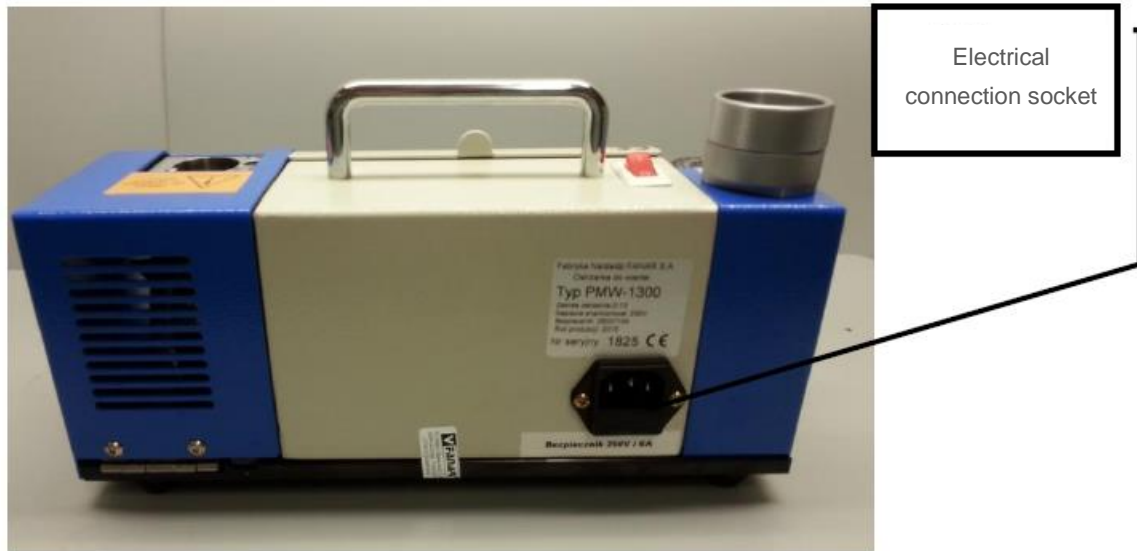
1. Main switch.
2. Drill fixation handle.
3. Setting base - setting the length and position of the drill for sharpening.
4. Working socket on the faceplate.
5. Working socket for chisel edge.
6. Handle opening the guard covering the mounting sleeves.
7. The transport handle of the device.



The drill bit is clamped into the holder using a sleeve of the appropriate size. The sleeve can be accessed by opening the sleeve cover as shown in the following figure.

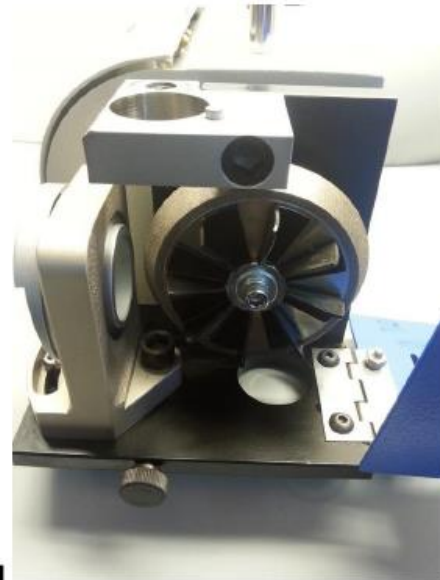
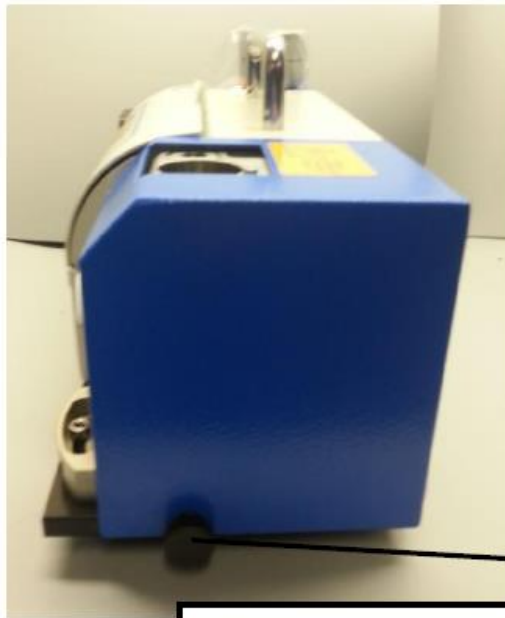


Back view



Side view

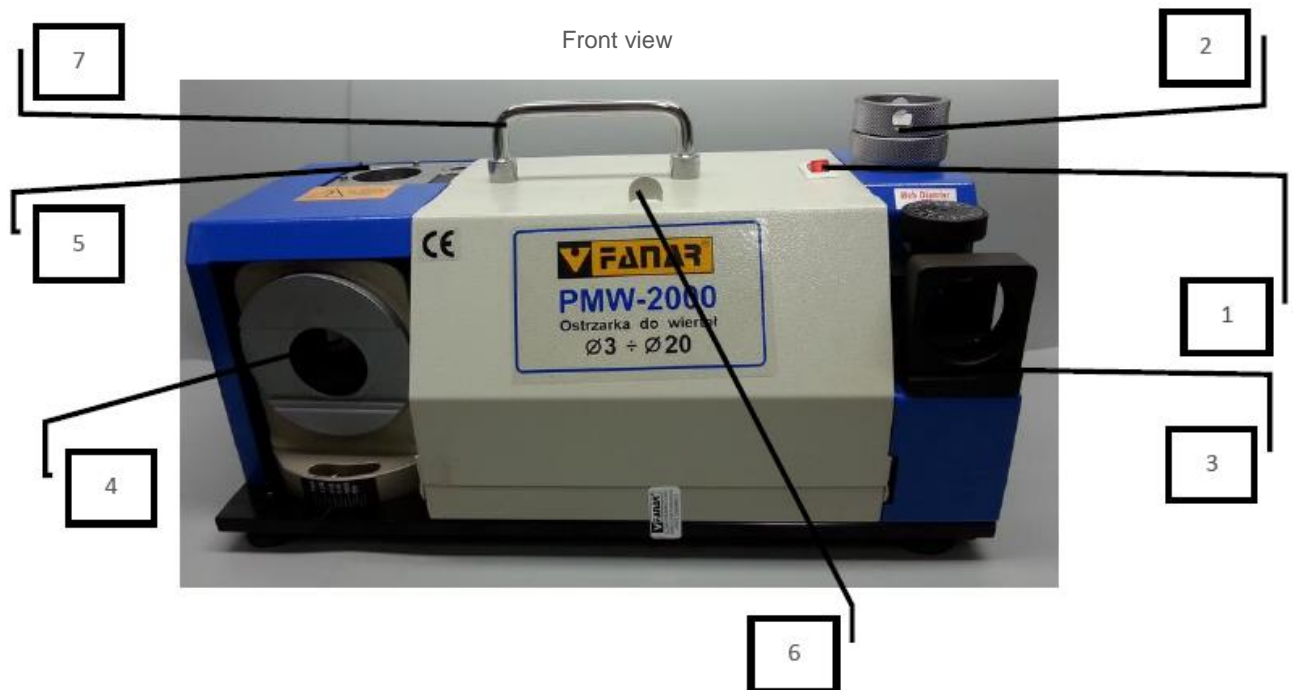
GENERAL DESCRIPTION OF SHARPENING MACHINES



Screw for opening the cover of the grinding disc

GENERAL DESCRIPTION OF SHARPENING MACHINES

PMW-2000



1. Main switch.
2. Drill fixation handle.
3. Setting base - setting the length and position of the sharpening drill bit.
4. Working socket on the faceplate.
5. Working socket for chisel edge.
6. Handle opening the guard covering the mounting sleeves.
7. The transport handle of the device.



The drill bit is clamped into the holder using a sleeve of the appropriate size. The sleeve can be accessed by opening the sleeve cover as shown in the following figure.



GENERAL DESCRIPTION OF SHARPENING MACHINES

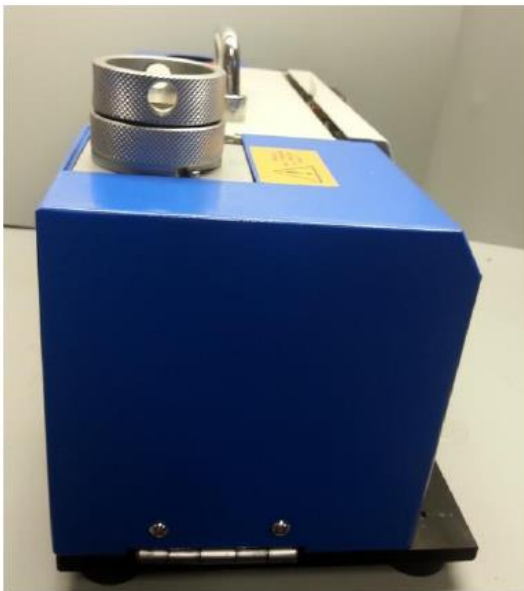
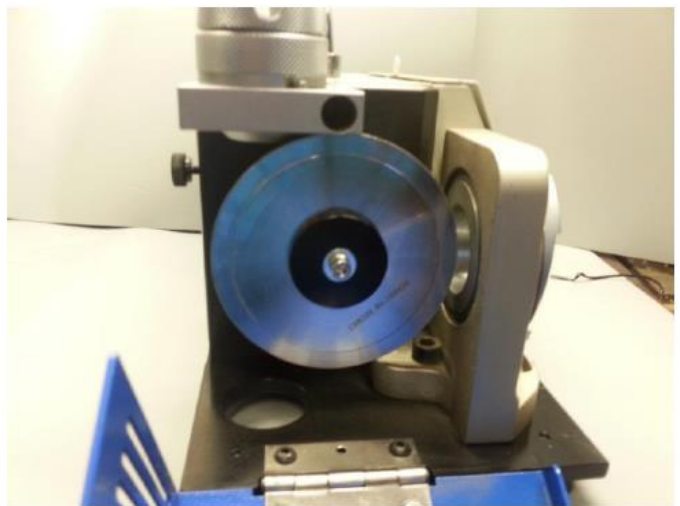
Back view

GENERAL DESCRIPTION OF SHARPENING MACHINES

Electrical
connection socket



Screw for opening the cover of the
grinding disc



GENERAL DESCRIPTION OF SHARPENING MACHINES

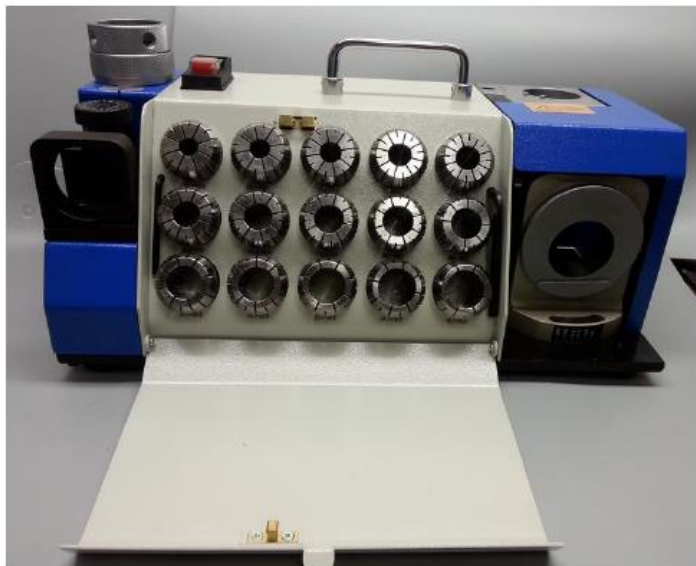
PMW-3000



1. Main switch.
2. Drill fixation handle.
3. Setting socket for the length and position of the drill for sharpening.
4. Working socket for sharpening the faceplate.
5. Working socket for chisel edge.
6. Handle opening the guard covering the mounting sleeves.
7. The transport handle of the device.



The drill bit is clamped into the holder using a sleeve of the appropriate size. The sleeve can be accessed by opening the sleeve cover as shown in the following figure.



GENERAL DESCRIPTION OF SHARPENING MACHINES

Back view



Maintenance

USE

Before you start working, you must:

- check the completeness of the device,
- set the workstation according to the guidelines in the Workstation description section,
- during the work, observe the recommendations and notes concerning safety and health at work.

The power supply connection must be carried out in accordance with the instructions and instructions described in the chapter *Electrical safety*. In particular, use original, undamaged plugs.



The socket outlet is equipped with a fuse to protect the device.



Continuous operation of the machine for more than 1 hour (time to start the grinding wheel rotation) is not permitted. This may cause damage to the device.

For further instructions on how to sharpen the drills, follow the instructions below:

MAINTENANCE

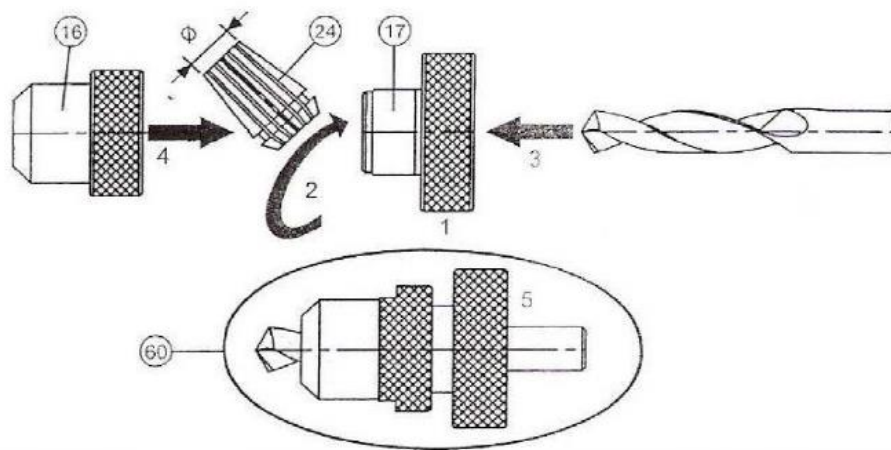
WORK CYCLE

Drill sharpeners of type PMW are specialized devices adapted to drill grinding operations by their work cycle.

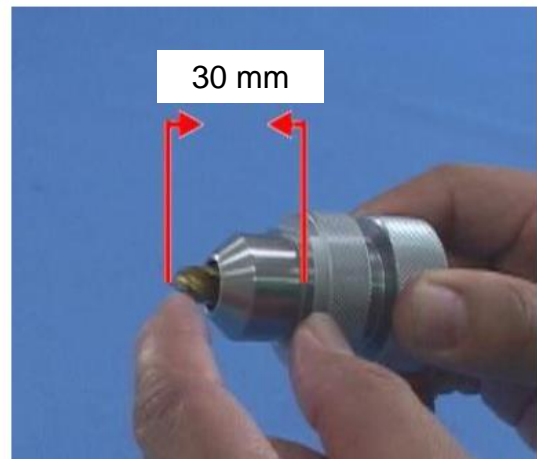
The work cycle of sharpening the drill is reduced to the following stages of the work cycle.



FIXING THE SHARPENING DRILL



- 1 • Select the sleeve (24) appropriate for the drill diameter from the set of sleeves.
- 2 • Fix the sleeve in the holder (17).
- 3 • Insert the drill loosely into the sleeve to a depth of approx. 30 [mm].
- 4 • Place the nut (16) on the sleeve (24) and slightly tighten the handle (17).
- 5 • Secure the drill to the handle (60) properly.



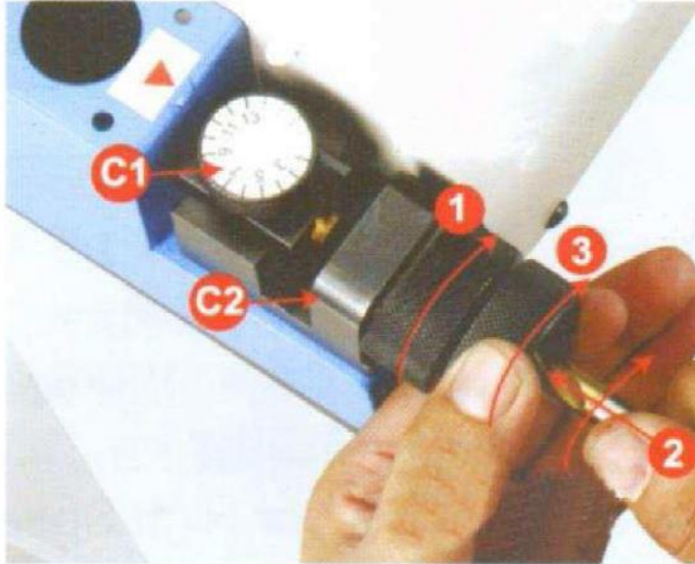
REMARKS



It is very important to select the correct size of the ER sleeve (24) to the diameter of the sharpened drill (the range of sleeve mounting is -1mm, e.g. sleeve D10mm is used to mount the drill above 9 to 10mm).

MAINTENANCE

POSITIONING OF THE LENGTH AND POSITION OF THE DRILL



- 1 • Move the scale (C1) back to the beginning, then set it to the correct diameter of the drill.
- 2 • Insert the drill holder (60) into the setting set (C2) and push it to the end.
- 3 • Move the drill (2) to the stop, turn the handle (1) clockwise to the stop, turn the drill clockwise to the stop.
- 4 • Tighten the handle (3) in this position.
- 5 • Remove the handle (60) from the setting socket and check the position of the drill in the handle.

NOTE

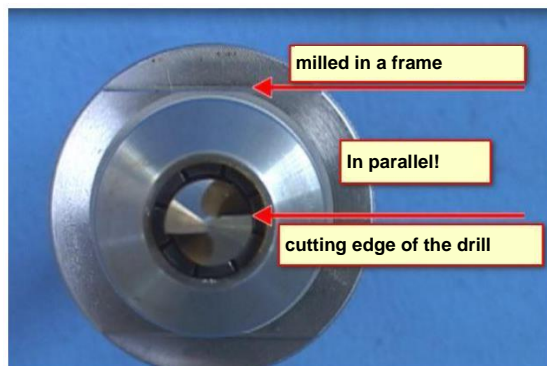
In the PMW-2000 and PMW-3000 models there is a double scale and you have to go back to the perceptible resistance, i.e. to

-O -to the bumper.

Remarks



The cutting edge of the drill should be parallel to the edge of the grooves in the handle.



MAINTENANCE



If the drill has a different spiral than the standard one, adjust the drill again by adjusting the knob (C1) to the different diameter of the drill.



The correct setting of the length of the drill is very important.

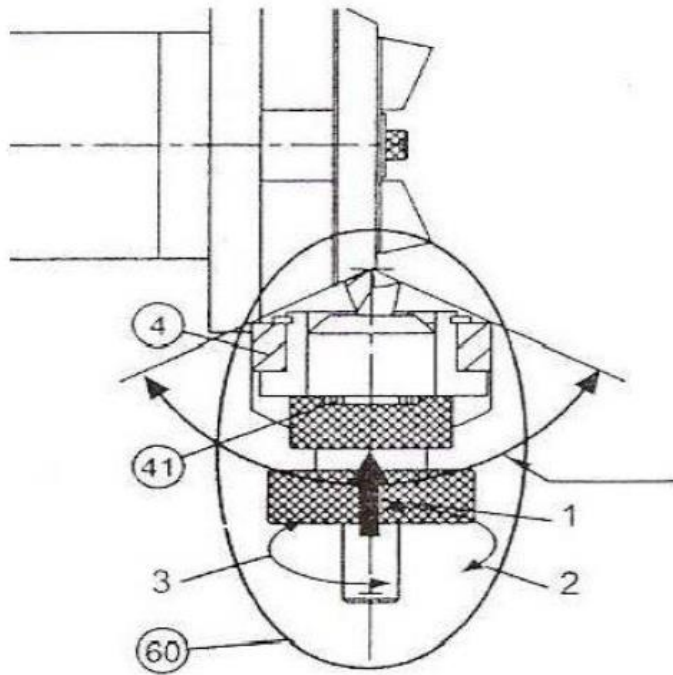
Incorrect setting of the drill length in the frame and high pressure on the grinding disc during sharpening can damage the grinding disc and/or the grinding disc drive shaft.



Each time a dangerous and/or life-threatening situation arises, use the main switch to stop the unit.

MAINTENANCE

SHARPENING OF THE FACEPLATE



- 1
 - Set the angle of the hole socket (4) corresponding to the top angle of the drill.
- 2
 - Insert the handle into the hole (4) and place the pins (41) in the groove of the holder.
- 3
 - Press the handle (60) and turn it clockwise 5-6 times until the grinding is complete.
- 4
 - Slide the handle (60) out of the hole and rotate it 180°.
- 5
 - Repeat the stages 2 and 3.

MAINTENANCE

Chisel edge correction sharpening (only for INOX drills)

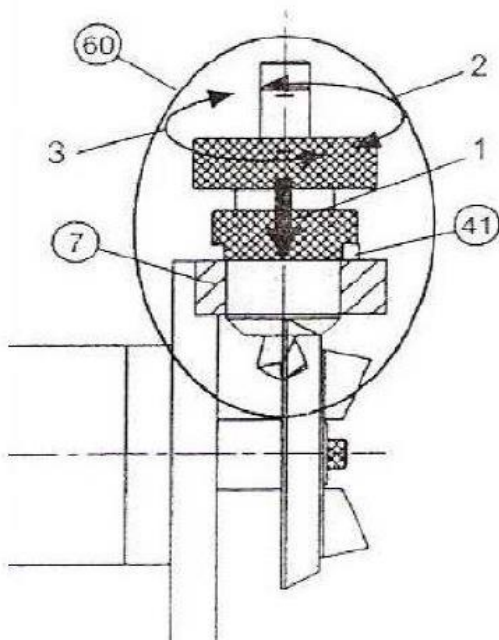
In order to obtain the correct chisel edge, use the Allen screw and correct the calibration as follows:

+

- Enlarging the chisel edge

-

- Reducing the chisel edge



1

- Insert the handle into the hole (7) and place the pins (41) in the groove of the holder.

2

- Press the handle (60) and turn it clockwise 5-6 times until the grinding is complete.

3

- Slide the handle (60) out of the hole and rotate it 180°.

4

- Repeat the stages 1 and 2.

OPERATION AND MAINTENANCE

Operation and maintenance

In order to achieve trouble-free long-term operation of the device, it is essential to follow the instructions described in the sections Activities before starting work and Post-work activities and EVERY TIME after finishing work to clean the device and accessories from fillings, dirt, dust and grease. It is also necessary to remove fillings from the working area of the grinding disc.

REPLACING THE GRINDING DISC.

The sharpening tool is the grinding disc.



During operation, the wear of grinding discs should be checked periodically.

Worn grinding discs must be replaced in accordance with the instructions given in the chapter "Operation and Maintenance".

A worn out grinding disc causes incorrect sharpening of drills, in particular:

- burning drills,
- damage to the safety fuse of the machine.

In order to replace the wheel, it is necessary to

- Switch off the power supply to the unit by means of the main switch,
- Pull the plug out of the power outlet,
- Open the disc guard by unscrewing the retaining screw,
- unscrew the disc using the correct and functional tools,
- fit a new disc,
- tighten all screws,
- close the cover,
- tighten the protective cap screw,
- connect the device to the power supply,
- perform a test run of the device.



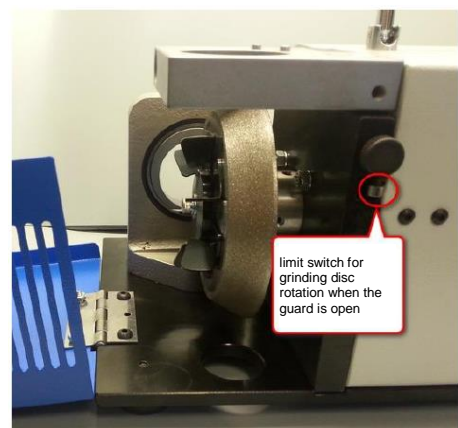
The sharpener has safety functions that prevent the spindle speed from being switched on when the grinding disc guard is opened.



Despite the use of a limit switch that prevents the grinding disc rotation from being switched on when the grinding disc guard is open, any operation with the guard open requires ABSOLUTE DISCONNECTION OF THE "MAIN SWITCH" AND PULL THE PLUG OUT OF THE POWER OUTLET.



During a test run, any unnatural or disturbing noises from the machine during start-up require its IMMEDIATE SHUTDOWN and check the cause of the malfunction.



WARRANTY

Warranty

1. The Tools Factory FANAR SA provides a guarantee for the efficient operation of the device for a period of 12 (twelve) months from the date of sale. The warranty period is extended by the time of possible warranty repairs. If the repair required replacement of parts, the warranty period is renewed for the replaced part.
2. In case of a complaint, the warranty card filled in by the Seller, in particular with the date of sale, the signature of the Seller and the serial number and/or catalogue number (index) should be provided. If there is no indication of the date of sale, proof of purchase must be provided.
3. The guarantee can only be provided if the following requirements are met altogether:
 - a. The damage was caused only by a physical defect due to reasons inherent in the device,
 - b. The accessories recommended by the Guarantor or the manufacturer were used,
 - c. The device was used in accordance with the enclosed instruction manual,
 - d. Periodic inspections provided for in the instruction manual were carried out on time,
 - e. The defective device has the original nameplate and is complete.
4. The warranty does not apply to:
 - a. Damage caused by the fault of the user,
 - b. Damage resulting from inadequate selection of the equipment to suit the nature of the work,
 - c. Damage resulting from overloading of the device due to excessive or improper operation,
 - d. Accessories included with the device, as well as component wear and tear resulting from normal use of the device,
 - e. Damage resulting from the lack of or delay in performing servicing of the device in accordance with the instruction manual in the indicated service.
5. Any repairs or attempts at repairs made by unauthorized persons will void the warranty and the device must not be disassembled or incomplete.
6. If a defect covered by the warranty is found, the complete device together with the required documents should be delivered to the Seller in its original packaging at the expense and risk of the Buyer. In the event of failure to meet this condition, the Guarantor shall not be liable for damages arising during transportation.
7. Defects acknowledged by the Guarantor shall be removed under warranty within 14 days from the date of delivery of the damaged device to the Seller. If it is necessary to bring in missing atypical parts or if the repair of the equipment requires an expert's opinion, the repair period may be extended.
8. This warranty does not exclude, limit or suspend Buyer's rights resulting from the device's non-compliance with the contract of sale.

Annexes

- EC declaration

WASTE MANAGEMENT

Waste management



According to the European Directive 2002/96/EC on old and used electrical and electronic equipment and their incorporation into national law, used power tools must be collected separately and returned to a secondary raw material collection point which carries out disposal in accordance with the national economic cycle and the Waste Act.

CONTACT INFORMATION

Contact information

For after-sales service, please contact us:

SERVICE OF DRILL SHARPENERS

Fabryka Narzędzi FANAR S.A.

TEL. (23) 672 44 44

PURCHASE OF CONSUMABLES (GRINDING WHEELS)

Fabryka Narzędzi FANAR S.A.

Sales Department

TEL. (23) 674 3024

Information on the company

FABRYKA NARZĘDZI FANAR S.A.

ul. Płocka 11, 06-400 Ciechanów

tel. (48 23) 672 44 41, 674 30 00

fax. (48 23) 672 48 41, 672 23 31

e-mail: info@fanar.pl

www.fanar.pl





CE DECLARATION OF CONFORMITY

We hereby declare and take responsibility for the following devices:

Name: SHARPENER FOR DRILLS
Model: PMW
Type: PMW-1300, PMW-2000, PMW-3000

Distributor:

FABRYKA NARZĘDZI FANAR S.A.
Ul. Płocka 11, 06-400 Ciechanów
tel.: +48 23 672-44-41, fax: +48 23 672-48-41

We declare that the equipment has been manufactured in accordance with the applicable regulations:

Low Voltage Directive 2006/95/EC
Machinery Directive 2006/42/EC

EN ISO 12100-1:2003
EN ISO 12100-2:2003
EN ISO 12121-1:2007
EN 61029-1:2000
EN 61209-1:2009

Distributor: Fabryka Narzędzi FANAR S.A.

Signatur e: [Stamp: PROKURENT
Chief Accountant
Hanna Kucińska]
[Signature]

FABRYKA NARZĘDZI FANAR S.A.
Ul. Płocka 11, 06-400 Ciechanów
tel. 23 674 30 00, fax 23 672 23 31
e-mail: info@fanar.pl
NIP 566-00-10-444, REGON: 130143575
- 02 -]

Remarks

FABRYKA NARZĘDZI FANAR S.A.

Ul. Płocka 11, 06-400 Ciechanów

tel. (48 23) 672 44 41, 674 30 00

fax. (48 23) 672 48 41, 672 23 31

e-mail: info@fanar.pl

www.fanar.pl

Domestic Sales Office

tel. (48 23) 674 30 16, 674 30 19

fax (48 23) 672 33 74

e-mail: sprzedaz@fanar.pl

Fanar Trade

tel. (48 23) 672 44 41, 674 30 00

fax (48 23) 674-30-01

e-mail: info@fanar.pl

ADNOTATIONS				
Description of the failure	Date of acceptance	Repair remarks Service stamp	Date of execution	The guarantee has been extended

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THE TERMS OF THE GUARANTEE

1. The Tools Factory FANAR SA provides a guarantee for the efficient operation of the device for a period of **12 (twelve) months** from the date of sale. The warranty period is extended by the time of possible warranty repairs. If the repair required replacement of parts, the warranty period is renewed for the replaced part.
2. In case of a complaint, the warranty card filled in by the Seller, in particular with the date of sale, the signature of the Seller and the serial number and/or catalogue number (index) should be provided.
If there is no indication of the date of sale, proof of purchase must be provided.
3. The guarantee can only be provided if the following requirements are met altogether:
 - a) The damage was caused only by a physical defect due to reasons inherent in the device,
 - b) The accessories recommended by the Guarantor or the manufacturer were used,
 - c) The device was used in accordance with the enclosed instruction manual,
 - d) Periodic inspections provided for in the instruction manual were carried out on time,
 - e) The defective device has the original nameplate and is complete.
4. The warranty does not apply to:
 - a) Damage caused by the fault of the user,
 - b) Damage resulting from inadequate selection of the equipment to suit the nature of the work,
 - c) Damage resulting from overloading of the device due to excessive or improper operation,
 - d) Accessories included with the device, as well as component wear and tear resulting from normal use of the device,
 - e) Damage resulting from the lack of or delay in performing servicing of the device in accordance with the instruction manual in the indicated service.
5. Any repairs or attempts at repairs made by unauthorized persons will void the warranty and the device must not be disassembled or incomplete.
6. If a defect covered by the warranty is found, the complete device together with the required documents should be delivered to the Seller in its original packaging at the expense and risk of the Buyer. In the event of failure to meet this condition, the Guarantor shall not be liable for damage arising during transportation.
7. Defects acknowledged by the Guarantor shall be removed under warranty within **14 days** from the date of delivery of the damaged device to the Seller.
If it is necessary to bring in missing atypical parts or if the repair of the equipment requires an expert's opinion, the repair period may be extended.
8. This warranty does not exclude, limit or suspend Buyer's rights resulting from the device's non-compliance with the contract of sale.



WARRANTY CARD

Product data (name, index, serial number)

Buyer data (name, address, tel.)

Stamp of the point of sale

VAT invoice number

Date of sale, signature of seller

Recipient signature

I confirm that I have received a complete and technically efficient device and instruction manual in Polish. I have read and accept the terms of this warranty.