Working Instructions Translation

WIDOS Rotating Circular Saw 500
Model / Type: Rotating Circular Saw 500

Serial number, year of construction: see type label

Customer entries

Inventory no.: 

Place of working: 

Order of spare parts and after sales service:

Address of manufacturer

WIDOS
Wilhelm Dommer Söhne GmbH
Einsteinstr. 5
D - 71254 Ditzingen

Phone: +49 7152 9939 0
Fax: +49 7152 9939 40
Introduction

Purpose of the document

These working instructions give you information about all important questions which refer to the construction and the safe working of your apparatus.

Just as we are, you are obliged to engage in these working instructions, as well.

Not only to run your apparatus economically but also to avoid damages and injuries.

Should questions arise, contact our service team in the factory or in our subsidiary companies.

We will help you with pleasure.

According to our interest to continuously improve our products and working instructions, we kindly ask you to inform us about problems and defects which occur in exercise.

Thank you.

Structure of the working instructions

This manual is arranged in chapters which belong to the different using phases of the apparatus.

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1. Description of the product

This chapter gives important basic information about the product and its prescribed use. All technical details of the saw are put together as a general arrangement.

1.1. Usage and purpose-oriented use

The Rotating Circular Saw on prismatic guides has been designed only for the straight cutting of plastic pipes from OD = 180 mm up to OD = 500 mm (max. wall thickness appr. 60 mm). All use going beyond is not purpose-oriented.

The manufacturer is not responsible for damages caused by misuse.

The risk is held only by the user.

Also part of the purpose-oriented use:

- Respecting all the indications of the working instructions and
- Performing the inspection and maintenance works.

1.2. Conformity

The apparatus corresponds in its construction to the valid recommendations of the European Community as well as to the according European standard specifications.

The development, manufacturing and mounting of the apparatus were made very carefully.

1.3. Designation of the product

The product is designated by a type label at the basic frame.

It contains the type, the serial number and the year of construction of the apparatus.

1.4. Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage:</td>
<td>230 V</td>
</tr>
<tr>
<td>Frequency:</td>
<td>50 Hz</td>
</tr>
<tr>
<td>Power:</td>
<td>2200 W</td>
</tr>
<tr>
<td>Ø of the saw blade:</td>
<td>250</td>
</tr>
<tr>
<td>Sound intensity level:</td>
<td>104 dB(A)</td>
</tr>
<tr>
<td>Weight:</td>
<td>appr. 20 kg</td>
</tr>
<tr>
<td>Emissions:</td>
<td>A noise level 80 dB (A) during cutting will occur. Ear protection is therefore obligatory!</td>
</tr>
</tbody>
</table>

For article numbers and component parts see spare parts list chapter 6.
2. Safety rules

The base for the safe handling and the fault-free operation of this apparatus is the knowledge of the basic safety indications and rules.

- These working instructions contain the most important indications to run the apparatus safely.
- The safety indications are to be followed by all persons working with the apparatus.

2.1. Explanation of the symbols and indications

In the working instructions, following denominations and signs are used for dangers:

This symbol means a possible danger for the life and the health of persons.
- The non-respect of these indications may have heavy consequences for the health.

This symbol means a possible dangerous situation.
- The non-respect of these indications may cause light injuries or damages on goods.

This symbol means a possible risk of saw dust.
- Protective goggles is obligatory.

This symbol means a possible risk of injury by noises exceeding 80 dB(A).
- Ear protection is obligatory

This symbol gives important indications for the proper use of the apparatus.
- The non-respect of these indications may conduct to malfunctions and damages on the apparatus or on goods in the surrounding.

Under this symbol you get user tips and particularly useful information.
- It is a help for using all the functions on your apparatus in an optimal way and helps you to make the job easier.

The regulations for the prevention of accidents are valid (UVV).

Read carefully these working instructions. In case of damages caused by not following these instructions your guarantee expires.

For thus resulting consequential damages we accept no liability.
2.2. Obligations of the owner

The owner is obliged only to let persons work with the apparatus who

- Know about basic safety and accident prevention rules and are instructed in the handling of the apparatus, as well as who
- Have read and understood the safety chapter of this manual, confirmed this by their signature and who have reached the legal minimum age.

*The safety-conscious working of the staff has to be checked in regular intervals.*

2.3. Obligations of the worker

All persons who are to work with the apparatus are obliged before starting the work:

- To follow the basic safety and accident protection rules;
- To have read and understood the safety chapter and the warnings in this manual and to confirm by their signature that they have well understood them;
- To inform themselves about the functions of the apparatus before using it.

2.4. Measures of organization

- All equipment required for personal safety is to be provided by the owner.
- All available safety equipment is to be inspected regularly.

2.5. Information about safety precautions

- The working instructions have to be permanently kept at the place of use of the apparatus. They are to be at the operator’s disposal at any time and without much effort.
- In addition to the manual, the common valid and the local accident protection rules and regulations for the environmental protection must be available and followed.
- All safety and danger indications on the apparatus have to be in a clear readable condition.
- Every time the apparatus changes hands or is being rent to third persons, the working instructions are to be sent along with and their importance is to be emphasized.

2.6. Instructions for the staff

- Only skilled and trained persons are allowed to work with the apparatus.
- It must be clearly defined who is responsible for transport, mounting and dismounting, starting the operation, and dismounting.
- A person who is being trained may only work with the apparatus under supervision of an experienced person.
2.7. Dangers while handling the apparatus

The WIDOS Rotating Circular Saw is constructed according to the latest technical standard and the acknowledged safety rules. However, dangers for the operator or other persons standing nearby may occur. Also material damages are possible.

The apparatus may only be used

- According to the purpose-oriented usage;
- In safety technical impeccable status.

Disturbances which may affect the safety of the apparatus must be cleared immediately.

The following general safety instructions must be observed absolutely when working with electric tools!

- Use only approved and respectively marked extension cables.
- Check your apparatus on damages before starting the sawing operation!
- The working area must be kept clean. Lack of tidiness in the working area can lead to accidents.
- Keep visitors away.
- Damaged parts may only be repaired and exchanged by the WIDOS company or an authorized service partner.
- Never remove remaining parts near the saw blade with your fingers.
- The apparatus has to be switched off and the mains plug has necessarily to be unplugged before any fault clearance, repair or maintenance works.
- A working area around the apparatus without obstacles and a nonslip planar floor is of basic importance for a safe operation.
- The working area must be well lightened and free of waste (cuttings, remaining parts).
- Wear tight-fitting clothes during the work.
- Keep handles dry and free of grease and oil.
- Do not wear finger-rings, bracelets, etc.
- If you have long hair, wear a hair net.

- During sawing it is obligatory to wear protection goggles!
- During sawing it is obligatory to wear ear protection!
- Whenever necessary, wear suitable workers’ protective clothing, such as protective footwear.
- Take care that no person has to step over the electric cables.
- Any unauthorized modifications on devices relevant to safety are forbidden.
- The crankcase and the swivel bearing may only be opened by an authorized service partner (torsion spring in the inside is under high pressure!).
2.8. **Warranty and liability**

Fundamentally our „general sales and delivery conditions“ are valid. They are at the owner’s disposal latest when signing the contract. Guarantee and liability demands referring to personal injuries or damages on objects are excluded if they are caused by one or several of the following reasons:

- Not using the apparatus according to the prescriptions.
- Inexpert transport, mounting, starting, operating, and maintenance of the apparatus.
- Running the apparatus with defective or not orderly mounted safety appliances.
- Ignoring the information given in this manual.
- Structural modifications on the apparatus without permission.
- Unsatisfactory checking of parts of the apparatus which are worn out.
- Repairs performed in an inexpert way.
- In case of catastrophes and force majeure.

2.9. **Extension cable and stand-by unit**

- Only use a **not winded-up** extension cable with a cross section of 3x1.5 mm², max. 20 m (3x 2.5 mm², max. 50 m). At outdoor usage, only use approved and respectively marked extension cables.
- Connection to stand-by unit: Minimum power 2.5 kVA.
3. Operating elements

<table>
<thead>
<tr>
<th>No.</th>
<th>Denomination/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Toggle clamping lever, to press the rail guiding to the pipe.</td>
</tr>
<tr>
<td>2</td>
<td>Rail guiding with scale (to adjust the pipe dimension)</td>
</tr>
<tr>
<td>3</td>
<td>Clamping lever (bilateral), to adjust the pipe diameter to be cut by means of the scale attached to the rail guiding.</td>
</tr>
<tr>
<td>4</td>
<td>Flexible pipe clamping tool, may be pressed with the rollers to the pipe by means of the toggle clamping lever.</td>
</tr>
<tr>
<td>5</td>
<td>Bow grip to guide the saw around the pipe (bilateral)</td>
</tr>
<tr>
<td>6</td>
<td>Fix pipe clamping tool.</td>
</tr>
<tr>
<td>7</td>
<td>Locking pin, to exchange the saw blade</td>
</tr>
<tr>
<td>8</td>
<td>On -/ off switch</td>
</tr>
<tr>
<td>9</td>
<td>Push button to change the saw blade</td>
</tr>
<tr>
<td>10</td>
<td>Swivel segment to swivel the saw</td>
</tr>
</tbody>
</table>
4. Starting and operating

The pipe must be solid and may not be deformed during the sawing operation.

In order to guarantee an accurate and constant cut, you should carry out the cutting of larger pipe diameters possibly by 2 persons.

The sound intensity level is higher than the legal level of 75 dB (A), for that reason wear an officially approved ear protector.

The cuttings produced during sawing may come into your eyes. Do absolutely wear safety goggles.

4.1. Operating

4.1.1. How to position the saw on the pipe

Put the pipe onto the support e.g. on a WIDOS bearing block and tightly clamp the pipe by the clamping belt(s).

Adjust the clamping tools (4=flexible and 6=fix) onto the pipe dimension.

Thus, release the clamping lever and shift the pipe clamer on the rail (arrow) until the pipe diameter is shown on the scale.

Clamp this position by both clamping levers (5).

Bring the saw to the desired position on the pipe and tighten the flexible clamping tool by the lever (1).

Put the connecting cable of the saw around the pipe.

The power socket must be on the side of the fix pipe part in order to prevent damages to the line by the saw.

Make sure that the cable length is appropriate. Plug the cable into the mains (230 V / 50 Hz).
4.2. How to set the cutting depth / cutting process

The cutting depth is correctly adjusted if the saw blade protrudes from the material appr. by the depth of the cutting tooth.

Activate the saw at switch (9) and push clamping lever (8) downwards until it snaps in (arrow).

4.2.1. Cutting process

Saw in reverse rotation.
Otherwise you run the risk of an unexpected saccadic movement onwards into sawing direction and of injuries.

Observe during cutting that the rotational speed of the motor does not decline too much in order to prevent blocking.

Once the saw is blocked, thus:
- Immediately turn off the motor,
- Shift the saw to the rear or release the cutting depth adjustment until the saw blade is free,
- Start the motor again, wait for full rotational speed and continue the cutting process.

Advance direction when sawing
Turning direction of the saw blade
Pipe

The turning direction of the saw blade is shown on the guiding rail.

Constantly pull the saw around the pipe by the bow-type handles (8) at appropriate speed until the pipe is cut.

Press the switch (10), without pressing the locking pin simultaneously and turn off the motor by this.

Disconnect the mains plug.

Release the clamping lever (8), bring the saw into the upper position and lock this position by the clamping lever (8) again.

Remove the chips within the housing after standstill of the saw blade.
5. Storage / Maintenance / Saw blade replacement

5.1. Storing

- Store the saw dry and inaccessible for unauthorized persons.
- Protect the saw from pushes.
- Do not lay the saw on the saw blade.

5.2. Maintenance

The rotating circular saw requires practically no maintenance. The lubrication of the antifriction bearings and gears is designed to last for the service life of the apparatus. It is recommended to clean the air intake and outlet ports with compressed air while the apparatus is at standstill. This will prevent the openings from becoming clogged with dust.

5.3. How to change the saw blade

Before changing the saw blade or any other works on the apparatus, first disconnect the plug from the mains.

Always use a well-sharpened blade suitable for the application. Blunt or cracked and deformed saw blades are dangerous and must not be used. Saw blades out of high-alloy rapid machining steel (HSS-steel) must not be used.

Lower the machine by appr. 30 mm cutting depth in order to replace the saw blade.

Actuate pushbutton (10) and fold lever (11) upwards.
Disassemble adjusting ring (12) and unhinge Bowden cable (13).
Then fold guard plate (14) sidewards.
Take the attached Allen key SW 5 and detach screw (15) of the saw blade.
Remove the saw blade and clean the support surfaces between tool flange, saw blade and clamping flange before mounting it.
Insert a new saw blade and fix the screws for the saw blade.
Attach guard plate (14) and fix it with Bowden cable (12).
Mount back adjusting ring (13) before Bowden cable (12).
At last, fold lever (11) back downwards; pushbutton (10) will thus snap in again.

5.4. Disposal
At the end of the life time, the apparatus has to be disposed of properly, non-polluting and in accordance with the national laws of waste disposal.
6. Spare parts list

You can access our website and select our spare parts lists via the qr code shown here. Select “Rotating Circular Saw 500”
7. Declaration of conformity

Issuing the declaration of conformity with regard to complying with the basic requirements and assembling the technical documentation is in the sole responsibility of:

| Manufacturer / Installation company: | WIDOS Wilhelm Dommer Söhne GmbH |
| Address: | WIDOS GmbH  
Einsteinstr. 5  
D-71254 Ditzingen |

Subject of the present declaration is the following device:

| Product name: | WIDOS Rotating Circular Saw 500 |
| Model name: | Rotating Circular Saw 500 |
| Machine number: | |
| Year of construction: | |

For the stated device we herewith declare that it complies with the basic requirements stipulated in the following designated harmonizing regulations:

**in the sense of the EC guideline EC-Machinery Directive 2006/42/EC**

Statement of the relevant harmonizing standards referred to, or indication of the specifications that the conformity is declared for:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN EN ISO 12100</td>
<td>Safety of machines, basic concepts, general layout guidelines</td>
</tr>
<tr>
<td>DIN EN 60204.1</td>
<td>Electric equipment of industrial machines</td>
</tr>
</tbody>
</table>
| DIN EN 60555,  
DIN EN 50082,  
DIN EN 55014 | Electro-magnetic resistance |

Entitled to compile the technical documentation:

| Name: | WIDOS Wilhelm Dommer Söhne GmbH |
| Address: | Einsteinstr. 5  
D-71254 Ditzingen |

Signed on behalf of the company:

| Name, first name: | Dommer, Martin |
| Function: | Technical director |

Heimerdingen, 06.05.2019

Place / Date  
Legally binding signature

This declaration is to certify the compliance with the mentioned harmonizing regulations, however does not include any assurance of properties.