

# **Down draft table**

Operating instructions - EX-0-714-004 - CE

Edition 1, March 20, 2024



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1 Identification CT-POR

#### 1 Identification

The series CT-POR down draft table is a stationary solution for extracting fumes and dust generated during cutting processes. The down draft table must only be operated using original Thermacut® spare parts. These operating instructions describe only the CT-POR down draft table.

When used in these operating instructions, the terms "product" and "table" always refer to the down draft table CT-POR.

## 1.1 Marking

This product fulfills the requirements that apply to the market to which it has been introduced. A corresponding marking has been affixed to the product, if required.

## 1.2 Identification plate

Fig. 1 CT-POR identification plate



The product is labeled by means of an identification plate.

For inquiries, please have at hand the product type, product number, and year of construction as indicated on the identification plate.

#### 1.3 Signs and symbols used

The following signs and symbols are used in the operating instructions:

- General instructions.
- 1 Steps to be carried out in succession.
- Lists.
- ⇒ Cross-reference symbol indicating detailed, supplementary, or further information.
- A Caption, item description.

CT-POR 1 Identification

## 1.4 Classification of the warnings

The warnings used in the operating instructions are divided into four different levels and shown prior to potentially dangerous work steps. Depending on the type of danger, the following signal words will be used:

#### **A** DANGER

Describes an imminent threatening danger. If not avoided, it may cause severe injuries or death.

## **A WARNING**

Describes a potentially dangerous situation. If not avoided, this may result in death or serious injuries.

## **A** CAUTION

Describes a potentially harmful situation. If not avoided, this may result in slight or minor injuries.

#### **NOTICE**

Describes the risk of impairing work results, material damage, or irreparable damage to the device or equipment.

2 Safety CT-POR

## 2 Safety

This chapter provides basic safety instructions and warnings about residual hazards that should be kept in mind in order to operate the product safely. Non-observance of the safety instructions may result in risks to the life and health of personnel as well as cause environmental or material damage.

## 2.1 Designated use

The product described in these operating instructions may be used only for the purpose and in the manner described in these operating instructions. The product is used to extract cutting fumes and dust that is generated during cutting. The product can be used with Thermacut® fume extraction systems to extract and filter fumes and dust produced when working on steel with an alloy content of nickel and chrome under 30%. Any other use is considered improper. Unauthorized modifications or changes to enhance the performance are not permitted.

- ➤ Do not exceed the maximum load data specified in the documentation. Excessive loads lead to irreparable damage.
- > Do not make any structural modifications to the product.
- > Use the product only in a closed environment.
- ➤ Do not store or use the product outdoors where it is wet.
- ➤ When storing outdoors, use suitable protection against the weather conditions.

## 2.2 Responsibilities of the user

➤ Ensure that only suitably qualified personnel perform work on the product or system.

Suitably qualified personnel are:

- those who are familiar with the basic regulations on occupational safety and accident prevention;
- those who have been instructed on how to handle the product;
- those who have read and understood these operating instructions;
- those who have been trained accordingly;
- those who are able to recognize possible risks because of their special training, knowledge, and experience.
- > Keep non-suitably qualified people out of the work area.

#### Country-specific obligations of the operator

In some countries, it is forbidden to return the filtered air to the installation area due to residual health risks. For example, when operating the product in France, the cleaned air must be expelled from the building.

> Observe the local occupational health and safety regulations.

CT-POR 2 Safety

## 2.3 Warning and information signs

The following warning, notice and mandatory signs can be found on the product:



> Wear a respiratory mask.



> Wear your personal protective clothing.



> Wear protective gloves.



> Wear safety shoes.



> Wear ear protection.



Wear safety goggles.



> Read and observe the operating instructions.



➤ Do not throw any cigarettes or burning objects into the table.



Entering the table is forbidden.



Warning against hot surfaces.



Warning against risk of slipping.

➤ Ensure a dry and clean base in the room where the device is to be installed.

These markings must always be legible. They may not be covered, obscured, painted over, or removed.

2 Safety CT-POR

#### 2.4 Basic safety instructions

The product has been developed and manufactured in accordance with the latest technology and recognized safety standards and directives. Due to the product design, unavoidable technical residual risks exist to the user, third parties, products, and other material property. The manufacturer will accept no liability for damage caused by non-observance of the documentation.

- ➤ Please read the documentation carefully before using the product for the first time and comply with the instructions contained.
- ➤ Only operate the product in technically perfect condition and ensure compliance with all documentation.
- ➤ Read the documentation carefully before carrying out specific work, for example commissioning, operation, transport, or maintenance.
- ➤ Use suitable means to protect yourself and bystanders from the hazards listed in the documentation.
- > Store the documentation within easy reach of the product for reference and enclose all documents when passing on the product.
- > Consult the documentation on additional welding components.
- When handling gas cylinders, consult the instructions from the gas manufacturers and the corresponding local regulations, e.g. pressurised gas regulations.
- > Observe the local accident prevention regulations.
- ➤ Only trained specialists should commission, operate, and service the device. Qualified personnel are persons who, based on their special training, knowledge, experience and due to their knowledge of the relevant standards, are able to assess the tasks assigned to them and identify possible dangers.
- ➤ Keep the work area in order. Ensure good lighting of the work area.
- Switch off the power, gas, and compressed air supplies and unplug the mains plug for the entire duration of servicing, maintenance, and repair work.
- > For disposal, observe the local regulations, laws, provisions, standards, and directives.

CT-POR 2 Safety

## 2.5 Product-specific safety instructions

### **A WARNING**

#### Health risk caused by inhaling harmful dust

The product contains harmful dust that can collect on surfaces and penetrate the ambient air as of the first use. It can damage the respiratory tract when inhaled.

- > Check and wear your personal protective equipment.
- ➤ Use the product only in rooms with sufficient ventilation.
- Ensure that all seals on the product are free from dirt and debris.
- ➤ The provided filtration system must be used when operating the product.
- ➤ Immediately remove dust deposits from the environment with a dust class H industrial vacuum cleaner or a damp cloth.

#### **A WARNING**

# Fire and explosion hazard due to usage not in accordance with the designated use

The extraction of flammable, aggressive chemical or oil-laden substances and materials as well as dusts containing aluminum or magnesium can pose a risk of fire and explosion due to chemical reactions. This may result in serious injuries.

- Use the product according to its designated use only.
- Use a suitable filter system.

#### **NOTICE**

#### Risk of material damage due to fire or explosion

The extraction of flammable, aggressive chemical or oil-laden substances and materials, as well as dusts containing aluminum or magnesium, can pose a risk of fire and explosion. This can result in irreparable damage to the product.

- Use the product according to its designated use only.
- Use a suitable filter system.

## 2.6 Personal protective equipment

- ➤ Do not wear loose fitting clothing or jewelry.
- ➤ Use a hair net for long hair.
- Wear your personal protective equipment.
- ➤ Ensure that others in close proximity are also wearing personal protective equipment.

Personal protective equipment consists of protective clothing, safety helmet, safety goggles, a class P3 respiratory mask, class S1 and higher protective gloves and safety shoes.

## 2.7 Emergency information

- ➤ In the event of an emergency, immediately disconnect the following supplies: Compressed air supply.
- ➤ Extinguish burning oil or emulsions using a CO<sub>2</sub> or powder fire extinguisher.

3 Scope of delivery CT-POR

#### 3 Scope of delivery

The following components are included in the scope of delivery:

- 1× CT-POR down draft table
- 1× connection kit (air inlet and blind cover)
- 1× maintenance unit (pressure reducer, oil and water separator)
- 1× activation rail (optional)
- 4× mounting adapter plates
- 1× operating instructions
- > Order the equipment parts and consumables separately.
- ➤ The order data and ID numbers for the equipment parts and consumables can be found in the current catalog.
- > For more information about points of contact, consultation, and orders, please visit www.Thermacut.com.

Although the items delivered are carefully checked and packaged, it is not possible to fully rule out the risk of transport damage.

## **Goods-in inspection**

- > Use the delivery note to check that everything has been delivered.
- > Check the delivery for damage (visual inspection).

#### **Complaints**

- > If goods are damaged, contact the final carrier.
- > Keep the packaging for possible checks by the carrier.

#### Returns

- ➤ Use the original packaging and packing material for returns.
- ➤ If you have questions concerning packaging and safety during shipment, contact your supplier, carrier, or transport company.

## 4 Product description

## 4.1 Structure and function

Fig. 2 Structure

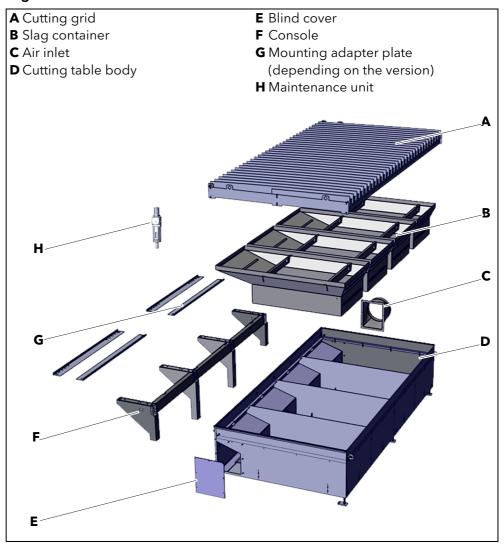
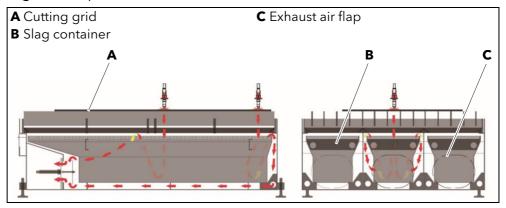


Fig. 3 Operation



During thermal cutting processes such as flame cutting and plasma cutting, fumes and dust that are hazardous to health are produced, and these can be extracted and collected by the down draft table and a connected fume extraction system. The down draft table comprises extraction sections running transversally to the exhaust air channel. Each extraction section has its own exhaust air flap. The exhaust air flaps (C) are opened by pneumatic cylinders. Depending on the cutting system, the integrated roller sensors

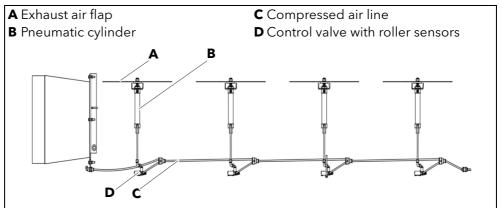
are triggered by an attached activation rail. Once the roller sensors have been triggered, the connected exhaust air flap is opened. The exhaust air flaps open only in the area of the down draft table where cutting will take place. The fumes are sucked from the extraction section of the table into the exhaust channel and then into the fume extraction system mounted on the down draft table. During cutting, the slag falls down and is collected in the slag containers (B). The size of the slag containers (B) corresponds to the size of the extraction sections. The slag containers (B) have integrated lugs for crane hooks and can be easily lifted out for cleaning. They are covered by a grill (optional), which prevents small parts from falling into the slag container (B). The table closes at the top with a steel frame, the cutting grid (A).

The following extraction products can be connected to the product:

- Thermacut® fume extraction systems, e.g. 880200-40

## 4.2 Pneumatic components

Fig. 4 Pneumatic components



## 4.3 Technical data

#### 4.3.1 Ambient conditions

**Tab. 1** Ambient conditions for transport and storage

Ambient temperature	-10°C to +40°C	
Relative humidity	80% non-condensing	
Installation height	< 1000 m above sea level	

 Tab. 2
 Ambient conditions for operation

Ambient temperature	+10°C to +40°C	
Relative humidity	70% non-condensing	
Installation height	< 1000 m above sea level	

#### 4.3.2 Product data

**Tab. 3** Product data

Product	CT-POR
Electrical power supply	None
Dimensions (L × W × H)	2110 × 3550 × 840 mm
Max. cutting area	1500 × 3000 mm
Weight	870 kg
Pneumatic supply (compressed air)	5 to 6 bar
Capacity	190 liter
Slag container	
Nominal diameter for	Ø 350 mm
DN intake piping	
Optimum air volume flow	3000 to 4000 m <sup>3</sup> /h
Max. plate thickness	100 mm
Sound pressure level LpA	<= 75 dB (A)

#### 5 Transport and installation

### **A** WARNING

#### Risk of injury due to improper transport and installation

Improper transport and installation can cause the product to tip or fall over. This may result in serious injuries.

- > Check and wear your personal protective equipment.
- Ensure that all supply lines do not encroach into the area in which employees are working.
- Place the product on a suitable base (flat, solid, dry) on which it will not topple over.
- ➤ Note the weight of the product when lifting it. 

  ⇒ 4.3 Technical data on page EN-13
- ➤ Use an appropriate lifting tool with load handling attachment for transporting and installing the product.
- > Avoid abrupt lifting and setting down.
- ➤ Do not lift the product over persons or other products.
- > Send bystanders out of the danger zone.
- At least two people should work together to mount the product.

#### **NOTICE**

#### Risk of material damage due to improper transport and installation

Improper transport or installation can cause the product to tip or fall over. This can result in material damage and irreparable damage to the product.

- ➤ Protect the product against weather conditions, such as rain and direct sunlight.
- Ensure that the product does not make contact if you pass over edging.
- ➤ Use the product only in dry, clean and well-ventilated rooms.
- ➤ Maintain a minimum distance of 1 m from the wall when installing the product to ensure that the product has sufficient ventilation.
- At least two people should work together to mount the product.

The product can be transported and installed using either a forklift or a lifting tool.

## 5.1 Fastening transport lugs



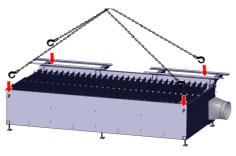
1 Attach the transport lugs (2×) to the top of the down draft table.



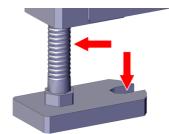
2 Attach the transport lugs (2×) to the sides of the down draft table.

## 5.2 Installing the down draft table

The set-up tasks described below must only be carried out using suitable and approved slings (ropes, chains, belts). The slings must be attached only on the provided crane lugs or transport loops on the down draft table.



- 1 Attach slings or hooks to the transport lugs on the down draft table and lift the down draft table using suitable lifting tool.
- **2** Transport to a suitable installation site but do not set down yet.



3 When the down draft table is in a suitable position, level the table using the adjusting screws on the bottom. Correct levelling is crucial for optimal cutting quality and trouble-free operation.

Optional (material is not included in the scope of delivery):

- 4 Mark drill holes  $(6 \times)$  on the floor.
- **5** To ensure free access to the markings, reposition the down draft table.
- **6** Use a percussion drill to drill the holes (6×) on the markings. Observe the manufacturer's instructions for the attachment means.
- **7** Insert nail plugs (6×) in the drill holes. Balance any unevenness by appropriate means.
- **8** Move the down draft table back into position and tighten to the ground at the attachment holes.

CT-POR 6 Commissioning

## 6 Commissioning

#### **A** WARNING

#### Risk of injury due to fire

A fire may occur due to improper use or connection. This may result in serious burns.

- ➤ Do not use the product to extract welding fumes that result from welding oil-wetted parts.
- ➤ Do not use the product to extract flammable substances and liquids.
- ➤ Do not use the product in areas subject to dust or gas explosion hazards.

## 6.1 Fitting the air inlet and piping

The fume extraction system can be fixed using piping (not included in the scope of delivery) at the down draft table's air inlet. The air inlet must be mounted on the down draft table.

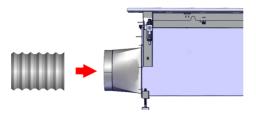


- 1 Cut the supplied seal to size.
- 2 Stick the seal onto the air inlet's mounting surface. Ensure that mounting holes are not obscured.



- **3** Position the air inlet on the table using the threaded bolts (7×).
- 4 Mount the air inlet with washers (7×) and nuts (7×) on threaded bolts on the table.

  Tighten the nuts using an AF 10 hexagonal socket wrench.



**5** Fasten the piping of the fume extraction system to the air inlet using self-drilling screws and seal off using a gasket.

6 Commissioning CT-POR

#### 6.2 Mounting the blind cover



- 1 Cut the supplied seal to size.
- 2 Stick the seal onto the blind cover's mounting surface. Ensure that mounting holes are not obscured.



- **3** Position the blind cover on the table using the threaded bolts (7×).
- 4 Mount the blind cover with washers (7×) and nuts (7×) on threaded bolts on the table.

  Tighten the nuts using an AF 10 hexagonal socket wrench.

## 6.3 Establishing equipotential bonding

#### **A WARNING**

#### Electric shock due to defective cables

The use of damaged or improperly installed cables may result in a potentially fatal electric shock.

- ➤ Check all live cables and connections for proper installation and damage.
- ➤ Have any damaged, deformed, or worn parts replaced by a qualified electrician only.
- ➤ Allow only an electrician or a trained individual to establish equipotential bonding.

To protect electronic components against negative impacts owing to parasitic electric currents, equipotential bonding must be provided on every down draft table and on cutting units. We recommend using a 70 mm<sup>2</sup> cable to ground the table.



- 1 Loosen and remove a serrated washer and a nut using socket wrench AF 19 on the side of the table.
- 2 Position ground cables (2×) on both sides on the threaded bolts.
- **3** Attach the ground cables to the threaded bolts using serrated washers and nuts.
- **4** Establish equipotential bonding to the hall (on the customer side, not included in the scope of delivery).

CT-POR 6 Commissioning

## 6.4 Establishing the compressed air supply

The maintenance unit is included in the scope of delivery and comprises a pressure reducer and an oil and water separator. The maintenance unit must be mounted on the down draft table and be connected to the compressed air supply.



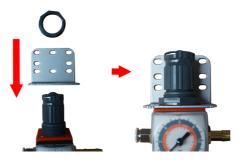
- 1 Loosen the blind plug using a 3 mm Allen key and mount on the other side of the maintenance unit (optional, according to mounting direction).
- **2** Screw the manometer into the maintenance unit.



- **3** Wrap the quick coupling's threaded connection with Teflon tape.
- **4** Mount the quick coupling at the side to the maintenance unit using ring/fork wrenches AF 13 and 14.



- **5** Wrap the quick compressed air connection's threaded connection with Teflon tape.
- **6** Screw in the compressed air connection on the right hand side in the maintenance unit.



- 7 Unscrew the plastic ring.
- **8** Put on the mounting bracket and fix it with a plastic ring.



- **9** Ensure that dry and oil-free compressed air with a pressure of 5.0 to 6.0 bar is available.
- **10**Close off the compressed air supply until the entire supply line is installed and protect against inadvertent opening.
- 11Mount the maintenance unit with the mounting bracket and screws (4×) on the outside of the table. Tighten using an AF 7 hexagonal socket wrench.

6 Commissioning CT-POR



- **12**Attach the compressed air hose to the table using the maintenance unit's quick coupling.
- **13**Connect the compressed air supply to the compressed air connection of the maintenance unit (on the customer side). Use a compressed air hose with an inside diameter of 9 mm.



**14**Close the end of the compressed air hoses on the other side of the down draft table.

## 6.5 Carrying out a functional test

- 1 Switch on the customer's compressed air supply.
- **2** Check that the pressure at the maintenance unit is between 5.0 bar and 6.0 bar.

If the pressure is not in the specified range, proceed as follows:

- **3** Pull up the adjustment wheel on the upper part of the maintenance unit and unlock the maintenance unit.
- **4** Turn the adjustment wheel and set the desired system pressure (5.0 to 6.0 bar).

Turn clockwise: increase the system pressure.

Turn counterclockwise: decrease the system pressure.

- **5** Press down the adjustment wheel on the upper part of the maintenance unit and lock the maintenance unit.
- **6** Manually actuate the roller switch and check whether the individual exhaust air flaps open and close.

The exhaust air flap should be closed without the roller switch being actuated. If the exhaust air flaps do not open and close correctly, the adjusting screws on the compressed air valves and the position of the roller sensors must be checked and adjusted.

- ⇒ 9.1 Setting the compressed air valve on page EN-31
- ⇒ 9.2 Setting the roller sensors on page EN-31

CT-POR 6 Commissioning

# 6.6 Attaching the mounting adapter plates for the EX-TRACK CNC

The visual direction for attachment is from the front of the table toward the air outlet. This results in the terms "front" and "rear mounting plate".



- **1** Position the mounting adapter plates (4×) on the down draft table's console.
- **2** Position the front mounting adapter plate so the final small slot on the rail lines up with the outer hole pattern on the console.
- **3** Use M10 screws (4×) to secure the mounting adapter plates to the console.
- **4** Hand-tighten the screws only so the plate position can still be adjusted later on.



- **5** Position the rear mounting adapter plate so the third to last slot lines up with the outer hole pattern on the console.
- **6** Use M10 screws (2×) to secure the mounting adapter plates to the console.
- 7 Hand-tighten the screws only so the position of the mounting adapter plate can still be adjusted later on.

6 Commissioning CT-POR

## 6.7 Attaching the rail for the EX-TRACK CNC (optional)



Gear rack

- **1** Use a suitable lifting device to carefully position the rail on the mounting adapter plates.
- **2** Ensure that the gear rack sits on the inside!
- **3** Use the M16 screws (8×) to secure the rail to the mounting adapter plates.

Only hand-tighten the screws.



- **4** Check the height alignment along the mounting adapter plates.
- **5** Use a spirit level to check the alignment and leveling.

Please note that the down draft table must already have been leveled.

⇒ 5.2 Installing the down draft table on page EN-15



**6** If necessary, use an AF 24 wrench to loosen the console screws on the table and align the height.



CT-POR 6 Commissioning



**7** Position the two outer edges of the mounting adapter plates flush with the front of the consoles and tighten the M10 screws with an AF 17 wrench.



- **8** Position the rail parallel to the table body.
- **9** To this end, use a measuring aid (e.g. folding ruler) to measure the distance from the inside of the table to the rail's guide rail at both the start and end of the table.
- **10**Firmly screw the M16 screws on the left side of the rail to the outer edge of the mounting adapter plate.



**11**Remeasure the distance between the inner side of the rail and the table.

When measuring, always work from the outer edge of the table to the inside of the rail.

- **12**Visually align the inner edge of the mounting adapter plates with the console and the rail.
- **13**Securely attach the plates to the console using the M10 screws and an AF 17 wrench and to the rail using the M16 screws and an AF 24 wrench.

Further information about the EX-TRACK CNC can be found in the EX-TRACK CNC operating instructions.

6 Commissioning CT-POR

#### 6.7.1 Attaching the activation carriage

To make the EX-TRACK CNC compatible with the CT-POR cutting table, the former has been equipped with an activation carriage that activates the extraction system when passed by.

Fig. 5 EX-TRACK CNC with activation rail





- **1** Use a size 4 Allen key to loosen the screws on the spatter protector.
- 2 Remove the spacer.
- **3** Remove the spatter protector.



- **4** Attach the activation rail provided:
- > Place the washer on the screw.
- > Insert the spacer sleeves.
- ➤ Insert the screw with washer through the spatter protector into the spacer sleeve and tighten it.
- ➤ Position the activation rail so the valves are activated when passed by.

The activation rail must not rub!

After attaching the activation rail, set the roller sensors. 

⇒ 9.2 Setting the roller sensors on page EN-31

CT-POR 7 Operation

#### 7 Operation

#### **A** WARNING

#### Health risk caused by inhaling harmful cutting fumes

Cutting processes produce fumes with harmful dust particles, which settle on surfaces and can be released into the ambient air. It can damage the respiratory tract when inhaled.

- > Check and wear your personal protective equipment.
- ➤ Use the product only in rooms with sufficient ventilation.

#### WARNING

## Health risk caused by inhaling harmful dust

The product contains harmful dust that can collect on surfaces and penetrate the ambient air as of the first use. It can damage the respiratory tract when inhaled.

- > Check and wear your personal protective equipment.
- > Use the product only in rooms with sufficient ventilation.
- Ensure that all seals on the product are free from dirt and debris.
- ➤ The provided filtration system must be used when operating the product.
- ➤ Immediately remove dust deposits from the environment with a dust class H industrial vacuum cleaner or a damp cloth.

#### **A** WARNING

#### Risk of injury due to fire

A fire may occur due to improper use or connection. This may result in serious burns.

- ➤ Do not use the product to extract welding fumes that result from welding oil-wetted parts.
- > Do not use the product to extract flammable substances and liquids.
- ➤ Do not use the product in areas subject to dust or gas explosion hazards.
- **1** Turn on the compressed air supply (5.0 to 6.0 bar).
- 2 Switch on the connected fume extraction system.

#### **Decommissioning**

- **1** Disconnect the product from the compressed air supply.
- 2 Turn the knob at the maintenance unit (release).

#### 8 Maintenance and cleaning

Scheduled maintenance and cleaning are prerequisites for a long service life and trouble-free operation. If the product is operated for more than eight hours a day, the maintenance intervals should be changed as needed. We recommend recording the inspections.

#### **A WARNING**

## Health risk caused by inhaling harmful cutting fumes

Cutting processes produce fumes with harmful dust particles, which settle on surfaces and can be released into the ambient air. It can damage the respiratory tract when inhaled.

- > Check and wear your personal protective equipment.
- > Use the product only in rooms with sufficient ventilation.
- Ensure that all seals on the product are free from dirt and debris.
- ➤ The provided filtration system must be used when operating the product.
- ➤ After cleaning and maintenance work, check all threaded fittings for a tight fit, leaks, chafing abrasion points. Tighten any threaded fittings that have been loosened. Rectify any identified defects immediately.
- ➤ Immediately remove dust deposits from the environment with a dust class H industrial vacuum cleaner or a damp cloth.

#### **A WARNING**

#### Risk of crushing

Limbs can be crushed if product components are improperly installed or uninstalled.

- > Keep your hands out of the danger zone.
- > Check and wear your personal protective equipment.

#### **A** CAUTION

#### Risk of injury due to unexpected start

If the product's compressed air supply is not interrupted during maintenance, cleaning or disassembly, the exhaust air flaps may open and close unexpectedly and cause injury.

- Close off the compressed air supply.
- > Keep your hands out of the danger zone.

## 8.1 Maintenance and cleaning intervals

The specified intervals are standard values and refer to single-shift operation. We recommend recording the inspections. The date of the inspection, the detected defects and the name of the inspector must be observed.

#### **Daily**

- > Check condensate and drain if necessary.
  - ⇒ 8.3 Checking and cleaning pneumatic components on page EN-29
- ➤ Check/correct the pressure on the maintenance unit (5 to 6 bar).

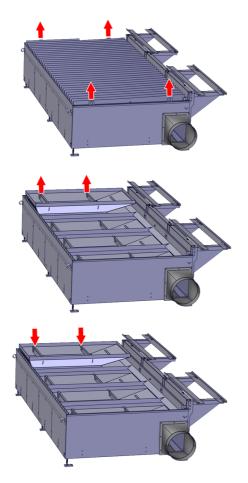
## Weekly

- > Check product for visible damage.
- ➤ Check the ground cables, connector hoses, and connections to ensure that they are securely connected and not damaged, and replace them if necessary.
- ➤ Check all connection points of the piping and connectors for dust escape.
- Check the connection and tight fit of all pneumatic components.
  - ⇒ 8.3 Checking and cleaning pneumatic components on page EN-29
- ➤ Check the fill level of the slag container and empty once the fill level reaches 50%.
  - ⇒ 8.2 Cleaning the slag container on page EN-28

#### Yearly

- ➤ Check the unit's ground connections for damage.
- ➤ Open the piping inspection flap, and check the piping for dust deposits.

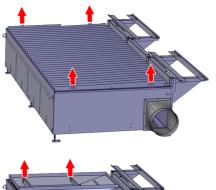
## 8.2 Cleaning the slag container

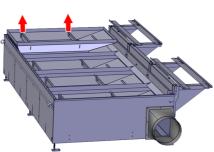


- **1** Remove the ground cable on both sides.
  - ⇒ 6.3 Establishing equipotential bonding on page EN-18
- 2 Lift out the cutting grid using a suitable lifting tool on the provided lugs.
- **3** Lift out and empty the slag container using a suitable lifting tool.
  - ⇒ 11 Disposal on page EN-32
- **4** Remove any deposits from the interior of the down draft table using a suitable industrial vacuum cleaner.
- **5** Re-insert the slag containers and cutting grid.
- **6** Connect the ground cables on both sides.
  - ⇒ 6.3 Establishing equipotential bonding on page EN-18

## 8.3 Checking and cleaning pneumatic components

Cutting fumes and dust can have negative effects on the pneumatic valves and lines. If the down draft table's operation becomes impaired, then valves and pneumatic lines must be checked, cleaned or, if necessary, replaced.





- **1** Remove the ground cable on both sides.
  - ⇒ 6.3 Establishing equipotential bonding on page EN-18
- **2** Lift out the cutting grid using a suitable lifting tool on the provided lugs.
- **3** Lift out and empty the slag container using a suitable lifting tool.
- 4 Clean the valves. Manually actuate the roller sensors and check whether the exhaust air flap opens and closes correctly. If the exhaust air flap does not open and close correctly, pneumatic components must be cleaned, adjusted or replaced.
  - ⇒ 7 Operation on page EN-25
- **5** Connect the ground cables on both sides.
  - ⇒ 6.3 Establishing equipotential bonding on page EN-18

## 9 Faults and troubleshooting

### **A WARNING**

## Health risk caused by inhaling harmful cutting fumes

Cutting processes produce fumes with harmful dust particles, which settle on surfaces and can be released into the ambient air. It can damage the respiratory tract when inhaled.

- > Check and wear your personal protective equipment.
- ➤ Use the product only in rooms with sufficient ventilation.
- Ensure that all seals on the product are free from dirt and debris.
- ➤ The provided filtration system must be used when operating the product.
- ➤ Immediately remove dust deposits from the environment with a dust class H industrial vacuum cleaner or a damp cloth.

## **A** CAUTION

#### Risk of injury due to unexpected start

If the product's compressed air supply is not interrupted during maintenance, cleaning or disassembly, the exhaust air flaps may open and close unexpectedly and cause injury.

- > Close off the compressed air supply.
- > Keep your hands out of the danger zone.
- > Observe the documentation for the welding components.
- ➤ Contact your retailer or Thermacut® in the event of questions or problems.

**Tab. 4** Faults and troubleshooting

Fault	Cause	Troubleshooting
Air pressure is too low	Compressed air supply is faulty.	Check the compressed air supply and compressed air connection and replace if necessary.
Low/no flow of air, insufficient extraction / exhaust air flaps do not open	Activation carriage does not press the roller switch down.	<ul><li>➤ Check and set the roller switch.</li><li>⇒ 9.2 Setting the roller sensors on page EN-31</li></ul>
	Compressed air supply is faulty.	Check the compressed air supply and compressed air connection.
		Check the pneumatic components.
		⇒8.3 Checking and cleaning pneumatic components on page EN-29
Plasma device does not ignite	Insufficient ground connection to the cutting machine.	> Check the ground cable.
	Coating of the table cover (especially in new condition) insulated from the plate to be cut.	Scrape off paint from the covers using a steel plate or rub it away using a roughing or twisted knot brush.

**Tab. 4** Faults and troubleshooting

Fault	Cause	Troubleshooting
Paint burnt onto the	Too high cutting capacity.	➤ Check the set power range.
outside of the table	The plate is positioned with the cutting edge too close to the outer edge of the table.	Check the position of the plate to be cut to the outer edge.
	A phase cut outward heats up the table's outer plate.	Observe a sufficient distance outward during phase cutting.

## 9.1 Setting the compressed air valve

If the exhaust air flaps do not close or open properly, the compressed air valves must be set using the adjusting screws.



1 To reduce the compressed air supply, turn the adjusting screws to the right. To increase the compressed air supply, turn the adjusting screws to the left.

## 9.2 Setting the roller sensors

If the exhaust air flaps do not close or open properly, the mounting height of the roller sensors may need to be adjusted.



- 1 Loosen the screws (2×) using an AF 8 hexagonal socket wrench and change the position of the roller sensors.
- 2 Retighten the screws (2×).

10 Disassembly CT-POR

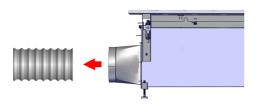
#### 10Disassembly

### **A** CAUTION

## Risk of injury due to unexpected start

If the product's compressed air supply is not interrupted during maintenance, cleaning or disassembly, the exhaust air flaps may open and close unexpectedly and cause injury.

- > Close off the compressed air supply.
- > Keep your hands out of the danger zone.



- 1 Disconnect the down draft table from the compressed air supply.
- 2 Disconnect piping on connector.

## 11Disposal

#### 11.1Disposal of cutting dust

All cutting dust and slag collected must be disposed of in accordance with local regulations.

## 11.2Disposal of materials

This product is mainly made of metallic materials that can be melted in steel and iron works and are thus almost infinitely recyclable. The plastic materials used are labeled in preparation for their sorting and separation for later recycling.

#### 11.3Disposal of consumables

Oil, greases and cleaning agents must not contaminate the ground or enter the sewage system. These substances must be stored, transported and disposed of in suitable containers. Contaminated cleaning tools (brushes, rags, etc.) must also be disposed of in accordance with the information provided by the consumables' manufacturer.

➤ Observe the relevant local regulations and disposal instructions in the safety data sheets specified by the manufacturer of the consumables.

The disposal of dust collecting bags and disposal bags is subject to special waste regulations. The dust must not enter sewage systems or be disposed of together with normal household waste.

> Observe the local and official regulations.

#### 11.4Packaging

Thermacut® has reduced the transport packaging to the necessary minimum. The ability to recycle packaging materials is always considered during their selection.

## 12Spare parts and consumables list

**Tab. 5** Spare parts and consumables list

Item	Item description	Item number
	Adjustable foot 1×	EX-0-713-035
	Air cylinder, MF25 × 80SCA, for use at up to 80 degrees	EX-0-713-026
HERR A second A second	Air valve with roller	EX-0-713-023
	Air valve 1/8" 5/2 pneumatic, type 4A110-06	EX-0-713-027
	Silencer, flat, 1/8" –6 V, BSLM-01	EX-0-713-025
	t-connection, air, 1/8" to 2 × 6 mm pipe (GPB-01/APB-01)	EX-0-713-021
-	1/8" to 90 degrees to 6 mm pipe with air regulator (ISC6-01 B-A)	EX-0-713-020
The state of the s	I-connection 1/8" to 6 mm pipe GPC6-01/EPC6-01/APC6-01	EX-0-713-022
	Y-connection, air, 3 × 6 mm pipe, PVC (EPY6/APY6)	EX-0-713-024
	PU pipe, D = 6.0 mm d = 4.0 mm, temperature -15° to +60°, blue	EX-0-713-016
	Slats for CT-POR-GRID-16X32-A1	EX-0-713-016
	Dust container, 1505 × 735 × 398 mm for cutting table 16X32 MD-DA	EX-0-713-017

**Tab. 5** Spare parts and consumables list

Item	Item description	Item number
	Bracket for portable cutting machine incl. pneumatic valve for activating the exhaust air flap for the cutting table  1.5×3.2 MD-DA	EX-0-713-018
	Triangular bracket for CT-POR 16×32 MB-D-A	EX-0-713-015
	Connection kit for portable cutting table comprising: air outlet Ø 350 mm, cover, pressure regulator for CT-POR MB-D-A	EX-0-713-019

CT-POR 13 Warranty

## 13Warranty

This product is an original Thermacut® product. Thermacut® guarantees correct manufacture and assumes a factory production and function warranty for this product upon delivery, which is in line with the latest technology and current regulations. If Thermacut® is responsible for a defect that is present, Thermacut® is obliged to remedy the defect or deliver a replacement at its own cost and its own discretion. The warranty covers manufacturing faults, but not damage resulting from natural wear and tear, overloading or improper use. The warranty period is defined in the General Terms and Conditions. Exceptions in the case of specific products are regulated separately. Warranty will also be rendered invalid if spare and consumables are used that are not original Thermacut® parts and if the product has been repaired improperly by the user or a third party.

Consumables are excluded in general from the warranty. In addition, Thermacut<sup>®</sup> is not liable for damage caused by using our products. Questions about warranty and service can be addressed to the manufacturer or our distributors. For more information, please visit www.thermacut.com.

#### **ADDRESSES AND CONTACTS**

#### **EUROPE**

#### **CZECH REPUBLIC**

THERMACUT, k.s. Head office and production Sokolovská 574, Mařatice 686 01, Uherské Hradiště

Tel.: +420 572 420 411 Fax: +420 572 420 420

IČ: 46963715 / DIČ: CZ46963715

E-mail: info@thermacut.cz reditelstvi@thermacut.cz www.thermacut.cz

#### **CZECH REPUBLIC**

THERMACUT, k.s.
Central sales department
Dukelská 76A

742 42 Šenov u Nového Jičína Tel.: +420 556 423 418, 440 E-mail: sales@thermacut.cz obchod@thermacut.cz www.thermacut.cz

#### **GERMANY**

THERMACUT GmbH Am Rübgarten 2 D-57299 Burbach

Tel.: +49 (0)2736 29 49 11-0 Fax: +49 (0)2736 29 49 11-77 E-mail: info@thermacut.de

www.thermacut.de

#### **CROATIA**

THERMACUT CROATIA d.o.o. Petra Preradovića 21 532 70 Senj

Tel.: +385 53 882 622

E-mail: thermacut@gs.t-com.hr

www.thermacut.hr

#### **POLAND**

THERMACUT-POLAND SP. Z O.O. ul. Stawowa 20 43-400 Cieszyn POLAND

Tel.: +48 33 852 13 34

E-mail: thermacut@thermacut.pl

www.thermacut.pl

#### **FRANCE**

THERMACUT FRANCE 6 Rue des Frères Lumière 67201 Eckbolsheim Tel.: +33 3 88 76 58 75

E-mail: thermacut@thermacut.fr

www.thermacut.net

#### **RUMANIA**

THERMACUT ROMANIA SRL B-dul 1 Decembrie 1918 nr. 127A 540445 Târgu Mureș,

Tel.: +40 265 263 205 Fax: +40 265 250 317 E-mail: office@thermacut.ro

www.thermacut.ro

Jud. Mureș

#### **RUSSIA**

OOO "ТЕРМАКАТ" 454048 Г. ЧЕЛЯБИНСК УЛ. КИРОВОГРАДСКАЯ Д.2 ТЕЛ./Ф АКС: +7 351 211 08 15

#### ФИЛИАЛЫ

129343 Г. МОСКВА УЛ. УРЖУМСКАЯ Д.4 ТЕЛ.: +7 495 778 42 10 630032 Г. НОВОСИБИРСК

УЛ. СТАНЦИОННАЯ 60/1, ОФ ИС 116

TEЛ.: +7 383 375 07 90 E-mail: info@thermacut.ru www.thermacut.ru

#### **UKRAINE**

ООО "Термакат Украина ГмбХ" ул. Петропавловская 24 С. ПЕТРОПАВЛОВСКАЯ БОРЩАГОВКА КИЕВО-СВЯТОШИНСКИЙ Р-Н 08130

+380 50 336 33 91 E-mail: info@thermacut.ua www.thermacut.ua

Тел./факс: +380 44 403 16 99

#### **GREAT BRITAIN**

Abicor Binzel UK Ltd. Binzel House, Mill Lane Winwick Quay Warrington, WA2 8UA. Cheshire

Tel.: +44 1925 653944 Fax: +44 1925 654861 E-mail: info@abimail.co.uk www.thermacut.net

#### **NORWAY**

Binzel Norge AS Industrieveien 6 N-3300 Hokksund Tel.: 0047-32 25 19 90 E-mail: post@binzel.no www.thermacut.net

#### **SWEDEN**

Alexander Binzel AB Ringugnsgatan 4 SE-216 16 Limhamn Tel.: 0046-40 6 991 750 Fax: 0046-40 6 991 770 E-mail: order@binzel.se www.thermacut.net

#### **FINLAND**

ABICOR BINZEL Finland Oy Kartanontie 53 28430 Pori

Tel.: +358 2 634 4600 Fax: +358 2 634 4650 E-mail: info@binzel.fi www.thermacut.net

#### **DENMARK**

Abicor Binzel A/S Denmark Ringugnsgatan 4 SE-216 16 Limhamn Tel.: 0045-43621633 Fax: 0045-43622324 E-mail: ac@binzel.se, ket@binzel.se www.thermacut.net

#### **BELARUS**

IOOO "ABICOR BINZEL Technics" ul. Timirjazeva 97-10 BY-220020 Minsk Tel.: +375 29 5 800 300 E-mail: info@thermacut.by

E-mail: info@thermacut.by www.thermacut.by

#### **SLOVAKIA**

THERMACUT SLOVAKIA, s.r.o. Priemyselná ulica 1239 931 01 Šamorín Tel.: +421 31 591 0121 +421 903 644 954 E-mail: obchod@thermacut.sk

www.thermacut.sk

#### **ASIA**

Merkezi

#### **TURKEY**

Ticaret LTD. STI. Girne Mah. Irmak Sok. Küçükyali iş

ABICOR BINZEL Kaynak Teknik

E Blok No: 72-6E PK: 34852 Maltepe Istanbul Türkiye Tel.: +90 (216) 367 90 00 Fax: +90 (216) 367 90 14 E-mail: satisdestek@binzel-

abicor.com.tr

www.thermacuttr.com

### INDIA

ABICOR BINZEL TECHNOWELD PVT

LTD

SNo: 297, Indo German Technology

park

Village: Urawade Taluka: Mulshi

District: Pune-412 115

Tel.: 020-66743914, 020-39502691 E-mail: commercial@abicor-india.com

www.thermacut.net

#### **KAZAKHSTAN**

ABICOR BINZEL CENTRAL ASIA АЛМАТЫ

УЛ. ЕГИЗБАЕВА 52, 050046.

Тел.: + 7 777 826 42 42 + 7 717 262 57 30

E-mail: info@thermacut.com.kz

www.thermacut.kz

#### **VIETNAM**

MNT Industries Vietnam Co Ltd No. 17, Street 34, Binh Tri Dong B Ward,

Binh Tan District; Hochiminh City

Tel.: 0084-903 858 001

E-mail: ezio.minh@mnt.com.vn

www.thermacut.net

#### **SOUTH KOREA**

Abicor Binzel Korea Ltd. #A-101, 263, Gaejwa-ro

Guemjeong-gu

Busan

Tel.: 0082 (31) 732 6065 / 6066 / 6067 Fax: 0082 (31) 732 6064

E-mail: don.kim@binzel.kr www.thermacut.net

#### **JAPAN**

Thermacut Japan Ltd. 3F Shin-Osaka Hankyu Building 1-1-1, Miyahara, Yodogawa-ku, Osaka

532-0003 Japan

Mob.: +81 (0)80 4738 9752 Tel.: +81 (0)6 7662 8857 Fax: +81 (0)6 7635 7498 E-mail: s.miura@thermacut.jp

#### **UNITED ARAB EMIRATES**

ABICOR BINZEL MIDDLE EAST FZE

P.O. Box: 86026, WFZ-04/27

RAKIA Freezone, Jazeera al Hamra Ras al Kaimah, United Arab Emirates

Tel.: +971 (7) 2432355 +971 50 377 1348 Fax: +971 (7) 2432356 E-mail: info@binzel-abicor.ae

www.thermacut.ae

# **Change history**

The latest version of these operating instructions is available on our website:

www.thermacut.com.

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