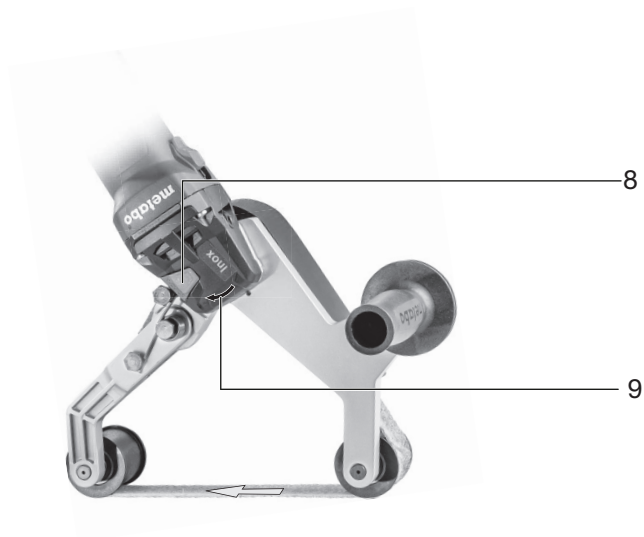
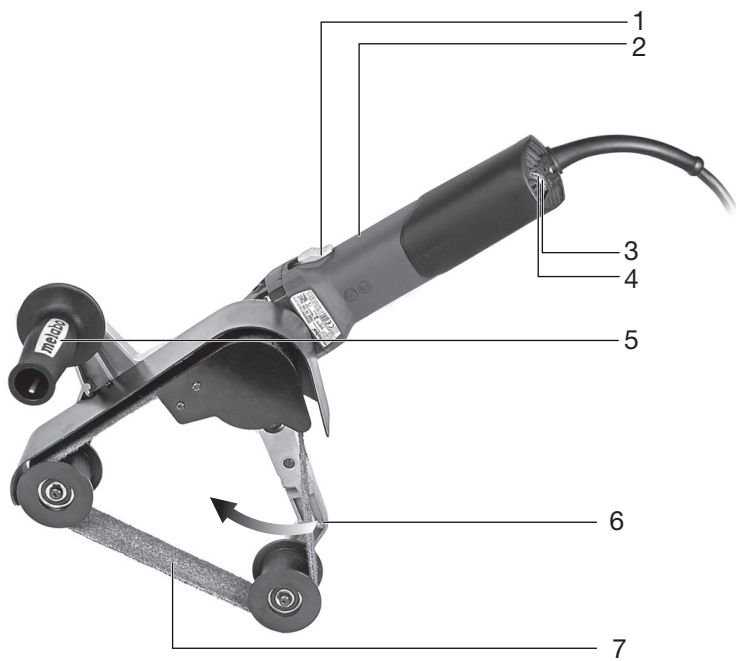
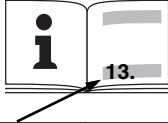


RBE 15-180



de	Originalbetriebsanleitung	4	fi	Alkuperäiset ohjeet	43
en	Original instructions	9	no	Original bruksanvisning	48
fr	Notice originale	14	da	Original brugsanvisning	52
nl	Oorspronkelijke gebruiksaanwijzing	19	pl	Instrukcja oryginalna	57
it	Istruzioni originali	24	el	Πρωτότυπες οδηγίες χρήσης	62
es	Manual original	29	hu	Eredeti használati utasítás	68
pt	Manual original	34	ru	Оригинальное руководство по эксплуатации	73
sv	Bruksanvisning i original	39	uk	Оригінальна інструкція з експлуатації	79



		RBE 15-180 *1) Serial-Number: 02243...
B_B	mm (in)	40 (1 ⁹ / ₁₆)
B_L	mm (in)	760 (29 ¹⁵ / ₁₆)
D_{max}	mm (in)	180 (7 ³ / ₃₂)
U	°	270
v₀	m/s	8,4 - 28
P₁	W	1550
P₂	W	940
m	kg (lbs)	3,4 (7.5)
a_h/K_h	m/s ²	< 2,5/ 1,5
L_{pA}/K_{pA}	dB(A)	94 / 3
L_{WA}/K_{WA}	dB(A)	105 / 3



*2) 2014/30/EU, 2006/42/EC, 2011/65/EU

*3) EN 62841-1:2015, EN 62841-2-4:2014, EN IEC 63000:2018

ppa. 

2021-09-14, Bernd Fleischmann

Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)

*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

Original instructions

1. Declaration of Conformity

We declare under our sole responsibility: These tube belt sanders, identified by type and serial number *1), comply with all relevant requirements of the directives *2) and standards *3). Technical file at *4) - see page 3.

For UK only:

UK We as manufacturer and authorized person to
CA compile the technical file, see *4) on page 3, hereby declare under sole responsibility that these tube belt sanders, identified by type and serial number *1) on page 3, fulfill all relevant provisions of following UK Regulations S.I. 2016/1091, S.I. 2008/1597, S.I. 2012/3032 and Designated Standards EN 62841-1:2015, EN 62841-2-4:2014, EN IEC 63000:2018 .

2. Specified Use

The tube belt sander is for glazing, tarnishing, texturing, polishing and smoothing metal pipes without the use of water.

The user bears sole responsibility for any damage caused by improper use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

3. General Safety Instructions



For your own protection and for the protection of your power tool, pay attention to all parts of the text that are marked with this symbol!



WARNING – Reading the operating instructions will reduce the risk of injury.

Pass on your power tool only together with these documents.

General Power Tool Safety Warnings



WARNING – Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all safety warnings and information for future reference! The term "power tool" in the safety warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

3.1 Work area safety

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.

- Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

3.2 Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- Do not abuse the power tool. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3.3 Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves**

away from moving parts. *Loose clothes, jewellery or long hair can be caught in moving parts.*

g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. *Use of dust collection can reduce dust-related hazards.*

h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. *A careless action can cause severe injury within a fraction of a second.*

3.4 Power tool use and care

a) Do not force the power tool. Use the correct power tool for your application. *The correct power tool will do the job better and safer at the rate for which it was designed.*

b) Do not use the power tool if the switch does not turn it on and off. *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

c) Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. *Power tools are dangerous in the hands of untrained users.*

e) Maintain power tools and accessories with care. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. *Many accidents are caused by poorly maintained power tools.*

f) Keep cutting tools sharp and clean. *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. *Use of the power tool for operations different from those intended could result in a hazardous situation.*

h) Keep handles and grasping surfaces dry, clean and free from oil and grease. *Slippery handles and grasping surfaces do not allow safe handling and control of the tool in unexpected situations.*

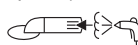
3.5 Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the power tool is maintained.*

4. Special Safety Instructions

Hold the power tool by insulated gripping surfaces, because the sanding surface may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Flying sparks are created when sanding metal. Ensure that no persons are in danger. Due to the risk of fire, all combustible materials must be removed from the work area (area affected by flying sparks).


 During machining, of metals in particular, conductive dust can form deposits inside the machine. This can lead to the transfer of electrical energy onto the machine housing. This can mean a temporary danger of electric shocks. This is why it is necessary when the machine is running to blow compressed air through the rear ventilation slots of the machine regularly, frequently and thoroughly. Here, the machine must be held firmly.


We recommend using a stationary extractor system and connecting a residual current circuit-breaker (FI) upstream. When the machine is shut down via the FI circuit-breaker, it must be checked and cleaned. See chapter 8. Cleaning for more information on cleaning the motor.

Wear ear protectors. Exposure to noise can cause hearing loss.

Wear protective gloves.

Wear tight-fitting protective gloves and clothing. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

 **WARNING** – Always wear protective goggles.

 Wear a suitable dust protection mask (filter class 3).

Secure the workpiece against slipping, e.g. with the help of clamping devices.

Always guide the machine with both hands on the handles provided. Loss of control can cause personal injury.

Never place your hand near rotating parts of the device or near the rotating sanding belt.

Remove sanding dust and similar material only when the machine is not in operation.

Pull the plug out of the plug socket before any adjustments, conversions or servicing are performed.

The rated speed of the sanding belt must be at least equal to the belt speed in idling marked on the power tool. A sanding belt running faster than its rated speed can break and fly apart.

Check prior to each use that the sanding belt is correctly attached and is completely on the rollers. Carry out a trial run: Allow the machine to run at

idling speed for 30 seconds in a safe location. Stop immediately if significant vibrations occur or if other defects are noted. If such a situation occurs, check the machine to determine the cause.

Reducing dust exposure:

⚠ WARNING - Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

This also applies to dust from other materials such as some timber types (like oak or beech dust), metals, asbestos. Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.

Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).

Collect the particles generated at the source, avoid deposits in the surrounding area.

Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled manner.

Use a suitable extraction unit.

Reduce dust exposure with the following measures:

- do not direct the escaping particles and the exhaust air stream at yourself or nearby persons or on dust deposits,
- use an extraction unit and/or air purifiers,
- ensure good ventilation of the workplace and keep clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
- Vacuum or wash the protective clothing. Do not blow, beat or brush.

5. Overview

See page 2

- 1 Sliding switch
- 2 Handle
- 3 Adjusting wheel for setting belt speed
- 4 Electronic signal indicator
- 5 Additional handle
- 6 Tensioner arm for replacing the sanding belt
- 7 Sanding belt
- 8 Press in the spindle locking button only when the spindle is stationary
- 9 Arrow (direction of rotation of drive shaft)

6. Initial Operation

⚠ Before plugging in, check that the rated mains voltage and mains frequency, as stated on the rating label, match with your power supply.

⚠ Always install an RCD with a max. trip current of 30 mA upstream.

Attaching the additional handle

⚠ Always work with the additional handle attached (5)! Secure the additional handle by screwing it tightly to the left or right.

7. Use

7.1 On/Off switch, continuous activation

⚠ Always guide the machine with both hands on the handles provided (2) and (5) hold tight. It is mandatory to use both hands when operating the machine. Loss of control can cause personal injury.

Do not operate on a table or holder.

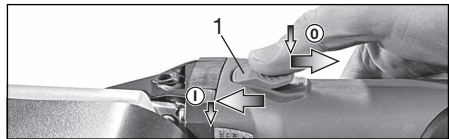
⚠ Switch the machine on first and place it onto the workpiece only once it has reached the full speed.

⚠ Always guide the machine with both hands.

⚠ The machine must not be allowed to draw in additional dust and shavings. When switching the machine on and off, keep it away from dust deposits.

⚠ After switching off the machine, only place it down when the motor has come to a standstill.

⚠ In continuous operation, the machine continues running if it is forced out of your hands. Therefore, always hold the machine using the handles provided, stand in a safe position and concentrate.



Switching on/Continuous activation: Push sliding switch (1) forward. For continuous activation, now tilt downwards until it engages.

Switching off: Press the rear end of the slide switch (1) and release.

7.2 Setting belt speed

The belt speed can be preset via the setting wheel (3) and is infinitely variable.

Positions 1-6 correspond approximately to the following belt speeds:

1	8,4 m/s	4	20,6 m/s
2	12,5 m/s	5	24,6 m/s
3	16,5 m/s	6	28,8 m/s

7.3 Sanding belt replacement

See illustration on page 3.

- Release the tensioner arm (6) and remove the sanding belt (7).
- Place the new sanding belt on the rollers such that its direction of circulation (arrows on the inside of the sanding belt) matches the arrow (9) on the gearbox.
- Release the tensioner arm (6).
- Ensure that the sanding belt is completely on the rollers.

7.4 Sanding procedure

Place the machine on the material such that the sanding belt is parallel to the surface of the workpiece.

When working, please ensure that the machine is operated at right angles to the pipe so that the belt does not fall off the rollers.


Using the additional handle, the belt can be pressed against the pipe and at same time placed around it. The angle of contact and the cutting output may be changed by the contact pressure.


Keep the machine in constant motion because otherwise recesses could be produced in the material.

8. Cleaning, Maintenance

Motor cleaning: blow compressed air through the rear ventilation slots of the machine regularly, frequently and thoroughly. Here, the machine must be held firmly.

9. Troubleshooting

 **The electronic signal display (4) lights up and the load speed decreases.** There is too much load on the machine! Run the machine in idling until the electronics signal indicator switches off.

 **The machine does not start. The electronic signal display (4) flashes.** The restart protection is active. If the mains plug is inserted with the machine switched on, or if the power supply is restored following an interruption, the machine does not start up. Switch the machine off and on again.

10. Accessories


Use only genuine Metabo accessories.

If you need any accessories, check with your dealer.

The dealer needs to know the exact model of your power tool in order to select the correct accessory.

For a complete range of accessories, see www.metabo.com or the main catalogue.

11. Repairs

 Repairs to electrical tools must be carried out by qualified electricians ONLY!

A defective mains cable must only be replaced with a special, original mains cable from metabo, which is available only from the Metabo service.

If you have Metabo electrical tools that require repairs, please contact your Metabo service centre. For addresses see www.metabo.com.

You can download spare parts lists from www.metabo.com.

12. Environmental Protection

The sanding dust generated may contain hazardous materials: do not dispose of with the household waste, but at a special collection point for hazardous waste.

Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.

Packaging materials must be disposed of according to their labelling in accordance with municipal guidelines. Further information can be found at www.metabo.com in the "Service" section.




Only for EU countries: Never dispose of power tools in your household waste! In accordance with European Directive 2012// EU on used electronic and electric equipment and its implementation in national legal systems, used power tools must be collected separately and handed in for environmentally compatible recycling.

13. Technical Specifications

Explanatory notes on the specifications on page 3. Changes due to technological progress reserved.

B_B	=Sanding belt width
B_L	=Sanding belt length
$D_{max.}$	=max. pipe diameter
U	=max. angle of contact
v_0^*	=Belt speed in idling
P_1	=Nominal power input
P_2	=Power output
m	=Weight without mains cable

Measured values determined in conformity with EN 62841.

-  Machine in protection class II
- ~ Alternating current

* Energy-rich, high-frequency interference can cause fluctuations in speed. The fluctuations disappear, however, as soon as the interference fades away.

The technical specifications quoted are subject to tolerances (in compliance with the relevant valid standards).



Emission values
These values make it possible to assess the emissions from the power tool and to compare different power tools. Depending on the operating conditions, the condition of the power tool or the accessories, the actual load may be higher or lower. For assessment purposes, please allow for breaks and periods when the load is lower. Based on the adjusted estimates, arrange protective measures for the user e.g. organisational measures.

Vibration total value (vector sum of three directions)
determined in accordance with EN 62841:

a_h = Vibration emission value
(sanding surfaces)

K_h = Uncertainty (vibration)

Typical A-effective perceived sound levels:

L_{pA} = Sound pressure level

L_{WA} = Acoustic power level

K_{pA} , K_{WA} = Uncertainty

During operation the noise level can exceed
80 dB(A).



Wear ear protectors!