

Originalfassung

DE BETRIEBSANLEITUNG

Übersetzung / Translation

EN USER MANUAL

CZ NÁVOD K POUŽITÍ

ROHRBIEGEMASCHINE

TUBE BENDER

OHÝBAČKA TRUBEK

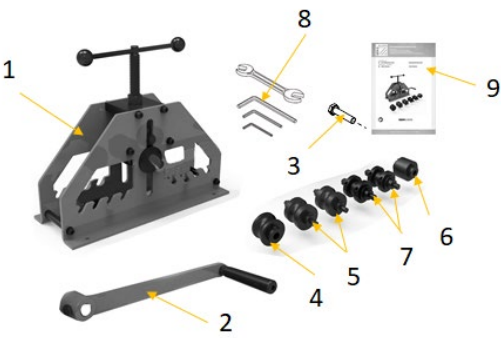


RBM1500

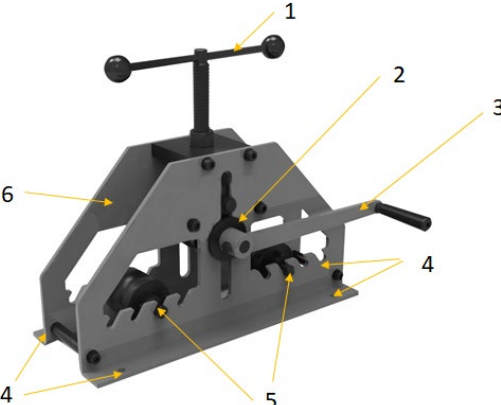


3 TECHNIK / TECHNIC / TECHNIKA

3.1 Lieferumfang / Delivery content / Obsah dodávky

		Beschreibung / Description	
	1	Produktgrundgestell / product frame / Rám stroje	
	2	Antriebskurbel / driving handle / Ohýbací klika	
	3	Befestigungsschraube Antriebskurbel / fixation screw driving handle / Šroub kliky	
	4	obere Rolle (Rundbiegen) / upper roller (round bending) / Horní rolna (kruhový materiál)	
	5	untere Rollen (Rundbiegen) / bottom rollers (round bending) / Spodní rolna (kruhový materiál)	
	6	obere Rolle (Vierkant/Rechteck biegen) / upper roller (square bending) / Horní rolna (čtyřhran)	
	7	untere Rolle (Vierkant/Rechteck biegen) / bottom roller (square bending) / Spodní rolna (čtyřhran)	
	8	Werkzeug / tool / Nářadí	
	9	Betriebsanleitung / user manual / Návod k použití	

3.2 Komponenten / Components / Části stroje

		Beschreibung / Description	
	1	Handrad für Höhenverstellung / hand wheel height adjustment / Nastavení výšky kola	
	2	Obere Rolle / upper roller / Horní rolna	
	3	Antriebskurbel / driving handle / Ohýbací klika	
	4	Befestigungslöcher / fixation holes / Upevňovací otvory	
	5	Unter Rollen / bottom rollers / Spodní rolna	
	6	Rahmen / frame / Rám stroje	

3.3 Technische Daten / Technical data / Technická data

Spezifikation / Specification		
max. Rundrohrdurchmesser / max capacity round tube / max. průměr trubky		38 mm
max. Vierkantrohrdimension / max. capacity square tube / max. rozměry hranolu		50,8 mm
max. Stärke Rohrwand / max. thickness tube wall / max. tloušťka stěny trubky		2 mm
Gehäuse Material / frame material / Materiál rámu		Karbonstahl / Carbon-steel, Q235
Biegewinkel / bending angle / Úhel ohnutí		0 – 360°
Verpackungsmaße (L x B x H) / packaging dimensions (L x W x H) / Rozměry balení (L x B x H)		665 x 245 x 425 mm
Produktmaße (L x B x H) / product dimensions (L x W x H) / Rozměry výrobku (L x B x H)		620 x 371 x 534 mm
Netto-Gewicht / net weight / Netto-hmotnost		36,5 kg
Brutto-Gewicht / gross weight / Brutto-hmotnost		38,1 kg



13 PREFACE (EN)

Dear customer!

This manual contains information and important notes for safe commissioning and handling of the tube bender RBM1500, hereinafter referred to as "product" in this document.



This manual is part of the product and must not be removed. Save it for later reference and if you let other people use the product, add this manual to the product.

Please pay special attention to the chapter safety!

Before first use read this manual carefully. It eases the correct use of the product and prevents misunderstanding and damages of product.

Due to constant advancements in product design, construction, illustrations and contents may deviate slightly. If you notice any errors, please inform us.

We reserve the right to make technical changes!

Check the goods immediately after receipt and note any complaints on the consignment note when taking over the goods from the deliverer!

Transport damage must be reported to us separately to us within 24 hours.

HOLZMANN MASCHINEN GmbH cannot accept any liability for transport damage that has not been reported.

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The place of jurisdiction is the regional court Linz or the court responsible for 4170 Haslach is valid.

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14 SAFETY

This section contains information and important notes on safe start-up and handling of the product.



For your own safety, read these operating instructions carefully before putting the product into operation. This will enable you to handle the product safely and prevent misunderstandings as well as personal injury and damage to property. In addition, observe the symbols and pictograms used on the product as well as the safety and hazard information!

14.1 Intended use of the product

The product is intended exclusively for the following operations: For bending pipes made of mild steel, copper and aluminium, e.g. for bending exhaust pipes, water pipes and electrical conduit, within the specified technical limits.

NOTE



HOLZMANN MASCHINEN GmbH assumes no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

14.1.1 Technical restrictions

The product is intended for use under the following ambient conditions:

Rel. Humidity:	max. 70 %
Temperature (Operation)	+5° C to +40° C
Temperature (Storage, Transport)	-20° C to +50° C

14.1.2 Prohibited applications / Hazardous misapplications

- Operating the product without adequate physical and mental aptitude
- Operating the product without knowledge of the operating instructions
- Changes in the design of the product
- Operating the product outside the technical limits specified in this manual
- Bending of plastic or PVC pipes
- Remove the safety markings attached to the product.
- Modify, circumvent or disable the safety devices of the product.

The improper use or disregard of the versions and instructions described in this manual will result in the voiding of all warranty and compensation claims against Holzmann Maschinen GmbH.

14.2 User requirements

The product is designed for operation by one person. The physical and mental aptitude as well as knowledge and understanding of the operating instructions are prerequisites for operating the product. Persons who, because of their physical, sensory or mental abilities or their inexperience or ignorance, are unable to operate the product safely must not use it without supervision or instruction from a responsible person.

Please note that local laws and regulations may determine the minimum age of the operator and restrict the use of this product!

Put on your personal protective equipment before working on the product.

Work on electrical components or equipment may only be carried out by a qualified electrician or under the instruction and supervision of a qualified electrician.

14.3 General safety instructions

To avoid malfunctions, damage and health hazards when working with the product, the following points must be observed in addition to the general rules for safe working:

- Before start-up, check the product for completeness and function. Only use the product if the guards and other non-parting guards required for machining have been fitted, are in good operating condition and have been properly maintained.
- Choose a level, vibration-free, non-slip surface for the installation location.
- Ensure sufficient space around the product!
- Ensure sufficient lighting conditions at the workplace to avoid stroboscopic effects.



- Ensure a clean working environment.
- Only use perfect tools that are free of cracks and other defects (e.g. deformations).
- Keep the area around the product free of obstacles (e.g. dust, chips, cut parts, etc.).
- Check the strength of the product connections before each use.
- The product may only be operated, serviced or repaired by persons who are familiar with it and who have been informed of the hazards arising from this work.
- Ensure that unauthorised persons maintain a safe distance from the product and keep children away from the product.
- When working on the product, never wear loose jewellery, loose clothing, ties or long, open hair.
- Hide long hair under hair protection.
- Wear close-fitting protective clothing and suitable protective equipment (eye protection, dust mask, ear protection; gloves only when handling tools).
- Always work with care and the necessary caution and never use excessive force.
- Do not overload the product!
- Do not work on the product if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Fix the product on a work surface that can withstand the product and the applied workload.

15 TRANSPORT

For proper transport, please observe the instructions and information on the transport packaging regarding the centre of gravity, attachment points, weight, means of transport to be used and the prescribed transport position, etc.

Transport the product in its packaging to the installation site using a forklift or pallet truck with the appropriate load capacity.

The product is heavy - please ask a second person to help you during transport and make sure that you have the correct posture when lifting, carrying and setting down the load:

- Lifting, setting down: Make sure you are standing firmly when lifting / setting down (legs hip-wide). Lift / set down the load with bent knees and straight back (like weightlifters). Do not lift / set down the load jerkily.
- Carrying: Carry the load with both hands as close to the body as possible. Carrying the load with a straight back

16 ASSEMBLY

16.1 Preparatory activities

16.1.1 Checking delivery content

Always note visible transport damage on the delivery note and check the product immediately after unpacking for transport damage or missing or damaged parts. Report any damage to the product or missing parts immediately to your retailer or freight forwarder.

16.1.2 Cleaning and lubrication

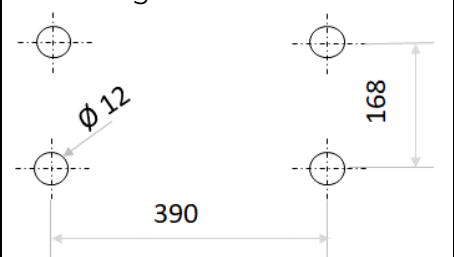
Before you install and commission the product at the intended location, carefully remove the anti-corrosion protection and grease residues.

Under no circumstances should you use nitro thinner or other cleaning agents that could attack the product's paint.

16.1.3 Site requirements

Place the product on a solid surface, for this purpose it can be mounted on a workbench and fixed with screws at the 4 holes. The workbench must be solid, level and strong enough to bear the weight of the product, the working material and the pressure applied to the products during bending. The space required by the product as well as the required load-bearing capacity of the workbench/stand result from the technical data (dimensions, weight) of your product. Observe the local safety regulations when designing the working area around the product. When dimensioning the required space, take into account that operation, maintenance and repair of the product must be possible at all times without restrictions.

Mounting hole pattern for table mounting is as follows:





16.14 Assembling

The product is pre-assembled, the parts removed for transport must be assembled according to the following instructions.

	<p>Assemble driving handle</p> <p>Fix the drive handle (1) to the shaft with the screw (2).</p>
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Select the correct rollers

Choose the right rollers according to the type of tube (round or square) you want to bend. If your tube does not match the exact size of the available rolls, use the roll size that is just larger than the tube material.

	<p>Change of the rollers</p> <ol style="list-style-type: none"> 1. Remove the locking pin (1) and the washer (2) from the drive shaft (3). 2. Loosen the grub screws (4) on the upper roller (5), then pull the drive shaft (12) and replace the upper roller (5). 3. Tighten the grub screws (4), mount the washer (2) and the locking pin (1). 4. To change the lower rollers, loosen the screw (6) and put the rollers back in the required position and then secure in position with the screw (6).
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17 OPERATION

17.1 Operations preparation

Check that all screws are tightened and that product is securely mounted on the workbench.

17.2 Handling

	<p>Clamping the workpiece</p> <p>Lift the upper rollers upwards by turning the handle (1) counter-clockwise until the workpiece to be machined can be inserted between the upper and the two lower rollers. The workpiece must be pushed in, until all three rollers (3, 4, 5) touch it. Then turn the upper roller (4) by means of the rotary handle (1) downwards so that slight pressure is applied to the workpiece/tube.</p> <p>Forming</p> <p>Start forming by pulling the pipe section to that side of the product with the driving handle where there is still excess material on the outer roller until it just rests on the roller. Increase the pressure on the workpiece by turning the handle (1) and pull the workpiece to the other side by operating the driving handle (2), again until the workpiece is just resting on the roller. Repeat the procedure until the desired bending radius is achieved.</p>
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18 CLEANING

NOTICE



Wrong cleaning agents can attack the varnish of the product. Do not use solvents, nitro thinners, or other cleaning agents that could damage the product's paint. Observe the information and instructions of the cleaning agent manufacturer!

Prepare the surfaces and lubricate the bare product parts with an acid-free lubricating oil. Regular cleaning is a prerequisite for the safe operation of the product and its long service life. Therefore, clean the device after each use of chips and dirt particles.

19 MAINTENANCE

The product is low-maintenance and only a few parts have to be serviced. Nevertheless, any faults or defects which may affect the safety of the user must be rectified immediately!

- Before each start-up, make sure that the safety devices are in perfect condition and function properly.
- Check all connections for tightness at least once a week.
- Regularly check that the warning and safety labels on the product are in perfect and legible condition.
- Use only proper and suitable tools.
- Only use original spare parts recommended by the manufacturer.

20 STORAGE

NOTICE



Improper storage can damage and destroy important components. Only store packed or unpacked parts under the intended environmental conditions!

When the product is not in use, store it in a dry, frost-proof and lockable place to prevent the formation of rust on the one hand and to ensure that unauthorised persons and in particular children have no access to the product on the other hand.

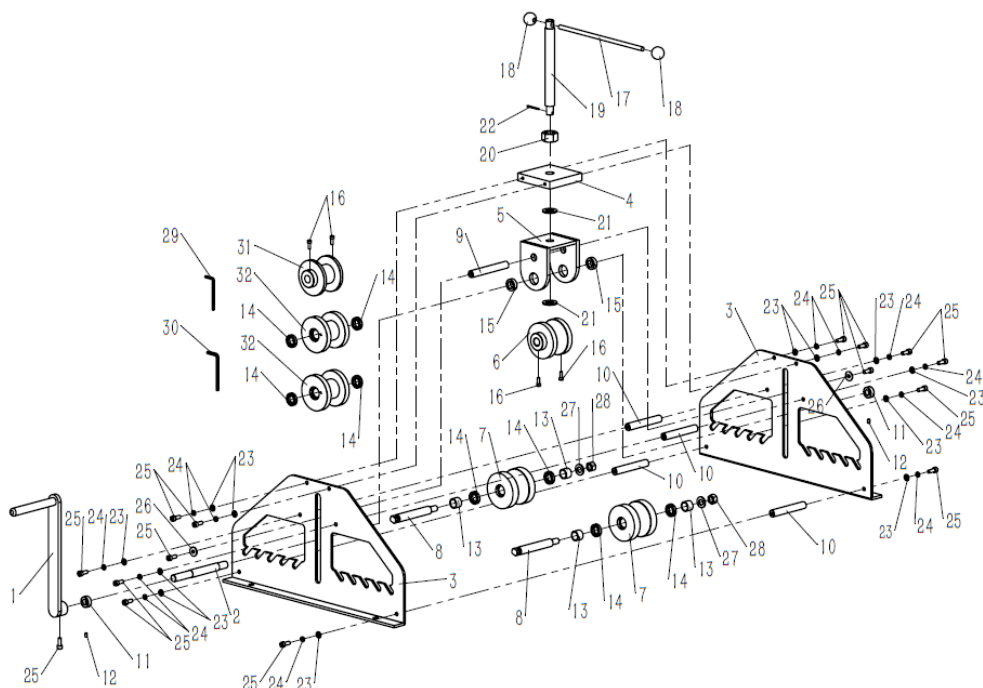
21 DISPOSAL



Observe the national waste disposal regulations. Never dispose of the product, product components or equipment in residual waste. If necessary, contact your local authorities for information on the disposal options available. If you buy a new product or an equivalent device from your specialist dealer, he is obliged in certain countries to dispose of your old product properly.



31.2 Explosionszeichnungen / Exploded view / Výkres dílů



No	Description	Qty	No	Description	Qty
1	Handle	1	17	Handle Lever	1
2	Driving Shaft	1	18	Handle Ball	2
3	Slide Plate	2	19	Lead Screw	1
4	Top Plate	1	20	Nut M24	1
5	"U" Bracket	1	21	Washer 18mm	2
6	Upper 1.5" Roller	1	22	Pin 3.2X32	1
7	Lower 1.5" Roller	2	23	Washer 8mm	12
8	Lower Roller Shaft	2	24	Spring Washer 8mm	12
9	Upper Shaft	1	25	Screw M8x20	16
10	Shaft	4	26	Washer 8mm	2
11	Locking spacer	2	27	Washer 14mm	2
12	Screw M6X10	2	28	Nut M14	2
13	Spacer	4	29	Hex Key Wrench 5mm	1
14	Bearing	4	30	Hex key wrench 6 mm	2
15	Bushing	2	31	Upper roller 2" for square tube	1
16	Screw M6x20	4	32	Lower roller 2" for square tube	2

32 ZUBEHÖR / ACCESSORIES / PŘÍSLUŠENSTVÍ

(DE) Optionales Zubehör finden Sie online auf der Produktseite, Kategorie EMPFOHLENE PRODUKTE.

(EN) Optional accessories can be found online on the product page, category RECOMMENDED PRODUCTS.

(CZ) Volitelné příslušenství najdete na internetu na stránce výrobku, kategorie DOPORUČENÉ VÝROBKY.