

User Manual EN

CladBoy compact CBC3



Instruction video



VIAVAC vacuum lifting bv

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Type: CBC3-500 and CBC3-800

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Preface

Introduction

Please read this user manual carefully. Become familiar with the operation and maintenance. This user manual belongs to the CladBoy compact CBC3 and must be handed over to the new owner in the event of resale or trade-in.

Purpose user manual

The purpose of this user manual is to instruct the user on the correct and safe use of the CladBoy compact CBC3. The user manual contains instructions regarding:

- the personal safety and product safety that must be observed to avoid risks that could lead to physical and/or material damage;
- the optimal use of the CladBoy compact CBC3;
- the maintenance instructions;
- the storage of the CladBoy compact CBC3;
- disposing of the CladBoy compact CBC3.

The user manual must be kept with the CladBoy compact CBC3.

Safety

Operations discussed in this user manual should be performed only by persons who:

- have read and understood this user manual;
- have read and understood the technical manual of auxiliary machines and tools;
- are familiar with all safety aspects of auxiliary machines and tools;
- are familiar with local legal working conditions, safety regulations and laws;
- will always comply with these regulations and laws.

Reading guide

Symbols

The following symbols and terms used in this user manual are to alert the reader to safety aspects and important information:

Symbol	Term	Meaning
	DANGER	Indicates a hazardous situation which, if the safety instructions are not followed, will result in serious injury or death and/or serious damage to a product or its surroundings.
	WARNING	Indicates a hazardous situation which, if safety instructions are not followed, could result in serious injury or death and/or serious damage to a product or its surroundings.
	CAUTION	Indicates a hazardous situation which, if the safety instructions are not followed, could result in light or average injury and/or damage to a product or the environment.
	NOTE	Provides information considered important.

References

A reference to a Chapter, table, or figure has a chapter number and a subject.

For example: See Chapter 2.4, 'Veiligheidsvoorzieningen'.

The numbers in square brackets are reference numbers in a figure. These are only valid within the Chapter of that figure.

For example: Hang the CladBoy compact CBC3 with the lifting eye [1] on the crane hook.

The numbers in parentheses are component numbers.

For example: Remove the bolts (644).

Footnotes

An asterisk (*) marks a footnote and usually appears in tables and formulas. If there is more than one footnote on the same page, the symbol is doubled or tripled.

List types

Procedure	Choice list	Summary
Carry out:	In case of type:	The following types:
1 Step one.	▶ A	• A
2 Step two.	▶ B	• B
3 Step three.	▶ C	• C

Declaration of conformity

VIAVAC vacuum lifting bv
1st Industrieweg 8
3411 MG Lopik
The Netherlands

Declares that the product:

CBC3 -

Serial number

Complies with the provisions of the guidelines:
Machinery Directive 2006/42/EC with associated changes
Low Voltage Directive 2006/95/EC with associated changes
EMC Directive 2004/108/EC with associated changes

Complies with the harmonized European standards:

NEN-EN-ISO12100-1	Safety of machines - Basic terminology
NEN-EN-ISO12100-2	Safety of machines - General design principles
NEN-EN-ISO14121	Safety of machines - Principles of risk assessment
NEN-EN981+A1A	Safety of machines - Audible and visual Hazard and information signals
NEN-EN60204-1:2001	Safety of machines - Electrical equipment for machines
NEN-EN13155+A2	Cranes – safety - Detachable lifting tools

Name and address of the person authorized to compile the technical file:
A.E. de Groot, 1e Industrieweg 8, 3411 MG, Lopik, The Netherlands

Lopik, dated/...../.....



Arie de Groot, Managing Director

Conformity to USA/Australia standards

- American standard ASME B30.20-2018
- American standard ASME BTH1-2011 design category "A", Service Class "0"
- Australian standard AS 4991-2004

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1 Introduction

1.1 Intended use

The CladBoy compact CBC3 is intended for lifting non-air permissive fixed form material. The contact surface can be both flat and slightly structured. The seal profile of the suction pad can compensate (not too rough) irregularities up to 2 mm (depending on the seal profile used on the suction pad).

The CladBoy compact CBC3 can be used in rain or snow. The contact surface between the panel and the suction pads must be dry. Moisture or ice greatly reduces the effective friction between the suction pad and the load.

**WARNING:**

Only qualified persons are allowed to operate the CladBoy compact CBC3.

1.2 Non-intended use

The CladBoy compact CBC3 is not intended for use in wind speeds exceeding eleven meters per second (wind force 6).

The CladBoy compact CBC3 is not suitable for lifting flexible loads. The load can peel off the suction pads, causing the load to come loose!

**NOTE:**

Improper use of the CladBoy compact CBC3 will invalidate the warranty on the product.

**WARNING:**

Non-intended use of the CladBoy compact CBC3 is not permitted. In the event of non-intended use, VIAVAC vacuum lifting bv cannot be held liable for physical injury and/or material damage

**WARNING:**

Never use the CladBoy compact CBC3 in places where there is a risk of explosion.

1.3 Operating terms



CAUTION:

Within the EU the CladBoy compact CBC3 must be checked every year by a recognized certified body.

The sticker on the side indicates the next inspection date.

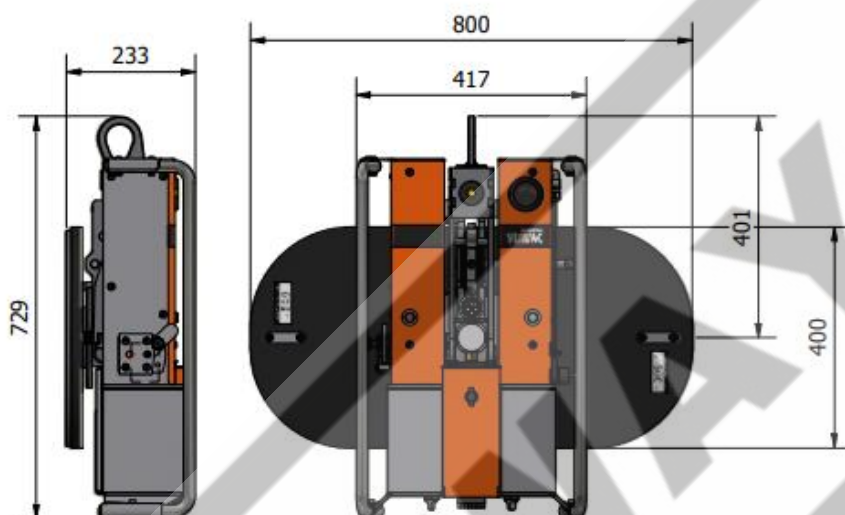
(Additional) law and regulations might apply per country.

A load to be lifted must meet the following requirements:

- The upper skin is not permeable to air in the places where the suction pads are placed;
- The load is not too flexible.
- Have a flat or slightly structured contact surface.

1.4 Product specifications

CBC3-500



CBC3-800

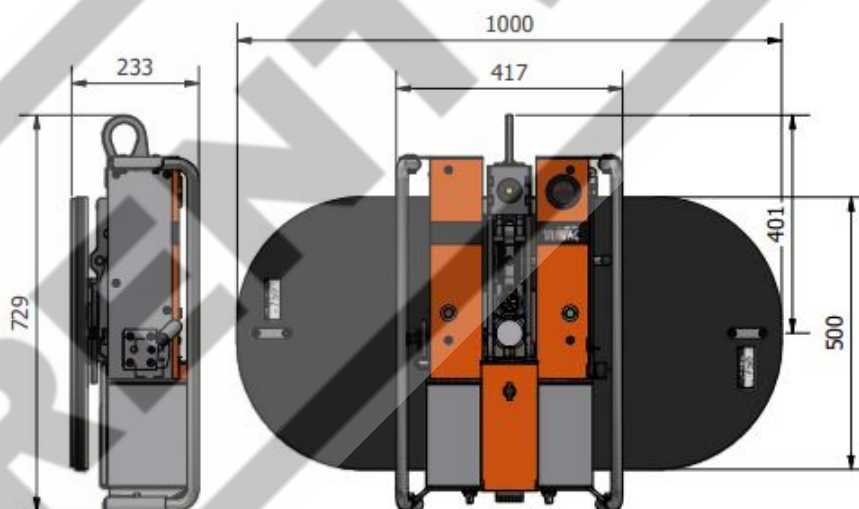


Figure 1.1 Dimensions CladBoy compact CBC3 in mm

Table 1.1 General data

Data	Value
Dimensions (l × w × h)	CBC3-500: 800 mm × 233 mm × 729 mm CBC3-800: 1000 mm × 233 mm × 729 mm
Own weight	CBC3-500: 60 kg CBC3-800: 70 kg
Noise level	96 dB
Lifting capacity	CBC3-500: maximaal 500 kg CBC3-800: maximaal 800 kg
Height	Maximum 1200 meters above sea level. See Chapter 5.1.1 'At high altitude'.
Operating temperature	0° C to + 40° C -10° C to 0° C with precautions
Wind speed	Maximum 11 meters per second (wind force 6)
Life span	With correct use and maintenance, a minimum of 20.000 lifting cycles.
Functions	90° tilt from horizontal to vertical with locking facility in vertical position. 360° turning with locking facility every 90°.
Battery life	More than a full working day
Power supply	Battery 12V; 12Ah
Battery charger	Primary 110V – 240V Secondary 12V; 2.2A
Vacuum pump	1 piston pump 12V Capacity: 26 liters per minute Maximum: Approx. -0.80 bar final vacuum
Safety features	• Secondary safety device • Acoustic alarm that warns when the vacuum level is too low • Vacuum buffer tank that prevents an immediate vacuum loss in case of leakage or failure of the vacuum pump • Vacuum gauges with red/green indication

1.5 Warranty

The products of VIAVAC vacuum lifting bv are precisely manufactured from high quality materials. Should an error or defect nevertheless occur, VIAVAC vacuum lifting bv provides a warranty in accordance with the provisions below.

1.5.1 Warranty conditions

The warranty period is 1 year. The warranty only applies if the machine has been used as prescribed in this manual. If it is found during the repair that the defect was caused by improper use and is therefore not covered by the warranty, we reserve the right to charge you the repair rate or new parts. The warranty doesn't cover damage caused by external influences, careless damage, improper use, changes to the device, extensions, insertion of foreign parts and so on. The decision on the application of the warranty lies with VIAVAC vacuum lifting bv at all times. For more details on the warranty conditions, please refer to the general terms and conditions of delivery. These are available from your VIAVAC dealer.

1.5.2 The warranty doesn't apply:

Rubber seal profiles are excluded from warranty.

1.6 Contact information

VIAVAC vacuum lifting bv

Address: 1^e Industrieweg 8
3411 MG Lopik
Netherlands
Telephone number: +31 (0)348 449 660
Email: info@viavac.com
Website: www.viavac.com

2 Safety

2.1 General

**WARNING:**

Always follow the general safety instructions and precautions in this chapter. Relevant safety instructions are also included in each chapter. All users must understand and follow these safety instructions.

2.2 Personal Protective Equipment (PPE)

You must be able to hear the acoustic alarm therefore never use hearing protection when using the CladBoy compact CBC3.

**WARNING:**

Always use the PPE prescribed by the manufacturer(s) of the applied products.

2.3 Safety symbols

Safety symbols are located on the CladBoy compact CBC3 in various places to alert the user to:

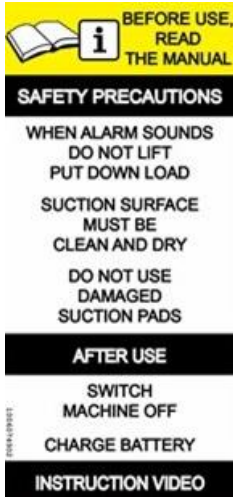
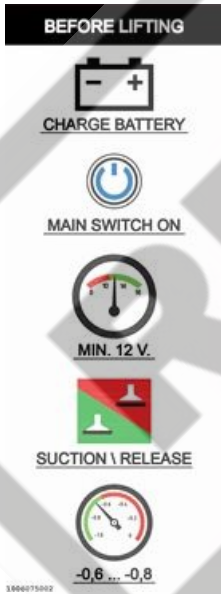
- the possible dangers;
- the PPE to be used (if required);
- the correct (safe) operation.

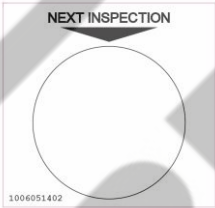
**CAUTION:**

Make sure that the stickers remain legible. Replace damaged and illegible stickers.

2.4 Information stickers

Table 2.1 Information stickers

Sticker	Place	Description
	Side left	Before use: • Read the manual Safety precautions: • When alarm sounds do not lift, put down the load • Suction surface must be clean and dry • Do not use damaged suction pads After use: • Switch machine off • Charge the battery Instruction video
	Side left	Instruction video QR code
	Side right	Before lifting: • Charge battery • Main switch on • Check battery level • Check suction \ release • Check vacuum level

Sticker	Place	Description
	Side right	Rotate - tilt
		
	Side right	Identification plate
	Side right	Next inspection
	Side right	Next annual inspection date

Sticker	Place	Description
	Front left side	Suction \ release
	Bottom, at water drain valve	Water drain
	Front center	Never stand under a suspended load.
	Top	After use do not store standing on suction pads.

2.5 Safety features

The CladBoy compact CBC3 has the following safety features:

- Secondary safety device
- Acoustic alarm that warns when the vacuum level is too low.
- Vacuum buffer tank that prevents an immediate vacuum loss in case of leakage or failure of the vacuum pump.
- Vacuum gauge with red/green indication.



CAUTION:
It is prohibited to bypass or disable safety features.

2.6 Falling safety device

**NOTE:**

According to the CE regulation EN 13155, it is mandatory in all countries of the European Union to apply extra falling safety device when using vacuum lifting tools on the construction site. This can be achieved as follows:

- ▶ A vacuum circuit and the application of additional falling safety device.
- ▶ At least two separate vacuum circuits.

The CladBoy compact CBC3 is equipped with one vacuum circuit.
The use of additional falling safety device is therefore mandatory.

**CAUTION:**

Prevent damage to the safety strap.

Shield any sharp edges of the load to be lifted at the location of the securing strap.
Never use damaged safety straps. Replace it immediately.

2.7 Safety regulations

2.7.1 During use

General

- Always follow local procedures.
- To ensure your own safety, always use the prescribed safety aids and personal protective equipment such as helmets, shoes and gloves.
- Ensure the safety of bystanders, for example using barriers and safety signs.
- If the work cannot be carried out according to the applicable procedures, establish an adapted procedure, which guarantees the safety of everyone.
- Never use the CladBoy compact CBC3 in an explosive or flammable environment.
- Protect the CladBoy compact CBC3 from excessive heat and moisture.

User requirements

- Only qualified persons are allowed to operate the CladBoy compact CBC3.
- All employees must understand the procedures and signals used for lifting.
- All employees must understand emergency procedures.
- The user must have good hearing and is not allowed to wear hearing protection.
- The user must be in a stable physical and mental condition.

Requirements for the material

- Only use the CladBoy compact CBC3 and the accessories for their intended purpose.
- Before starting work, check if the CladBoy compact CBC3 is in good condition and report any defects or doubts about its correct condition immediately.
- Always use the correct tools and equipment.
- Pay attention to the maximum load of the appliances and accessories.
- Regularly check the safety straps for damage and wear. Do not work with connected or damaged equipment.
- The CladBoy compact CBC3, lifting equipment and accessories must be inspected periodically.
- Only use approved lifting equipment.

While lifting

- Always use the correct lifting equipment when lifting the CladBoy compact CBC3.
- Always lift the CladBoy compact CBC3 by the lifting eye.
- The user must remain within hearing and sight distance of the CladBoy compact CBC3 during lifting.
- The user of the CladBoy compact CBC3 must be in constant contact with the operator of the lifting machine.
- Check the attachment and balance of the load before lifting.
- When lifting, make sure that the load doesn't hit any obstacles.
- Warn bystanders of any approaching load.
- Never lift a load that is longer or higher than the configuration allows.
- Never leave a pending load unattended.
- Never stand under a pending load.
- Make sure that the contact surface of the load to be lifted is clean and dry.
- Position the suction pads correctly on the load.
- Put the load down immediately when the acoustic alarm sounds.

2.7.2 While working on roofs

When working on roofs within four meters of the roof edge, additional safety precautions must be taken, for example:

- installing temporary shielding;
- installing safety lines and using a seat belt.

2.7.3 During storage and transport

- Use proper, appropriate and approved transportation equipment.
- When using a forklift, the driver must be in possession of a forklift license.
- Adjust your speed to the situation and take the weight of the load into account.

2.7.4 Prohibitions

Never use the CladBoy compact CBC3:

- when it is damaged;
- when it is malfunctioning;
- when parts are missing;
- when any of the suction pad seals are damaged or cracked;
- when the inspection period has expired;
- when the ambient noise exceeds 70 dB;
- when the warning stickers on the device are missing or not clearly legible;
- when the vacuum gauge indicates a vacuum level that is too low;
- when the alarm sounds;
- at wind speeds above eleven meters per second (wind force 6);
- with a chance of wind gusts;
- to lift a load that weighs more than the safe working load allows;
- to lift a load longer than the configuration allows;
- to lift a load that is broken, cracked or kinked.

3 Description and operation

3.1 Special tools

Lifting equipment must meet these requirements:

- The lifting eye of the CladBoy compact CBC3 must fit properly.
- The 'Safe Working Load' (SWL) must be higher than the load to be lifted.

3.2 Main components

3.2.1 Vacuum unit



Figure 3.1 CladBoy compact CBC3 vacuum unit

- | | |
|------------------------------|---------------------------|
| 1 Lifting eye | 9 Charge indicator lamp |
| 2 Battery indicator | 10 Battery charging cable |
| 3 Locking pin | 11 Red indicator lamp |
| 4 Vacuum indicator | 12 Battery lid |
| 5 On/off-pushbutton | 13 Safety suspension |
| 6 Acoustic alarm | 14 Water drain plug |
| 7 Handle for tilting/turning | 15 Green indicator lamp |
| 8 Suction/release handle | 16 Suction pad |

3.2.2 Long lifting arm



Figure 3.2 Long lifting arm

3.2.3 Transport carriage



Figure 3.3 Transport carriage for CladBoy compact CBC3-500

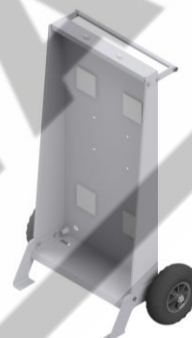


Figure 3.4 Transport carriage for CladBoy compact CBC3-800

3.2.4 Transport box

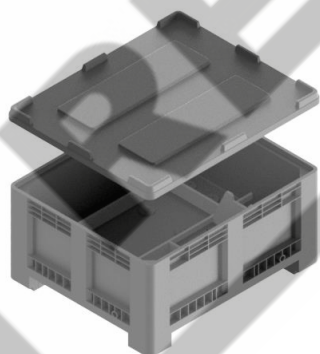


Figure 3.5 Transport box

3.2.5 Falling safety strap

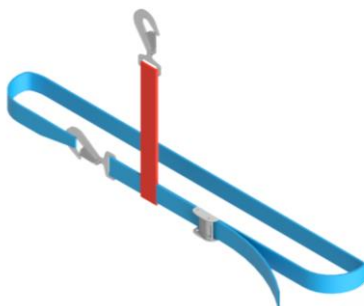


Figure 3.6 Falling safety strap for installation of vertical and horizontal wall panels

3.3 Controls

3.3.1 Indicating controls

Battery indicator

The battery indicator on the front of the vacuum unit provides an indication of battery voltage. To work with the CladBoy compact CBC3, the battery indicator should be between 11V and 14V.



Figure 3.7 Battery indicator

Vacuum indicator

The vacuum indicator on the front of the vacuum unit indicates the vacuum level at the suction pad in bars.

A load may only be lifted if the vacuum indicator indicates at least -0.6 bar.

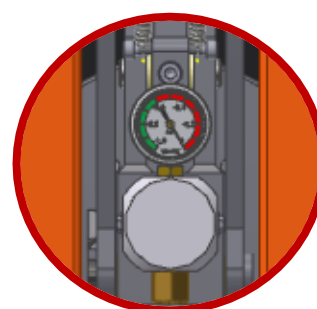


Figure 3.8 Vacuum indicator

Red and green indicator lamps

Red and green indicator lamps are located on the vacuum unit.
The red lights indicate that the required vacuum level of -0,6 bar has not yet been reached in the vacuum circuit.
The green indicator lamp indicates that it is safe to lift.

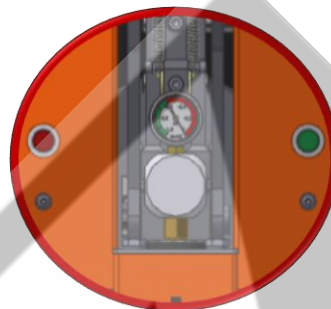


Figure 3.9 Red and green indicator lamps

Charge indicator lamp

The charge indicator lamp at the side of the CladBoy compact CBC3 shows during the charging of the battery 3 colours: orange (battery is empty), yellow (battery is being charged) and green (battery is fully charged).

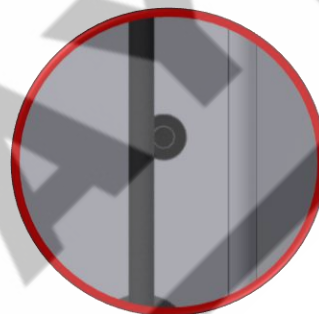


Figure 3.10 Charge indicator lamp

3.3.2 Operating controls

ON/OFF push button

The push button on the side of the vacuum unit is used to switch the CladBoy compact CBC3 on or off.

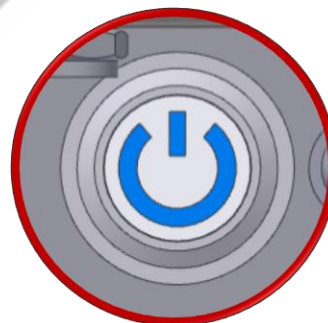


Figure 3.11 ON/OFF push button

Suction/release handle

The handle is used for putting the CladBoy compact CBC3 in the suction or release state.

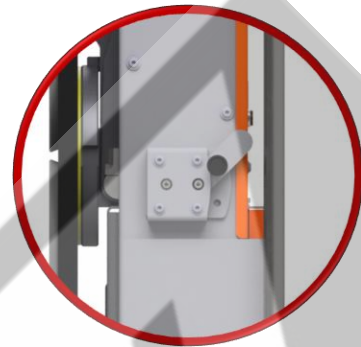


Figure 3.12 Suction/release handle

Tilt/rotate handle

The tilt/rotate handle on the side of the vacuum unit is used to tilt or rotate the suction pad.



Figure 3.13 Tilt/rotate handle

3.4 Battery

The battery can be charged with the battery charging cable on the side of the CladBoy compact CBC3.

- Fully charging the battery takes about 5 hours.
- With a full battery, the CladBoy compact CBC3 can be used for at least 8 hours.
- When the battery is fully charged, the battery charger automatically switches to maintenance charging.
- The plug can remain in the socket without the risk of overcharging the battery.
- Charge indicator lamp, at the side of the CladBoy compact CBC3, shows during the charging of the battery 3 colours: orange (battery is empty), yellow (battery is being charged) and green (battery is fully charged).



CAUTION:

The mains voltage must be between 110V and 240V.

Contact your dealer in the event of regularly recurring faults.



NOTE:

A battery lasts 3 to 5 years. As the capacity decreases over time, we recommend that you replace the battery every three years as a precaution.

4 Transport and storage

4.1 General remarks

**CAUTION:**

Always lift parts over 25 kg with several people or with lifting tools.

- Secure all parts securely and protect them from damage during transportation and storage.
- Never let the vacuum unit rest on the suction pads after use.

4.2 Transport dimensions

The dimensions of the CladBoy compact CBC3 in the transport carriage or a transport box are:

4.2.1 Transport carriage

CladBoy compact CBC3-500

- Length : 400 mm
- Width : 650 mm
- Height : 950 mm

CladBoy compact CBC3-800

- Length : 400 mm
- Width : 750 mm
- Height : 1150 mm

4.2.2 Transport box

- Length : 1000 mm
- Width : 1200 mm
- Height : 650 mm

4.3 Means of transport

4.3.1 Transport carriage

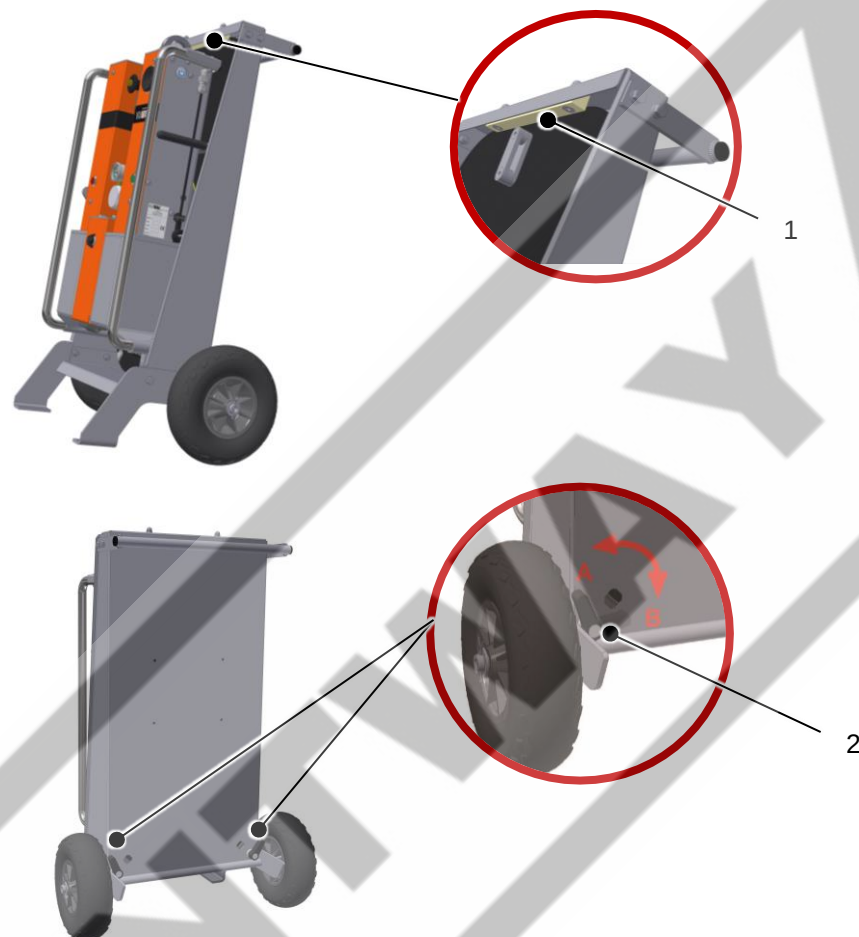


Figure 4.1 Transport carriage with machine

- 1 Plastic plate
- 2 Pawl latch with lever

Remove the CladBoy compact CBC3 from the transport carriage:

- 1 Connect the lifting eye of the CladBoy compact CBC3 to the crane.
- 2 Lift the machine so that it hangs about 30 centimeters above the ground.
- 3 Turn the lever of the pawl latch [2] from position A to position B.
- 4 Pull the bottom of the transport carriage away from the suction pad and lift it off the suction pad.

4.3.2 Transport box

A possibility is to combine the CladBoy compact CBC3 with a VIAVAC CA3. The transport box fits both the CladBoy compact CBC3 and the VIAVAC CA3 together, with extra accessories.

As soon as the lid of the box has been removed, the parts can be lifted directly from the transport box.

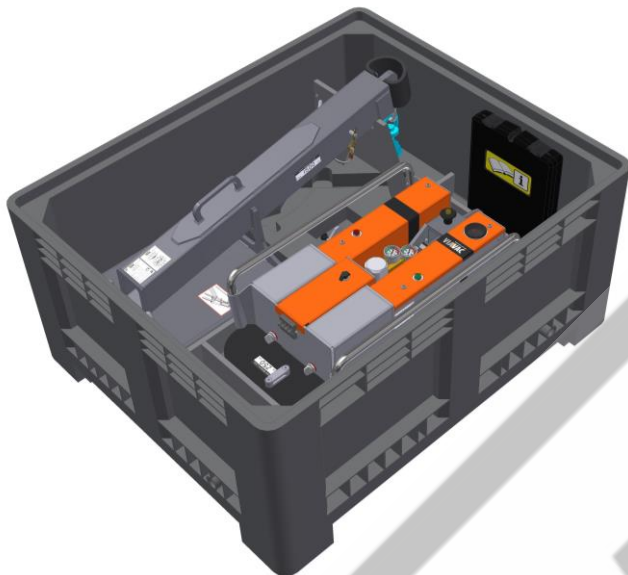


Figure 4.2 Transport box with CladBoy compact CBC3 and VIAVAC CA3

4.4 Storage conditions

- ▶ Short storage: In a dry place at a temperature above 0° C.
- ▶ Long storage: In a dry place at a temperature between 15 and 25° C.

4.4.1 Mechanical

- Remove all moisture, snow and ice.
- Empty the buffer tanks. See chapter 6.6 'Empty the buffer tanks'.

4.4.2 Electrical

Store the CladBoy compact CBC3 with a fully charged battery. This extends the life of the battery. Intermediate charging of the battery has no negative effect on the capacity (no memory effect).

4.5 Storage

Short-term and long-term storage

- 1 Switch off the CladBoy compact CBC3 by using the on/off push button.
- 2 Clean and dry all parts.
- 3 Check the CladBoy compact CBC3 and repair any damage.
- 4 If necessary drain water from the buffer tanks, see Section 6.6 'Empty the buffer tanks'.
- 5 Store the CladBoy compact CBC3 in a dry place.
- 6 Charge the battery.

5 Initial setup

5.1 Max lifting capacity

The maximum lifting capacity depends on the capacity of the active suction pad. The SWL is indicated on a sticker on the suction pad.

Check that the load to be lifted doesn't exceed the safe working load.

5.1.1 At high altitude

At heights of more than 500 meters above sea level, the lifting capacity decreases. This is because the atmospheric pressure is lower at high altitudes. As a result, the vacuum switches, which control the switching of the vacuum pump and alarms, operate differently. At altitudes above 1200 meters above sea level, the settings of the pressure switches must be adjusted (see table Table 5.1 Altitude table).



DANGER:

This procedure must be carried out by an expert appointed by VIAVAC.

Table 5.1 Altitude table

Altitude (meters)	Air pressure (millibars)	Lifting capacity (%)
0 – 500	1050 – 950	100
501 – 1000	949 – 900	95
1001 – 1500	899 – 850	90
1501 – 2000	849 – 800	85
2001 – 2500	799 – 750	80
2501 – 3000	749 – 700	75

5.2 Machine configuration

5.2.1 Adjusting the lifting eye

The CladBoy compact CBC3 has a short lifting eye (standard) and a long lifting arm (optional). The long lifting arm has two different positions. Choose the lifting aid and any position that best suits the lifting situation.



Figure 5.1 Short lifting eye (standard)



Figure 5.2 Long lifting arm (optional)

5.2.2 Replace short with long lifting eye

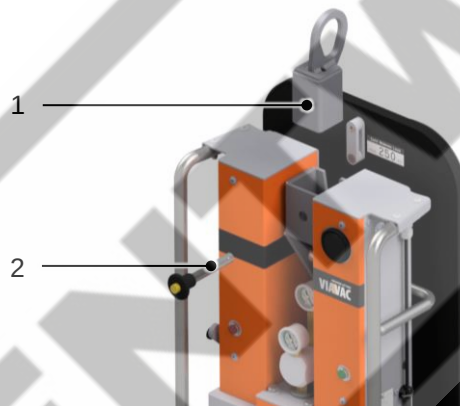


Figure 5.3 Detailed view of the short lifting eye

- 1 Lifting eye
- 2 Securing pin

- 1 To change the lifting eye, the machine must be placed in its transport carriage, be in its transport box or stand on its suction pads on a clean floor.
- 2 Press the colored button on the securing pin [2] to pull it out of the lifting eye [1].
- 3 Pull the lifting eye upwards out of the suspension.
- 4 Lower the long lifting arm into the suspension from above.
- 5 Replace the locking pin in the same hole to secure everything.

5.2.3 Adjusting the long lifting arm position

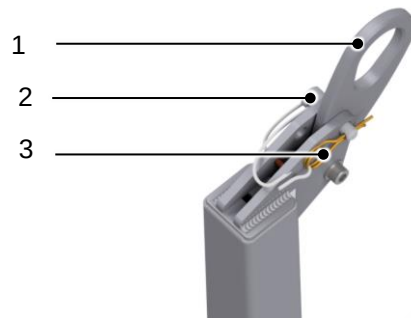


Figure 5.4 Detailed view of the long lifting arm

- 1 Lifting eye
- 2 Locking pin
- 3 Spring cotter

- 1 To change the position of the long lifting eye, the machine must either hang in its transport carriage, be in its transport box or stand on its suction pads on a clean floor.
- 2 Pull the spring cotter [3] from the locking pin [2].
- 3 Hold the lifting eye [1] while pulling the locking pin out of its hole.
- 4 Align the hole in the lifting eye with the hole of the desired position and insert the locking pin [2].
- 5 Put the spring cotter [3] back on.

5.2.4 Using the long lifting arm

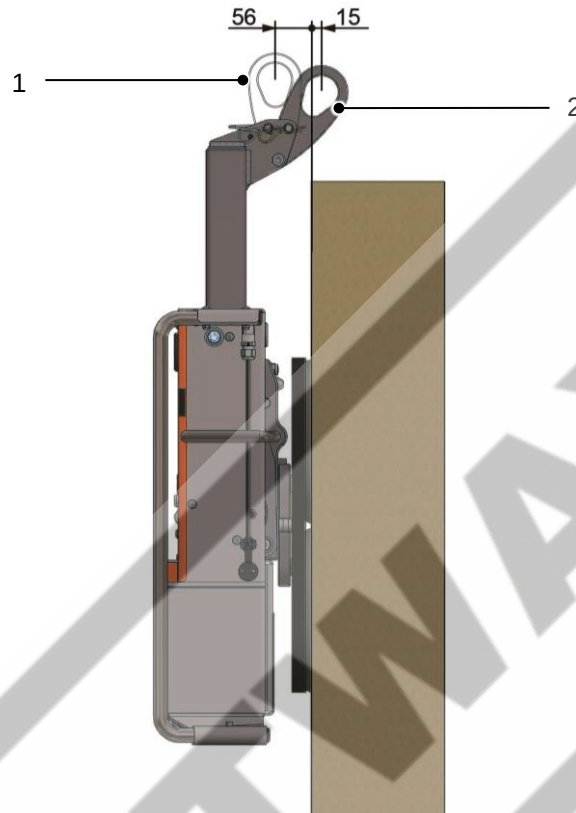


Figure 5.5 Dimensions of the two different positions of the long lifting arm in mm

- 1 Position 1
- 2 Position 2 (forward position)

The long lifting arm has two different positions: position 1 [1] and position 2 [2]

When installing horizontal wall panels the panel might hang slightly forward because of the placement of the lifting eye. Since pushing the panel vertically during mounting can become rather heavy when the weight of the panel increases, the forward position [2] of the long lifting arm can be used.

By using this position, the position of the lifting arm relative to the centre of gravity of the load is more profitable and this will hang straighter.

When the forward position [2] of the lifting arm is used, this will also be located above the panel.

It is therefore not recommended to rotate the load in this position, since it could touch the lifting eye.

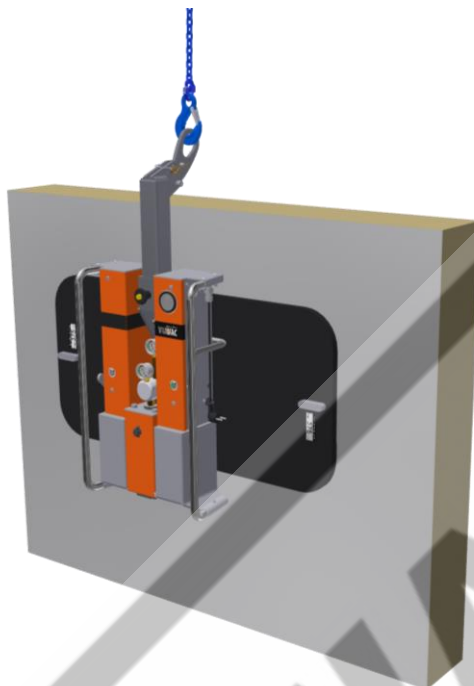


Figure 5.6 CladBoy compact CBC3 with long lifting arm and panel.



WARNING :

The forward position of the long lifting arm is intended to hang over the load, so that the load hangs as straight as possible. The lifting eye can touch the load in this position.

5.3 Maximum panel length to mount

Sandwich wall panels

The tables below show a guideline for the maximum length (meters) of sandwich wall panels to be mounted with the CladBoy compact CBC3.



NOTE:

According to the CE regulation EN 13155, it is mandatory in all countries of the European Union to apply extra falling safety device when using vacuum lifting tools on the construction site. This can be achieved as follows:

- ▶ A vacuum circuit and the application of additional falling safety device.
- ▶ At least two separate vacuum circuits.

The CladBoy compact CBC3 is equipped with one vacuum circuit.
The use of additional falling safety device is therefore mandatory.

Table 5.2 Maximum length (meters) of sandwich wall panels for mineral core

	Mineral core (mm)						
	40	60	80	100	120	150	200
Vertical wall panel	-	12	12	13*	13*	14*	12*
Horizontal wall panel	-	10	10	11*	11*	12*	12*
Weight KG/m ² (indication)	-	17	19	22	24	27	32

* Check the weight of the panel and compare to the maximum lifting capacity of the vacuum lifting device.

Table 5.3 Maximum length (meters) of sandwich wall panels for PIR/PUR

	PIR/PUR core (mm)						
	40	60	80	100	120	150	200
Vertical wall panel	10	12	12	14	14	16*	-
Horizontal wall panel	10	12	12	13	13	15*	-
Weight KG/m ² (indication)	11	11.5	12	13	14	16	-

* Check the weight of the panel and compare to the maximum lifting capacity of the vacuum lifting device.

6 Operation

Please read this chapter carefully so that you can operate the CladBoy compact CBC3 correctly.

**CAUTION:**

Ensure the safety of bystanders, for example using barriers and safety signs.

**WARNING:**

Check cables, chains and safety straps regularly for damage and wear.
Do not work with connected or damaged equipment.

**WARNING:**

Check the attachment and balance of the load before lifting.

**WARNING:**

Follow the safety instructions in Chapter 2.7, Safety regulations.

6.1 Precautionary measures

6.1.1 In case of frost

The lifting capacity in normal use of the CladBoy compact CBC3 is guaranteed at temperatures between 0° C and +40° C.

The CladBoy compact CBC3 can be used at temperatures between -10° C and 0° C. Take the following precautions:

- 1 Remove all moisture from the CladBoy compact CBC3. This prevents blockage of the filters and the pipes.
 - a Place the CladBoy compact CBC3 in a dry and heated room.
 - b Switch on the CladBoy compact CBC3 by pushing the on/off button.
 - c Put the CladBoy compact CBC3 on suction, by using the suction/release handle.
 - d Let the pump run for about 15 minutes.
 - e Switch off the CladBoy compact CBC3 by pushing the on/off button.

Remove all moisture, snow and ice from the suction pad and the load to be lifted.

This contamination from the load and the suction pad reduces the lifting capacity.

**NOTE:**

Store the CladBoy compact CBC3 overnight at a temperature of 15° C or higher to ensure sufficient battery capacity.

6.1.2 The battery

To work with the CladBoy compact CBC3 all day long:

- 1 During operation, keep an eye on the vacuum tightness of the system:
 - a Does the vacuum pump stop after 10 seconds after the vacuum level of -0.65 bar is reached?
 - b Does it take at least 30 seconds for the vacuum pump to start again?

If the vacuum pump starts more frequently, there could be a leak in the vacuum system. In this case, the battery will run out faster.

- 2 First repair the possible leak and only then continue working.

6.2 Before use check the CladBoy compact CBC3

- 1 Check if the suction pad seal is damaged.
- 2 Replace damaged seal. It is not allowed to lift with a damaged seal.
- 3 Check if the suction pad is damaged.
- 4 Replace damaged suction pad. It is not allowed to lift with a damaged suction pad.
- 5 Check if the suction pads are dirty, greasy or wet.
- 6 Clean or dry the suction pad if necessary.
- 7 Check whether the buffer tanks are empty. Empty the buffer tanks if necessary.
See Chapter 6.6 , 'Empty the buffer tanks '
- 8 Check whether the battery is sufficiently charged. See Chapter 6.5, 'Charge battery'.

6.2.1 Before use check the loads

- 1 Check if the loads to be lifted do not exceed the safe working load.
See Chapter 5.1, 'Max lifting capacity'.
- 2 Check if the maximum overhang is not exceeded.
See Chapter 5.3 ' Maximum panel length to mount '

6.3 Operating procedure

During each lifting movement, observe the following:

- The pointer of the vacuum gauge must be constantly in the green area during lifting.
- Acoustic alarm must not sound during lifting.
- The red indicator lamp must not be on during lifting.



WARNING:

Never lift when the vacuum gauge is in the red area and/or the acoustic alarm is sounding.
In that case, put the load down as quickly as possible.

If the vacuum pump fails, the load is held for at least five minutes from the time the pressure drops below the required vacuum level of -0.60 bar.

- 1 Switch on the CladBoy compact CBC3 by pushing the on/off button.
 - The vacuum pump starts.
 - The acoustic alarm sounds.
 - The red indicator lamp light up.

When the vacuum level of -0.60 bar is reached in the vacuum circuit (not visible on the vacuum gauge), the following happens:

- The acoustic alarm stops.
- The red indicator lamp goes out.
- The green indicator lamps light up.

When the vacuum level of -0.65 bar is reached, the vacuum pump will stop after a maximum of ten seconds.

- 2 Check that the acoustic alarm is sounding and if the red indicator lamps light up when any of the vacuum levels drops below -0.60 bar.
 - a Make sure the suction pads are not touching a load.
 - b Briefly put the CladBoy compact CBC3 in the "suction" position by using suction/release handle.

For each load:



WARNING:

Remove water, snow and ice where the suction pad is placed on the load. Then there is enough friction to lift the load in a vertical position.



WARNING:

First remove any protective film that may have been adhered to the load.

- 1 If the suction pad is not correctly tilted or rotated in relation to the load to be lifted:
Use the tilt and/or rotation handle to correctly orient the CladBoy compact CBC3.
- 2 Place the suction pad on the load.
Make sure that the suction pad is on a flat part of the load.
- 3 Switch the CladBoy compact CBC3 to the "suction" position by using suction/release handle.
- 4 Wait until the green indicator lamp lights up.
- 5 Check on the vacuum gauge if the vacuum level of the suction pad is at least -0.60 bar (pointer in the green area).
- 6 Lift the load only a few centimeters.
- 7 Secure the safety straps, see chapter 6.4 'Using the safety straps'.
- 8 Lift the load to its destination.
- 9 Rotate and/or tilt the load, if necessary, by using tilt/rotate handle.
- 10 Release the safety straps.
- 11 Zet de lading op zijn plaats.
- 12 Switch the CladBoy compact CBC3 to the "release" mode by using suction/release handle. The suction pad will release after a few seconds.
- 13 Check if the suction pad is dirty, greasy or wet.
Clean or dry the suction pad if necessary.

After the last load has been placed:

- 1 Switch off the CladBoy compact CBC3 by pushing the on/off button.
- 2 Empty the buffer tanks if the work has been done in moist or wet conditions. See Chapter 6.6, 'Empty the buffer tanks'.
- 3 Place the CladBoy compact CBC3 back in its transport carriage/transport box, see Chapter 4.3.1 'Transport carriage' and chapter 4.3.2 'Transport box'.
- 4 Put the CladBoy compact CBC3 on the charger. See Chapter 6.5, 'Charge battery'.

**LET OP:**

Laat de CladBoy compact CBC3 na gebruik nooit op de zuignappen rusten.

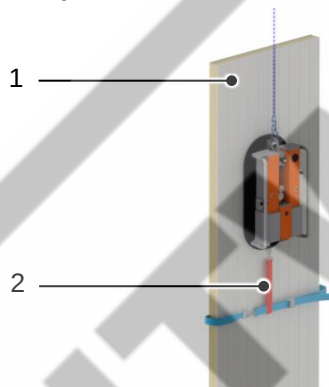
6.4 Using the safety straps**6.4.1 Safety straps for vertical panels**

Figure 6.1 Vertical wall panel with safety strap

- 1 Wall panel
- 2 Safety strap

- 1 Attach the hook to the red safety strap on the suction pad safety suspension.
- 2 Lift the load a few centimeters above the ground.
- 3 Fasten the blue safety strap around the load. Pull it tight.
- 4 Once the load has reached its final destination, loosen the safety strap.

6.4.2 Safety straps for horizontal panels

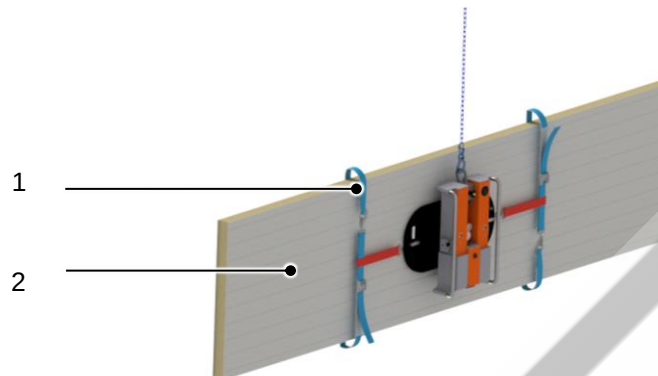


Figure 6.2 Horizontal wall panel with safety strap

- 1 Safety strap
- 2 Wall panel

- 1 Two safety straps are necessary for horizontal panels.
- 2 Attach the hook to the red safety strap on the suction pad safety suspension.
- 3 Lift the load a few centimeters above the ground.
- 4 Fasten the blue safety strap around the load. Pull it tight.
- 5 Once the load has reached its final destination, loosen the safety strap.

6.5 Charge battery

- 1 Turn off the CladBoy compact CBC3 by pushing the on/off button.
- 2 Insert the plug of the battery charging cable into the mains socket.
- 3 The battery LED indicator will light up in orange to indicate that the charger is receiving power.



CAUTION:

The mains voltage must be between 110V and 240V.

6.6 Empty the buffer tanks



DANGER:

Never open a water drain plug when a load is attached to the CladBoy compact CBC3.

- 1 Switch off the CladBoy compact CBC3 by pushing the on/off button
- 2 Place the machine in the transport carriage.
- 3 Open the water drain plugs [1] at the bottom.
- 4 Wait until no more water flows out of the buffer tank.
- 5 Screw back the water drain plugs.

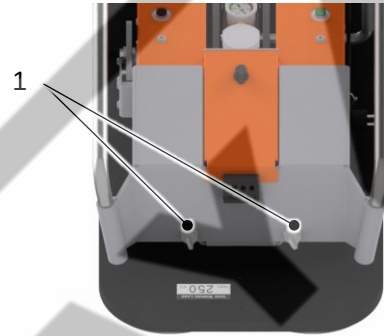


Figure 6.3 Empty the buffer tank

1 Water drain plugs

7 Maintenance

Maintenance of the CladBoy compact CBC3 and the replacement of simple parts must be carried out by a competent technical person. If necessary, an approved expert of VIAVAC can perform the work. To do so, contact VIAVAC or your VIAVAC dealer.

**CAUTION:**

Only use original VIAVAC parts for repairs, as the properties and quality of these parts are guaranteed.

**WARNING:**

Self-installed changes can affect safety. It is therefore prohibited to make self-installed changes to the CladBoy compact CBC3. VIAVAC vacuum lifting bv is not liable if changes are made to the CladBoy compact CBC3.

**WARNING:**

Follow the safety instructions in Chapter 2.7' Safety regulations.

7.1 Preparation

Record inspections and repairs in writing with the following forms: "Inspection and maintenance report" and/or "maintenance history".

7.2 Regular maintenance

Record inspections and repairs in writing with the following forms: "Inspection and maintenance report" and/or "maintenance history".

7.2.1 Tools

- Stopwatch
- Natural vinegar (for cleaning rubber parts)
- Cleaning cloth

7.2.2 Maintenance schedule

Maintain the CladBoy compact CBC3 according to the maintenance schedule to ensure maximum efficiency and to detect defects as early as possible.

**CAUTION:**

Have the CladBoy compact CBC3 regularly inspected in accordance with the laws that apply in the country where the CladBoy compact CBC3 is used.

**NOTE:**

The CladBoy compact CBC3 has no parts that require lubrication.

7.2.3 Maintenance before use

See Chapter 3, 'Description and operation' for the location of the parts on the machine.

Table 7.1 Maintenance points

No	Part	Action	Approval criteria
1	Lifting eye	Inspect	Free from deformations and cracks Sufficiently free of wear
2	Vacuum unit	Inspect	Free from deformations and cracks Sufficiently free of wear
3	Suction pad	Inspect	Free from cracks Dirt and grease free (clean with natural vinegar if necessary) Dry
4	Suction pad seal	Inspect	Free from cracks Dirt and grease free (clean with natural vinegar if necessary) Dry
5	Buffer tanks	Empty	Empty the water from buffer tanks
6	Stickers	Inspect	Present and readable
7	Batteries	Inspect	Check if the battery voltage is sufficient
8	Vacuum gauges	Testing	The gauges are working well
9	Acoustic warner alarm	Testing	Is well audible
10	Indicator lamps	Inspect	Lamps are clearly visible
11	Vacuum circuits	Testing	Max 10% leakage in 1 minute
12	User Manual	Inspect	Present and readable

**CAUTION:**

Never use solvents, petrol or other chemicals to clean rubber parts.

7.3 Testing Vacuum Circuits

- 1 Place the machine with the suction pad on an airtight surface and switch the CladBoy compact CBC3 to the "suction" position.
- 2 Switch off the CladBoy compact CBC3.
- 3 Check the vacuum drop in the circuit with the vacuum gauge.

7.4 Replace fuse

Behind the right orange cover of the machine is one 5A mini fuse and one 10A fuse. A fuse may only be replaced by a fuse of the same value, for example 10 A.

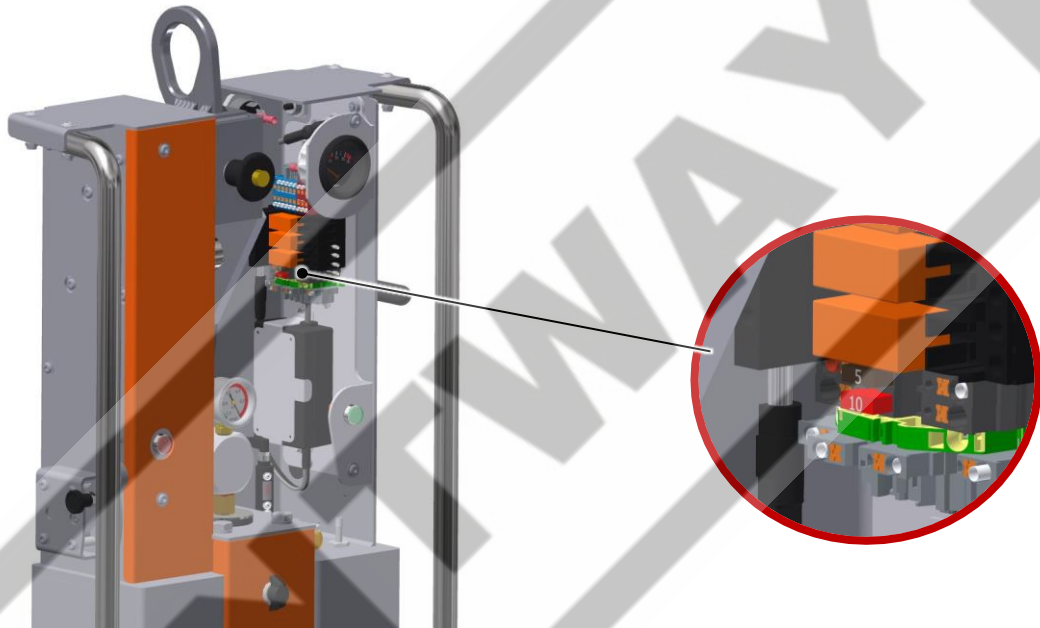


Figure 7.1 View of inside of CladBoy compact CBC3 machine: fuses.

- 1 Make sure the device is turned off and unplugged
- 2 Remove the two screws from the right cover to remove it from the base unit.
- 3 Remove the fuse from the fuse holder on the DIN rail using a pair of tongs.
- 4 Install a new fuse.
- 5 Screw the cover back onto the base unit.
- 6 Check the machine for correct operation.

7.5 Replace battery

Over time, the maximum capacities of the batteries will decrease permanently. It is possible to replace them yourself.

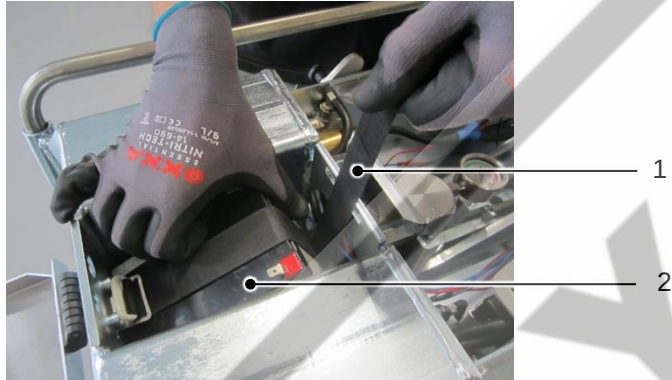


Figure 7.2 View of battery

- 1 Velcro
- 2 Battery

Dismantling

- 1 Make sure the device is turned off and unplugged.
- 2 Open the battery door by first turning the lock 90°.
- 3 Disconnect all cables from the battery poles [2]. Make sure you know which poles they were connected to.
- 4 Loosen the Velcro strap [1]. This one doesn't have to be taken out completely.
- 5 Flip the battery over so that the poles face the bottom of the machine.
- 6 Push the Velcro strap [1] aside and pull the battery out of the machine.

Mounting

- 1 Place the new battery upright - with the poles pointing to the bottom of the machine - in the battery compartment.
- 2 Place the Velcro strap [1] in front of it.
- 3 Tilt the battery while pulling on the Velcro strap (see Figure 7.2 'View of battery').
- 4 Fasten the Velcro straps [1] again.
- 5 Reconnect all cables to the poles into the same positions.
- 6 Close the battery door and close the lock.
- 7 Check the machine for proper operation.



NOTE

The old batteries must be properly disposed.

7.6 Replace suction pad seal

An intact seal is essential to be able to work safely with the CladBoy compact CBC3. If the seal is damaged, it must be replaced. It is possible to buy a seal separately from VIAVAC and replace it yourself.

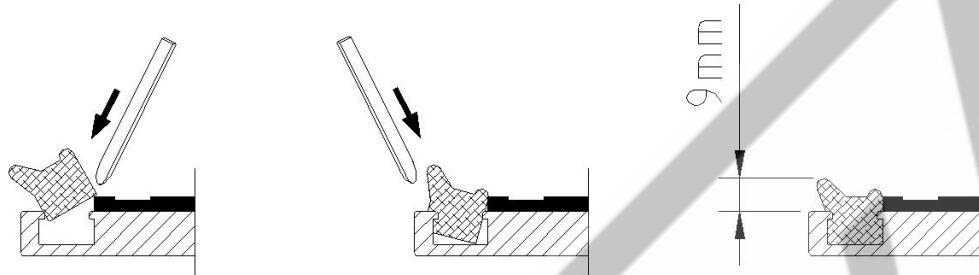


Figure 7.3 Replace suction pad seal

- 1 Pull the damaged seal out of its groove.
- 2 Place the outside of the new seal in the groove all around. Make sure the glue seam is centered on one long side on the outer edge of the groove.
- 3 Press the inside of the seal into the groove using the seal tool from VIAVAC or a blunt screwdriver.
- 4 Press the outside of the seal back into the groove where necessary.
- 5 Make sure that the seal is seated properly in the groove all around.



NOTE:

There is a sticker on the suction pad with a QR code. This refers to an instructional film that shows how to correctly place a seal in a suction pad.



Figure 7.4 Instruction video for the replacement of the suction pad seal.

8 Malfunctions

Table 8.1 Malfunction analysis

Fault	Cause	Action
The CladBoy compact CBC3 doesn't work and the voltage gauge has red or no light	The battery voltage is too low	Charge or replace the battery if necessary
	The fuse of the control current is defective	Replace the fuse
The CladBoy compact CBC3 doesn't have sufficient suction and an acoustic alarm sounds	The seal of the suction pad is damaged	Replace the suction pad seal
	The load is made of porous material	The load cannot be picked up with this machine configuration, change the configuration
	The surface of the load is too rough	The load cannot be picked up with this machine configuration, change the configuration
The vacuum pump continues to run, does suck in enough and the acoustic alarm doesn't sound	A component in the machine is defective	Consult a VIAVAC dealer
	The battery voltage is too low	Charge or replace the battery if necessary
	Vacuum Leakage	Check the suction pad and replace the seal profile if necessary
	The surface of the load is too rough or porous	The load cannot be picked up with this machine configuration, change the configuration
Vacuum pump is not working	The fuse of the pump is defective	Replace the fuse
	The vacuum pump is defective	Replace the vacuum pump



NOTE:

Contact your dealer in the event of regularly recurring faults.

9 Disassembling and disposal

9.1 Disassembling

When disassembling the CladBoy compact CBC3, observe the disposal regulations (applicable on site and at the time of disassembly).

9.2 Disposal

The CladBoy compact CBC3 contains harmful substances that must not be released into the environment. Properly dispose the CladBoy compact CBC3 for responsible processing, whereby raw materials can be recovered.

VIAVAC vacuum lifting bv offers the possibility to collect and recycle the CladBoy compact CBC3. To use the service, you must return the CladBoy compact CBC3 to our service department. This department will then dispose the product in a responsible manner.

The CladBoy compact CBC3 can also be delivered at a recycling center.



CAUTION:

It is the responsibility of the owner of the CladBoy compact CBC3 to dispose the product in a proper manner.

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