scheppach OSM100 Oscillating Spindle Grinding Machine Instruction Manual

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Contents

Dear customer

we wish you a pleasant and successful working experience with your new scheppach machine.

Note

According to the applicable product liability law the manufacturer of this device is not liable for damages which arise on or in connection with this device in case of:

- improper handling,
- non-compliance with the instructions for use,
- repairs by third party, non authorized skilled workers,
- installation and replacement of non-original spare parts,
- improper use,
- failures of the electrical system due to the noncompliance with the electrical specifications and the VDE 0100, DIN 57113 / VDE 0113 regulations.

Recommendations

Read the entire text of the operating instructions prior to the assembly and operation of the device.

These operating instructions are intended to make it easier for you to get familiar with your device and utilize its intended possibilities of use.

The operating instructions contain important notes on how to work safely, properly and economically with your machine and how to avoid dangers, save repair costs, reduce downtime, and increase the reliability and working life of the machine.

In addition to the safety regulations contained herein, you must in any case comply with the applicable regulations of your country with respect to the operation of the machine.

Put the operating instructions in a clear plastic folder to protect them from dirt and humidity, and store them near the machine. The instructions must be read and carefully observed by each operator prior to starting the work. Only persons who have been trained in the use of the machine and have been informed on the related dangers and risks are allowed to use the machine. The required minimum age must be met.

In addition to the safety notes contained in the present operating instructions and the special regulations of your country, the generally recognized technical rules for the operation of wood working machines must be observed.

General Notes

- When you unpack the device, check all parts for possible transport damages. In case of complaints the supplier is to be informed immediately. Complaints received at a later date will not be acknowledged.
- Check the delivery for completeness.
- Read the operating instructions to make yourself familiar with the device prior to using it.
- Only use original scheppach parts for accessories as well as for wearing and spare parts. Spare parts are available from your specialized dealer.
- Specify our part numbers as well as the type and year of construction of the device in your orders.

osm 100

Delivery Status	
	oscillating spindle grinding machine
	workbench of massive grey cast iron
	rkbench of massive grey cast iron 6 abrasive sleeves (K80, ø 15/21/28/40/53/77 mm)
	5 rubberized grinding rolls (115 mm)
	6 table inlays ø 18/25/31/44/57/82 mm
	4 spindle discs ø 14/22/46/71
	mounting tool
	Operation Manual

Technical Data	
Dimensions L x W x H mm	400/365/440
m 400/365/440 R	2000
Table size mm	370 x 290
Table height mm	330
oscillation stroke mm	16
grinding height max. mm	98
ø spindle mm	12,7
vacuum connector ø mm	38
Gewicht kg	13,5
Drive`	
Motor V/Hz	230–240/50
Input P1 W	450

Subject to technical changes!

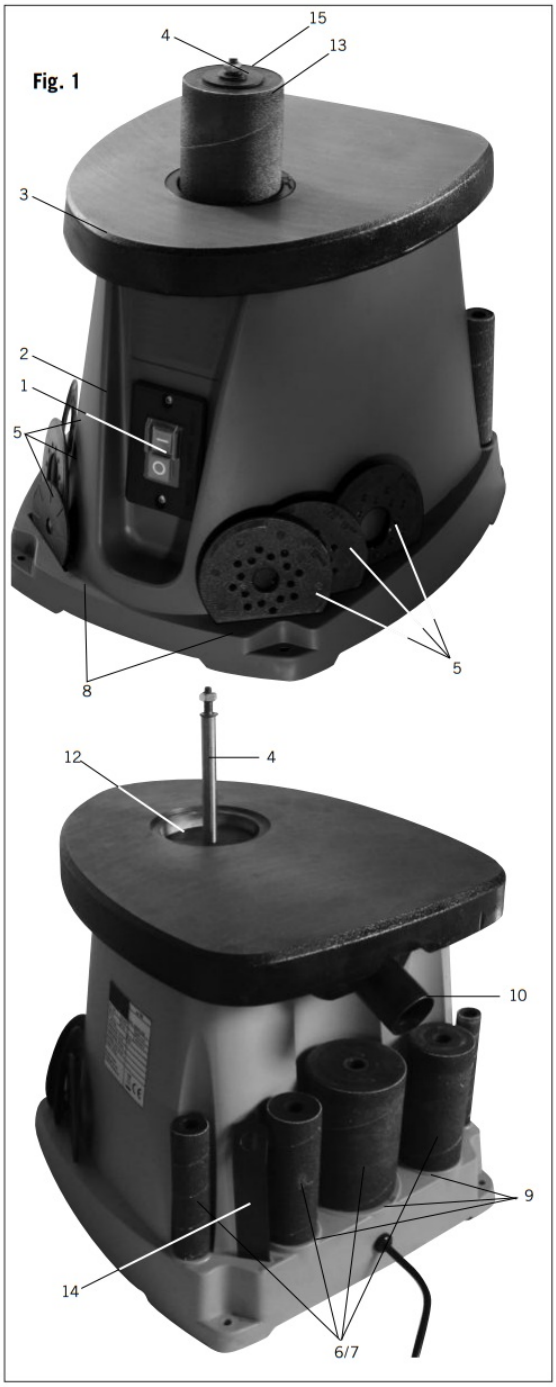
Noise parameters acc. to EN ISO 3744
The indicated rates are emission rates and do not correspond with safe working rates. Although there is a correlation between emission and immission levels, it is not sure whether reliable precautions are necessary or not. The following factors can influence the present immission level at the working place: Time of impact, property of working room, other noise sources (for instance, number of machines and other neighbouring activities. The reliable working place rates can also vary from one country to another. Yet this information should enable the user to perform a better evaluation of the dangers and risks,

Acoustic power level in dB
Idling LWA = 84 dB(A)
Finishing LWA = 87 dB(A)
A measurement uncertainty allowance K = 3 dB applies

to the mentioned emission values.

Equipment

Fig. 1



1. ON/OFF switch
2. housing
3. grey cast iron table
4. tool spindle
5. table inlets
6. rubber sleeves
7. abrasive sleeves
8. table inlay slot

9. rubber and abrasive sleeves slot
10. vacuum connector
11. Lower spindle disc
12. upper spindle discs (3 pcs.)
    a. small 16 mm
    b. medium 20 mm
    c. large 35 mm
13. Hook wrench SW 13
14. spindle thread M8

In these operating instructions we have marked the places that have to do with your safety with this sign:

General Safety Rules

When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

- Keep guards in place and in working order.
- Remove adjusting keys and wrenches. Form the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- Keep the working area clean. Cluttered areas and benches invite accidents.
- Don’t use in a dangerous environment. Don’t use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- Keep children away. All visitors should be kept at a safe distance from the work area.
- Make your workshop kid proof. Lock your workshop. Tools not used should be kept in a dry place, inaccessible for children.
- Don’t force the tool. It will do the job better and safer at the rate for which it was designed.
- Use the right tool. Don’t force the tool or attachment to do a job for which is was not designed.
- Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in voltage resulting in loss of power and overheating.
- Wear proper clothing. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip shoes are recommended. Wear protective hair covering to contain long hair. Roll your sleeves up to above the elbows.
- Protect your eyes by safety goggles. Everyday eyeglasses offer only little protection. They are no safety glasses. Wear a face or dust mask when working in a dusty environment.
- Secure work. Use clamps or a vice to hold work, when practical. It is safer than using your hand, and it frees both hands to operate the tool.
- Don’t overreach. Keep proper footing and balance at all times.
- Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow the instructions for lubricating, and changing accessories.
- Always disconnect the machine before servicing, and when changing accessories, such as blades, bits, cutters, and the like.
- Only use recommended accessories. Consult the operating instructions for the recommended accessories.

The use of improper accessories may cause risk of injury to persons.

- Never stand on the machine. Serious injury could occur if the machine is tipped or if the cutting tool is unintentionally contacted.
- Check for damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment or binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation.

  A guard or other part that is damaged should be properly repaired or replaced.
- Direction of work. Push the workpiece towards the saw blade or cutter only in the moving direction of the tool.
- Never leave the machine unattended while it is running. Wait until the tool has come to an absolute standstill, before you leave the machine.
- Use the correct power connection. Do not pull the power plug to stop the machine during work. Never remove the plug from the socket by pulling the extension cord.
- Always stay attentive to what you are doing, even when using the machine regularly. Bear in mind that a fraction of a second is sufficient to cause an injury.
- Keep your safety in mind. Safety is a combination of common sense and staying alert as long as the machine is switched on.
- When used in enclosed rooms, the machine must be connected to a dust extractor unit to remove wood chips and sawdust. The air flow rate at the suction connector must be 20 m/s.

Additional safety rules for the oscillating spindle grinding machines
WARNING: Do not use your machine until it is completely assembled and installed according to the instructions.

- If you are not familiar with the operation of the sanding machine, ask the head of the department, your teacher, or any other qualified person.
- **ATTENTION:** This machine has only been designed for sanding wood or similar materials. The sanding of other materials can cause fire, injuries, or damage the product.
- Always wear safety goggles.
- This machine may only be operated indoors.
- **IMPORTANT:** Mount and use the machine on a horizontal surface. A non-horizontal surface can damage the motor.
- If the machine tends to tilt or walk (especially when sanding long and heavy panels), it must be fastened to a solid surface of sufficient carrying force.
- Firmly hold the workpiece when sanding.
- Do not wear gloves. Do not hold the workpiece with a cloth during sanding.
- Never sand workpieces too small to be held safely.
- Avoid awkward hand positions where a sudden slip could cause your hand to touch the sanding belt or disc.
- When sanding a large piece of material, provide an additional support at table height.
- Never sand an unsupported workpiece. Secure the workpiece with the table or the fence. Exceptions are the sanding of curved workpieces on the outside of the sanding disc.
- Always clear the table, fence or sanding belt of scraps or other objects, before turning the machine on.
- Do not perform any layout assembly or set-up work on the table while the sanding machine is in operation.
- Switch the machine off and pull the power plug from the socket when fitting or removing accessories.
- Never leave the working area of the sanding machine while the tool is running, or as long as it has not come to

an absolute standstill.
- Always place the work piece on the grinding table. To sharpen bent tools with the grinding disc, place them securely on the table.

Warning! This electric tool generates an electromagnetic field during operation. This field can impair active or passive medical implants under certain conditions. In order to prevent the risk of serious or deadly injuries, we recommend that persons with medical implants consult with their physician and the manufacturer of the medical implant prior to operating the electric tool.

Proper Use

The machine meets the currently valid EU machine directive.

- The manufacturer’s safety, operation and maintenance instructions as well as the technical data given in the calibrations and dimensions must be adhered to.
- Relevant accident prevention regulations and other generally recognized safety and technical rules must also be adhered to.
- The machine may only be used, maintained or repaired by trained persons who are familiar with the machine and have been informed about the dangers.
  Unauthorized modifications of the machine exclude a liability of the manufacturer for damages resulting from the modifications.
- The machine is intended for use only with original spare parts and original tools from the producer.
- Any other use is considered to be not intended. The manufacturer excludes any liability for resulting damages, the risk is exclusively borne by the user.

Remaining hazards

The machine has been built using modern technology and in accordance with recognized safety rules. Some hazards, however, may still remain.

- There is the danger of injuries to fingers and hands by the rotating grinding tool when there is improper guidance or application of the work piece to be grinded.
- There is a danger of injuries by catapulted work pieces when guided or fixed improperly.
- The use of incorrect or damaged mains cables can lead to electrical injuries.
- Although having regarded all considerable rules there may still remain not obvious remaining hazrds.
- Minimize remaining hazards by following the instructions in ”Safety Rules”, ”Use only as authorized” and in the entire operating manual.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

Commissioning

ATTENTION!! Always disconnect the power supply before beginning any maintenance or setup work on the machine.

Mounting belt/disc sander to work bench
If your belt/disc sander is to be used in a permanent location, it is recommended you secure it to a workbench or other stable surface. When mounting the belt/disc sander to a workbench, holes should be drilled through the supporting surface of the workbench.

- Mark holes on workbench where belt/disc sander is to be mounted using holes in the base as a template for hole pattern.
- Drill holes through workbench.
- Place belt/disc sander on workbench aligning holes in the base with holes drilled in the workbench.
- Insert bolts (not included) and tighten securely with lock washers and hex nuts (not included).

Note: All bolts should be inserted from the top. Install the lock washers and hex nuts from the underside of the workbench.

Clamping belt/disc sander to work bench

- If your belt/disc sander is to be used as a portable tool, it is recommended you fasten it permanently to a mounting board that can easily be clamped to a workbench or other stable surface.
  The mounting board should be of sufficient size to avoid tipping while belt/disc sander is in use. Any good grade plywood or chipboard with a 3/4 in. (19 mm) thickness is recommended.
- Mark holes on board where belt/disc sander is to be mounted using holes in the base as a template for hole pattern.
- Follow last three steps in section Mounting Belt/Disc Sander to Workbench.

If lag bolts are used, make sure they are long enough to go through holes in belt/disc sander base and material the belt/ disc sander is being mounted to. If machine bolts are used, make sure bolts are long enough to go through holes in belt/disc sander, the material being mounted to, and the lock washers and hex nuts.

Connection to vacuum suction.
The use of an extraction system is recommended.

Tool changes, Fig. 2–7

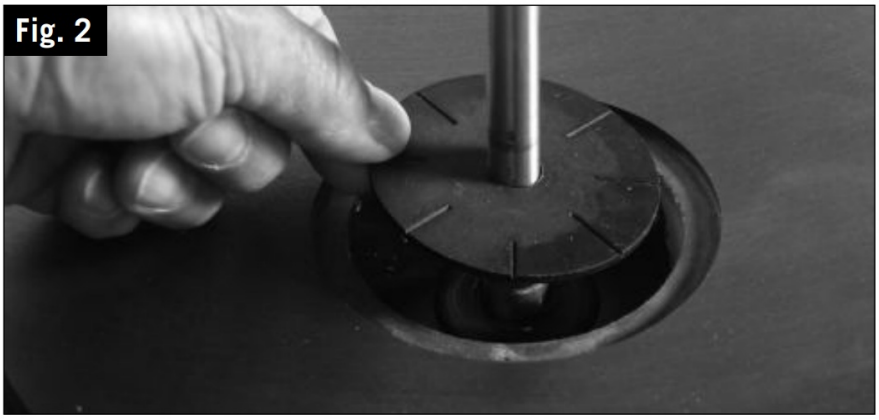


Fig. 3

Fig. 4

Fig. 5

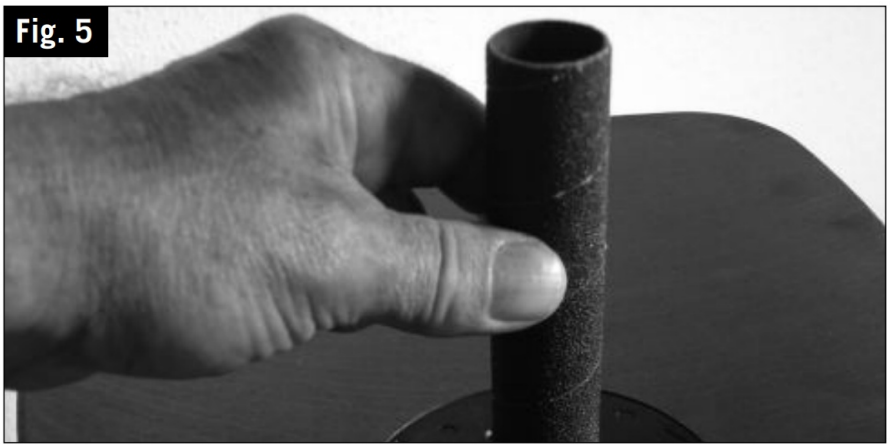


Fig. 6

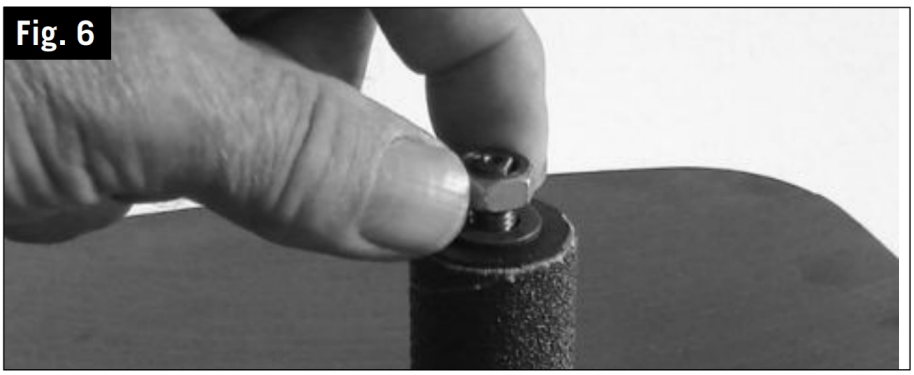


Fig. 7

ATTENTION!! Turn off the machine and disconnect the main plug.

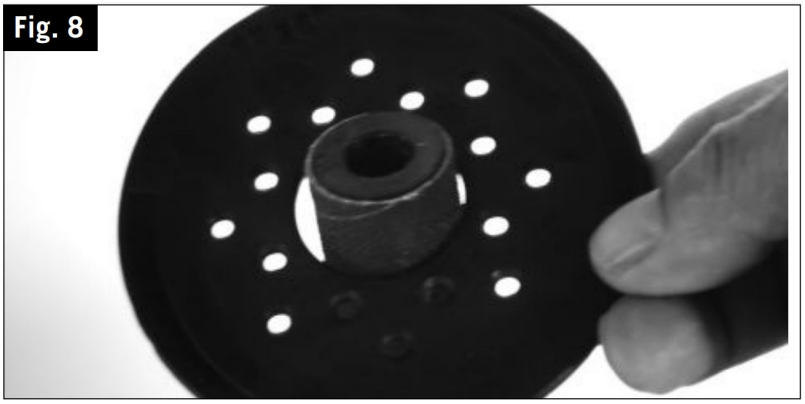
When changing tools make sure to have all parts cleaned.

Prepare the appropriate tool and mount it as follows:

1. Attach the lower spindle disc (16) to the spindle (4) (fig.2).
2. Insert the table inlays (5) into the table (fig. 3).
3. Attach the lower spindle disc (6) to the spindle (4) (fig.2).
4. Slide the abrasive sleeve (7) onto the rubber sleeve (6) (fig. 5).
5. Apply the disc (13) (use the correct measurements) (fig. 6).
6. Put on the hex-nut and tighten it with the hook wrench (14). (fig. 7)

Be sure always to mount the correct parts when changing the abrasive sleeves. The table inlays have to be bigger than the abrasive sleeves. (fig. 8)

Fig. 8



Note! The 13 mm abrasive sleeve is put directly onto the spindle (4).

Table:

Abrasive sleeve inside D	Table inlay inside D	Spindle disc size
13 mm	18 mm	small 16 mm
19 mm	25 mm	medium 20 mm
26 mm	31 mm	medium 20 mm
38 mm	44 mm	large 35 mm
51 mm	57 mm	large 35 mm
76 mm	82 mm	large 35 mm

Initial operation

After completing all assembly and setup work, turn on the machine and while it idles, check that the spindle can move faultlessly. In the case of disturbances, turn the machine off immediately and rectify the cause.

Once the machine has reached its maximum revolution speed you at start the grinding work.

Move the work piece slowly in the direction contrary to the running direction of the grinding roll.

Do not overload the machine by too much pressure against the grinding roll.

After finishing the grinding turn off the machine and disconnect the main plug.

ATTENTION!! Use dust mask, protective goggles and vacuum extraction.

Electrical connection

The installed electric motor is factory connected ready for operation. The connection meets the applicable VDE and DIN regulations.

The connection made by the customer as well as any extension cables used must comply with all relevant regulations.

Connection and repair work on the elctric equipment must be carried out by a qualified technician only.

Important note
The motor rating is S 1. This means that when overloaded it switches off automatically. After a cooling period (can vary) you may switch it on again.

Maintenance

Disconnect the main plug before conducting any maintenance work.
Cleaning the machine after every use is recommended.
Keep the safety devices, air boxes and the crankcase clean.
Clean the machine with a cloth.
Do not use any solvents or cleaning agents because they could harm the plastic parts of the device.
Do not let water get into the interior of the machine.
The interior of the machine is completely maintenance free.

Service information
Please note that the following parts of this product are subject to normal or natural wear and that the following parts are therefore also required for use as consumables.
Wear parts*: grinding medium, Carbon brushes, sharpening wheel, angle gauge, v-belt

- Not necessarily included in the scope of delivery!

Trouble shooting

Problem	Possible Cause	Help
Motor doesn’t start	a) ON/OFF switch damaged. b) ON/OFF cable damaged. c) ON/OFF relay damaged. d) Fuse blown. e) Motor burnt	a-d) Replace all damaged parts bef ore you use your machine again. e) Contact your local service centre . Every attempt to carry out a repair , can be dangerous if it is not done by skilled personnel.
Machine gets slower during work.	Too much pressure put on the work piece	Reduce the pressure on the workpi ece.
Sanding belt comes off the drive pu lleys.	Belt does not run straight.	Reset the track
The wood gets burnt during sandin g.	a) Sanding disc or belt covered wit h grease. b) Excessive pressure on workpiec e.	a) Replace disc or belt. b) Reduce pressure on workpiece.
Strong vibrations	a) loosely mounted tool b) defective tool c) spindle knocks	a) tighten tool b) change tool c) repair at a Service-Station

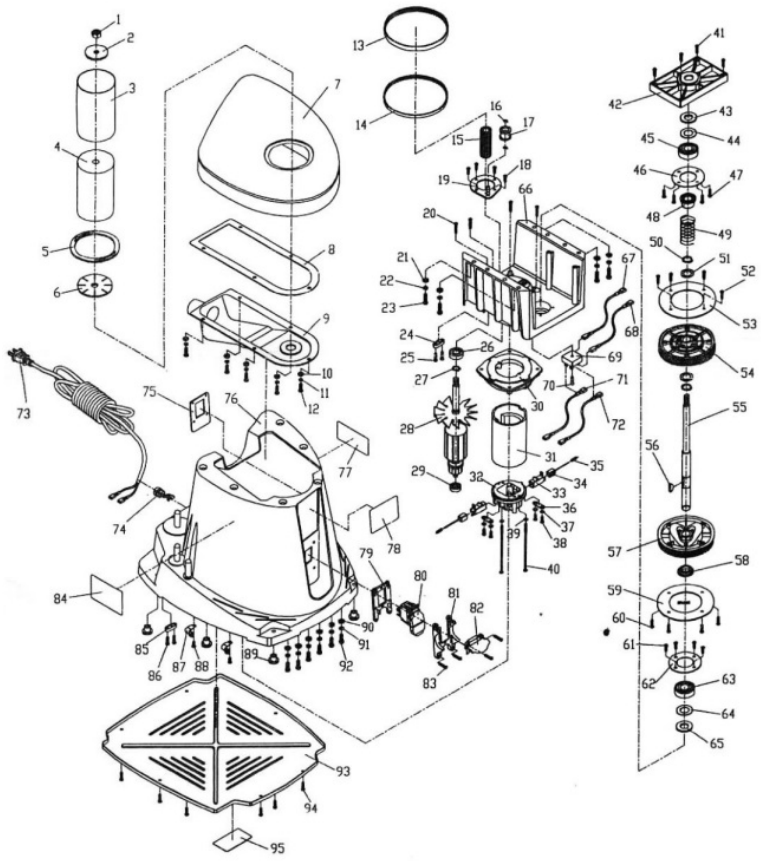
Only for EU countries.

Do not dispose of electric tools together with household waste material!
In observance of european directive 2012/19/EC on wasted electrical and electronic eqipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Manufacturer

scheppach
Fabrikation von Holzbearbeitungsmaschinen GmbH
Günzburger Straße 69
D-89335 Ichenhausen

Exploded Parts



hereby declares the following conformity under the EU Directive and standards for the following article

Warranty

Apparent defects must be notified within 8 days from the receipt of the goods. Otherwise, the buyerís rights of claim due to such defects are invalidated. We guarantee for our machines in case of proper treatment for the time of the statutory warranty period from delivery in such a way that we replace any machine part free of charge which provably becomes unusable due to faulty material or defects of fabrication within such period of time. With respect to parts not manufactured by us we only warrant insofar as we are entitled to warranty claims against the upstream suppliers. The costs for the installation of the new parts shall be borne by the buyer. The cancellation of sale or the reduction of purchase price as well as any other claims for damages shall be excluded.

scheppach Fabrikation von Holzbearbeitungsmaschinen GmbH | Günzburger Str. 69 D-89335 Ichenhausen | **www.scheppach.com**

Do not dispose of electric tools together with household waste material! In observance of european directive 2012/19/EC on wasted electrical and electronic eqipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Declaration Of Conformity

CE hereby declares the following conformity under the EU Directive and standards for the following article

Spindelschleifmaschine OSM100

☐ 2014/29/EU
☐ 2014/35/EU
☐ 2006/28/EC
☐ 2005/32/EC
☒ 2014/30/EU
☐ 2004/22/EC
☐ 1999/5/EC
☐ 2014/68/EU
☐ 90/396/EC
☒ 2011/65/EU

☐ 89/686/EC_96/58/EC

☒ 2006/42/EC
Annex IV
Notified Body:
Notified Body No.:
Reg. No.

☐ 2000/14/EC_2005/88/EC
Annex V
Annex VI
Noise: measured LWA =xx dB(A); guaranteed LWA =xx dB(A)
Notified Body:

☐ 2004/26/EC
Emission. No:

Standard references: EN 12100-1; EN 12100-2; EN 13857; EN 60204-1; EN 61029-1/A12; EN 55014-1; EN 55014-2; EN 61000-3-2; EN 61000-3-3

Ichenhausen, den 12.03.2016 : Technical Director

Unterschrift / Markus Bindhammer / Technical Director

Documents / Resources

	scheppach OSM100 Oscillating Spindle Grinding Machine [pdf] Instruction Manual OSM100, Oscillating Spindle Grinding Machine, Spindle Grinding Machine, Grinding Machine, OSM100, Machine

References

- scheppach | scheppach