

***Manual for lifting tool
for workpieces
suspended under the ceiling.***



MINLIFT ApS

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Technical data

Holder for lifting tool

Machine type	Holder for lifting column Baumeister & Schack Hexalift V3
Year of manufacture	2024
Dimensions	Width : 318 mm Depth : 111 mm Height : 1100 mm
Weight	approx. 15 kg

Lifting column

Machine type	Løftesøjle Baumeister & Schack Hexalift V3
Marking	CE
Year of manufacture	2024
Dimensions	Width : 240 mm Depth : 60 mm Height : 680 mm Stroke length: 500 mm
Speed	approx. 9 mm/sec (unloaded) approx. 5 mm/sec (full load)
Noise	< 70db (A)
Power	Special battery 24 V DC, 6.9 Ah
WLL	200 kg
Weight	approx. 20 kg (incl. bracket)

Bracket

Machine type	One-hand cross and holding bracket with combined X- and Y axis
Year of manufacture	2024
WLL	200 kg
Adjustment	+/- 11 cm

Battery

Battery type	Li-Ion
Voltage	24 V
Protection	Batteriet har integreret beskyttelse mod: <ol style="list-style-type: none"> 1. Overvoltage 2. Overcharging 3. Overheating

EC DECLARATION OF CONFORMITY

Machinery Directive 2006/42/EC Annex II Part A)

Manufacturer

Company : MIN Lift ApS
 Address: Lykkebrovej 12
 DK-4672 Klippinge
 Telephone: +45-20128737

Hereby declares that

Lifting tool for workpieces for mounting under the ceiling

Type: Hexalift V3 with mounted cross and holding bracket

No.: all numbers from 1 Sept. 2024

complies with the provisions of the machinery Directive (Directive 2006/42/EC) as amended, and with national legislation replacing this directive;

complies with the following other Community Directives:
 DS/EN 292-1/-2 Basic Concepts, DS/EN 349 Hazard Areas: Protection of the Body,
 DS/EN ISO 12100 Safety of Machinery. General Principles of Design.

It is also declared

that the following (parts of) harmonised standards/national standards implementing these have been applied:

that the following (parts of) national standards/ standards and technical specifications have been applied:

Titel: Director

Name: Morten Ingemann Nielsen

Company : MIN Lift ApS

14. september 2024

Date

Morten Ingemann Nielsen

Signature

EC DECLARATION OF CONFORMITY

Lifting column



**baumeister
& schack**

Einbauerklärung/ Declaration of Conformity

Dokumentationsbevollmächtigter

Document representative

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Produkt/ product Hubsäule/ *lifting column*: **Cleanlift / Hexalift**
Typ/ *type*: **CD240.../CM240.../HD240.../HM240...**

Dies betrifft alle seit dem 01.02.2016 gefertigten Produkte./ *This affects all products produced since 01.02.2016.*

Erklärung/ Declaration :

Das Produkt ist entwickelt, konstruiert und gefertigt in Übereinstimmung mit den folgenden Richtlinien und Normen (oder Teilen daraus). Die speziellen technischen Unterlagen gemäß der Maschinenrichtlinie Anhang VII Teil B wurden erstellt./ *The product is developed, engineered and manufactured according the following directives and harmonized norms (or parts of them). The special technical documentation according to the Machinery Directive Annex VII Part B has been prepared.*

Geltende Richtlinien / *valid directives* :

2006/42/EG:2006 Maschinenrichtlinie/ *machine directive*
Nach Anhang I sind erfüllt/ *According to Annex I are fulfilled* 1.1.5; 1.3.2; 1.3.3; 1.3.4; 1.3.7; 1.3.8; 4.1.2.3; 4.1.3; 4.3.2.
2014/30/EG:2014 EMV-Richtlinie/ *EMC directive*
2014/35/EU:2014 Niederspannungsrichtlinie / *Low Voltage directive*

Angewandte Normen (oder Teile daraus)/ *Realized harmonized norms (or parts of them)*:

DIN EN ISO 12100:2011 Sicherheit von Maschinen — Allgemeine Gestaltungsgrundsätze, Risikobeurteilung und Risikominderung *Safety of machinery - Basic concepts, general principles for design*
EN 61000-6-2:2005/ AC:2005 Elektromagnetische Verträglichkeit (EMV)- Teil 6-2: Fachgrundnormen- Störfestigkeit für Industriebereich/ *Electromagnetic compatibility (EMC) - Part 6-2: Generic standards- Immunity for industrial environments*
EN 61000-6-3:2007/ A1:2011/AC:2012 Elektromagnetische Verträglichkeit (EMV)- Teil 6-3: Fachgrundnormen- Störaussendung für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe/ *Electromagnetic compatibility (EMC) - Part 6-3: Generic standards- Emission standard for residential, commercial and light-industrial environments*

Wir verpflichten uns einzelstaatlichen Stellen auf begründetes Verlangen die speziellen Unterlagen zu der unvollständigen Maschine nach Absprache elektronisch oder in Papierform zu übermitteln. *We undertake to submit to national authorities, on justified request, the special documents relating to the partly complete by electronic or written consent.*

Diese unvollständige Maschine darf erst dann in Betrieb genommen werden, wenn gegebenenfalls festgestellt wurde, dass die Maschine, in die die unvollständige Maschine eingebaut werden soll, den Bestimmungen dieser Richtlinie entspricht. *This partly complete machinery must not be put into operation before if it is found that the completed machinery in which the partly complete machinery shall be installed complies to this directive.*

Name : Jens Baumeister Dipl.-Ing.(FH)
Position : Geschäftsführender Gesellschafter / *Managing Director*

Balingen, den 06.02.2019
Ort und Datum/ *place and date*

Unterschrift/ *signature*

Symbols used

Before you start assembling or using your new lifting tool, it is important, that you read and understand this manual .

3 different symbols may appear in the manual:



A black pointing hand is used to draw attention to **explanatory points** in drawings



A coloured hand is used to draw attention to **important points** in the text.



A warning triangle is used to draw attention to **important safety issues**.

Signs on the machine

Example of signs mounted on the lifter

MINLIFT ApS Lykkebrovej 12 DK-4672 Klippinge Tlf.: +45-20128737			
Machine number	2024/001	Electrical connection:	24 V DC
Type:	Lifting tool for workpieces suspended under the ceiling	Air:	
Year of manufact.	2024	Noise:	< 70 dB(A)
Weight:	35 kg	WLL:	200 kg



The specified weight limit (WLL = 200 kg) is per lifting column.

If you have 2 lifting columns on the platform, you may therefore (theoretically) lift 400 kg.



It is always the lift's platform capacity that determines how much load you can have with you.

If the platform capacity is exceeded, the lift's safety system disengages and the lift cannot move upwards.

Exampel

Platform capacity (see sign on the lift) :	227 kg
2 pcs lifting columns on the platform (2 x 35 kg) :	70 kg
1 man on the platform (85 kg) :	<u>85 kg</u>
For the remainder of the load:	72 kg



See chart on page 21.

Brief description of the machine

Congratulations on your new lifting tool.

You will now find it much easier to install, e.g., ventilation ducts, sprinkler pipes and other long items, that need to be mounted under the ceiling. You will quickly find that the tool not only saves you a lot of time, but also helps you avoid heavy and twisted lifting and hence strain.

The lifting tool can lift up to 200 kg. Two lifting tools can lift up to 400 kg.

The lifting tool consists of a holder that is mounted to the platform railing. The holder must be mounted to both handrail and knee bar. This means the equipment is safe and cannot tip over.



If your lift has **a retractable (Roll Out) extension deck**, you may **not** mount the lifting tool here.



The holder is divided into two - an upper and a lower part. Mount the lifting column in the upper part.

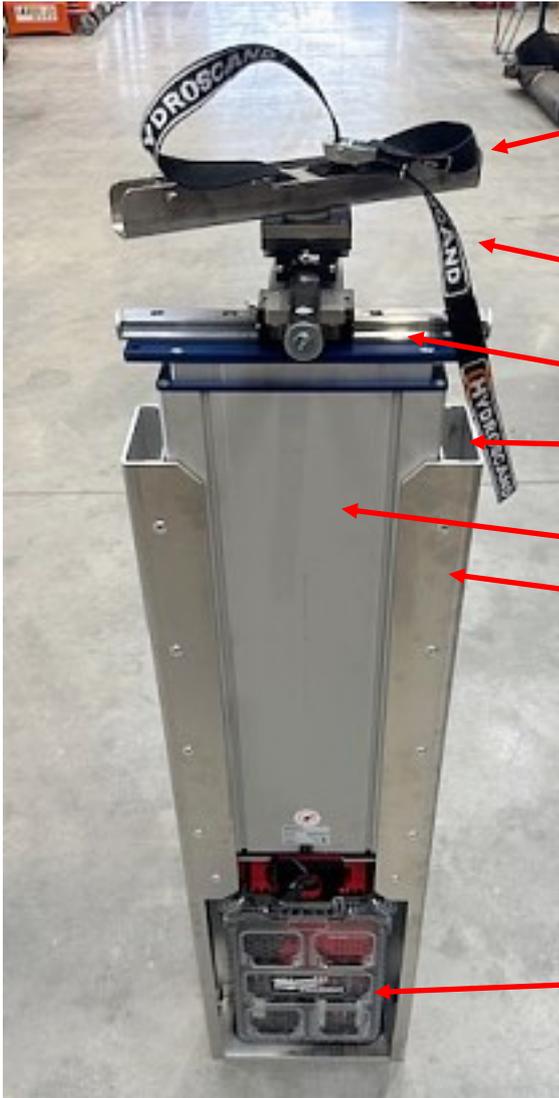
Place the battery, charger, etc., in the lower part. You are now completely independent of a mains connection. The battery normally lasts for a full working day.

Mount the bracket at the top of the lifting column. i.e. the 2 combined ball guides (X and Y axes) and the workpiece holder with load securing straps on the bracket.

With the 2 ball guides, you can adjust the workpiece +/- 11 cm in each axis. The axes can be adjusted either separately or both at the same time.

There are currently 3 different types of workpiece holders, all of which are easily interchangeable (see page 19)

Scope of delivery 1/2



1. U-holder for mounting "workpiece holders" or long holder (see page 18).
The U-holder can be rotated approximately +/- 15°.
2. Lashing strap
3. XY-bracket
4. Compartment for storing additional "workpiece holders"
5. Lifting column
6. Holder (rear mountings)
7. Electronics compartment
(For contents see next page)



8. Up/down remote control.
The cable extends up to 2,8 m.
The remote control is equipped with a hook on the rear so that it can hook onto the holder.

Scope of delivery 2/2



1. Battery 24 V DC, 6.9 Ah (enough for approx. 50 up/down runs at stroke length 50 cm)
2. Batteryholder
3. Control
4. Charger



For more information on the individual parts, see page18

Preparing the lifting tool 1/2

1. Lift the holder onto the lift platform and place it on the long side of the lift where you intend it to be.
2. Mount the holder's mounting to the lift's railing as shown in the picture below. Tighten the nuts.
3. Mount the lifting column into the holder.
4. Press the battery holder's lock button and install the battery in the holder (see picture on page 18).
5. The battery holder's wire is "plugged" into the controller (see picture on page 18).
6. The wire from the lifting column and the wire from the remote control are "plugged" into the controller.
7. Press the power on/off button on the battery.



NOTE: The battery can be charged while it is in the holder,



Preparing the lifting tool 2/2



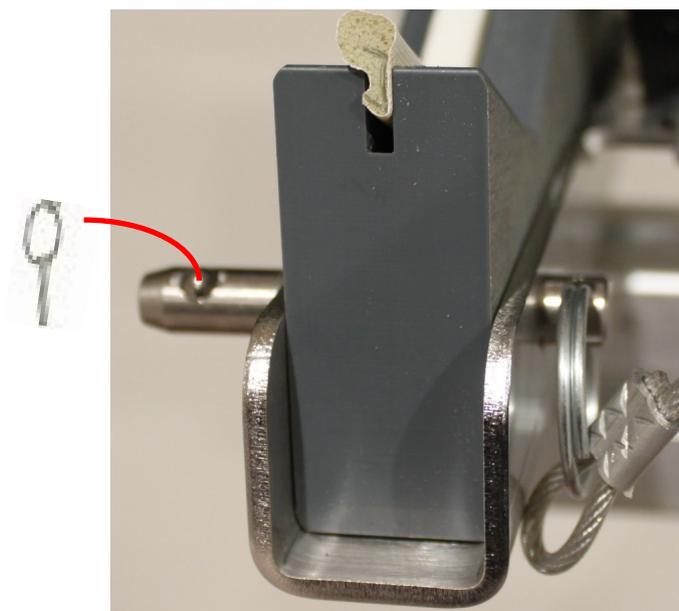
If you are using a (magnetic) line laser, place the supplied holder on the railing of the lift. So far, the holder only fits railings on Skyjack lifts.



Mount the workpiece holder that suits your work.

This picture shows the long workpiece holder, which has been developed especially for the smaller lifts.

For other workpiece holders see page 19.



The workpiece holders are secured in their holder by means of cotter pins.

Remember to secure the cotter pins so that they do not fall out.

Safety precautions



The lift's manual for driving and parking **must be observed**.



Current regulations and work instructions at the workplace **must be complied with**.

Check the equipment before mounting on the platform

1. Check that the battery(-ies) is/are charged.
2. Check that the lifting column (the Z-axis) does not make a noise when it moves up.
3. Check that the bracket's ball guides (X and Y-axes) are running smoothly.
Lubricate them with acidfree oil if necessary.
4. **Check the straps for fastening workpieces.**



They must not be frayed or otherwise damaged.

5. **Check the workpiece holders on the bracket. They must not be damaged or loose.**

Mounting the lifting tool onto the platform



1. When the lifting tool is on the platform, **it must be secured to both the knee bar and the hand-rail via the installed mountings**. See drawing on page 17.

Both mountings **must** be used. They cannot be installed incorrectly.



2. If the platform has a retractable (Roll out) extension deck, **do not** place lifting equipment here. All lifting tools **must be** placed on the **fixed** base of the platform.

Loading a workpiece

1. Check the weight of the item and calculate how much load you can/may take with you. See example calculation on page 7, or the table on the last page.
2. Place the workpiece in the 2 holders so that it is centred.
3. **Secure the workpiece with the 2 mounted straps.**



Mounting a workpiece at the workplace

1. Mount the workpiece in accordance with the regulations.
2. **If you are installing pipes (or similar workpieces), only loosen the straps when the workpiece is fixed (for example, when mounting brackets are closed).**
3. **If you have taken multiple items up with you and have to go further to a new mounting location, secure the remaining workpieces by re-fastening them with the straps and lowering the load before moving on.**



Joint lifting

1. **Do not use the lifting equipment for joint lifting.**

Maintenance

Lifting column: Wipe with a damp cloth, if necessary with a mild and environmentally friendly detergent. If the lifting column starts to make a noise, smells, or does not work, it must be sent back to Min Lift ApS for repair.

XY-bracket: Wipe (blow clean with compressed air if necessary) and lightly lubricate with acid-free oil. Replace the workpiece holders on the XY-bracket if they become defective.

Replace the straps on the XY-bracket if they become defective.

For ordering (and mounting) new straps, see page 20.

Battery: Charge after use.

Recharge the battery if it has not been used for 6 months.

Scrapping and recycling

A lifting tool that can no longer be used must not be disposed of as a complete unit but must be disassembled, sorted and re-cycled in its individual parts, depending on the type of material and in accordance with applicable environmental regulations.

1. The components of the lifting tool must be sorted by type of material and delivered for recycling.
2. The lifting column should be returned for recycling as a single unit.
3. Be aware of local regulations and in case of doubt contact the local environmental authorities.
4. The lifting tool does not contain parts that require special scrapping instructions.

Lifting column with cross bracket



Cross bracket



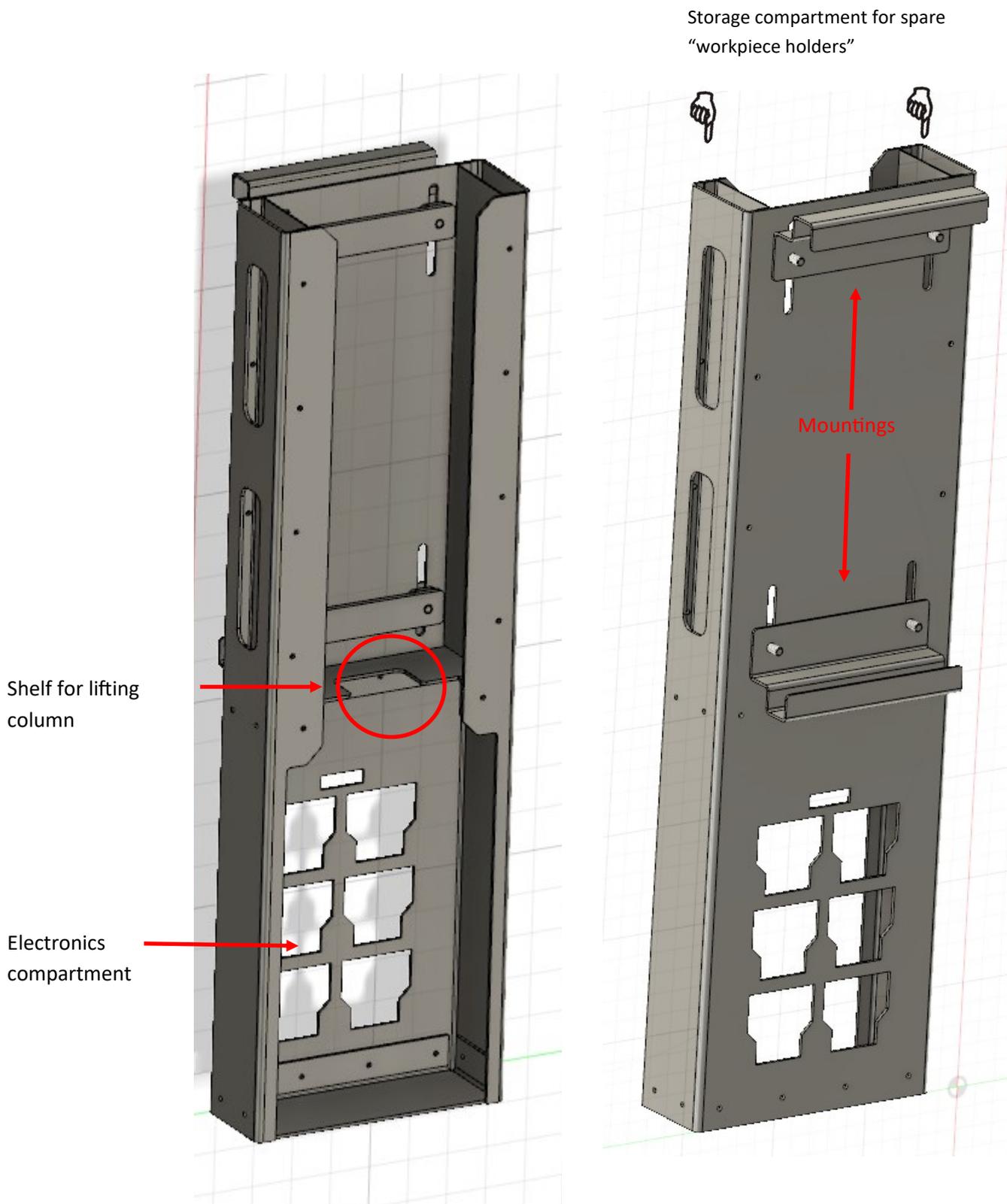
Lifting column



Remote control

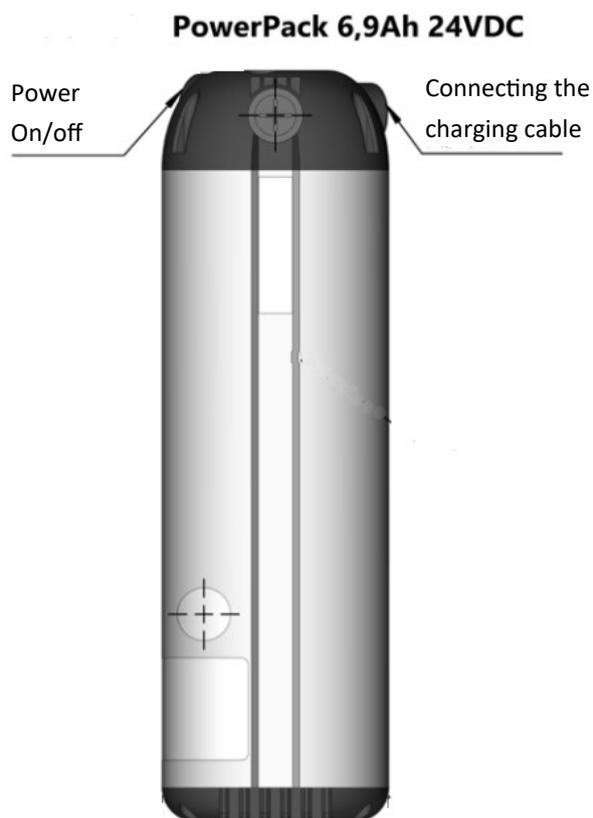
Total weight: approx. 20 kg

Holder for lifting column

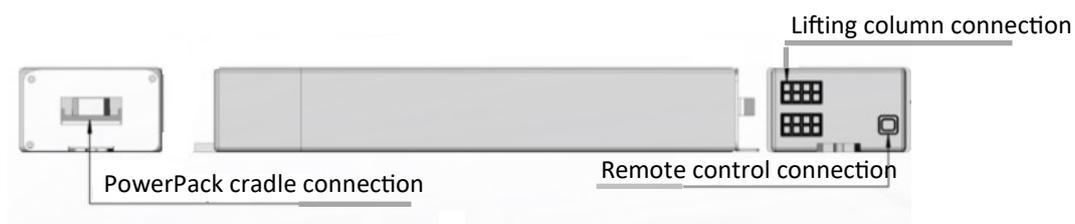


Total weight: approx. 15 kg (incl. battery)

Electronic parts



PowerPack control



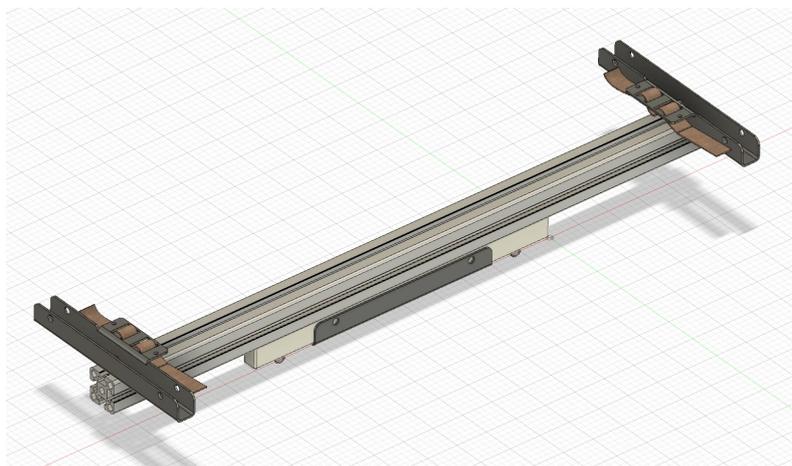
PowerPack charger



Accessories



The picture shows 3 standard "workpiece" holders available.



If you only have a small lift available with only slight lifting capacity, you have the option of purchasing the holder shown above.

By mounting this on a single lifting column, you can still lift and install long workpieces.



To calculate how much load you can take up with you, see the example on page 7 or the chart on page 21.

Spare parts



Spare straps are available for purchase :

Carl Ras: item number 31008865

1,5 mtr x 25 mm.

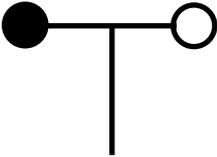
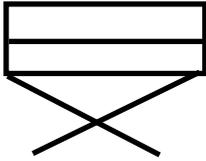


Lashing straps are mounted as shown above.



Always replace the lashing straps in pairs.

Load distribution chart

			(85 kg) 	
0 m/s	159 kg	1	1	39 kg
0 m/s	227 kg	1 2	1 1	107 kg 72 kg
0 m/s	272 kg	1 2 2	1 1 2	152 kg 117 kg 32 kg
0 m/s	318 kg	1 2 2	1 1 2	198 kg 163 kg 78 kg
0 m/s	349 kg	1 2 2	1 1 2	200 kg 194 kg 109 kg
0 m/s	408 kg	1 2 2	1 1 2	200 kg 253 kg 168 kg
0 m/s	454 kg	1 2 2	1 1 2	200 kg 299 kg 214 kg
0 m/s	567 kg	1 2 2	1 1 2	200 kg 400 kg 327 kg