Working Instructions
Translation

WIDOS Inside deheader 500
Unheated

Keep for further use!

Headquarters: D-71254 Ditzingen-Heimerdingen Country court Stuttgart HRB 200973 Managing director: Jürgen Dommer
Product Identification

Type: WIDOS Inside debeader 500, unheated
Serial number / year of construction: see nameplate

Customer entries

Inventory No.: 
Place of working: 

Order of spare parts and after sales service

Address of manufacturer

WIDOS
W. Dommer Söhne GmbH
Einsteinstr. 5
D - 71254 Ditzingen-Heimerdingen

Phone: ++49 71 52 / 99 39 - 0
Telefax: ++49 71 52 / 99 39 - 40
E-mail: info@widos.de

Address of the subsidiary companies

WIDOS GmbH
An der Wiesenmühle 15
D-09224 Grüna / Sachsen
Phone: ++49 371 / 8 15 73 - 0
Telefax: ++49 371 / 8 15 73 - 20

WIDOS
W. Dommer Söhne AG
St. Gallerstr. 93
CH-9201 Gossau
Phone: +41 (0) 79 432 5737
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. Due to this structure, the searched information can be easily found.
# Contents

1. **DESCRIPTION OF THE PRODUCT** ................................................................. 5
   1.1. Usage and purpose-oriented use ................................................................. 5
   1.2. Safety measures ......................................................................................... 5
   1.3. Conformity ............................................................................................... 5
   1.4. Designation of the product ........................................................................ 5
   1.5. Technical data ............................................................................................ 6
       1.5.1. WIDOS Inside debeader 500, unheated ............................................. 6
   1.6. Equipment .................................................................................................. 6
   1.7. Supplementary package (optional) ............................................................. 6

2. **SAFETY RULES** .......................................................................................... 7
   2.1. Explanation of the symbols and indications ............................................... 7
   2.2. Obligations of the owner, measures of organization .................................. 7
   2.3. Structural modifications on the apparatus ................................................. 7
   2.4. Danger of cutting at cutting head ............................................................... 8
   2.5. Warranty and liability .............................................................................. 8

3. **OPERATING ELEMENTS AND OPERATING** ........................................... 9
   3.1. Operating elements .................................................................................... 9
   3.2. Cutting head with support for casing and extension .................................. 10
   3.3. Guidance with extension and support ...................................................... 10
   3.4. Operating ................................................................................................... 11
       3.4.1. Remove the bead ............................................................................... 11

4. **MAINTENANCE AND STORAGE** .............................................................. 12
   4.1. Disposal ..................................................................................................... 12

5. **SPARE PARTS LIST** ................................................................................... 13
   5.1. Supplementary package (optional) ........................................................... 15

6. **DECLARATION OF CONFORMITY** ........................................................... 17
1. Description of the product

1.1. Usage and purpose-oriented use

The WIDOS Inside Debeader 500, unheated has been particularly designed for the use on building sites to enable the removal of welding beads on PE and PP pipes on site. The bead is removed ideally during the cooling time.

Support (for cutting-head) for the range of: Inside Ø appr.: 300 - 400 mm (size 1),
400 - 500 mm (size 3),

Support (for extension) for the range of: Inside Ø appr. 300 - 400 mm (size 1),
400 - 500 mm (size 3).

All use going beyond is not prescribed.
The manufacturer is not responsible for damages caused by misuse.
The risk is held only by the user.

1.2. Safety measures

In case of wrong use, wrong operation or wrong maintenance, the machine itself or products standing nearby can be damaged or destroyed.
Persons being in the endangered area may be injured.
Therefore these working instructions have to be thoroughly read and the corresponding safety regulations must be necessarily adhered to.

1.3. Conformity

The machine 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 machine were made very carefully.

1.4. Designation of the product

The product is designated by type labels which are attached at the crane, at the aggregate, at the heating element, at the planer and at the basic machine.
They contain the type, the serial number and the year of construction of the machine.
1.5. Technical data
All important technical data of each single component are displayed. They allow a rapid information about the working capacity and the structure

<table>
<thead>
<tr>
<th>1.5.1. WIDOS Inside debeader 500, unheated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight incl. Accessories and wooden case:</td>
</tr>
<tr>
<td>Suitable for inside Ø:</td>
</tr>
<tr>
<td>Length:</td>
</tr>
</tbody>
</table>

1.6. Equipment
The following equipment is part of the first delivery:

<table>
<thead>
<tr>
<th>Piece</th>
<th>Denomination / Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Allan key, size 6</td>
</tr>
<tr>
<td>1</td>
<td>Annular fork wrench, size 13</td>
</tr>
<tr>
<td>2</td>
<td>Annular fork wrench, size 19</td>
</tr>
</tbody>
</table>

For article numbers and single parts please contact the WIDOS company.

1.7. Supplementary package (optional)

<table>
<thead>
<tr>
<th>Weight incl. Accessories:</th>
<th>ca. 32 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable for inside Ø:</td>
<td>300 - 500 mm</td>
</tr>
<tr>
<td>Length:</td>
<td>appr. 8 m</td>
</tr>
</tbody>
</table>
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 dangerous situation.
- The disrespect of these indications may cause slight injuries or damages on goods.

This symbol gives important indications for the proper use of the machine.
- The disrespect of these indications may conduct to malfunctions and damages on the machine 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).

2.2. Obligations of the owner, measures of organization

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 and certify this by their signature.
- 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 effort.

2.3. Structural modifications on the apparatus

- No modifications, extensions or reconstructions may be made on the apparatus without permission of the manufacturer.
- Parts of the apparatus which are not in a perfect condition are to be replaced immediately.
- Only use original WIDOS spare and wear parts.
- In case of purchase orders please always indicate the serial number of the apparatus!
2.4. Danger of cutting at cutting head

You may get injured by cutting yourself.

- Do not touch the cutting head at the knife, take special care upon changing the knife.

2.5. 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.
- Ignoring the information given in this manual.
- Structural modifications on the apparatus without permission.
- Unsatisfactory checking of parts of the apparatus which are subject to wearing.
- Repairs performed in an inexpert way.
- In case of catastrophes and force majeure.
### 3. Operating elements and operating

#### 3.1. Operating elements

#### Table of Operating Elements

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 x Extension for handle 2 m</td>
</tr>
<tr>
<td>2</td>
<td>Girder with cutting head and grip for chip</td>
</tr>
<tr>
<td>3</td>
<td>5 x Hexagon-head screw and hexagon nut</td>
</tr>
<tr>
<td>4</td>
<td>Handle</td>
</tr>
<tr>
<td>5</td>
<td>Extension for handle 1 m</td>
</tr>
<tr>
<td>6</td>
<td>Support for casing, size 3 (Ø 400 – 500 mm)</td>
</tr>
<tr>
<td>7</td>
<td>Support for casing, size 1 (Ø 300 – 400 mm)</td>
</tr>
<tr>
<td>8</td>
<td>5 x Support for extension, size 1 (Ø 400 – 500 mm)</td>
</tr>
<tr>
<td>9</td>
<td>5 x Support for extension, size 3 (Ø 300 – 400 mm)</td>
</tr>
<tr>
<td>10</td>
<td>5 x Guidance for extension complete</td>
</tr>
<tr>
<td>11</td>
<td>Transport case</td>
</tr>
<tr>
<td></td>
<td>no picture Annular fork wrench size 13</td>
</tr>
<tr>
<td></td>
<td>no picture Annular fork wrench size 19</td>
</tr>
<tr>
<td></td>
<td>no picture Allan key size 7</td>
</tr>
</tbody>
</table>
3.2. Cutting head with support for casing and extension

- Knife
- Cutting head
- Grip for chip
- Hexagon-head screw (2 sizes)
- Hexagon-head screw + washer (large)
- Support for casing (2 sizes)

3.3. Guidance with extension and support

- Guidance for extension
- Hexagon-head screw + washer (large)
- Extension (2 sizes)
- Support for extension (2 sizes)
3.4. Operating

- The required pipe inner diameter for removing the bead is calculated as follows: 
  Pipe inner diameter minus 1 x bead height.

- Mount the support (A) according to the required inner diameter of the pipe on the cutting head.
- Mount the support (B) (according to the inner diameter of the pipe) at the guidance for extension.
- Both supports (sleeve pointing downwards) have to be on the same side of extension.
- If required, the extensions have to be screwed in alignment with the cutting head extension (enclosed hexagon screw and nut). The additional guidance’s for extension also have to be mounted (middle or end of the extension).

3.4.1. Remove the bead

- Insert the cutting head vertically into the pipe (the cutting knife has to point upwards) until the sleeve of the guiding / cutting head abuts at the bead thereby holding the handle horizontally (the inside deheader is out of the pipe center axis).
- Turn the cutting head steadily in **clockwise direction** by 360° and cut off the bead.

**Do not** displace the inside deheader in an axial direction once the cutting operation has started!

- Pull out the inside deheader together with the cut-off bead.
4. Maintenance and storage

- Replace damaged parts immediately.
- Only use WIDOS spare parts.

Prescribed maintenance and inspection works should be performed in time. Inspection works after 1 year are recommended.

The works should be performed at the WIDOS GmbH company or by an authorized partner.

- Check the knife for sharpness, exchange it if necessary
- Store in a dry place.
- Protect the apparatus from vibrations and shocks.
- Handle the apparatus carefully.

4.1. Disposal

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

1. Girder with cutting head comple.
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 
17. 
18. 
19. 
20. 
21. 
22. 
23. 
24. 
25. 
26. 
27. 
28. 
29. 
30. 

### Pos. 2, Girder with cutting head comple.

- 12 - 13
- 21 - 22

### Pos. 11, Guide for extension comple.

- 23
- 24 - 25
- 26 - 27
- 28
- 29
- (10)
### WIDOS Internal bead remover 500

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Name</th>
<th>Piece</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extension for internal bead remover</td>
<td>5</td>
<td>5641221</td>
</tr>
<tr>
<td>2</td>
<td>Girder with cutting head complete</td>
<td>1</td>
<td>564151KP</td>
</tr>
<tr>
<td>3</td>
<td>Support for guide Ø 400-500 mm</td>
<td>1</td>
<td>5641123</td>
</tr>
<tr>
<td>4</td>
<td>Support for guide Ø 300-400 mm</td>
<td>1</td>
<td>5641121</td>
</tr>
<tr>
<td>5</td>
<td>Hexagon head screw M 12x60 DIN 933 (support)</td>
<td>7</td>
<td>0933L060</td>
</tr>
<tr>
<td>6</td>
<td>Hexagon nut M 12 DIN 934</td>
<td>7</td>
<td>0934L</td>
</tr>
<tr>
<td>7</td>
<td>Handle</td>
<td>1</td>
<td>564121</td>
</tr>
<tr>
<td>8</td>
<td>Extension for handle</td>
<td>1</td>
<td>564122</td>
</tr>
<tr>
<td>9</td>
<td>Support for extension Ø 400-500 mm</td>
<td>5</td>
<td>5641283</td>
</tr>
<tr>
<td>10</td>
<td>Support for extension Ø 300-400 mm</td>
<td>5</td>
<td>5641281</td>
</tr>
<tr>
<td>11</td>
<td>Guide for extension, complete</td>
<td>5</td>
<td>564127</td>
</tr>
<tr>
<td>12</td>
<td>Support rest for cutting head</td>
<td>2</td>
<td>564145</td>
</tr>
<tr>
<td>13</td>
<td>Flat-head screw M 5 x 12 DIN 7991</td>
<td>2</td>
<td>7991E012</td>
</tr>
<tr>
<td>14</td>
<td>Cutting head for girder</td>
<td>1</td>
<td>564143</td>
</tr>
<tr>
<td>15</td>
<td>Flat-head screw M 6 x 20 DIN 7991</td>
<td>4</td>
<td>7991F020</td>
</tr>
<tr>
<td>16</td>
<td>Spiral pins 5 x 22 DIN 7343</td>
<td>8</td>
<td>7343E008</td>
</tr>
<tr>
<td>17</td>
<td>Girder unheated</td>
<td>1</td>
<td>564151</td>
</tr>
<tr>
<td>18</td>
<td>Grip for chip</td>
<td>1</td>
<td>564156</td>
</tr>
<tr>
<td>19</td>
<td>Hexagon head screw M 8 x 16 DIN 933</td>
<td>4</td>
<td>0933H016</td>
</tr>
<tr>
<td>20</td>
<td>Washer M 8 DIN 9021</td>
<td>2</td>
<td>9021H</td>
</tr>
<tr>
<td>21</td>
<td>Knife</td>
<td>1</td>
<td>MES060</td>
</tr>
<tr>
<td>22</td>
<td>Flat-head screw M 5 x 8 DIN 7991</td>
<td>2</td>
<td>7991E008</td>
</tr>
<tr>
<td>23</td>
<td>Base plate</td>
<td>5</td>
<td>5641271</td>
</tr>
<tr>
<td>24</td>
<td>Clamping plate</td>
<td>5</td>
<td>5641272</td>
</tr>
<tr>
<td>25</td>
<td>Pan-head screw M 8 x 65 DIN 912</td>
<td>10</td>
<td>0912H065</td>
</tr>
<tr>
<td>26</td>
<td>Hexagon head screw M 8 x 20 DIN 933</td>
<td>10</td>
<td>0933H020</td>
</tr>
<tr>
<td>27</td>
<td>Washer M 8 DIN 9021</td>
<td>10</td>
<td>9021H</td>
</tr>
<tr>
<td>28</td>
<td>Spiral pins 5 x 22 DIN 7343</td>
<td>20</td>
<td>7343E022</td>
</tr>
<tr>
<td>29</td>
<td>Spiral pins 5 x 16 DIN 7343</td>
<td>10</td>
<td>7343E016</td>
</tr>
<tr>
<td>30</td>
<td>Transport case</td>
<td>1</td>
<td>TK00561</td>
</tr>
</tbody>
</table>
5.1. Supplementary package (optional)
## WIDOS Internal bead remover 500

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Name</th>
<th>Piece</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extension for internal bead remover</td>
<td>4</td>
<td>5641221</td>
</tr>
<tr>
<td>2</td>
<td>Support for extension Ø 400-500 mm</td>
<td>3</td>
<td>5641283</td>
</tr>
<tr>
<td>3</td>
<td>Support for extension Ø 300-400 mm</td>
<td>3</td>
<td>5641281</td>
</tr>
<tr>
<td>4</td>
<td>- Hexagon head screw M 8 x 16 DIN 933</td>
<td>4</td>
<td>0933H016</td>
</tr>
<tr>
<td>5</td>
<td>- Washer M 8 DIN 9021</td>
<td>2</td>
<td>9021H</td>
</tr>
<tr>
<td>6</td>
<td>Guide for extension, complete</td>
<td>3</td>
<td>564127</td>
</tr>
<tr>
<td>7</td>
<td>- Base plate</td>
<td>3</td>
<td>5641271</td>
</tr>
<tr>
<td>8</td>
<td>- Clamping plate</td>
<td>3</td>
<td>5641272</td>
</tr>
<tr>
<td>9</td>
<td>- Pan-head screw M 8 x 65 DIN 912</td>
<td>6</td>
<td>0912H065</td>
</tr>
<tr>
<td>10</td>
<td>- Hexagon head screw M 8 x 20 DIN 933</td>
<td>6</td>
<td>0933H020</td>
</tr>
<tr>
<td>11</td>
<td>- Washer M 8 DIN 9021</td>
<td>6</td>
<td>9021H</td>
</tr>
<tr>
<td>12</td>
<td>- Spiral pins 5 x 22 DIN 7343</td>
<td>12</td>
<td>7343E022</td>
</tr>
<tr>
<td>13</td>
<td>- Spiral pins 5 x 16 DIN 7343</td>
<td>6</td>
<td>7343E016</td>
</tr>
<tr>
<td>14</td>
<td>Hexagon head screw M 12x60 DIN 933 (support)</td>
<td>4</td>
<td>0933L060</td>
</tr>
<tr>
<td>15</td>
<td>Hexagon nut M 12 DIN 934</td>
<td>4</td>
<td>0934L</td>
</tr>
</tbody>
</table>
6. Declaration of conformity

In the sense of the EC guideline, EC Machinery Directive 2006/42/EC

Corporation

WIDOS GmbH
Einsteinstr. 5
D-71254 Ditzingen-Heimerdingen

declare under own responsibility that the product

WIDOS Inside Debeader 500, unheated

to which this declaration refers corresponds to the following norms and normative documents:

1. DIN EN ISO 12100 – 1 and 2 (substitute for DIN EN 292 Part 1 and 2)
   Safety of machines, basic terminology, general guidelines for design

The technical documentation is completely available.

The working instructions are available in the national language of the operator.

Ditzingen-Heimerdingen, 03/12/2012

______________________________

Martin Dommer (Technical director)