

ROTHENBERGER

ROTHERM 2000

ROTHERM 2000



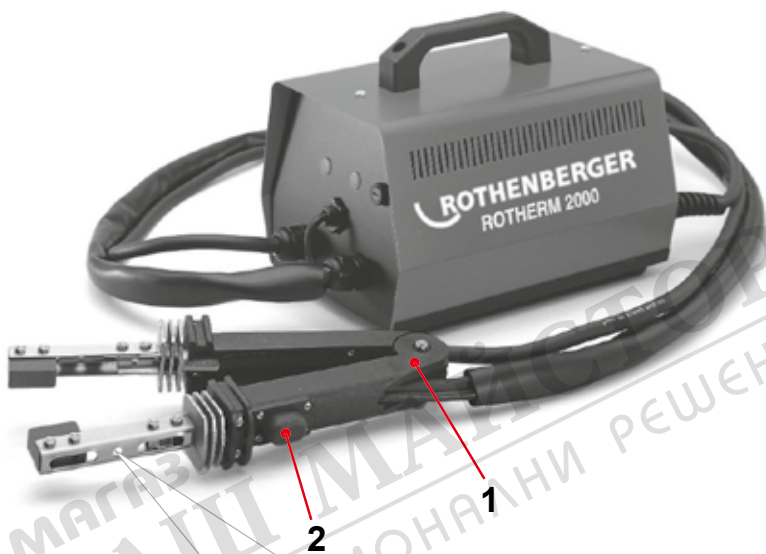
DE Bedienungsanleitung
EN Instructions for use
FR Instruction d'utilisation
ES Instrucciones de uso
IT Istruzioni d'uso
NL Gebruiksaanwijzing

PT Instruções de serviço
DA Brugsanvisning
SV Bruksanvisning
PL Instrukcja obsługi
RU Инструкция по использованию




www.rothenberger.com

A Overview



Art. no: 36700	ROTHERM 2000 230V Typ C
Art. no: 036700Z	ROTHERM 2000 230V Typ J
Art. no: 36701	ROTHERM 2000 110V UK
Art. no: 036701V	ROTHERM 2000 USA

Intro

DEUTSCH - Originalbetriebsanleitung! Bedienungsanleitung bitte lesen und aufbewahren! Nicht wegwerfen! Bei Schäden durch Bedienungsfehler erlischt die Garantie! Technische Änderungen vorbehalten!	Seite 2
ENGLISH Please read and retain these directions for use. Do not throw them away! The warranty does not cover damage caused by incorrect use of the equipment! Subject to technical modifications!	Page 8
FRANÇAIS Lire attentivement le mode d'emploi et le ranger à un endroit sûr! Ne pas le jeter! La garantie est annulée lors de dommages dus à une manipulation erronée! Sous réserve de modifications techniques!	Page 14
ESPAÑOL ¡Por favor, lea y conserve el manual de instrucciones! ¡No lo tire! ¡En caso de daños por errores de manejo, la garantía queda sin validez! Modificaciones técnicas reservadas!	Página 20
ITALIANO Per favore leggere e conservare le istruzioni per l'uso! Non gettarle via! In caso di danni dovuti ad errori nell'uso, la garanzia si estingue! Ci si riservano modifiche tecniche!	Pagina 26
NEDERLANDS Lees de handleiding zorgvuldig door en bewaar haar goed! Niet weggooien! Bij schade door bedieningsfouten komt de garantieverlening te vervallen! Technische wijzigingen voorbehouden!	Bladzijde 32 
PORTUGUES Queiram ler e guardar o manual de instruções! Não deitar fora! Em caso de avarias por utilização incorrecta, extingue-se a garantia! Reservado o direito de alterações técnicas!	Página 38
DANSK Læs betjeningsvejledningen, og gem den til senere brug! Smid den ikke ud! Skader, som måtte opstå som følge af betjeningsfejl, medfører, at garantien mister sin gyldighed! Ret til tekniske ændringer forbeholdes!	Side 44
SVENSKA Läs igenom bruksanvisningen och förvara den väl! Kasta inte bort den! Garantin upphör om apparaten har använts eller betjänats på ett felaktigt sätt! Med reservation för tekniska ändringar!	Sida 50
POLSKI Instrukcję obsługi proszę przeczytać i zachować! Nie wyrzucać! Przy uszkodzeniach wynikających z błędów obsługi wygasa gwarancja! Zmiany techniczne zastrzeżone!	Strony 56
РУССКИЙ Прочтите инструкцию по эксплуатации и сохраняйте её для дальнейшего использования! В случае поломки инструмента из-за несоблюдения инструкции клиент теряет право на обслуживание по гарантии! Возможны технические изменения!	Страница 62



ПРОФЕССИОНАЛЬНАЯ КОПИРОВАНИЕ

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Markings in this document:



Danger!

This sign warns against the danger of personal injuries.



Caution!

This sign warns against the danger of property damage and damage to the environment.



Call for action



1 Safety Notes

1.1 Intended use

Only use ROTHERM 2000 for soft soldering of copper pipes. This device may only be used correctly as described.

1.2 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 warnings and instructions for future reference.

The term "power tool" in the warnings refers to your electrically-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- b) **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.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- a) **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.
- b) **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.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges and moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors only, use an extension cords suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **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) Personal safety

- a) **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 momentary lack of attention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **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.
- d) **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.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

- f) **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.
- 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. 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 for safe handling and control of the tool in unexpected situations.
- 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.

1.3 Special safety instructions

The plug socket must be in accordance with VDE (Association of German Electrotechnical Engineers) regulations, and must be fitted with a 10-amp fuse!

The electrodes achieve a high working temperature, so neither touch front part of the forceps or electrodes during and after soldering.

After soldering has been completed, the soldering gun must be laid down in such a manner that no flammable objects can ignite and no injuries can be sustained by any persons.

Change worn electrodes and electrode holders.

This device is not intended for use by children and persons with physical, sensory or mental limitations or a lack of experience or knowledge. This device can be used by children aged 8 and above and by persons who have physical, sensory or mental limitations or a lack of experience or knowledge if a person responsible for their safety supervises them or has instructed them in the safe operation of the device and they understand the associated dangers. Otherwise, there is a danger of operating errors and injuries.

Supervise children during use, cleaning and maintenance. This will ensure that children do not play with the device.

The equipment must only be operated by qualified specialized staff!

2 Technical Data

Working range: Cu-Pipe.....	Ø 6 – 54mm
Voltage	230V (115V), 50-60Hz
Nominal Input Current.....	max. 9A (18A)
Output Voltage.....	6 V AC
Nominal Output.....	2000 VA
Dimensions (L x W x H).....	260 x 190 x 200mm
Weight	ca. 12,7kg
Operating mode.....	S3 - 30%
Noise pressure level (L _{pA})	70 dB (A) K _{pA} 3 dB (A)
Sound power level (L _{WA})	81 dB (A) K _{WA} 3 dB (A)
The noise level during operation can exceed 85 dB (A). Wear hearing protection!	
Measured values determined in accordance with EN 60335.	

3 Function of the Unit

This soldering set is particularly well suited for performing repair and modification work in rooms or dwellings where a fire hazard exists.

ROTHERM 2000 is designed for easy, safe and timesaving soft soldering without using a tamper.

3.1 Overview

(A)

1	Soldering tongs	3	Flat electrodes
2	Pneumatic switch	4	Stick electrodes

3.2 Electric supply

The soldering unit must be connected to a socket with a protective earth (earthed wire). Ensure that the mains voltage is correct! Before connecting the unit, check that the mains voltage is the same as that specified on the rating plate.

3.3 Operation

- If necessary, the electrode holder respectively flat (3) - or stick electrodes (4) should be attached.
- Prepare the soldering joint properly. Spread soldering paste ROSOL 3, or soft solder fluxing over the workpiece.
- Plug mains plug into power supply (red control lamp light up).
- Attach soldering tongs (1) and press pneumatic switch (2) (green control lamp light up). Control of soldering temperature is better by simultaneously applying the filler wire.

The heating of the fittings depends on the material used and the wall thickness.

- Feed in the solder until the soldering gap is filled and release the switch (2) (green control lamp off).
- Remove the soldering tongs (1) from the workpiece.



When the soldering tongs is laid aside, attention should be paid to ensure that objects in the immediate working vicinity are protected from direct contact with it!

- Remove plug from mains socket (red control lamp off).

4 Care and Maintenance

Repairs should only be carried out by ROTHENBERGER service centres or dealers authorised by ROTHENBERGER.

Check the electrodes and holders for damage and consumption.

Burned-out flat or stick electrodes should be replaced in good time. Replace the holders if necessary.

5 Troubleshooting

Symptom	Possible Reason
The red "Input Voltage" control LED does not light up:	<ul style="list-style-type: none">- no input voltage- defective mains cable- the red control LED is defective- the fuse in the main unit is defective
The green control LED does not light up:	<ul style="list-style-type: none">- the pneumatic circuit has not been activated- the air intake to the pneumatic circuit has been interrupted- a vacuum has developed in the air in-take- the overload protection has switched off the unit temporarily

6 Accessories

Accessory Name	ROTHENBERGER Part Number
Flat electrode w.holder,ROTHERM 2000,pair	36711
Flat electrode ROTHERM 2000,pair	36721
Rod electrodes w.holder ROTHERM 2000,pair	36710
Rod electrodes ROTHERM 2000,pair	36720
Steel Case	36715
Fittings solder paste ROSOL 3, 250g	45225
Fitting solder ROSOL 3, 3mm spool,250g	45255
Cleaning fleece ROVLIES,130x60mm,10pcs.	45268
Soft solder flux	www.rothenberger.com
Solder	www.rothenberger.com
Copper tube internal brushes	www.rothenberger.com

7 Customer service

The ROTHENBERGER service locations are available to help you (see listing in catalog or online) and replacement parts and service are also available through these same service locations. Order your accessories and spare parts from your specialist retailer or using RoService+ online:

Phone: + 49 (0) 61 95 / 800 – 8200

Fax: + 49 (0) 61 95 / 800 – 7491

Email: service@rothenberger.com

www.rothenberger.com

8 Disposal

Components of the unit are recyclable material and should be put to recycling. For this purpose registered and certified recycling companies are available. For an environmental friendly disposal of the non-recyclable parts (e.g. electronic waste) please contact your local waste disposal authority.

For EU countries only:



Do not dispose electric tools with domestic waste. In accordance with the European Directive 2012/19/EU the disposal of electrical and electronic equipment and its implementation as national law, electric tools that are no longer serviceable must be collected separately and utilised for environmentally compatible recycling.