

# **OPERATION MANUAL FOR LOOKING THROUGH GRINDING MACHINE SM180**



**Original manual**  
Please keep for further use!

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# ***EC-DECLARATION OF CONFORMITY***

The manufacturer:

Kaindl-Schleiftechnik  
Reiling GmbH  
Remchinger Straße 4

75203 Königsbach-Stein  
Germany

declares that the machine  
described herein:

**Grinding machine**  
Type: **SM 180**

refers to the security and health requirements  
of the following EC instructions:

EC-Machine instruction (2006/42/EC)  
EC-Instruction EMV (2004/108/EC)

### **Applied harmonised norms:**

**EN ISO 12100-1 and EN ISO 12100-2; EN ISO 13857; EN ISO 13732-1;  
EN 61029-1, EN 60204 Part 1; EN 61000-6-1; EN 61000-6-2;  
EN 61000-6-3; EN 61000-6-4**

**Changes in design, which affect the technical data, listed in this manual and the directed use, therefore change the machine substantially, make this declaration of conformity invalid!**

The documents were compiled by:

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### ***1. DIRECTED MEANS OF USE***

The **looking through grinding machine SM 180** is determined exclusively for hand operated and occasionally grinding of different tools, as drills, cutoff tools, turning tools and hammer drills, etc.

For other operations as listed here, the machine is not destined for. That goes for unauthorized use.

### ***2. TECHNICAL DATA***

Power:	0,15 KW
Revolutions:	1405 Rpm
Electrical connection:	230 Volt /50 Hz; Option 110 Volt /60 Hz
Grinding wheel:	Ø 180 mm
Coating of wheel:	Diamond, electroplated
Connection for dust exhaust:	Ø 35 mm
Weight:	approx. 9 Kg
Noise load:	below 70 db/A

### **3. GENERAL SAFETY ADVICE**

When working with the through looking grinding machine SM 180, always wear your protection glasses!

### **4. DUTY OF TAKING CARE BY USER**

The looking through grinding machine has been designed and constructed under consideration of an endangering analyses and careful selection of observed harmonized norms, as well as further technical specifications. The SM 180 meets the state of the art and grants a maximum of safety.

This safety can only be achieved in daily work, when all necessary steps are taken. It is the duty of taking care by user to plan and control these steps.

The operator in particular has take care that:

- the machine is used as directed (see chapter "Description")
- the machine is use in flawless condition, especially that the safety installations are checked regularly for function
- requested personal security equipment for the operator is available and used
- the operation manual is always kept in a readable condition, complete and available near the machine
- all safety and warning instructions are not removed from the machine and kept readable

### **5. REQUIREMENT TO THE OPERATING PERSONNEL**

The grinding machine is only operated by personnel, who knows the operation manual and work with correspondingly.

### **6. MOVING**

Moving to another place by hand carry of the SM 180. Here grab the columns between upper and lower housing. Net weight: 9 Kg.

### **7. SET UP**

Place on a working table with height of approx. 80-95 cm. Take care for a safe stand. The SM 180 can also be screwed on the working table. Please see the 3 boring holes on the bottom of the machine.

### **8. ENVIRONMENTAL CONDITIONS FOR SET UP**

Temperature: from +5 to +50° Celsius

Humidity: from 90%, not condensing

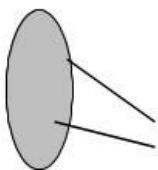
### 9. OPERATION

The diamond grinding wheel of the SM 180 is also coated on the back side, so that you can grind from below and look from the top through the diamond wheel and see your workpiece.

So you have full visible control of your workpiece and can correct the hand held piece if necessary.



**Please always wear your safety glasses!!!**



**CAUTION:**

Lens cover always must be kept close when not in use  
(Fire hazard by sunbeam)

### 10. DESCRIPTION OF THE OPERATIONS PARTS

Optical lens LED lighted (Option)



Diamond grinding wheel

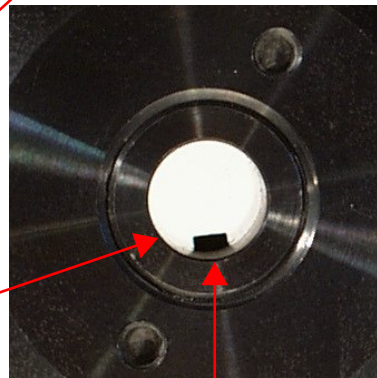
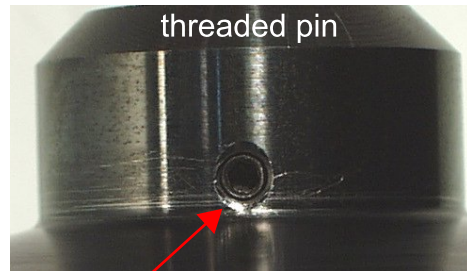
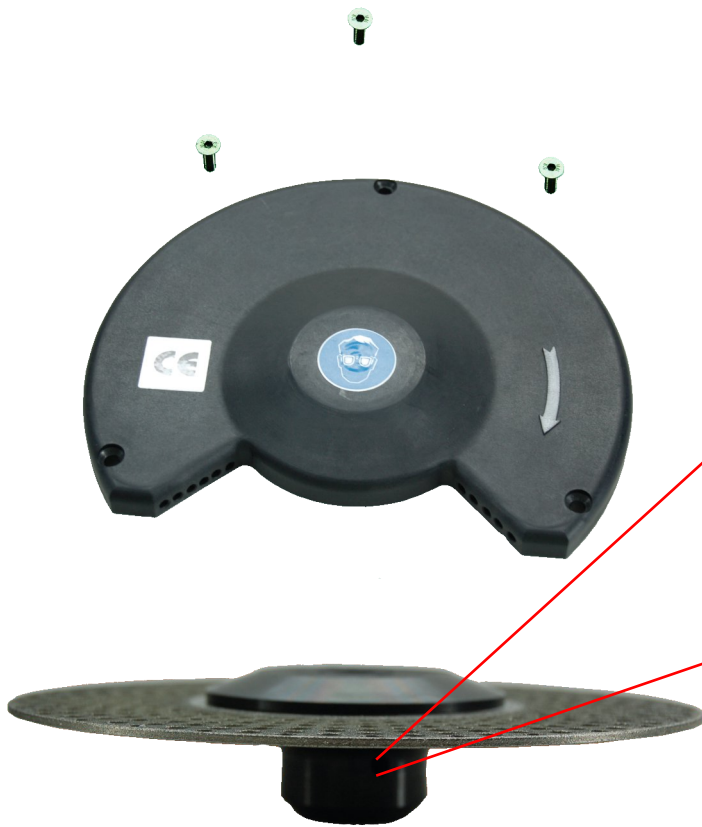
Switch 0/I

Boring holes for screwing on a work table

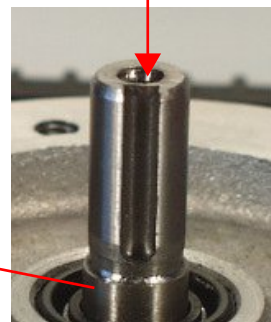
### 11. CHANGE OF THE GRINDING WHEEL



For changing the grinding wheel you have to disconnect the main plug!



The threaded pin of grinding wheels must be are tightened in notch of the motor shaft.





### 12. INSTRUCTION MANUAL FOR LATER BUILDING THE GRINDING REST ON THE SM 180



1. Unplug the SM 180 and lighted lens from electric current (in case this option is mounted on your machine)
2. Remove the lighted lens (in case this part is mounted)
3. Lay the machine on its side, so that you can see the lower fastening screws (M8 flat-head socket cap screw)
4. Loose all 3 screws and remove the bottom part from the columns
5. Carefully slide the grinding rest on the corresponding column (left column at the opening for the grinding wheel). **ADVISE:** in case the grinding rest cannot be slid from below, then unscrew the complete column and try to slide the grinding rest from the other side onto the column
6. Fix the bottom part again with the 3 screws and put the machine in upright position.



### **13. MAINTENANCE**

Check the circuit cable occasionally.

### **14. SPARE PARTS LIST**

<b>Item No.</b>	<b>Description</b>
10947	Diamond grinding wheel D 126 (standard)
10948	Diamond grinding wheel D 76 (medium)
10949	Diamond grinding wheel D 46 (fine)
10946	Grinding wheel support
11136	Plastic cover for optical lens
11018	Motor SM 180 1450 U/m 240 V /50 Hz
10960	Cleaning rubber

### **15. WARRANTY**

The warranty is **12 months** from date of shipment and refers to a **one shift work** under conditions of a appropriate use of the machine. The guarantee includes the costs for replacing of defect parts and assembly groups including the required working time. Replacement can also included repaired, used parts and assemblies.

Excluded from any guarantee are:

- Wear parts
- Transport damages
- Damage by improper use of the machine
- Damage by use of force
- Damages and consequential damages caused by breach of the duty of taking care of the user

**In case of a warranty claim, we ask you to inform us about the serial No. of the machine.**

Returns have to be authorized by us, before shipment. We reserve the right to charge you with the transportation cost, if the return was not authorized. Spare parts or replacement parts are transferred absolutely in our ownership.

### **16. REPAIRS**

Repairs of the looking through grinding machine are only allowed in our factory, or by personal authorized by us. The change of wear parts is permitted.