## Operator's manual



## TruTool TKA 500

## Table of contents

1 Safety ..... 2
1.1 General safety information ..... 2
1.2 Specific safety information for lip trimmers ..... 2
2 Description ..... 3
2.1 Intended use ..... 3
2.2 Technical data ..... 4
2.3 Icons ..... 4
2.4 Noise and vibration information ..... 5
3 Setting work ..... 7
3.1 Chamfer height ..... 7
3.2 Set up radius tool ..... 10
3.3 Select multi-edge cutters ..... 10
4 Operation ..... 12
4.1 Overload protective device on the motor ..... 12
4.2 Working with the TruTool TKA 500 ..... 13
5 Maintenance ..... 15
5.1 Replacing the tool ..... 17
5.2 Replacing multi-edge cutters ..... 18
5.3 Changing the impeller ..... 19
5.4 Changing the power cable ..... 19
5.5 Replacing carbon brushes ..... 20
6 Accessories and consumables ..... 21
6.1 Ordering consumables ..... 22
6.2 Accessories ..... 23
7 Appendix: Declaration of conformity, guar- ..... 36 antee, replacement parts lists

## 1. Safety

### 1.1 General safety information

## WARNING



## DANGER

## A WARNING

- Read all the safety information and instructions including those in the brochure also supplied.
- Failure to comply with the safety information and instructions can cause electric shock, burns and/or serious injury.
- Retain all the safety information and instructions for future use.


## Electrical voltage! Risk of fatal injury due to electric shock!

> Remove the plug from the plug socket before undertaking any maintenance work on the machine.
> Check the plug, cable and machine for damage each time before using the machine.
$>$ Keep the machine dry and do not operate it in damp rooms.
> Connect the fault current (FI) circuit breaker with a maximum breaking current of 30 mA when using the electric tool outside.
> Only use original TRUMPF accessories.

## Damage to the machine due to improper handling.

> Wear safety glasses, hearing protection, breathing protection, protective gloves and working shoes when working.
> Connect the plug only when the machine is switched off. Pull the power plug after use.
> Do not carry the machine by the cable.
> Have maintenance carried out by specialists.

### 1.2 Specific safety information for lip trimmers

## WARNING

Risk of injury to hands.
> Do not reach into the processing line with your hands.
> Use both hands to hold the machine.

## 2. Description



TruTool TKA 500: Overview
Fig. 33402

### 2.1 Intended use

## \ WARNING

## Damage to the machine due to improper handling.

> Only use the machine for work and materials as described under "Intended use."

The TRUMPF TruTool TKA 500 lip trimmer is an electrical powered hand-held device designed for the following applications:

- Processing of workpieces made of steel, chromium steel, aluminum, aluminum alloys, brass or plastic material (PA6).
- Utilization in industry and trade.
- Attachment of visible edges
- Rounding off of T-beams etc.
- Removal of cutting burrs after splitting procedures (e.g. guillotine shearing).


### 2.2 Technical data

|  | Other countries |  |  | USA |
| :---: | :---: | :---: | :---: | :---: |
|  | Values |  |  |  |
| Voltage | 230 V | 120 V | 100 V | 120 V |
| Frequency | $50 / 60 \mathrm{~Hz}$ |  |  | $50 / 60 \mathrm{~Hz}$ |
| Working speed | 3-4 m/min |  |  | 10-13 ft/min |
| Nominal power consumption | 1400 W | 1400 W | 1200 W | 1140 W |
| Idle stroke rate | 8390/min | 7300/min | 7300/min | 7300/min |
| Weight with guide handle | 3.9 kg | 3.9 kg | 3.9 kg | 8.6 lbs |
| Min. material thickness (see Fig. 36835) | Chamfer height/Radius $+1.5 \mathrm{~mm}$ | Chamfer height/Radius $+1.5 \mathrm{~mm}$ | Chamfer height/Radius $+1.5 \mathrm{~mm}$ | Chamfer height/ Radius +0.059 in |
| Max. chamfer length (see Tab. 3) |  |  |  |  |
| - $400 \mathrm{~N} / \mathrm{mm}^{2}$ | $5 \mathrm{~mm} / \mathrm{R} 4$ | $5 \mathrm{~mm} / \mathrm{R} 4$ | $5 \mathrm{~mm} / \mathrm{R} 4$ | $0.197 \mathrm{in} / \mathrm{R0} 0.157 \mathrm{in}$ |
| - $600 \mathrm{~N} / \mathrm{mm}^{2}$ | $2.5 \mathrm{~mm} / \mathrm{R} 2$ | $2.5 \mathrm{~mm} / \mathrm{R} 2$ | $2.5 \mathrm{~mm} / \mathrm{R} 2$ | $0.098 \mathrm{in} / \mathrm{R} 0.079 \mathrm{in}$ |
| - $800 \mathrm{~N} / \mathrm{mm}^{2}$ | 1.5 mm | 1.5 mm | 1.5 mm | 0.059 in |
| Smallest radius for interior cutouts at: |  |  |  |  |
| - $30^{\circ}, 40^{\circ}$ | 16 mm | 16 mm | 16 mm | 0.63 in |
| - $45^{\circ}, 60^{\circ}$ | 12 mm | 12 mm | 12 mm | 0.47 in |
| - R | 11 mm | 11 mm | 11 mm | 0.433 in |
| Safety class | ॥ / $\square$ | ॥ / $\square$ | ॥ / $\square$ | II / $\square$ |

Tab. 1

### 2.3 Icons

## Note

The following symbols are important for reading and understanding the operator's manual. The correct interpretation of the symbols will help you operate the machine better and safer.

| Icon | Name | Meaning |
| :--- | :--- | :--- |
| R | Read operator's manual | Read the operator's manual and safety information in <br> their entirety before starting up the machine. Closely <br> follow the instructions given. |
| $\square$ | Safety class II | Indicates a doubly insulated tool. |
| $\square$ | Alternating current | Type or property of current |
| V | Volt | Voltage |
| A | Ampere | Current, current input |
| Hz | Hertz | Frequency (oscillations per second) |
| W | Watt | Power, power input |


| Icon | Name | Meaning |
| :--- | :--- | :--- |
| mm | Millimeters | Dimensions e.g.: material thickness, chamfer length |
| in | Inch | Dimensions e.g.: material thickness, chamfer length |
| $\mathrm{n}_{\mathrm{o}}$ | Idle speed | Revolution speed without load |
| $\ldots /$ min | Revolutions/strokes per minute | Revolution speed, stroke rate per minute |

Tab. 2

### 2.4 Noise and vibration information

## WARNING

## Noise emission value may be exceeded.

Wear hearing protection.

## The vibration emission value can be exceeded!

> Select the right tools and exchange them in time in the event of wear.
> Have maintenance carried out by trained specialized technicians.
> Define additional safety measures for protecting the operator from the effect of vibrations (e. g. keep hands warm, organization of working procedures, machining at normal feed force).
> Depending on the operating conditions and state of the electric tool, the actual load might be higher or lower than the specified measured value.

## Notes

- The specified vibration emission value was measured in accordance with a standardized testing procedure and can be used to compare one electric tool with another.
- The specified vibration emission value can also be applied for a provisional estimate of the vibration load.
- Times during which either the machine is switched off or running but not actually in use can considerably reduce the vibration load during the entire working period.
- Times during which the machine works independently and self-propelled do not have to be calculated.

| Designation of measured value | Unit | Value according to <br> EN 60745 |
| :--- | :--- | :--- |
| Vibration emission value $a_{h}$ (vector <br> sum of three directions) | $\mathrm{m} / \mathrm{s}^{2}$ | 4.4 |
| Uncertainty K for vibration emission <br> value | $\mathrm{m} / \mathrm{s}^{2}$ | 1.5 |


| Designation of measured value | Unit | Value according to <br> EN $\mathbf{6 0 7 4 5}$ |
| :--- | :--- | :--- |
| A-class acoustic pressure level L $_{P A}$ <br> typically | $\mathrm{dB}(\mathrm{A})$ | 88 |
| A-class acoustic power level L $_{\text {WA }}$ <br> typically | $\mathrm{dB}(\mathrm{A})$ | 99 |
| Uncertainty K for noise emission <br> value | dB | 3 |

Tab. 3

## 3. Setting work

## A WARNING

## Overheated support plate and dial ring! <br> Risk of burns

> Wear protective gloves when setting the chamfer height.

### 3.1 Chamfer height



Fig. 36835

| Material and tensile strength | Max. chamfer height mm/in |  |  |  |  |  | Max. chamfer length $\mathrm{mm} / \mathrm{in}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Angle | $30^{\circ}$ |  | $45^{\circ}$ |  | $60^{\circ}$ |  | 230 V | 110/120 V |
|  | 230 V | 110/120 V | 230 V | 110/120 V | 230 V | 110/120 V |  |  |
| $400 \mathrm{~N} / \mathrm{mm}^{2}$ | 4.3 | 3.5/0.138 | 3.5 | 2.8/0.110 | 2.5 | 2.0/0.079 | 5.0 | 4.0/0.157 |
| $600 \mathrm{~N} / \mathrm{mm}^{2}$ | 2.2 | 1.9/0.079 | 1.8 | 1.6/0.061 | 1.3 | 1.1/0.043 | 2.5 | 2.2/0.087 |
| $800 \mathrm{~N} / \mathrm{mm}^{2}$ | 1.3 | 1.1/0.044 | 1.1 | 0.9/0.036 | 0.8 | 0.7/0.028 | 1.5 | 1.3/0.051 |
| $250 \mathrm{~N} / \mathrm{mm}^{2}$ | 6.5 | 6.5/0.256 | 6.4 | 6.0/0.237 | 5.0 | 4.3/0.169 | 10 | 8.5/0.335 |

Tab. 4


Fig. 33408

## Note

The chamfer height is set with the aid of the support plate and read by means of the number scale on the dial ring.

1. Undo the clamping lever (1).
2. Rotate the support plate (3) until the desired chamfer height can be read off the dial ring (2). The chamfer height is calculated as follows:
(value on the scale) + (value on the dial ring) $=$ chamfer height.
Example: $1.5+0.7=2.2$
The values on the dial ring indicate the chamfer height (1) in mm .

Each complete rotation ( $=360^{\circ}$ rotation) corresponds to a chamfer height of 1.5 mm .
3. Fix the clamping lever (1) back into place.

Chamfer height is adjusted.


## Notes

- The machine is adjusted in zero position during assembly. Zero position means chamfer height zero. The dial ring can be readjusted.
- The integrated multi-edge cutter mount consists of the 3way multi-edge cutter mount, the 3 -way multi-edge cutter and the impeller.

4. When deburring or chamfering, insert the $45^{\circ} 3$-way multiedge cutter mount completely.

### 3.2 Set up radius tool

## 3-way multi-edge cutter mount



3-way multi-edge cutter mount
Fig. 33407

When deburring or chamfering with radius the multi-edge cutter mount $R$ is inserted completely. The integrated multi-edge cutter mount consists of the multi-edge cutter mount $R$, the multi-edge cutters R and the impeller R D20.

The multi-edge cutters are the actual wear parts. They are:

- useable for processing steel, aluminum and aluminum alloys as well as plastic material.
- suitable for working with radii $\mathrm{R} 2, \mathrm{R} 3$ or R 4 .


### 3.3 Select multi-edge cutters

The multi-edge cutters are the actual wear parts. They are:

- useable for machining steel, aluminum and aluminum alloys as well as plastic material.
- suitable for machining bevels of $0,15^{\circ} \ldots 60^{\circ}$.

There is an appropriate multi-edge cutter for each material:

| Tensile strength of the workpiece |  | Multi-edge <br> chamfer cut- <br> ter | Multi-edge <br> radius cut- <br> ter |
| :--- | :--- | :--- | :--- |
| Steel up to <br> $400 \mathrm{~N} / \mathrm{mm}^{2}$ | $0-2.2 \times 45^{\circ}$ | St Universal <br> $\mathrm{St} / \mathrm{Cr}$ | St R2, St R3 <br> St R4 |
| $2.2-3.5 \times 45^{\circ}$ | Cr Universal <br> $\mathrm{St} / \mathrm{Cr}$ |  |  |
| Steel up to $600 \mathrm{~N} / \mathrm{mm}^{2}$ | Cr | Cr R2 |  |
| Steel up to $800 \mathrm{~N} / \mathrm{mm}^{2}$ | Cr | - |  |
| Aluminum/aluminum alloy <br> up to $250 \mathrm{~N} / \mathrm{mm}^{2}$ | Alu | St R2, St R3 <br> St R4 |  |
| Plastic material (PA6) | Alu | St R2, St R3 |  |
|  |  | St R4 |  |

## Multi-edge cutters and setting value

| Radius | Chamfer height (approx.) <br> $\mathbf{m m}$ |
| :--- | :--- |
| R2 | 1.1 |
| R3 | 1.7 |
| R4 | 2.3 |

Tab. 6

## Notes

- The values of the chamfer height are recommended values which could differ from the specified values in individual cases.
- Before machining chrome-steel and aluminum and/or aluminum alloys, it is advisable to oil the cutting edges with cutting oil (see "Tab. 8", pg. 22) in order to improve the machinability of the edges and to increase the service life of the tools.


## 4. Operation

## $\triangle$ WARNING

## CAUTION

## CAUTION

Damage to the machine due to improper handling.
> Make sure the machine is always in a stable position when operating it.
$>$ Never touch the tool while the machine is running.
> Always operate the machine away from your body.
> Do not operate the machine above your head.

## Damage to property due to excessively high line voltage

Motor damage
> Check the line voltage. The power supply voltage must correspond to the information on the nameplate of the machine.
> When using an extension cord that is longer than 5 m , the cord must have a line diameter of at least $2.5 \mathrm{~mm}^{2}$.

## Damage to property!

Wear and destruction of the multi-edge cutter and of the multi-edge cutter mount, failure of the tool.
> Avoid collisions during processing.

### 4.1 Overload protective device on the motor

## Notes

- The appliance may switch off prematurely when affected by electromagnetic interference. The appliance will resume operation when the faults have been cleared.
- If the motor temperature is too high, the motor will switch off.

1. Allow the machine to run in idle until it has cooled down.
2. Operate the machine normally after it has cooled down.

### 4.2 Working with the TruTool TKA 500

## Switching on TruTool TKA

500


Fig. 33404

1. Only with 230 V motor: set the speed controller (1) to the highest level (= stage G).
2. Slide the on/off switch (3) on the motor (2) forwards and push the switch downwards until it locks into place.

The motor will start to run.

Working with the TruTool TKA 500

## Note

2-hand control device
Work is performed with two-hand operation for all machine positions.

When operating the machine ensure that the machine is held with both hands in such a way that both hands are kept away from the machining point.
3. Do not move the machine towards the workpiece until full speed has been reached.

## Note

When deburring or chamfering, the machine must always be guided from left to right (conventional milling).


Fig. 61420
4. Edit material.

## Switching off TruTool TKA

5. Remove the machine from the material.
6. Firstly push the on/off switch (see "Fig. 33404", pg. 13) on the motor downwards, then slide the switch backwards.

The motor is stopped.

## 5. Maintenance

## DANGER

Electrical voltage! Risk of fatal injury due to electric shock.
> Remove the plug from the plug socket before undertaking any maintenance work on the machine.

Overheated tool and multi-edge cutter mount!
Risk of burns
Wear protective gloves during tool change.

## CAUTION

## Damage to property caused by blunt tools.

Machine overload.
> Check tools regularly for wear. Sharp multi-edge cutters provide good cutting performance and prevent machine damage. Rotate or replace multi-edge cutters in good time.

## WARNING

Risk of injury due to incorrect repair work
Machine does not work properly.
> Maintenance may be carried out by trained specialist technicians only.
> Only use original TRUMPF accessories.


| Maintenance <br> point | Procedure and <br> interval | Recommended <br> lubricants | Lubricant order <br> no. |
| :--- | :--- | :--- | :--- |
| Gearbox and <br> gear head (2) | After 100 oper- <br> ating hours, <br> arrange for a <br> trained <br> specialist to <br> relubricate or to <br> replace the <br> lubricating <br> grease. | Lubricating <br> grease "G1" | 0139440 |
| Thread gear <br> housing com- <br> plete and thread <br> support plate <br> complete (3) | Clean and lubri- <br> cate as needed. | Lubricating <br> grease "G3" | 0353969 |
| Multi-edge <br> cutter mount: all <br> threads and <br> mounting surfa- <br> ces | During change- <br> over | Lubricating <br> grease "G3" | 0353969 |
| Multi-edge cut- <br> ters | Rotate or <br> replace as <br> needed. | - | - |
| Impeller | Replace if <br> required. | - | - |


| Maintenance <br> point | Procedure and <br> interval | Recommended <br> lubricants | Lubricant order <br> no. |
| :--- | :--- | :--- | :--- |
| Ventilation slots <br> $(1)$ | Clean as <br> needed. | - | - |

Maintenance positions and intervals
Tab. 7

### 5.1 Replacing the tool

## Removing the multi-edge <br> cutter mount



Fig. 33534

1. Set the socket wrench (4) to milling cutter.
2. Plug the face wrench (3) into the corresponding bore holes on the socket wrench.
3. Press the spindle lock (see "Fig. 33534", pg. 17) while simultaneously rotating the face wrench (3) counter-clockwise.
4. Remove the integrated multi-edge cutter mount completely.
5. Lubricate threads and support areas with "G3" lubricant before installation.

### 5.2 Replacing multi-edge cutters



Fig. 33406

1. Undo mounting screw (1) and remove multi-edge cutters (2).
2. Rotate multi-edge cutters or insert new multi-edge cutters.
3. Fasten the multi-edge cutters once again with fixing screws.
4. Lubricate threads and support areas with "G3" lubricant before installation.

### 5.3 Changing the impeller

The impeller must be replaced when there is wear, because otherwise the chamfer surfaces will not receive even machining.


Fig. 33410

1. Undo hexagonal nut (3) with single-head wrench (see "Tab. 8", pg. 22).
2. Pull away impeller (2) and replace it.
3. Fasten new impeller back on with hexagonal nut.

### 5.4 Changing the power cable

If the power cable is to be replaced, it should be procured from the manufacturer or an authorized dealer to avoid safety hazards.

## Note

For TRUMPF service addresses, see www.trumpf-powertools.com.

### 5.5 Replacing carbon brushes

The motor comes to a standstill whenever the carbon brushes are worn out.

## Note

For TRUMPF service addresses, see www.trumpf-powertools.com.
> Change the carbon brushes.

## 6. Accessories and consumables

|  | Scope of delivery | Consumables | Accessories | Order number |
| :---: | :---: | :---: | :---: | :---: |
| Pin-type face spanner | X | - | - | 0353531 |
| Socket wrench | X | - | - | 1241272 |
| Torx screwdriver TX 15x60 | X | - | - | 0353793 |
| Open-end wrench | X | - | - | 0068012 |
| Safety glasses | X | - | - | 0944950 |
| Case | X | - | - | 1209342 |
| Operator's manual, TruTool TKA 500 | X | - | - | 1893448 |
| Safety information, other countries | X | - | - | 0125699 |
| Safety information, USA | X | - | - | 1239438 |
| Cutting oil for steel (0.5 I) | - | X | - | 103387 |
| Cutting oil for aluminum (1) | - | X | - | 125874 |
| Spacer plate | - | - | X | 1236998 |
| Protective foil (5 pieces) | - | X | - | 1234851 |
| Waste metal box | - | - | X | 1236997 |
| Impeller $45^{\circ}-60^{\circ}$ for thin sheet metal D22x14.5 | - | - | X | 1237451 |
| Support plate (small) | - | - | X | 1315258 |
| Lubricating grease "G1" | - | X | - | 0139440 |
| Lubricating grease "G3" | - | X | - | 0353969 |
| Multi-edge cutter mount $15^{\circ}$ triple with impeller | - | - | X | 1412639 |
| Multi-edge cutter mount $20^{\circ}$ triple with impeller | - | - | X | 1619933 |
| Multi-edge cutter mount $25^{\circ}$ triple with impeller | - | - | X | 1419177 |
| Impeller $15^{\circ}-25^{\circ}$ D29.6x11.6 | - | X | - | 1414170 |
| Multi-edge cutter mount $30^{\circ}$ triple with impeller | - | - | X | 1237683 |
| Multi-edge cutter mount $35^{\circ}$ triple with impeller | - | - | X | 1256510 |
| Multi-edge cutter mount $40^{\circ}$ triple with impeller | - | - | X | 1620265 |
| Impeller $30^{\circ}-40^{\circ}$ D29.6x12.3 | - | X | - | 1237495 |
| Multi-edge cutter mount $45^{\circ}$ triple with impeller | X | - | - | 1227954 |
| Multi-edge cutter mount $50^{\circ}$ triple with impeller | - | - | X | 1429605 |
| Multi-edge cutter mount $55^{\circ}$ triple with impeller | - | - | X | 1251684 |
| Multi-edge cutter mount $60^{\circ}$ triple with impeller | - | - | X | 1257861 |
| Impeller $45^{\circ}$ - $60^{\circ} \mathrm{D} 22 \times 12.5$ | X | - | - | 1214439 |
| Multi-edge cutter mount R 3-way with impeller | - | - | X | 1663473 |
| Impeller R D20 | - | X | - | 1227953 |
| Multi-edge cutter mount R 2-way plasma with impeller (conic) | - | - | X | 1484142 |
| Impeller plasma D20 conic D15 | - | X | - | 1484526 |
| Multi-edge cutter mount R2-PLUS with impeller (crowned) | - | - | X | 1265985 |
| Impeller R2-PLUS D29 crowned D27 | - | X | - | 1266024 |
| Multi-edge cutter mount R4-PLUS with impeller (crowned) | - | - | X | 1264547 |
| Impeller R4-PLUS D27 crowned D24 | - | X | - | 1264586 |


|  | Scope of <br> delivery | Consuma- <br> bles | Accessories | Order num- <br> ber |
| :--- | :--- | :--- | :--- | :--- |
| RPLUS spacer plate and guard plate | - | - | X | 1265501 |
| Tool face edge | - | - | X | 1645165 |
| Work station for small parts | - | - | X | 1404742 |
| 3 Multi-edge cutters ST (replacement part set) | - | X | - | 1241780 |
| 3 Multi-edge cutters CR (replacement part set) | X | - | - | 1241851 |
| 3 Multi-edge cutters ALU (replacement part <br> set) | - | X | - | 1241852 |
| 3 Multi-edge cutters ST R4 (replacement part <br> set) | - | X | - | 1693629 |
| 3 Multi-edge cutters ST R3 (replacement part <br> set) | - | X | - | 1693742 |
| 3 Multi-edge cutters ST R2 (replacement part <br> set) | - | X | - | 1693743 |
| 3 Multi-edge cutters CR R2 (replacement part <br> set) | - | X | - | 1693744 |
| 3 Multi-edge cutters R3 coated (replacement <br> part set) | - | X | - | 1693745 |
| 3 Multi-edge cutters R PLUS ST (R2 and R4) | - | - | - | 1266783 |
| TKA selection card | X | X | - | - |
| Fixing screw for multi-edge cutter | - | 0353387 |  |  |

[^0]
### 6.1 Ordering consumables

## Note

The following data must be specified in order to ensure that parts are delivered correctly and without delay.

1. Specify the order number.
2. Enter further order data:

- Voltage data
- Quantity
- Machine type

3. Specify the complete shipping information:

- Correct address.
- Desired delivery type (e.g. air mail, courier, express mail, ordinary freight, parcel post).


## Note

For TRUMPF service addresses, see
www.trumpf-powertools.com.
4. Send the order to the TRUMPF representative office.

### 6.2 Accessories

## Spacer plate for deburring

| Order No. | 1236998 |
| :---: | :---: |
| Intended use | - Support plate for the removal of a cutting burr of up to approx. 3 mm . <br> - The spacer plate ensures workpiece support when burrs present. It can be clamped according to the chamfer direction. <br> Combinable with multi-edge cutter mount plasma. |
| Assembly | 1. Undo butterfly screw. <br> 2. Guide spacer plate into support plate. <br> 3. Tighten butterfly screw. <br> Spacer plate is parallel to support plate. |
| Technical data | Height $\mathrm{h}=3 \mathrm{~mm}$ <br> - Length $\mathrm{L}=122 \mathrm{~mm}$ <br> - Depth t = 52 mm |

## 5 Protective foil for low-scratch machining (Set)

| Order No. | 1234851 |
| :---: | :---: |
| Intended use | - Low-scratch guidance to the support plate using an affixed sheet of plastic. <br> - For soft work pieces. |
| Assembly | 1. Clean support plate. <br> 2. Stick on foil. |
| Technical data | Self-sticking foil <br> - Diameter $\varnothing=116 \mathrm{~mm}$ <br> - Thickness $\mathrm{d}=0.3 \mathrm{~mm}$ |

Tab. 10

Chip box

| Order No. | 1236997 |
| :---: | :---: |
| Intended use | - Storage bin for chips for applications with straight edges. <br> - Rotatable $360^{\circ}$. <br> - Tool not necessary for mounting. |
| Assembly | 1. Push support plate between the middle hook and the edge of the chip box and clamp. <br> 2. Turn chip box parallel to the direction of machining. <br> 3. Press middle flange (middle hook is lifted out of the plate gutter edge). <br> Release chip box. |
| Technical data | - Height approx. 100 mm <br> - Width approx. 130 mm <br> - Depth approx. 80 mm |

Tab. 11

## Impeller for thin sheet metal

| Order No. | 1237451 |
| :---: | :---: |
| Intended use | a "Rest" material thickness <br> s Material thickness <br> - For applications with small "rest" material thickness a. <br> Note : <br> - Good workpiece support. <br> - Support plate parallel to the workpiece. |
| Assembly | 1. Align disc springs. <br> 2. Tighten nut, until impeller is touching multi-edge cutter. <br> 3. Undo nut approx $10^{\circ}$. <br> It should now be possible to turn the impeller easily. |
| Technical data | - Minimum "residual" material thickness a $=0.7 \mathrm{~mm}$ <br> - Impeller dimensions <br> - $\quad \varnothing=22 \mathrm{~mm}$ <br> - Height $\mathrm{h}=14.5 \mathrm{~mm}$ <br> Multi-edge cutter mount $45^{\circ}-60^{\circ}$ |

## Support plate (small)

| Order No. | 1315258 |
| :---: | :---: |
| Intended use | - For restricted spaces. <br> - For all multi-edge cutter mounts. <br> Note : <br> Small diameter makes guidance of the TKA difficult. |
| Assembly | Countersunk screws M4x6 (1646214) <br> 1. Remove support plate. <br> 2. Install small support plate with new $M 4 \times 6$ screws. |
| Technical data | - $\mathrm{d}=76 \mathrm{~mm}$ |

Tab. 13

Pipe and tube processing with all multi-edge cutter mounts $15^{\circ}-60^{\circ} R$

| Order No. | (see "Tab. 8", pg. 22) <br> Intended use <br> the contrary angle. |
| :--- | :--- |
| Assembly | 1 Screw 0353387 (3x) <br> 2 Impeller <br> 3 Nut M6 <br> 1. Select and install multi-edge cutter and <br> multi-edge cutter mount. <br> Desired chamfer $=30^{\circ} \rightarrow$ Selection: <br> multi-edge cutter mount $60^{\circ}$. <br> 2. Install multi-edge cutter mount. <br> 3. Set chamfer size as per the data <br> sheet. <br> 4. Lock multi-edge cutter mount into place <br> with bracket. <br> 5. Bevel pipe or tube on the face-side. <br> a Chamfer height <br> b Chamfer length |
| Technical data |  |

Tab. 14

## Multi-edge cutter mount plasma

| Order No. | 1484142 |  |
| :---: | :---: | :---: |
| Intended use | - Round off from plasma cut edges. <br> - Can also be used with spacer plate (1236998). |  |
| Assembly | 1. Select and install multi-edge cutter. <br> Most suitable: R3 coated (1320639). <br> 2. Fastened with screws 0353387. <br> 3. Install multi-edge cutter mount. <br> 4. Setting the chamfer size. <br> 5. Lock into place with bracket. Usage: chamfer, radius, pipe and tube processing. |  |
| Technical data | R radius R 2 , R3 <br> c Max. angle $12^{\circ}$ <br> - Impeller diameter approx. $\mathrm{d}=15 / \mathrm{d}=20 \mathrm{~mm}$ <br> Note : <br> - The impeller can not be used with other multi-edge cutter mounts because of its small inside diameter. |  |

Tab. 15

Multi-edge cutter mount R2 and R4 PLUS for corner weld processing

| Order No. | R2 PLUS: 1265985 <br> R4 PLUS: 1264577 |
| :---: | :---: |
| Intended use | - Round off from weld seam R2 or R4. <br> - The spacer plate ensures workpiece support when burrs present. It can be clamped depending on the chamfer direction. <br> - Usage of a special impeller with larger diameter to eliminate angle errors is possible. |
| Assembly | 1 spacer plate ( 3 mm ), 2 guard plate, 3 multi-edge cutter mount R2 and R4 PLUS <br> 1. Release the spacer plate from the guard plate. <br> 2. Clamp support plate between spacer plate/guard plate (set 1265501) and tighten (distance plate is parallel to the support plate). <br> 3. Select multi-edge cutter mount. <br> 4. Install the 3 multi-edge cutter R PLUS (1266783) with 3 screws (0353387). <br> 5. Install multi-edge cutter mount in TKA 500. <br> 6. Set the height of the reference multi-edge cutter. <br> 7. Lock in place with bracket. <br> 8. Round off corner weld. |



Tab. 16

## Tool face edge

| Order No. | 1645165 |
| :--- | :--- | :--- |
| Intended use |  |
| Assembly |  |


| Abrasion | TKA 500-0 / TKA $\mathbf{5 0 0}$ (1A1) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Material | 230 V |  |  |  |
| Material | a Cutting depth <br> milling deepth <br> max. $\mathbf{m m}$ | b Material thick- <br> ness <br> sheet thickness <br> max. $\mathbf{m m}$ | a Cutting depth <br> milling deepth <br> max. $\mathbf{m m}$ | b Material thick- <br> ness <br> sheet thickness <br> max. $\mathbf{m m}$ |
| Steel $\mathbf{4 0 0 ~ \mathrm { N } / \mathrm { mm } ^ { 2 }}$ | 0.5 | 8.0 | 0.5 | 8.0 |
| Steel $600 \mathrm{~N} / \mathrm{mm}^{2}$ | 0.4 | 6.0 | 0.4 | 6.0 |
| Steel $800 \mathrm{~N} / \mathrm{mm}^{2}$ | 0.2 | 4.0 | 0.2 | 4.0 |
| Aluminum $\mathbf{2 5 0 ~ N} / \mathrm{mm}^{2}$ | 1.0 | 8.0 | 1.0 | 8.0 |

Tab. 18

Workstation for small parts

| Order No. | 1404742 |  |
| :---: | :---: | :---: |
| Intended use | - Bevel or round off small parts, on fixed TKA 500. <br> - Defined chip removal. <br> Note : <br> - Use only with TKA 500 (restart protection). |  |
| Assembly | 1 Clamping lever for internal thread screw <br> 2 TKA 500 <br> 3 Workstation <br> 4 Screw <br> 5. Screw clamps or pedestal <br> 1. Pull out the mains plug. <br> 2. Change clamping lever. <br> 3. Push TKA 500 into the workstation. <br> 4. Tighten screw. <br> 5. Bevel/round off as per the operator's manual. | $\theta$ |
| Technical data | Minimum material thickness $=1 \mathrm{~mm}$ <br> Workpiece dimensions: $50 \times 50 \mathrm{~mm}$ (min.) $-300 \times 300 \mathrm{~mm}$ (max.) |  |

Tab. 19

| Strength | Maximum chamfer length without <br> workstation in $\mathbf{~ m m}$ | Maximum chamfer length with <br> workstation in $\mathbf{~ m m ~}$ |
| :--- | :--- | :--- |
| Steel $400 \mathrm{~N} / \mathrm{mm}^{2}$ | 5.0 | 3.0 |
| Steel $600 \mathrm{~N} / \mathrm{mm}^{2}$ | 2.5 | 2.0 |
| Steel $800 \mathrm{~N} / \mathrm{mm}^{2}$ | 1.5 | 1.0 |
| Aluminum $250 \mathrm{~N} / \mathrm{mm}^{2}$ | 10 | 5.0 |
|  |  | Tab. 20 |

7. Appendix: Declaration of conformity, guarantee, replacement parts lists

[^0]:    Accessories and consumables

