

Operating Instructions





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1 General information

1.1 About these instructions

These original operating instructions describe how to safely use the PLATINUM 100 Lifting Waler (code:606920).

1.2 Product description

The PLATINUM 100 Lifting Waler is used to raise upright and move single or multiple connected PLATINUM 100 or MANTO formwork elements with the platform system attached. The maximum load capacity of a single Lifting Waler is 1500 kg.

1.3 Intended use

The PLATINUM 100 Lifting Waler is a lifting accessory. It is used to raise upright single or multiple connected PLATINUM 100 and MANTO formwork elements. A platform can then be attached to the formwork elements. Connected formwork elements have to be securely attached to one another as described in the formwork system user guide.

The PLATINUM 100 Lifting Waler cannot always be attached to horizontal formwork elements. The combinations that are possible will be stated explicitly in these operating instructions.

PLATINUM 100 Lifting Walers must always be used in pairs. Both of the PLATINUM 100 Lifting Walers must be attached to the RASTO Bracing Tube (code:605595, available separately). The maximum load capacity per Lifting Waler is 1500 kg.

1.4 Other relevant documents

These operating instructions focus particularly on safe operation of the PLATINUM 100 Lifting Waler. Please also observe and comply with the information and instructions contained in the following documents:

- · The user guide for the platform system used
- The user guide for the formwork system used (MANTO or PLATINUM 100)

General information

1.5 Overview



🛱 PLATINUM 100 Lifting Waler

2 Safety guidance

- 1. The contractor may assign only persons properly trained and familiar with the required tasks as described in the risk assessment and the operating instructions to use the lifting accessories. The operating instructions must be readily available at all times!
- 2. Do not stand or walk under suspended loads!
- 3. Do not endanger persons within the swivel range of the crane!
- 4. Wear appropriate personal protective equipment! Protective gloves that comply with EN 388, minimum performance level 1. Safety footwear S3 that complies with EN ISO 20345 (EN 345) and an industrial helmet that complies with EN 397.
- 5. Do not subject the Lifting Waler to weight that exceeds the load-bearing capacity!
- Use the Lifting Walers only in pairs. Brace the two Lifting Walers with a RASTO Bracing Tube (code:605595, available separately) to prevent the sling from exerting diagonal pull!
- 7. Attach the Lifting Walers only to formwork elements that are in serviceable condition!
- 8. Attach formwork elements to the hoisting equipment such that they are symmetrical to their centre of gravity!
- 9. Do not hoist formwork elements with loose items on them.
- 10. Do not hoist loose or tightly strapped horizontally stacked elements!
- 11. Refer to the user guide for the formwork elements to be transported for information on assembly and erection of the formwork elements.
- 12. Before transporting stacked formwork elements, check all connectors and connections between the elements! Verify that the number of connectors is correct!
- 13. When lifting the formwork into place, secure the formwork elements to prevent uncontrolled motion!
- 14. The points at which the Lifting Walers are attached to the formwork elements have to be free of dirt and concrete and be undamaged!
- 15. Lift, transport and set down loads in a manner that prevents them from unintentionally tipping over, falling apart or slipping!
- 16. Do not move loads when the wind speed is greater than 15 m/s or 54 km/h (Bft 7)! The load must be able to be transported safely!
- 17. Lift, transport and set down loads such that the Lifting Waler is not damaged.
- 18. Do not attach the crane hook directly to the suspension link on the Lifting Waler! Use only suitable slings attached to the integrated suspension link on the Lifting Waler to hoist it!

Safety guidance

- 19. The sling hook must move freely in the Lifting Waler suspension link!
- 20. Do not detach the Lifting Walers from the formwork elements until the formwork is properly secured to prevent it from overturning!
- 21. The angle of the slings on the crane hook may not exceed 60°. Do not knot steel wires and steel chains. Untangle twisted chains before attaching them!
- 22. Visually inspect the Lifting Walers before each use and during operation, checking for faults such as deformation, cracks, breaks, incomplete labelling, etc.
- 23. Store the Lifting Walers such that they are protected from weather conditions and aggressive substances.
- 24. The contractor is responsible for ensuring that a Lifting Waler with defects that could in any way affect safety is not used!
- 25. The contractor is responsible for having repairs to lifting accessories performed only by the manufacturer. Use only original spare parts!
- 26. The contractor must ensure that, before operation begins, the lifting accessory has been inspected by a qualified person and that no deficiencies have been found!
- 27. The contractor is responsible for having the lifting accessory inspected by a qualified person at least once a year!
- 28. When damage or other extraordinary circumstances that could affect the SWL have occurred, the contractor is responsible for having the lifting accessory inspected by a qualified person!

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2.1 Conventions in this user guide

2.1.1 Warnings and notes

DANGER	Danger! Danger indicates a hazardous situation that, if not avoided, will cause death or serious injury.
	Warning! WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Caution! Caution indicates a hazardous situation that, if not avoided, can cause minor or moderate injury.
NOTE	Note! Note indicates a hazard that can cause property damage.
0	This note indicates that an additional inspection is required.
-;0;-	This note shares practical experience with the user, e.g. how to perform a task more easily or quickly.
	This note indicates particularly important information, e.g. that a requirement has to be fulfilled.
	This symbol indicates that additional information from other documents is required. These documents could be user guides or operating instructions for other products.

2.1.2 Instructions

In this user guide instructions are always identified with the word Step, e.g.

- **Step 1** Insert the locking bolt into the bore from the outside.
- **Step 2** Secure the pin with the spring cotter pin.

3 Before use

Perform a functional check before every use. Also check the ID plate and inspection tag.

3.1 Functional check

Before every use of the Lifting Waler, check the following features:

- The locking mechanism should work smoothly and close easily with the locking bolt.
- The Lifting Waler should hook easily to the formwork element, without exerting force.
- The two securing pins in the bolt unit can be inserted into the holes in the H-rib of the formwork element without exerting force.
- The upper bracket grasps over the upper profile and the form sheet on the formwork element.
- There is one spring pin on each securing pin on the locking mechanism and the bolt unit. Both securing pins are secured with their respective spring pins.
- The lynch pin on the bracket for the RASTO Bracing Tube is in place and can be secured in the RASTO Bracing Tube without exerting force.

If for whatever reason one or more of these features cannot be checked as described here, the Lifting Waler must be inspected and repaired by the manufacturer or an authorised agent.

3.2 Checking ID plate and inspection tag

Before every use of the Lifting Waler, check that the ID plate and the inspection tag are in place and legible. If the ID plate or inspection tag is missing or illegible, the Lifting Waler may not be used.

The Lifting Waler may be operated only if it has been inspected within the last year.



ID plate missing or illegible!

The PLATINUM 100 Lifting Waler may not be used if the ID plate is missing or illegible. The manufacturer or an authorised agent must issue a new plate.

Inspection tag missing or illegible!

The PLATINUM 100 may not be used if the inspection tag is missing or illegible. The manufacturer or a qualified person must then inspect the equipment and issue a new tag. This applies only to HÜNNEBECK rental equipment pursuant to test certification as specified by DGUV (German statutory accident insurance regulations) 100-500*.

The German ordinance on industrial safety and health (Betr-SichV) applies to the use of equipment that is not rented.

Comply with prescribed area of application!

* Test certification as specified by DGUV applies!



4 Attaching Lifting Waler

The Lifting Waler can be attached to vertical formwork elements as well as to horizontal formwork elements. Always attach Lifting Walers to formwork elements in pairs. Comply with the following when installing the Lifting Walers:

- Always attach the Lifting Walers as close as possible to a vertical profile on the formwork element, spacing them no more than 300 mm away from the profile; refer to the illustration on page 11.
- Attach the Lifting Devices as far apart from one another as possible. Do not exceed the maximum angle of the sling on the crane hook!
- Position the Lifting Walers such that the centre of gravity of the load is centred between the two Lifting Walers.

	Formwork elements can drop!		
	If the Lifting Waler is used without bracing, the formwork ele-		
	ments can loosen and fall off!		
	This can cause personal injury or death!		
	Always brace the Lifting Walers with a RASTO Bracing Tube		
	(code:605595, available separately) to prevent the sling from		
	exerting diagonal pull (Refer to section 4.3)!		
	Use the PLATINUM 100 Lifting Walers only to transport form-		
-`Ċ´-	work elements with a platform system attached. Use a trans-		
\ \ \	port hook suitable for the formwork system to transport form-		
	work elements without a platform system.		
Γ			
1	For a clearer view, the following illustrations do not show the		
-Ω-	platform system! However, all of the tasks shown here can be		
	done with the platform system attached.		

🛱 PLATINUM 100 Lifting Waler



4.1 Attaching Lifting Waler to vertical formwork elements

The PLATINUM 100 Lifting Waler can be used to raise upright and move PLATINUM 100 formwork elements as well as MANTO formwork elements. Because the profile spacing on PLATINUM 100 and MANTO formwork elements is not the same, the bolt unit on the Lifting Waler has to be attached to the required position. The respective positions are indicated on the Lifting Waler by **P** for PLATINUM 100 and **M** for MANTO.



Before the Lifting Waler can be attached to a formwork element, ensure that the formwork element is about 50 mm off the ground (e.g. place the formwork element on timber beams). Once the Lifting Walers have been attached, they have to be braced with the RASTO Bracing Tube (code:605595, available separately).



Formwork element can fall over!

If the bolt unit is not in the right position for the formwork type used, the formwork element can fall, seriously injuring persons on the ground! Always put the bolt unit in the proper position for the formwork type being used! Always check that the Lifting Waler is attached properly!

PLATINUM 100 Lifting Waler

4.1.1 Attaching Lifting Waler to PLATINUM 100 formwork elements

Follow these steps to attach a Lifting Waler to PLATINUM 100 formwork elements. If the bolt unit is already in position \mathbf{P} , proceed with step 3.

Step 1 Pull the securing pin Ø 26 and the spring pin out of the bolt unit.



Step 2 Insert the bolt unit into the upper position P and secure it with the securing pin Ø 26. Secure the securing pin with the spring pin.



Attaching Lifting Waler

Step 3 Pull the securing pin Ø 26 and the spring pin out of the locking mechanism.



🛱 PLATINUM 100 Lifting Waler

Step 4 Open the locking mechanism.



Attaching Lifting Waler

Step 5 Hang the Lifting Waler in a suitable place on the formwork element. The upper bracket on the Lifting Waler grasps over the form sheet. The bolt unit securing pins are fixed in the holes in the H-rib.



H PLATINUM 100 Lifting Waler

Step 6 Close the locking mechanism and insert the securing pin Ø 26. Secure the securing pin with the spring pin.



0	The bolt unit securing pins have to be completely submerged in the holes in the formwork element H-rib! The bracket has to rest securely against the top edge profile of the formwork ele- ment! Otherwise the bolt unit may not be attached as it should be for the respective type of formwork!
	If the securing pin cannot be easily inserted into the locking mechanism, there may be dirt on the top edge profile of the formwork. Remove the dirt. Do not apply force to insert the securing pin!

4.1.2 Attaching to MANTO formwork elements

Follow these steps to attach a Lifting Waler to MANTO formwork elements. If the bolt unit is already in position \mathbf{M} , proceed with step 3.

Step 1 Pull the securing pin Ø 26 and the spring pin out of the bolt unit.



Step 2 Insert the bolt unit into the lower position M and secure it with the securing pin Ø 26. Secure the securing pin with the spring pin.



H PLATINUM 100 Lifting Waler

Step 3 Pull the securing pin Ø 26 and the spring pin out of the locking mechanism.



Step 4 Open the locking mechanism.



Attaching Lifting Waler

Step 5 Hang the Lifting Waler in a suitable place on the formwork element. The upper bracket on the Lifting Waler grasps over the form sheet. The bolt unit securing pins are fixed in the holes in the H-rib.



Step 6 Close the locking mechanism and insert the securing pin Ø 26. Secure the securing pin with the spring pin.



The bolt unit securing pins have to be completely submerged in the holes in the formwork element H-rib! The bracket has to rest securely against the top edge profile of the formwork element! Otherwise the bolt unit may not be attached as it should be for the respective type of formwork!



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If the securing pin cannot be easily inserted into the locking mechanism, there may be dirt on the top edge profile of the formwork. Remove the dirt. Do not apply force to insert the securing pin!

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4.2 Attaching Lifting Waler to horizontal formwork elements

When attaching the Lifting Waler to horizontal formwork elements, it always has to be positioned such that it is above an H-rib of the formwork. A Waler Bolt D20 (code:420000) and a Spring Pin 4 (code:173776) are needed to secure it. Installation is the same for PLATINUM 100 and MANTO formwork elements. With both systems, the bolt unit can be attached to position \mathbf{P} as well as to position \mathbf{M} .



The PLATINIM 100 Lifting Waler cannot be attached to every horizontal MANTO or PLATINUM 100 formwork element. The bolt unit has to be turned for attachment to some formwork elements (Refer to section 4.2.1). The Lifting Waler cannot be attached to some horizontal formwork elements. The following tables show the possible combinations.

MANTO G2/G3

Panel width	yes/no/turned ¹⁾
2400	yes
1200	yes
1050	yes
900	yes
750 (also MP)	yes
700	yes
650	turned
600	turned
550	no
450	no
300	no

MANTO G3M

Panel width	yes/no/turned ¹⁾
2400	turned
1200	turned
900	no
600	no

PLATINUM 100

Panel width	3600	3000	1200	900	600
2400	turned	turned	turned	turned	turned
1200	turned	turned	turned	turned	turned
VZ 105	no	no	no	no	no
900	yes	yes	yes	no	no
750	yes	yes	yes	no	no
600	yes	yes	yes	no	no
450	no	no	no	no	no

¹) Bolt unit turned

4.2.1 Turning bolt unit

The bolt unit on the Lifting Waler has to be turned around to be able to attach it to some MANTO and PLATINUM 100 panels. The bolts then face the locking mechanism.

Step 1 Pull the securing pin Ø 26 and the spring pin out of the bolt unit.



Step 2Pull off the bolt unit (1), turn it around (2), put it back on and fasten it with the
securing pin Ø 26 with spring pin (3). Either hole (P or M) can be used.



PLATINUM 100 Lifting Waler

4.2.2 Attaching Lifting Waler

Step 3 Pull the securing pin Ø 26 and the spring pin out of the locking mechanism.



Step 4 Open the locking mechanism.



Attaching Lifting Waler

Step 5 Hang the Lifting Waler on the formwork element such that the Lifting Waler rests above an H-rib. The upper bracket on the Lifting Waler grasps over the form sheet.



Step 6 Close the locking mechanism and insert the securing pin Ø 26. Secure the securing pin with the spring pin.



PLATINUM 100 Lifting Waler

Step 7 Attach the Lifting Waler to the H-rib with a Waler Bolt D20. Lock the Waler Bolt D20 into place with the spring pin.



4.3 Bracing Lifting Waler

Once the Lifting Walers have been attached, they have to be aligned parallel to one another and then braced with the RASTO Bracing Tube (code:605595). There is a half coupler on each of the Lifting Walers.

Formwork elements can drop!
If the Lifting Walers are used without bracing, the formwork
elements can loosen and fall off!
This can cause personal injury or death!
Always use the RASTO Bracing Tube (code:605595) to brace
the Lifting Walers!

NOTE	Do not apply diagonal force to the Lifting Walers!
NOTE	Diagonal force would bend the Lifting Walers or damage
	formwork elements. Always use the RASTO Bracing Tube
	(code:605595) to brace the Lifting Walers! This will prevent
	damage to the components.

- **Step 1** Align the Lifting Walers perpendicular to the formwork element.
- Step 2 Remove the lynch pin from the bracket for the bracing tube on both Lifting Walers.



Step 3 Place the bracing tube in both brackets and secure with the lynch pins.

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5 Raising formwork elements upright

Before the formwork elements can be raised upright or moved, the Lifting Walers have to be attached to the crane. There is a suspension link at the top of each Lifting Waler. Use a suitable sling to connect the suspension link to the crane.



Raising formwork elements upright





Attach a guiding rope to the formwork elements before lifting them. This allows the formwork elements to be guided properly.

Step 1 Connect the Lifting Walers' suspension links to the crane. Use a suitable sling.



- **Step 2** Carefully raise the formwork element upright by crane. Watch the centre of gravity.
- **Step 3** Secure the formwork element to prevent it from overturning.

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6 Detaching Lifting Waler

Once the formwork elements have been raised upright or moved, the Lifting Walers can be detached. When lowering both Lifting Walers with the crane, the RASTO Bracing Tube has to remain in place. When lowering the Lifting Walers manually, detach the RASTO Bracing Tube first. Otherwise the assembly made up of Lifting Walers and RASTO Bracing Tube is too heavy.

Risk of falling!
If the Lifting Walers are detached from an unsafe position, there
is a risk of falling and injury! Always stand in a safe place when
detaching the Lifting Walers! Do not climb up the formwork
elements!

- **Step 1** Detach the RASTO Bracing Tube if necessary.
- **Step 2** Pull the securing pin Ø 26 and the spring pin out of the locking mechanism.



Detaching Lifting Waler

Step 3 Open the locking mechanism. Insert the securing pin again and lock it with the spring pin.



Step 4 Lift the Lifting Walers up and off of the formwork element.

PLATINUM 100 Lifting Waler

7 Examples of applications

The following illustrations show examples of joined elements that can be raised upright using pairs of Lifting Walers.

7.1 Example: Stacked PLATINUM 100 formwork elements (240/300)

With platforms on two levels, total weight approx. 2800 kg



7.2 Example: Stacked MANTO formwork elements (120/270)

With platforms on three levels, total weight approx. 2150 kg



8 Bracing formwork on form sheet side

The Quick-Action Strut Connector can be used to attach Alignment Struts to the Lifting Walers and brace the formwork on the form sheet side.



Formwork can overturn!
Wind can cause the formwork to shift at the base or to lift off
and tip over.
This can cause personal injury or death!
Secure the base of the formwork to prevent slipping and uplift!

H PLATINUM 100 Lifting Waler



8.2.1 RASTO Quick-Action Strut Connector (code:607205)

- 1 Drop latch with red mark
- 2 Nut
- 3 Claw
- 4 Clamp

Bracing formwork on form sheet side

8.2.2 Bracing formwork

Alignment Strut can drop!
If the Alignment Strut is not locked to the Quick-Action Strut
Connector properly, the Alignment Strut can fall off.
This can cause personal injury or death!
Jerk the Alignment Strut after attaching it to be sure that it is
correctly locked into place.

- **Step 1** Release the nut on the Quick-Action Strut Connector enough that the claws fit over the Lifting Waler.
- Step 2 Slide the recessed grip of the Quick-Action Strut Connector onto the Lifting Waler.



H PLATINUM 100 Lifting Waler

Step 3 Tighten the nut on the Quick-Action Strut Connector. The claws should be in the recesses of the recessed grip.



Step 4Press up the drop latch on the Quick-Action Strut Connector with the retaining
bolt on the Alignment Strut, and press the Alignment Strut against the Quick-
Action Strut Connector. The Alignment Strut clicks into place and the drop latch
closes. The red mark on the drop latch is no longer visible.



- **Step 5** Jerk the Alignment Strut to be sure that it is locked properly into the Quick-Action Strut Connector.
- **Step 6** Secure the Alignment Strut to the ground.

Technical data

9 Technical data

Length:	1678 mm
Width:	165 mm
Height:	302 mm
Weight:	28.00 kg
Maximum load-bearing capacity per Lift- ing Waler:	1500 kg

10 Inspection instructions

10.1 Area of application

The German ordinance on industrial safety and health (BetrSichV), §3 sec. 3 and §10 applies to the type, scope and intervals of mandatory inspections as well as to the requirements pertaining to the persons tasked with performing the inspections.

The test certificate items stated here serve as a guideline for inspecting equipment before it is used for the first time and for regular inspections of the PLATINUM 100 Lifting Waler.

10.2 Purpose

Inspecting the Lifting Waler is intended to ensure operating and functional safety of the equipment. The inspections and tests are performed to systematically detect and remedy faults relevant to safety.

Inspections should be performed at regular intervals, occurring at least once a year. If the operating conditions require otherwise, inspections can be performed more frequently. This applies e.g. when the equipment is used very frequently, when there is excessive wear or under special operating conditions such as in a corrosive environment.

10.3 Responsibility

The user is responsible for scheduling regular safety inspections of the Lifting Waler. Safety inspections of this equipment should be performed only by qualified persons (qualified person as specified by DGUV (German statutory accident insurance regulations) regulation 54, §23).

🛱 PLATINUM 100 Lifting Waler



11 Test certificate for PLATINUM 100 Lifting Waler

Part code:	606920	
Serial number:		
Year of manufacture:		
Functional check pursuant to section 3.1 passed:		
Weld seams visible, no external cracks or damage detectable:		
No deformation:		
Securing pins in place and attached with wire cable / spring pins:		
No corrosion damage that could affect functioning or safety:		
ID plate in place and legible:		
Regular testing documented by inspection tag with month/year:		
Data bag containing operating instructions		
Lifting Waler free of concrete residue:		
Clear opening of lifting eye (dimension a) 75 \pm 4.0 mm:		
Distance between main profile and bracket (dimension b) 142.5 \pm 1 mm:		
Distance between closed locking mechanism and upper bracket (dimension c) 64 ± 2 mm:		
Space between the insides of the bolt unit securing pins (dimension d) 81.1 \pm 1 mm:		
Repairs may be made only by the manufacturer, and only original spare parts may be used!		

The German trade association dictates only visual inspection.

Date:

Inspector:

PLATINUM 100 Lifting Waler

EU-Konformitätserklärung



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erklärt hiermit, dass das nachfolgende Produkt aufgrund seiner Bauart und in der von HÜNNEBECK in Verkehr gebrachten Ausführung allen einschlägigen Bestimmungen der nachfolgend aufgeführten Richtlinien und harmonisierten Normen entspricht. Bei einer Änderung des Produkts ohne unsere Zustimmung verliert diese Erklärung ihre Gültigkeit.

Produktbezeichnung

PLATINUM 100 Aufrichtriegel

Artikelnummer

606920

Produktbeschreibung

Lastaufnahmemittel zum Aufrichten und Versetzen von PLATINUM 100 und MANTO Schalelementen mit daran montiertem Bühnensystem.

Richtlinien

2006/42/EG (Maschinenrichtlinie)

Harmonisierte Normen

- DIN EN 1677-1:2009-03 und 1677-4:2009-03
- DIN EN ISO 12100:2010
- DIN EN 13155:2003+A2:2009
- DIN EN ISO 13857:2008

Ratingen, den 17.08.2020 HÜNNEBECK GmbH

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The illustrations contained in this document reflect normal operation at a construction site and are not always correct in regard to safety issues.

Last modified October 2020 Keep for later use!







