



Operating instructions Clesana C1

# We say **THANK YOU.**

Thank you for your trust. By purchasing the Clesana C1 you have opted for an innovative and pioneering sanitary hygiene product. We wish you lots of fun using it. Your Clesana Team.

Clesana C1
The welding toilet.



# **Download**

Bedienungsanleitung (DE)
Operating instructions (EN)
Mode d'emploi (FR)
Istruzioni per l'uso (IT)
Instrucciones de uso (ES)
Gebruiksaanwijzing (NL)



### Clesana AG

Werdenstrasse 72 CH-9472 Grabs

Email: info@clesana.com





C	ont	cent			
1.	Intr	oduction	(		
	1.1.	About this manual	(		
	1.2.	Warning signs and symbols	(		
2.	Safe	ety			
	2.1.	Proper use			
	2.2.	User qualification			
	2.3.	Operation			
	2.4.	Cleaning and maintenance	8		
	2.5.	Modifications and repairs	8		
	2.6.	Residual risks			
		2.6.1 Live parts	8		
		2.6.2 Burning or pointed objects			
		2.6.3 Water ingress			
		2.6.4 Moving parts			
2	D	2.6.5 Harmful substances			
3.		ign and function			
	3.1.	Overview			
	3.2.	Control panel			
	3.3.	Display			
4.	Pre	paration			
	4.1. Check the status of the toilet				
	4.2.				
5.	Ope	erating steps after the toilet trip	16		
	5.1.	Use the absorber for fluid binding	10		
	5.2.	Note the filling level	16		
	5.3.	Start flushing process	1		
6.	Opt	ional operating steps	19		
	6.1.	Perform manual bag separation	19		
	6.2 Interrupt the flushing process				

	6.3. Restart the toilet					
7.	Clear	ning and maintenance	22			
	7.1.	Cleaning	. 22			
	7.2.	Replacing the Teflon tape (PTFE Tapes)	. 22			
8.	Main	tenance	23			
9.	). Error code24					
11.	I. Consumables and accessories 28					
12.	FAQ.		29			
13.	3. Disposal and the environment30					
14.	14. Technical specifications 30					





# 1. Introduction

#### 1.1. About this manual

These operating instructions familiarise you with the characteristics and functions of the waterless welding toilet Clesana C1. The manual contains important information for the correct and safe handling of the toilet.

- ▶ Read these operating instructions carefully before the initial start-up.
- ▶ Keep this manual safe so that the information is available at all times.

This manual is continuously improved, but it may happen that document enclosed with Clesana C1 does not correspond to the current version. We recommend that you check on our website https://clesana.com/eu whether there a newer version of this manual is available.

### 1.2. Warning signs and symbols

Warning signs are used in this manual in order to alert you against property damage and personal injuries.

Warning symbol	Warning word	Meaning
	CAUTION	Hazards for persons. Non-compliance can result in minor injuries.
-	NOTE	Information for avoiding property damage.

Symbol	Meaning
0	Important information, e.g. for better comprehension or for facilitating work processes
<b>•</b>	Action steps that you must perform
$\triangleright$	Measures for avoiding hazard in a warning sign
1., 2.	Several action steps that you must perform in the order specified
₩	Result indication of an action step or several action steps
(⇒ Page, "Chapter")	Reference to a chapter of the manual
1	Important details in graphics
1	Motion sequences in graphics

# 2. Safety

This chapter contains important information on safety of the device. Read the safety instructions thoroughly before start-up and operation.

# 2.1. Proper use

The waterless welding toilet Clesana C1 is intended to be used for sanitary bagging of excrements and personal hygiene articles. Bagging of nappies or biowaste is also possible. Different uses are not allowed. The device is intended exclusively for non-public areas.

#### Possible misuse

Not intended use of the device can result in property damage and personal injuries. For example, the device is not suitable for the following uses:

- Bagging of pointed or sharp-edged objects (e.g. broken glass, needles, razor blades
- Bagging of burning or red hot objects (e.g. ashes, cigarettes, matches)
- Bagging of liquids and chemicals that could react with the bag.
- Bagging of foodstuffs or organisms
- Use as climbing aid

### 2.2. User qualification

Persons, children and people with physical, sensory or mental disabilities not familiar with the device should use the Clesana C1 only under the supervision or according to the instructions of a responsible person.

Maintenance works must be carried out by authorised qualified persons. Contact your dealer if needed.

# 2.3. Operation

- ▶ Regularly check that all functions are carried out correctly.
- ▶ After each use and before leaving the Clesana C1 unattended, make sure that the flushing process is completed and that the toilet is ready for use.
- ► Never operate the Clesana C1 without correctly mounted lid and fully inserted tray.

The Soft-Close mechanism closes the toilet lid automatically. This mechanism will be damaged if the lid is manually pressed downwards.

- ▶ Never press the toilet lid downwards.
- ▶ Never use the toilet without inserted foil liner.





### 2.4. Cleaning and maintenance

- Perform only the cleaning works described in these operating instructions and note the associated safety instructions.
- ▶ Do not clean the toilet with running water.

Clesana foil liners ensure a reliable functioning of your Clesana C1. The use of other foils can result in malfunctions.

▶ Use only Clesana foil liner.

### 2.5. Modifications and repairs

Repairs not properly carried out can result in accidents and property damage.

- ▶ Do not open the base body.
- ▶ Do not install any additional components and do not make any modifications to the device.
- ► Contact your dealer if a defect is suspected.

### 2.6. Residual risks

#### 2.6.1 Live parts

Opening the base body can expose the live parts. There is a risk of life threatening electrocution.

▶ Do not open the base body.

### 2.6.2 Burning or pointed objects

Burning objects ignite the foil bag and cause fires. Pointed objects damage the foil bag, soiling the tray.

- ▶ Do not dispose of any burning materials such as cigarettes, matches or hot ashes in the toilet.
- ▶ Do not dispose of pointed or shape-edged objects in the toilet.

#### 2.6.3 Water ingress

Water can penetrate in the inside of the toilet through a not closed lid or a not correctly inserted tray, cause a short-circuit and damage the electronic control or the welding mechanism. This may result in malfunctions and damage to the components.

- ▶ Do not expose the Clesana C1 to jet water (e.g. when taking a shower).
- Use the Clesana C1 only when seated.
- ▶ Never operate the Clesana C1 in a wet room without the lid properly placed and fully inserted tray.
- ▶ If the welding unit comes into contact with water: Let the toilet to dry for 24 hours without inserted foil liner.

### 2.6.4 Moving parts

The Clesana C1 has a rotating mechanism for optimal positioning. If the area around the toilet is obstructed by objects, the rotating of the toilet may result in crushing of fingers.

▶ Keep the surroundings of the Clesana C1 free of objects.

#### 2.6.5 Harmful substances

Swallowing the absorber can lead to nausea and stomach discomfort. Eye contact can pose the risk of sever eye irritation.

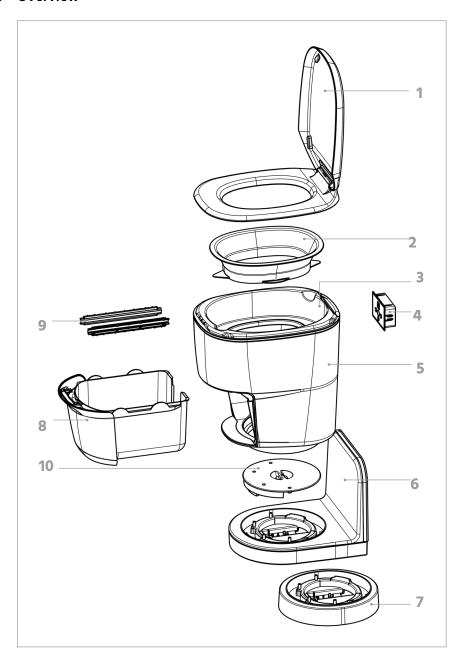
- ▶ Keep the absorber away from the reach of children.
- ▶ Note the safety data sheet of the absorber, available on the website: https://clesana.com/infobereich/.
- ▶ In the event of eye contact, rinse the eyes with running water for several minutes.
- ▶ If you have swallowed the absorber, rinse your mouth with water and drink up plenty of water.
- ▶ See a physician in case of persistent discomfort.



# ල

# 3. Design and function

### 3.1. Overview



No.	Description	Function
1	Lid/Glass	Covering of the foil compartment     Protection against entry of jet water
2	Foil cassette	Mounting of the foil liner
3	Foil compartment	Replica of a toilet bowl     Guiding the foil to the sealing mechanism
4	Control Panel/Display	<ul> <li>Toilet control</li> <li>Display of the remaining toilet trips with the inserted foil liner</li> <li>Display of operating status and error codes</li> </ul>
5	Housing/Base body	Mounting of lid/glass, foil cassette, Teflon tape and tray
6	L-Adapter	<ul> <li>Placing the toilet on the wall</li> <li>Mounting the toilet on the floor</li> <li>Covering the existing openings in the wall, e.g. due to a previously installed toilet</li> </ul>
7	Round base	Placing and free mounting of the toilet in the room
8	Tray	Mounting of up to 6 bags. This corresponds to 2 bag chains with 3 bags each.
9	Teflon tape (PTFE Tapes)	Preventing the sticking and tearing of welding seam in the welding process
10	Rotation discs	Pairing of the base body with the L-Adapter/ Base

The Clesana C1 is the first waterless toilet which operates based on the bag-welding principle. After each toilet trip the toilet welds the toilet content in a separate foil bag.

The foil bag is made of a multiple-folded continuous foil, the foil liner, previously mounted on the foil cassette (2) and is inserted in the foil compartment (3). The foil bag replicates a toilet bowel.

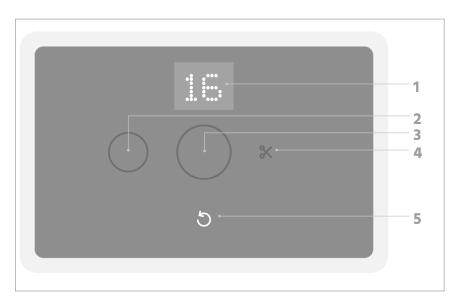
Once the flushing process is triggered via the control panel (4) the toilet pulls the foil from the foil cassette (2) automatically, welds it and prepares for the next use of the toilet.

The odour-proof closed foil bags are collected in the tray (8).





### 3.2. Control panel



No.	Description	Function
1	Display	Display of the remaining large (L) flushing processes
2	"Small flushing process" button (S)	<ul> <li>Press once: Triggering of a small flushing process</li> <li>Press twice: Triggering of an extra small flushing process</li> </ul>
3	"Large flushing process" button (L)	<ul> <li>Press once: Triggering of a large flushing process</li> <li>Press twice: Triggering of an extra large flushing process</li> </ul>
4	"Separate" button	Creating a single bag with subsequent pressing of buttons (2) or (3)
5	Arrow keys	Resetting the counter/display after replacing the foil liner     Interruption of the flushing process

# 3.3. Display



### The toilets is ready for operation.

Displayed numbers stand for the still available "Large flushing processes".

• From a number of "3", the display lights up in red to indicate the imminent ending of the foil liner.



### The toilets is not ready for operation.

The toilet lid is not properly closed.

- ► Close the toilet lid.
- ► If the display persists, perform a troubleshooting (⇔ Page 27, "Troubleshooting").



### The toilets is not ready for operation.

There is a fault in the welding unit.

▶ Perform a Troubleshooting (⇒ Page 27, "Troubleshooting").



### The toilets is not ready for operation.

Drawer must be emptied and/or the fill level checked.

- ▶ Empty the tray.
- ► If the display persists, perform a troubleshooting (⇒ Page 27, "Troubleshooting").



### The toilets is not ready for operation.

The battery voltage is too low.

► Perform a Troubleshooting (⇒ Page 27, "Troubleshooting").



### The toilets is not ready for operation.

► Perform a troubleshooting using the error codes (⇒ Page 24, "Error code").



### Status display of the process flow

The process is stopped if the lid or the tray is opened during the running process.

▶ Wait until the process is completed.



#### Bag size display

The bag size displayed on the Display will be produced.

- You can chose from four available bag sizes.
- Within 3s after pressing the button the bag size can be changed by pressing the button again.



## Instructions for replacing the Teflon tape

► Replace the Teflon tape within the next 50-100 cycles (-> Page 22, Replacing the Teflon tape)

12/32 13/32



# ල

# 4. Preparation

### 4.1. Check the status of the toilet

The display shows the theoretically available number of large bags (L). If the content in the foil compartment is heavier than 400 g, the weight can pull down the foil liner and falsify the number on the display(so-called slippage).

For technical reasons, a low residual foil always remains on the foil liner.

- ► Check that there is enough foil for a complete bag before each use of the toilet and in particular when the display shows less than 5 available bags.
- ▶ Make sure that there is always enough refill foil liner near the Clesana C1.

## 4.2. Insert or change the foil liner

 Press the rear clamp of the lid unit forward (1) and lift it upwards with both hands (2).



Take the foil cassette out of the toilet and insert lay it upside down on an even surface.



3. Place the foil liner such that the folding markings are in the middle of the longitudinal side of the cassette when pulling it on the cassette.



4. Place the foil liner over the foil cassette. The protruding foil liner points downwards.



5. Rotate the foil cassette and pull the protruding foil approx. 10 cm upwards.



6. Reinsert the foil cassette with the protruding foil pointing upwards in the foil compartment. Make sure no foil is jammed between the foil compartment and the foil cassette.



7. Pull the foil upwards until you see at least 4 visible folds.



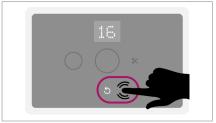
8. Fold the foil inwards and distribute it evenly in the foil compartment.



9. Place the lid unit by fixing it in the front area (1) and then snapping it in the groove in the rear area of the Clesana C1 (2).



- 10. Press and hold the arrow button on the control panel for 3 seconds (until the circle appears).
  - The foil tube is welded.
  - ♥ The counter is reset.
  - ♦ The toilets is ready for operation.



14/32 15/32



# 5. Operating steps after the toilet trip

### 5.1. Use the absorber for fluid binding



### CAUTION! Health impairment through improper use.

- Do not swallow the absorber.
- Do not allow the absorber to come into contact with the eyes.

For binding the fluids (e.g. urine) we recommend the use of Clesana Super Absorber. The powder shell dissolves upon coming into contact with the fluids. The powder binds the fluids in the foil bag.



▶ Insert a bag in the foil compartment before or after toilet trip.

## 5.2. Note the filling level



Toilet paper should not be over the prescribed maximum filling level, otherwise the welding can be interrupted.



- A Maximum filling level of a large bag (L)
- B Maximum filling level of a small bag (S)
- C Maximum filling level of an extra small bag (XS)
- D Exceeding the maximum filling level
- ▶ Note the correct position of the toilet paper:
  - A: With large bags below the white plastic ring shining through the film
  - **B:** With small bags bellow the upper transport rollers
  - **C:** With extra small bags bellow the welding jaws

# ල

# 5.3. Start flushing process

During the flushing process the individual bags are separated from each other by welding. After three bags the bag chain is automatically separated from the foil linger and falls into the tray.

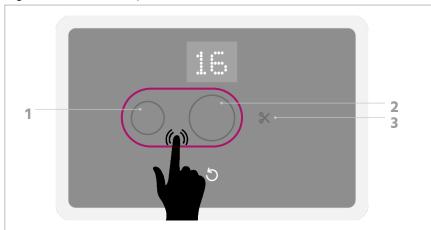


Fig. 1: Select small or large flushing process on the control panel

- 1 "Small flushing process" button (S)
- 2 "Separate" button
- 1 "Large flushing process" button (L)
- 1. Check the filling level of the toilet (⇒ Page 16, "Note the filling level").
- 2. Close the toilet lid.
- 3. Select the bag size on the control panel with button (1) or

Display	Bag size	Button	Bag length	Max. bag per liner	Recommended		
*** ** ** ** ** ** ** ** ** ** **	Small	1 x Flush. process small	ap- prox. 20cm	38	"Small business" and "Large business" with less paper		
** ** ** ** ** **	Large	1 x Flush. process large	ap- prox. 30cm	26	"Large business" with normal paper quantity		
* * ***  ** ** **  ** ** **  *** **  ** **  ** **  ** **  ** **  ** **	Extra Small	2 x Flush. process small	ap- prox. 15cm	50	"Small business" without paper		
* * **  ** ** **  ** ** **  *** **  ** **  ** **  * *****	Extra Large	2 x Flush. process large	ap- prox. 40cm	19	"Large business" with lots of paper. Is separated automatically.		

16/32 17/32





- Within 3 seconds after the last pressing of the button the bag size can be freely changed by pressing the button again. After 3 seconds the Display changes to "Status display of the process flow" and the last displayed bag size is produced
  - ♦ The flushing process is started.
  - Selected button (1) or (2) flashes.
  - The additional button (3) is flashing while the bag chain is separated automatically.
- 4. Wait until all buttons of the control panel light up.
  - ♦ The flushing process is completed.

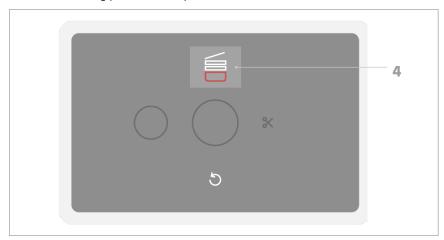


Fig. 2: Empty the tray after the separation of the second bag chain

- 5. If the second bag chain is separated automatically, follow the prompt on the Display (4) and empty the tray.
- If the counter is at 0, you can still initiate the flushing process using the button. The foil liner is always longer than when it is stored in the controller. This additional length serves to compensate for the slippage. The slippage can occur if the foil is pulled downwards, without the transport rollers conveying actively. This can be the case if the content is too heavy or when the foil is manually pressed downwards. If there is no slippage, you can produce further bags using the additional length. For this, the foil cassette must be removed and the residual quantity of the liner visually checked. A folding corresponds approx. to the length of an XS bag.

# 6. Optional operating steps

# 6.1. Perform manual bag separation

With this function you can separate the bag from the foil liner after flushing process and can remove it directly out of the tray.

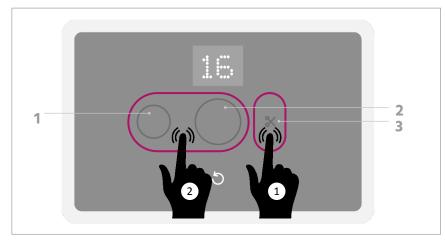


Fig. 3: Perform manual bag separation

- 1. Check the filling level of the toilet (⇒ Page 16, "Note the filling level")el").
- 2. Close the toilet lid.
- 3. Press and hold for 3 seconds one after the other the button (3), followed by button (1) or (2), depending on the bag size you wish to use.
  - ♦ The flushing process is started.
  - 🖔 Button (3) and selected button (1) or (2) flashes.
- 4. Wait until all buttons of the control panel light up.
  - ♦ The flushing process is completed.
  - \$\to\$ The filled and welded bag is separated and is in the tray.



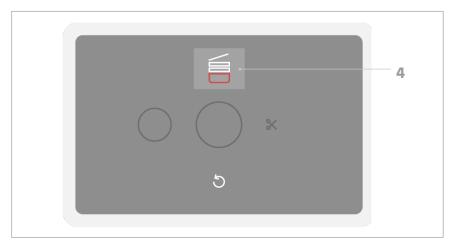


Fig. 4: Empty the tray after manual separation of the bag chain

5. Follow the prompt on the Display (4) and empty the tray.

## 6.2. Interrupt the flushing process

With this function you can interrupt the welding or separation process any time, e.g. if you have selected the incorrect bag size on the control panel. The welding jaws return to the start position after the interruption.

If the foil has been transported before the program interruption, the counter on the Display is adjusted accordingly.

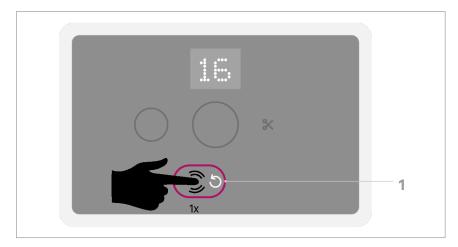


Fig. 5: Interrupt the flushing process



- 1. Press and hold the arrow button (1), while a process is in progress.
  - Message "E6" appears on the Display.
- 2. Confirm the message by pressing the arrow button (1).
- 3. Wait until all buttons of the control panel light up.
  - ♦ The program interruption is completed.

### 6.3. Restart the toilet

You can restart the toilet if the control panel does not respond or if there is an error. The number of remaining toilet trips is stored.

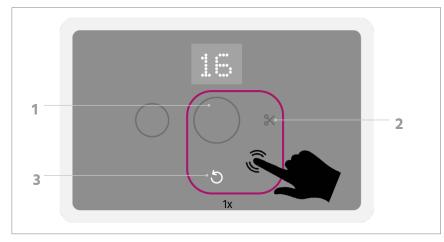


Fig. 6: Restart the toilet

- 1. Press and hold simultaneously the arrow button (3), the "Flushing process" button (1) and the "Separate" button (2).
  - ♦ The toilet restarts.
- 2. Wait until all buttons of the control panel light up.
- 3. If the error persists, preform a troubleshooting (⇒ Page 27, "Troubleshooting").

20/32 21/32



# 7. Cleaning and maintenance

### 7.1. Cleaning

#### NOTE! Damage to the Clesana C1 through improper cleaning.

- Do not clean the toilet with running water (e.g. With a hose).
- ▷ If the welding unit comes into contact with water: Let the toilet to dry for 24 hours without inserted foil liner.
- ▷ Do not use bleach.

Since the Clesana C1 operates without water, and the "Foil bowl" is renewed with each use, it is very low maintenance. We recommend however to clean the following components regularly with a moist cloth and commercially available cleaning materials:

- Toilet glass
- Toilet lid
- Foil compartment
- Base body

## 7.2. Replacing the Teflon tape (PTFE Tapes)

After approx. 1500 weldings or separations the non-stick coating of the Teflon tapes over the welding wires looses its effectiveness. The loss of the non-sticking effect leads to problems in the transport and the welding of the plastic foils.



- ▶ Both Teflon tapes must always be changed at the same time.
- ► The number of cycles can be queried via the display on the control panel. For this, open the lid and press the small-flush button once. The number "Total" corresponds to the total number of cycles produced, "PTFE tape" the number since the last replacement of the Teflon tapes.

### **Remove the Teflon tapes**

- Lift the lid and remove the loaded foil cassette.
- Insert the tip of a slotted screwdriver
   5 mm deep in the recess and lever the first Teflon tape out of the guide. Thereafter, manually pull out the Teflon tape flat out of the upper and lower guides. Repeat the procedure for the second Teflon tape.





Do not immerse the slotted screwdriver too deeply so as to avoid damaging the welding rod.

- 3. Repeat the process for the second Teflon tape.
- 4. Dispose of the removed Teflon tap in the household waste.

#### Insert the Teflon tapes

**NOTE!** Damage to the welding mechanism due to falling off of the Teflon tape If previously removed Teflon tapes are used again they can fall off due to the worn retaining lug. The welding mechanism might be damaged if the welding process is performed without Teflon tapes.

- Do not use any previously removed Teflon tapes.
- Make sure that when mounting the Teflon tapes all retaining lugs are snapped into place and are not damaged.
- 2. Click the first Teflon tape in the guide rail.
- 3. Repeat the process for the second Teflon tape.
- 4. Reset the counter after replacing the Teflon tapes.
  - For this, open the lid and press the "Small-flush button" to get to the Cycle menu.
  - Press and hold the arrow button for 5 seconds to reset the PTFE tape counter.



A video guide for replacing the Teflon tape is available at clesana. com/ptfe or the QR code below.



# 8. Maintenance

### NOTE! Opening the base body.

Opening the base body can result in irreversible damage to the C1. This would void the guarantee.

▷ Do not open the base body.

22/32 23/32





# 9. Error code

Error	Cause	Troubleshooting
E1	The toilet does not initialise.	► Switch the power off and on again.
E2	The toilet lid has been opened during the process.	► Close the lid.  ∜ The process continues.
E3	The tray has been opened during the process.	► Close the tray.  ♦ The process is continued.
E4	Voltage drop bellow 8.4V on the printed circuit board	<ol> <li>Press the arrow button to confirm.</li> <li>Have the power supply of the Clesana C1 checked by your dealer.</li> </ol> Possible causes:
		- Cable cross-section too small, loose contact in the cable - Crimping, seat contacts in the Anderson connector - Incorrect relay, battery too weak
E5	The battery voltage is less than 11.8V	<ol> <li>Press the arrow button to confirm.</li> <li>Charge the battery or replace it.</li> </ol>
E6	Confirm program abort	► Press the arrow button to confirm.
E8 E9	Light barrier error	➤ Restart the toilet (⇒ Page 21, "Restart the toilet").
E10 E11	Motor error	➤ Restart the toilet (⇒ Page 21, "Restart the toilet").
E12	Overcurrent on the left welding jaw motor, possible object between the welding jaws	<ol> <li>Press the arrow button to confirm.</li> <li>Open the lid and check for jammed objects.</li> </ol>
E13 E14	Error on the left welding jaw motor	▶ Press the arrow button to confirm.
E15	Overcurrent on the right welding jaw motor, possible object between the welding jaws	<ol> <li>Press the arrow button to confirm.</li> <li>Open the lid and check for jammed objects.</li> </ol>
E16 E17	Error on the right welding jaw motor	▶ Press the arrow button to confirm.

Error	Cause	Troubleshooting
E18	Overcurrent on upper roller motor, possible foil wrapping	<ol> <li>Open the lid and check the upper rollers.</li> <li>If needed, remove the wrapped foil from the roller.</li> <li>Close the lid.</li> </ol>
E19 E20	Error on the upper roller motor	▶ Press the arrow button to confirm.
E21	Overcurrent on lower roller motor, possible foil wrapping	<ol> <li>Open the lid and check the lower rollers.</li> <li>If needed, remove the wrapped foil from the roller.</li> <li>Close the lid.</li> </ol>
E22	Error on the lower roller motor	▶ Press the arrow button to confirm.
E23	Error on the lower roller motor	▶ Press the arrow button to confirm.
E24 E25	Safety Timer On	The error is automatically corrected by the system.
E26	Welding overcurrent	► Contact your dealer.
E27	Interruption of the welding current	► Contact your dealer.
E28	Overtemperature when welding	► Contact your dealer.
E29	Printed circuit board error	► Contact your dealer.
E30	Fan overcurrent	<ol> <li>Press the arrow button to confirm.</li> <li>Contact your dealer.</li> </ol>
E31	Fan error	▶ Press the arrow button to confirm.
E33	Software error when welding	► Contact your dealer
E34	No power when welding	► Contact your dealer.
E35	Short circuit of the welding current	► Contact your dealer.
E36	Welding is too cold, low temperature	► Contact your dealer.

24/32 25/32





Error	Cause	Troubleshooting
E37	Welding temperature has not been reached	Possible causes:  • Loose contact in the supply line  • Crimping, seat contact in the Anderson connector  • incorrect relay
E38	Hardware safety check before welding has failed.	<ol> <li>Check whether the voltage is other than 12V.</li> <li>Contact your dealer</li> </ol>
E39	Start welding temperature is too high	► Contact your dealer
E40	Deviation of the welding temperature	Possible causes:  • Loose contact in the supply line  • Crimping, seat contact in the Anderson connector  • incorrect relay

# 10. Troubleshooting

Fault	Display	Possible Cause	Remedy
The toilet cannot be		Battery voltage < 11.8 V	► Charge the vehicle battery.
used		The lid is open or is not mounted.	► Close or mount the lid or the lid unit.
		The magnets of the lower rubber pads of the lid are missing.	▶ Reinsert the magnets.
		The tray is not inserted or is full.	<ul> <li>Close or empty the tray (the tray must be open more than 2 seconds).</li> </ul>
		The magnets behind the tray have fallen out of their seat.	► Reinsert the magnets.
The control panel does not light up	-	The toilet is in standby.	Open/close the lid or press any button.
		There is no voltage.	Check the circuit breaker or the relay and the battery voltage.
		The control panel or the toilet is defective.	► Contact your dealer.
The bag is leaking	_	There is foreign object in the welding seam e.g. Toilet paper.	<ul> <li>Use less paper or press it further downwards (⇔(⇔ Page 16, "Note the filling level")).</li> </ul>
		The Teflon tape is defective, worn or loose.	<ul> <li>Press on the Teflon tape.</li> <li>Replace the Teflon tape if needed (⇔ Page 22, "Replacing the Teflon tape (PTFE Tapes)")).</li> </ul>
		Defective welding rod	► Contact your dealer.
Separation not suc- cessful	_	There is foreign object in the welding seam e.g. Toilet paper.	Remove object or use less paper or press it further down- wards.
		The welding rod is defective.	► Contact your dealer.





The bag sticks to the Teflon tape	_	The Teflon tape is worn out.	<b>&gt;</b>	Replace both Teflon tapes (⇒ Page 22, "Replacing the Teflon tape (PTFE Tapes)").
The length of the bag is irregular	_	The foil is jammed between the foil compartment and the cassette.	1. 2.	Remove the foil cassette. Check the foil cassette and reinstall properly.
		The bag length varies with content and filing process.	•	No correction needed.
The bag wraps itself around the transport rollers	_	The bags accumulate in the tray and are pulled upwards and in the transport rollers.	1. 2. 3.	Remove the foil from the transport rollers. Empty the tray and pull new foil downwards. Press the "Small flushing process" button.
	_	The foil sticks to the Teflon tape.	1.	Loose the foil from the Teflon tape. Replace the Teflon tape if needed (⇒ Page 22, "Replac- ing the Teflon tape (PTFE Tapes)")).

# 11. Consumables and accessories

You can also obtain consumables and accessories quickly and easily via the Clesana Online Shop.

www.shop.clesana.com



# 12. FAQ



All FAQ & Information are available at clesana.com.

### Can the bags be put in the compost (biowaste)?

No, the bags must be disposed of with the household waste. A biologically degradable variant is currently being evaluated. In addition, human faeces must not be disposed of in organic waste.

# Can the bags be disposed of in commercially available waste containers (residual waste)?

Yes, unless there are separate regulations in this respect.

#### Are the bags odour-proof?

In room temperature the bags are odour-proof for at least 2 weeks. With higher temperatures it is recommended to dispose of the bags within 2 days.

# Can I use the toilet again immediately after the triggering of the flushing process?

No, the previous "Flushing process" must be completed first. Opening the lid earlier can cause a malfunction.

#### Can I weld other things in the bag?

Yes, basically biowaste, nappies or feminine hygiene products can be welded. However, no sharp-edged objects or hot ashes should be put in the bag. Note the maximum filling level!

### Does the toilet function only with a 12V voltage?

Yes, only this power supply is currently possible. Operation using mains voltage of 230 volts is possible only with a special power supply unit.

#### How stable is the toilet?

The load-bearing capacity of the toilet with closed lid is 150 kg (sitting person).



# 13. Disposal and the environment

The Clesana C1 meets the requirements of EU Directive "Restriction of Hazardous Substances" (2011/65/EU). It is largely free of environmentally hazardous substances such as lead, cadmium, mercury or chromium VI.



In accordance with EU Directives, the device is considered electrical and electronic equipment waste for disposal purpose and must not be disposed of as household waste.

- Dispose of the device in accordance with local regulations.
- Dispose of the used batteries at the collection points provided for this purposes.

# 14. Technical specifications

Characteristic	Value	Unit
Height Width L-Adapter/round base length	515 363 516/461	mm mm mm
Seat height	478	mm
Weight of C1 w. L-Adapter/with round base	13.8/13.1	kg
Supply voltage	11.8–15	V
Rated voltage	12	V
Current consumption (max.)	22	А
Power consumption in standby	0.28	W
Power consumption (max.)	265	W
Energy consumption in separation process	1.7 ±0.17	Wh
Energy consumption in welding process	0.55 ±0.06	Wh
Usage temperature	5–40	°C
IP protection class	X4 (splash water protection)	_



## **Declaration of conformity**

Manufacturer: Clesana AG

Werdenstrasse 72 9472 Grabs Switzerland

hereby declares that the following product

Waterless toilet Clesana C1 Series

based on the following applied standard:

 EN 50498-2010 EMC Aftermarket Electronic Equipments in Vehicles Version: 2011-05-01

meets the basic requirements of the following directives:

- 2011/65/EU RoHS 2 in the current version at the time of the creation.
- Motor Vehicle EMC Directive 2004/104/EC in the current version at the time of the creation.

The product in question does not have any disruptive functions in accordance with Vehicle EMC Directive 2004/104/EG.

Signature

Markus Erb

**Executive Director** 

le.Co

Grabs, 20 December 2021

Placer, date











