User Manual

Translation from the original user manual

Stone Clamp

Type: AL800-UNI

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1. Preface

This preface contains general information regarding this user manual.

1.1. Machine Name

The name of the machine is AL800-UNI.

1.2. Warning

Read this user manual carefully before use and before performing maintenance on the AL800-UNI. Only then is optimal safety guaranteed. Maintenance of the AL800-UNI may only be carried out by qualified personnel.

1.3. Marking

This document uses the safety and precaution symbol displayed below.

The information presented next to this symbol alerts you to potential problems. This symbol also warns of the risk of serious injury to yourself or significant damage to the AL800-UNI..

1.4. Reordering the User Manual

Additional copies of the user manual can be ordered from ALMI Machinefabriek BV in Vriezenveen. When ordering, specify the document number and the desired quantity. The document number is listed in the footer.

1.5. Deficiencies in this User Manual

This user manual has been compiled with the utmost care. However, if you notice any inaccuracies or omissions, we kindly ask you to notify ALMI Machinefabriek BV.

2. Introduction

This chapter provides basic information about the AL800-UNI and the accompanying user manual. It is intended for the owner, operator, and maintenance technician of the AL800-UNI.

2.1. The User

Read this user manual carefully before using the AL800-UNI or before performing any work on it. Only then is optimal safety guaranteed.

Only qualified personnel may operate the AL800-UNI.

2.2. The Manufacturer

The manufacturer of the AL800-UNI is:

ALMI Machinefabriek BV
Wierdenseweg 82-86
7671 JK Vriezenveen
T+31(0)546 561 353
F+31(0)546 564 465

2.3. Machine-Identification

The AL800-UNI is equipped with the CE marking, which is affixed to the type plate. This marking confirms that the AL800-UNI complies with the fundamental safety and health requirements of the European Union. Below is an example of the type plate.

2.4. Function of the AL800-UNI

The function of the AL800-UNI is to lift and transport stones.

2.5. Machine-Options

The following accessories can be purchased separately:

- Height Adjuster (A020.00004)
- Strip with Widia points (A020.00005)
- Rock Clamp (A020.00003)

Refer to Chapter 5 for instructions on the operation and installation of these accessories.

2.6. Liability

ALMI Machinefabriek BV cannot be held liable for injuries to persons, damage to the AL800-UNI, or damage to products resulting from non-compliance with the operating and maintenance instructions.

2.7. Service

For service, please contact your dealer or your own technical department.

2.8. Warranty Conditions

art. 1 If ALMI Machinefabriek BV is notified of defects in the machine within 6 months of delivery, along with the purchase invoice and serial number, and if the defects are due to material or construction faults, ALMI will repair these defects.

art. 2 All warranty obligations will be void if:

- Repairs or modifications are made by others without ALMI's authorization or in an unqualified manner;
- Non-original parts are used;
- Damage or defects result from improper connection, unqualified use, or failure to follow instructions;
- Defects arise from natural wear and tear of the machine.
- Factory settings are changed without ALMI's authorization.

art. 3 ALMI reserves the right to have work on the machine carried out by third parties during and after the warranty period.

3. Safety Instructions

This chapter contains information on general safety instructions and is intended for the owner, operator, and maintenance technician of the AL800-UNI. Read this chapter carefully before using or performing maintenance on the AL800-UNI..

3.1. Protective Equipment

The protective equipment for the operator includes the following items:

- Protective clothing
- Safety gloves
- Safety shoes

3.2. Accident Prevention

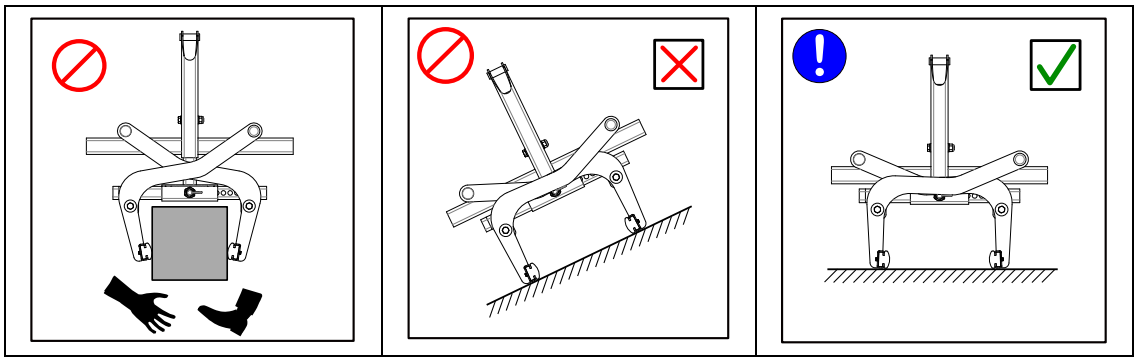
- Ensure that the surroundings are secured so that unauthorized persons cannot enter the danger zone around the AL800-UNI.
- Be especially careful when clamping wet, icy, frozen, or dirty building materials, as these materials are more likely to slip out during lifting.

3.3. Visual/Functional Inspection Before Use

- Before each use, the AL800-UNI must be visually inspected for defects.
- If defects are found, they must be corrected before the AL800-UNI can be used again.
- The AL800-UNI's manual must be available at the workplace.
- The nameplate must not be removed from the AL800-UNI.
- Unreadable safety stickers must be replaced.

3.4. Safety During Operation

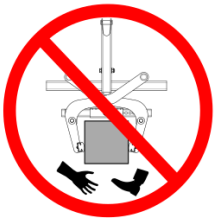
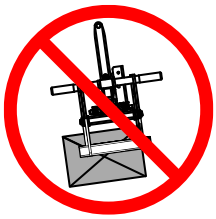
- The device may only be used close to the ground; it is strictly forbidden to lift the device more than 1 meter above the ground.
- Never place limbs under a lifted load
- The device may only be placed on a flat surface
- During operation, bystanders are not allowed to be in the working area of the device.
- It is forbidden to lift or lower with jerky movements.
- The lifting capacity of the device must never be exceeded.
- Do not lift loads that are at an angle.
- Always lift vertically.
- Do not lift stuck loads.
- Do not lift loads wrapped in plastic, as they can slip during lifting.
- Always lift with the center of gravity in the middle
- Only trained, qualified, and certified personnel may operate the device.
- The AL800-UNI may only be manually operated when holding the handles with both hands.
- Fast driving on uneven terrain (which causes shocks) is not allowed.



3.5. Warning Symbols on the AL800-UNI

The following warning symbols are affixed to the AL800-UNI. It is forbidden to remove or make these warning symbols unreadable in any way. Worn warning symbols must be replaced in time.

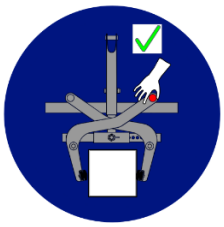
Prohibition Signs

Symbol	Meaning	Part No.
	Never stand under a load or place limbs under a lifted load. **Risk of injury!**	A050.00075
	Do not clamp conical objects	A050.00070
	Do not lift out of center. Always pick up a load from the center of gravity	A050.00067

Warning Signs

Symbool	Meaning	Part No.
	Watch out for the risk of clamping your hands	A010.00069

Mandatory Signs

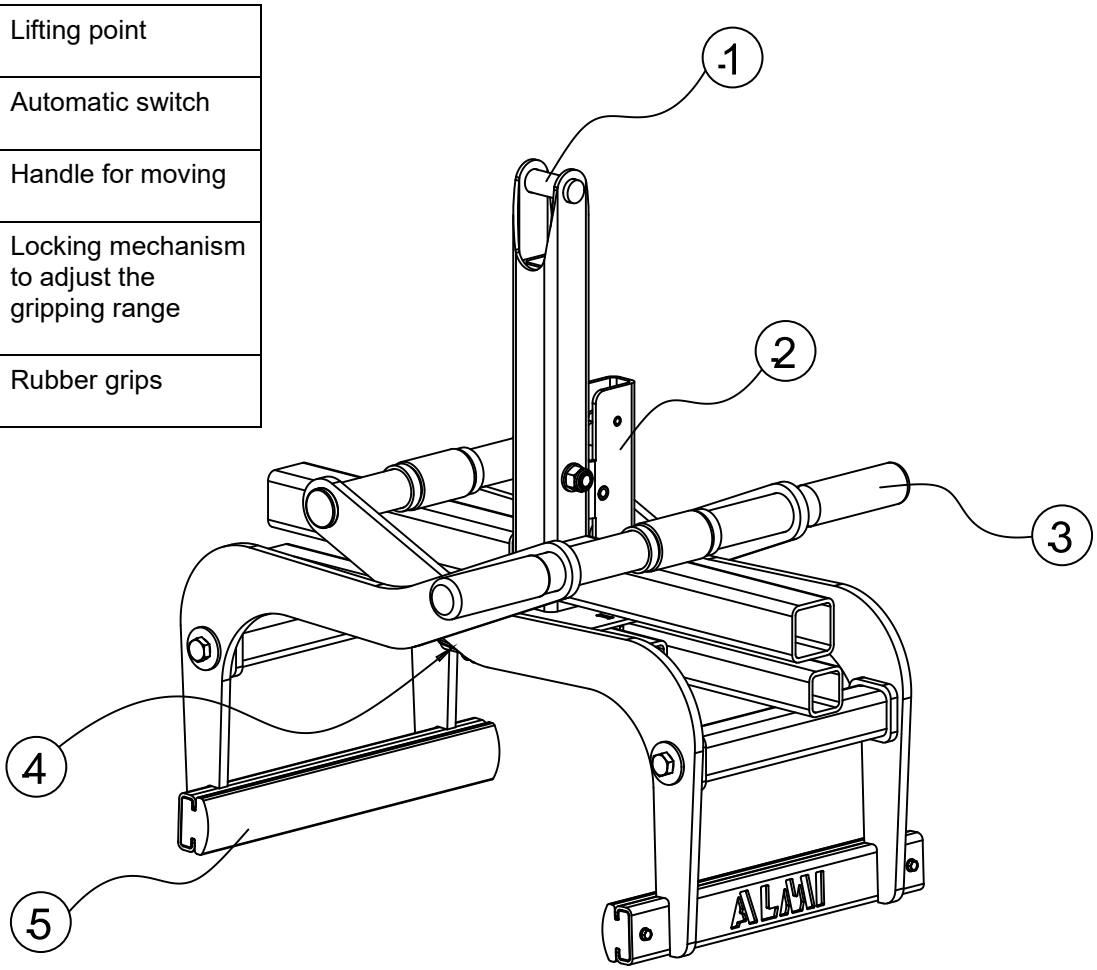
Symbool	Meaning	Part No.
	Everyone operating the device must first read the manual	A010.00068
	The AL800-UNI may only be manually operated when holding the handles with both hands.	A010.00076

4. Description

This chapter contains general information about the AL800-UNI and is intended for the owner, operator, and maintenance technician of the AL800-UNI .

4.1. AL800-UNI

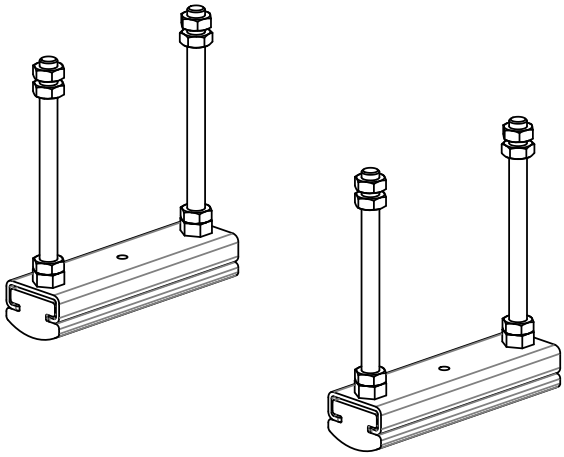
1	Lifting point
2	Automatic switch
3	Handle for moving
4	Locking mechanism to adjust the gripping range
5	Rubber grips



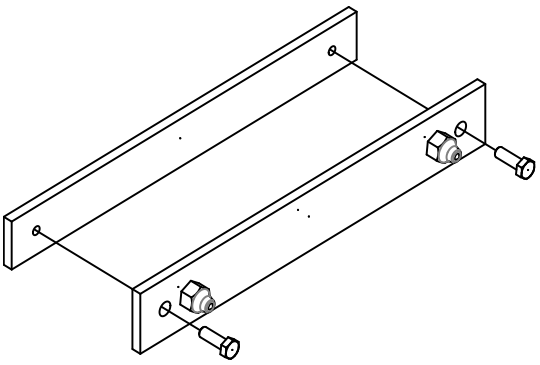
4.2. Accessories

The following accessories can be used with the AL800-UNI

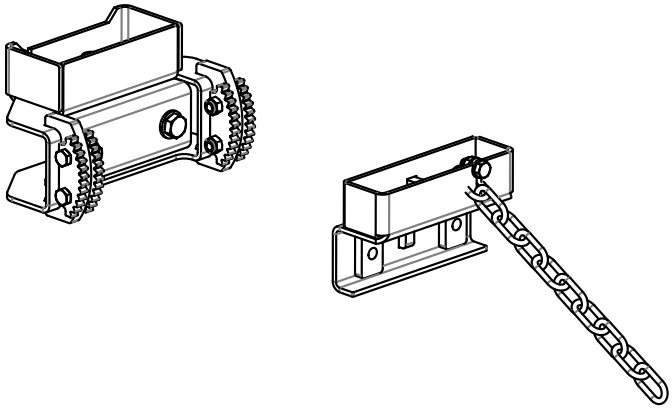
Height adjuster



Strip with Widia points



Rock clamp



4.3. Technical Data

Type:	AL800-UNI
Mass:	29 kg
Working Load Limit WLL	800 kg
Maximum stone width:	60 cm
Minimum stone width:	5 cm
Lifting height	18,5 cm

4.4. Installation

- The AL800-UNI is equipped with a lifting point and can be connected to various lifting tools/machines. Ensure that the maximum lifting weight of the lifting tool/machine is higher than the WLL (Working Load Limit) of the AL800-UNI.
- The AL800-UNI must never be rigidly connected to a lifting tool; the clamp must always be suspended cardanically.
- The AL800-UNI must be attached to the lifting tool with a suitable load hook or shackle. Ensure that the maximum load limit of the hook or shackle is higher than the WLL of the AL800-UNI.

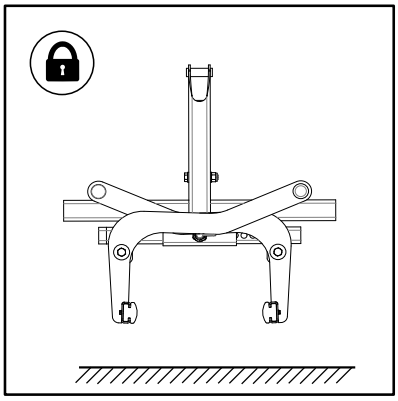
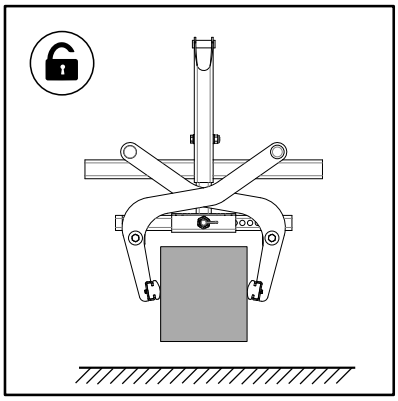
5. Operation of the AL800-UNI

This chapter explains the operation of the AL800-UNI and its accessories. It is intended for the owner, operator, and maintenance technician of the AL800-UNI.

5.1. Explanation of the automatic switch

The AL800-UNI is equipped with an automatic switch. The switch makes it possible to pick up and set down stones, as it allows the gripping arms to open and close. The switch occurs when the device is either set down or lifted.

The automatic switch has two positions:

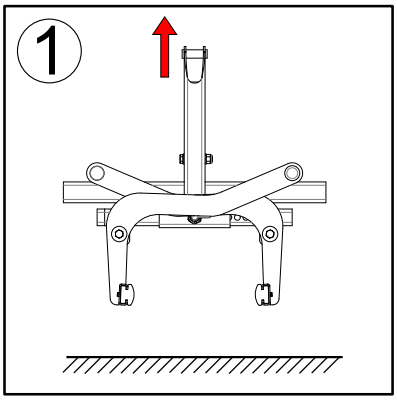
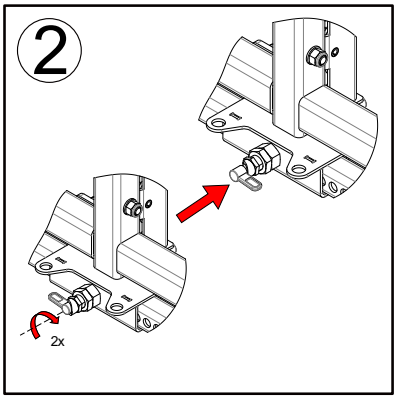
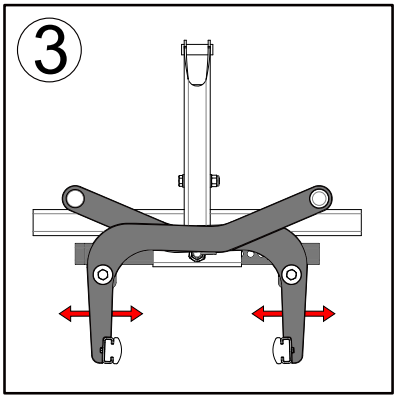
1: Blocked: When the switch is blocked, the gripping arms remain open when the AL800-UNI is lifted, preventing it from clamping. The AL800-UNI can then be moved towards the stone to be lifted, with the arms remaining open. As soon as the AL800-UNI is placed on the stone, the automatic switch will automatically switch to the open position.	
2: Opened: When the automatic switch is opened, the gripping arms move inward, allowing the stone to be clamped. The stone can then be lifted and moved to the desired destination.	

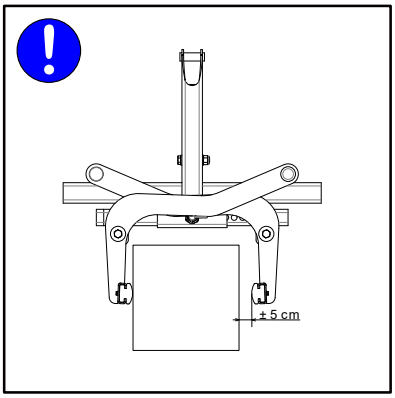
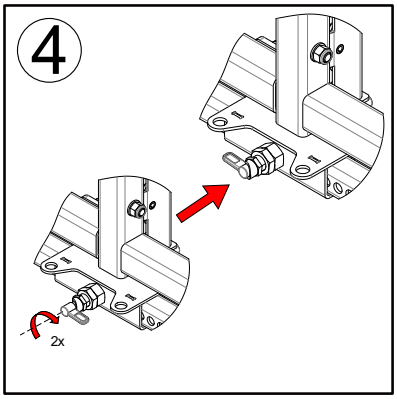
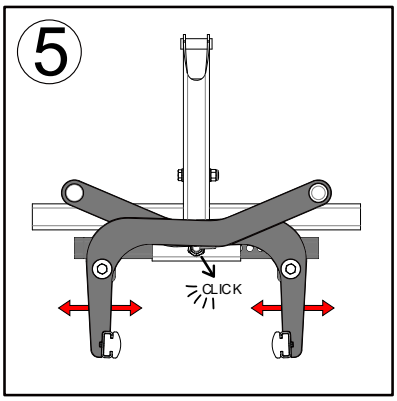
Warning: Once the automatic switch is open and a stone is clamped, avoid jerking movements. Jerky lifting or lowering and driving quickly over uneven terrain is prohibited!

5.2. Setting the Device

Before lifting and moving a stone, the correct gripping range must be set..

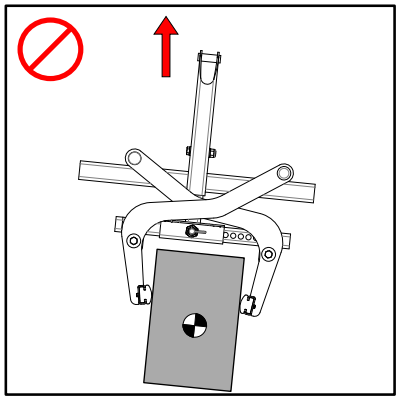
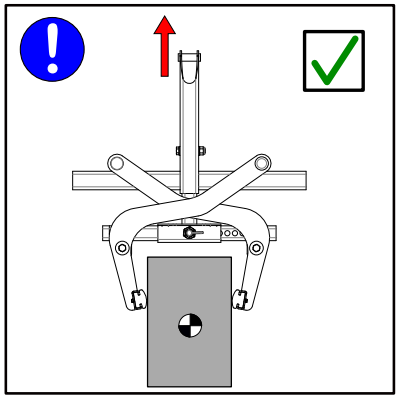
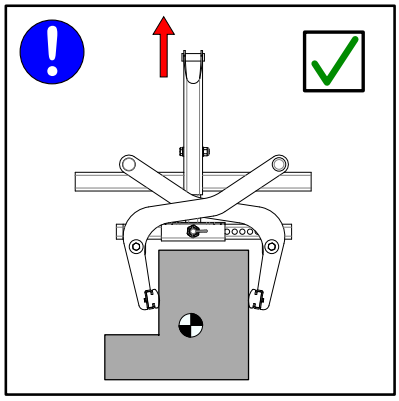
Be careful when adjusting the gripping range to avoid injury.

1. Lift the AL800-UNI off the ground. **Note**: Do not adjust the gripping range on both sides simultaneously	
2. Pull out the locking pin, turn it 180°, and secure it in the notch.	
3. Slide the square tube until the gripping range is approximately 5 cm larger than the stone to be gripped.	

• Determine the correct gripping range	
4. Pull the locking pin out again and turn it 180°.	
5. Slide the square tube until the locking pin clicks into the correct opening.	

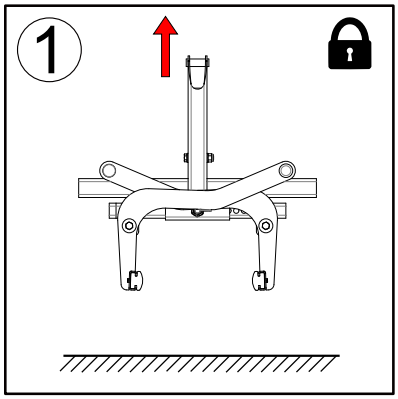
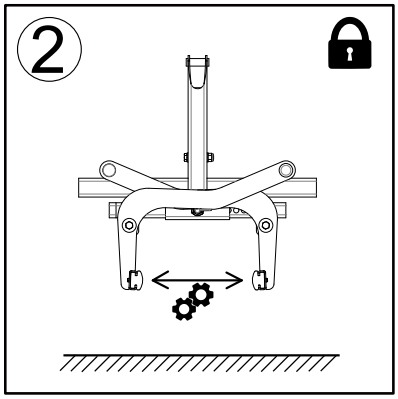
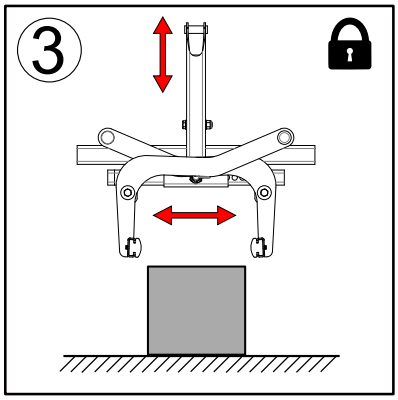
5.3. Setting the Center of Gravity

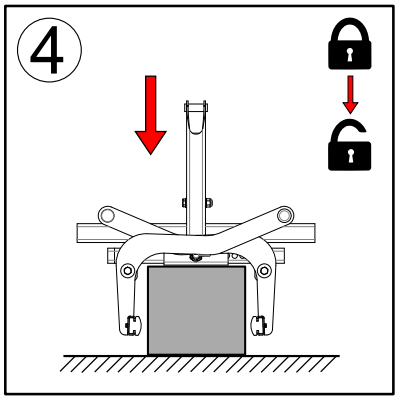
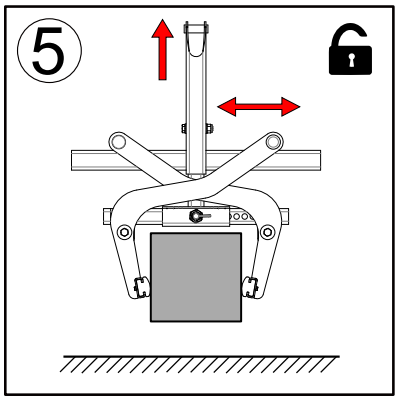
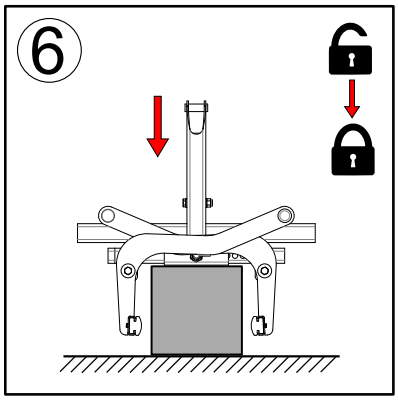
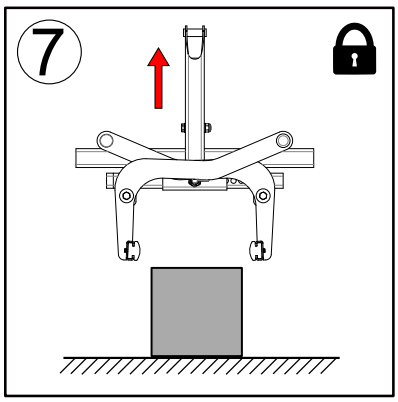
Before lifting and moving a stone, the center of gravity must be determined and correctly set.

Warning: Never lift stones out of the center of gravity. Always lift from the center. Risk of tilting! Risk of injury!	
Ensure that the gripping range is set symmetrically so that the gripped element hangs straight.	
When gripping cornerstones, the gripping range must be set asymmetrically to account for the center of gravity of the cornerstone.	

5.4. Operating the AL800-UNI

Once the AL800-UNI has been set according to the instructions in sections 5.2 and 5.3, it is ready for use. Operate the AL800-UNI as follows.

1. Lift the AL800-UNI straight up from a flat surface. Ensure the automatic switch is blocked.	
2. Due to the function of the automatic switch, the gripping arms will remain open.	
3. Position the machine above the material to be gripped and lower it so that the gripping arms drop along the material.	

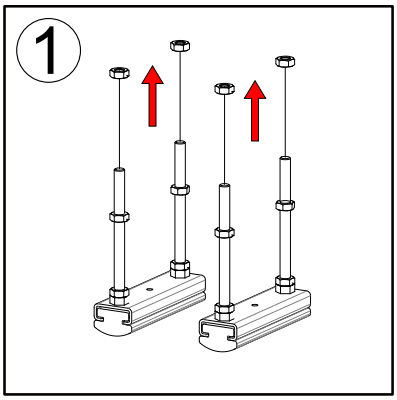
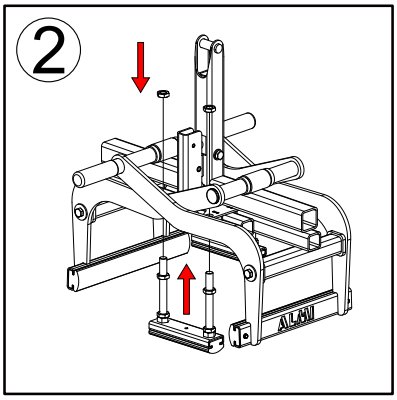
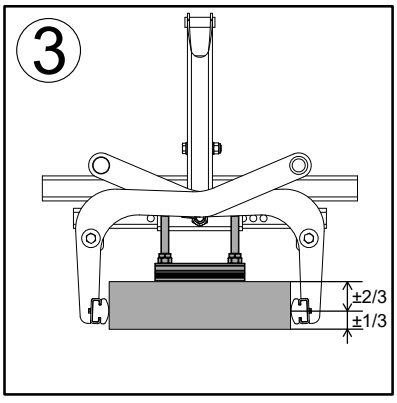
4. As soon as the AL800-UNI is completely placed on the stone, the automatic switch will unlock, and the gripping arms will close during the subsequent lifting.	
5. Lift the AL800-UNI carefully. The gripping arms will close and clamp the material. Move the stone to the desired location.	
6. Lower the AL800-UNI to release the material. The gripping arms will automatically open as the automatic switch re-locks.	
7. The AL800-UNI can then be lifted again, leaving the stone in place. **The automatic switch allows the AL800-UNI to be operated by one person.**	

5.5. Accessory: Height Adjuster

The height adjuster is designed to pick up lower stones or tiles. When the AL800-UNI is used to lift stacked stones, it is recommended to use the height adjuster. This helps set the gripping range for stones of the same size with a fixed height.

Be careful when installing the height adjuster to prevent injury.

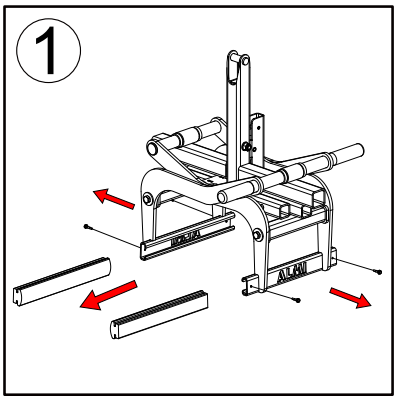
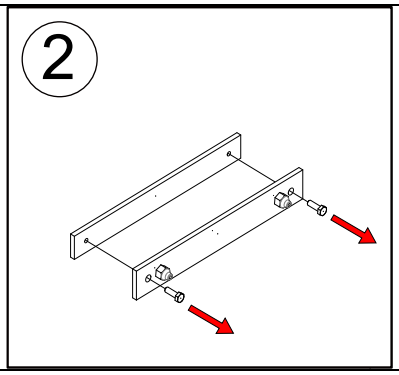
Installing the Height Adjuster

1. Remove the top nuts from the height adjuster.	
2. Mount the adjusters at the desired height on the mounting plate. Ensure that the adjusters are at the same height.	
3. Ensure that the rubber gripping arms grip the lower to middle part of the stone. Aim for a ratio of 1/3 at the bottom and 2/3 at the top, as shown in Figure 3.	

5.6. Accessory: Strip with Widia Points

The strip with Widia points is specially designed for heavier and/or smoother elements. It helps improve the grip on stones.

Be careful when installing the strip with Widia points to avoid injury.

1. Loosen the fastenings of the rubber gripping arms and remove the rubber gripping arms from the AL800-UNI.	
2. Remove the mounting screws from the strip.	
3. Slide the rear part of the strip into the C-profile and position the strip with Widia points in front of the C-profile so that the holes align. Then, tighten the mounting bolts securely	

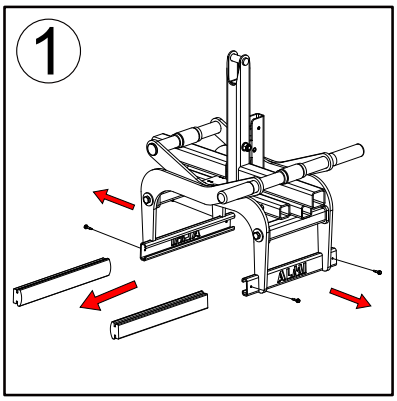
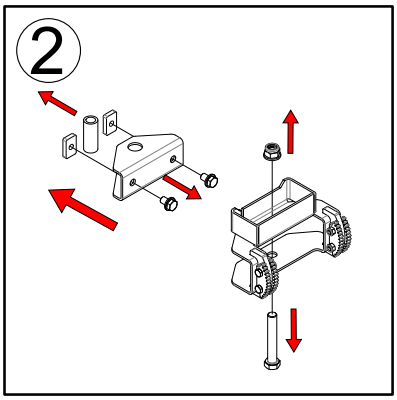
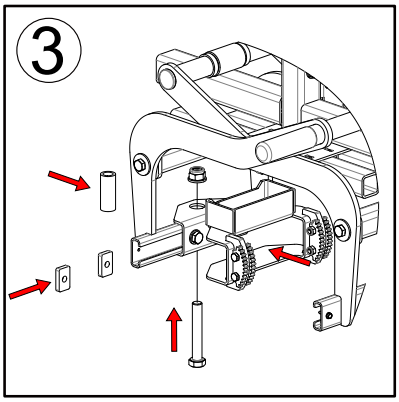
5.7. Accessory: Rock Clamp for rough stones

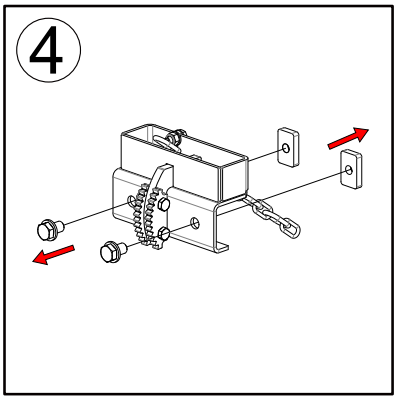
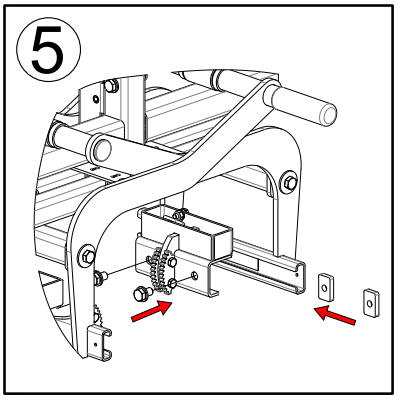
The rock clamp is intended to pick up stones or rocks that have a surface too rough or uneven for the standard configuration of the AL800-UNI.

To move rough-hewn stone blocks with the AL800-UNI, the standard rubber gripping arms must be replaced with steel gripping arms. Follow the steps below to change the gripping arms:

Be careful when installing the rock clamp to avoid injury.

Installing the Rock Clamp

Loosen the fastenings of the rubber gripping arms and remove the rubber gripping arms from the AL800-UNI.	
Remove the supplied nuts from the steel jaws for the left side. **Note**: Part 1 without a chain must be mounted on the left side of the AL800-UNI. This is the arm that is equipped with the handles.	
Place the steel jaw in the mounting points. Ensure it is securely fastened. **Note**: Part 1 without a chain must be mounted on the left side of the AL800-UNI. This is the arm with the handles.	

Remove the supplied nuts from the steel jaws for the right side. **Note**: Part 2 with a chain must be mounted on the right side of the AL800-UNI. This is the arm without the handles.	
Place the steel jaw in the mounting points. Ensure it is securely fastened. **Note**: Part 2 with a chain must be mounted on the right side of the AL800-UNI. This is the arm without the handles.	

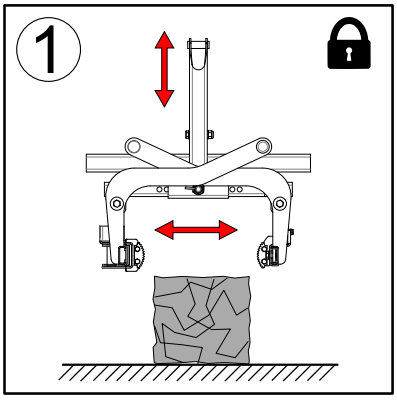
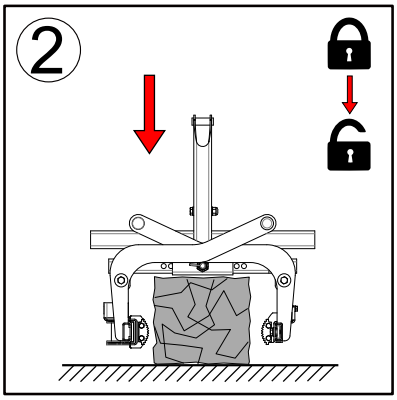
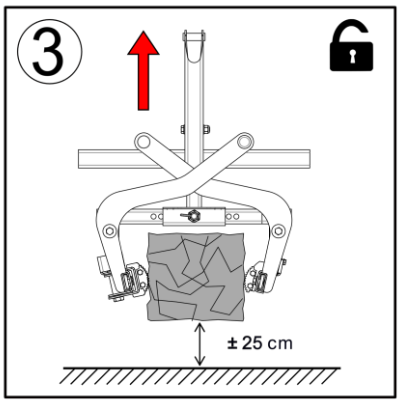
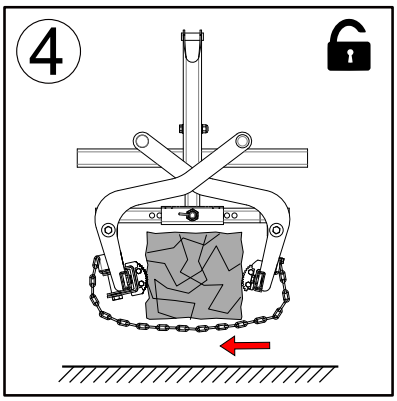
Pre-use Inspection:

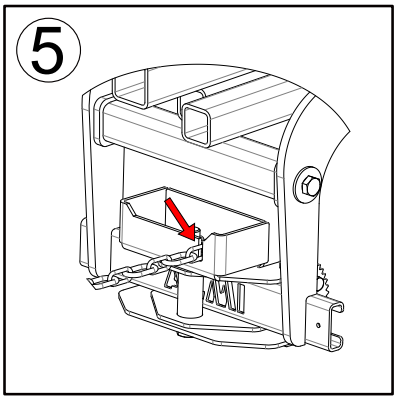
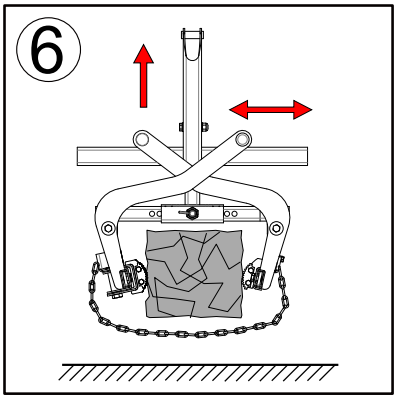
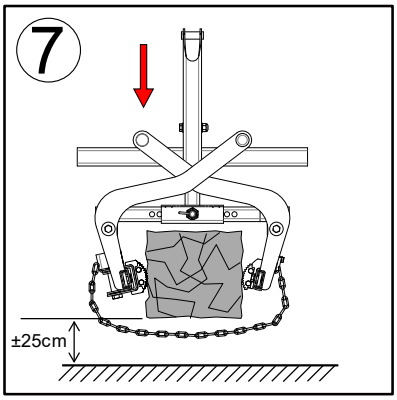
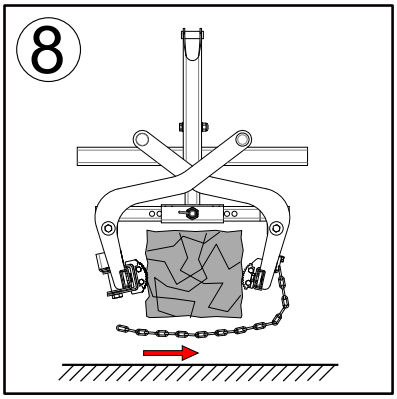
- Before each use, check that the steel gripping arms are securely fastened and show no signs of wear or deformation.
- Ensure that the gripping arms are clean and free from contamination.

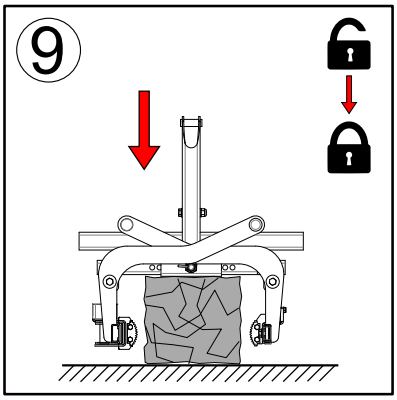
Warning: Worn or damaged jaws must be replaced. Otherwise, the stones or rocks may slip out of the clamp. Risk of injury**!**

5.7.1. Operation including Rock Clamp

Follow the steps below to safely use the AL800-UNI with the Rock Clamp:

1. Place the AL800-UNI above the element to be gripped (e.g., stone blocks).	
2. Lower the AL800-UNI until the automatic switch unlocks, causing the gripping arms to close during the next lift.	
3. Lift the AL800-UNI approximately 25 cm.	
4. Remove the safety chain from the casing and place it under the element to be gripped. **Warning**: Never place limbs under a lifted load. .	

5. Attach the safety chain to the hook on the other side of the AL800-UNI. Ensure that the safety chain is securely fastened around the center of the stone..	
6. Before lifting, check that the steel gripping arms have a firm grip on the stone. Then, carefully lift the AL800-UNI and move the stone to the desired location.	
7. Lower the AL800-UNI to approximately 25 cm above the ground.	
8. Remove the safety chain from the hook and remove it from under the gripped element. **Warning**: Never place limbs under a lifted load.	

9. Lower the AL800-UNI to release the material. The gripping arms will automatically open as the automatic switch re-locks.	

	Never stand under a load or keep limbs under the lifted load. **Risk of injury**!
	Check before lifting that the steel gripping arms have a firm hold on the stone. **Risk of injury!**
	The AL800-UNI may only be operated manually when held by the handgrips.
	The safety chain must never be used to attach the AL800-UNI to a crane or machine.
	Avoid hand contact with the element to be gripped to prevent injuries.

6. Maintenance

This chapter contains information on the maintenance requirements and is intended for the owner, operator, and maintenance technician of the AL800-UNI

6.1. Inspection Requirement

<table>
<tr><td rowspan="2"> </td><td>• The owner must ensure that the device is inspected by a qualified expert at least once a year, and any identified deficiencies must be corrected.</td></tr>
<tr><td>• The relevant legislation in the country of use must be observed and followed.</td></tr>
</table>

6.2. Repairs

<table>
<tr><td> </td><td>• Repairs on the AL800-UNI may only be performed by individuals with the necessary knowledge.</td></tr>
</table>

6.3. Troubleshooting

The table below provides an overview of possible malfunctions, causes, and solutions

Malfunction	Cause	Solution
Insufficient clamping force	Load too heavy	Reduce the load's weight
	Worn clamping rubber	Replace the clamping rubber
	Incorrect gripping range set	Reset the gripping range
Automatic switch not functioning	Automatic switch contaminated	Clean the automatic switch with a high-pressure cleaner
	Defective parts	Replace the defective parts

6.4. Inspection/Maintenance Points

The AL800-UNI must be periodically inspected on the following points.

No.	Description	Time Interval
1	Check all fastening bolts and, if necessary, retighten them according to the valid tightening torque for the bolt strength class	50 hours
2	Check if the automatic switch still functions properly	50 hours
3	Check if the clamping rubber is still in good condition; see also 6.2.1	50 hours
4	If applicable, check the gripping jaws; see also 6.2.1	50 hours
5	Inspection of the lifting tube and all welds/bolts. Have a qualified expert inspect for cracks and wear	Annually

Table 6.4-1

6.5. Replacement Parts

If a repair to the AL800-UNI is necessary, we recommend contacting your dealer. If you carry out repairs yourself, you must ensure that only original parts are used. Only original parts may be used to maintain the warranty. When ordering parts, provide the following information::

- **The type number:**
  The type number is listed on the nameplate.
- **The part number:**
  The part number is listed in the “exploded view” drawing provided in Chapter 9, Appendix 1.

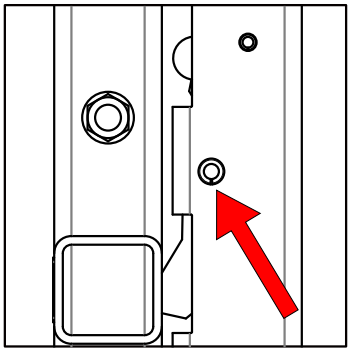
6.5.1. Wear Parts

The AL800-UNI and its accessories have several wear parts that must be replaced in a timely manner to ensure safe and proper use of the AL800-UNI. Check regularly if these wear parts are still in good condition, including:

- Rubber clamping profiles: Inspect for cracksren
- Rock clamp teeth: Inspect the steel gripping jaws for wear and/or damage.

6.5.2. Automatic Switch

When replacing a defective automatic switch, ensure that the open side of the tension pin faces downward. Incorrect assembly may result in improper operation of the automatic switch.



7. Disposal

This chapter provides information on disposing of the AL800-UNI. It is intended for the owner and the maintenance technician of the AL800-UNI .

The AL800-UNI must be disposed of according to the legislation in the country of use. The owner is responsible for the disposal of the AL800-UNI..

8. EC Declaration of Conformity for Machines

(Directive 2006/42/EC Article 6 Paragraph 2 and Annex II Part A)

Manufacturer: ALMI Machinefabriek
Wierdenseweg 82 - 86
7671 JK Vriezenveen
Info@almi.nl
www.almi.nl

Hereby declares that::

The AL800-UNI

With

Type number XXXXXXXXX

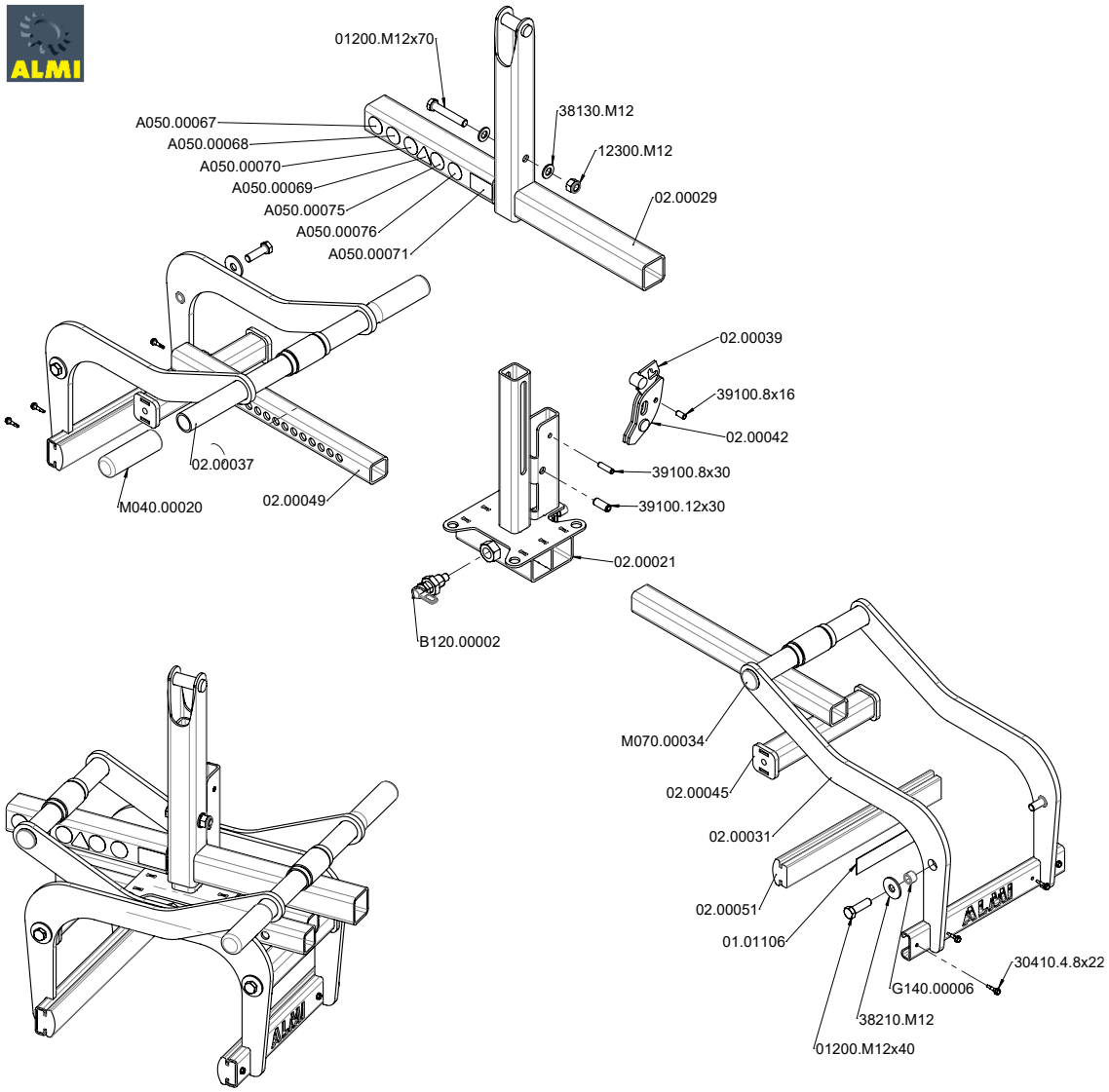
- Is in compliance with the Machinery Directive 2006/42/EC,

The following (parts of) European Standards have been applied:

- NEN-EN-ISO 12100:2010 - Safety of machinery - General principles for design - Risk assessment and risk reduction
- NEN-EN-IEC 60204-1:2006 Safety of machinery - Electrical equipment of machines - Part 1: General requirements.

Issued on 01-03-2026, Vriezenveen, The Netherlands

Signature:

S. Jansen
Directeur.

9. Appendix 1: Exploded View AL800-UNI