# MRS Quattro



EN - Installation manual

BM22001 Rev. A 2017-01-24



# **English Manual**

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#### Important

This User Manual contains important safety instructions and information regarding the use of the Quattro and accessories.

In this manual, the user is the person being lifted. The assistant is the person operating the hoist.



#### Warning!

This symbol indicates important information related to safety. Follow these instructions carefully.

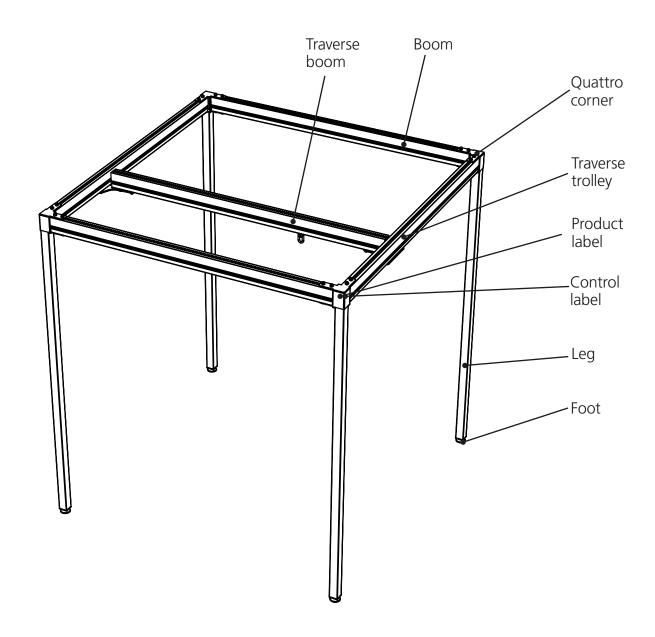


Read User Manual before use! It is important to fully understand the content of the user manual before attempting to use the equipment.

Visit www.etac.com for download of documentation to ensure you have the latest version.

# **MRS Quattro**

#### MRS Quattro components:



## About MRS Quattro

MRS Quattro is a gantry intended for Molift Air and Molift Nomad hoists. The purpose is for lifting and transferring a person from/to bed, floor, chair, wheelchair or toilet with a sling. The MRS Quattro is made of light-weight materials. Traverse ranges from 2 to 3,5 meters and the lifting capacity is 300 kg (661 lbs). It is ideal for hospitals, and institutions, where permanent installations are

not possible or desirable, but can also be used in privates homes. The MRS Quattro should only be used indoor on flat surfaces. Such as Bedroom, bathroom, living room etc.

# General

## Declaration of conformity



The MRS Quattro and related accessories described in this user manual are CE marked in accordance with EU Council Directive 93/42/EEC concerning medical devices, class 1, complies to standard NS-EN ISO 10535:2006.

#### Conditions for Use

Hoisting and transferring a person may contain an element of risk. A risk assessment should be carried out prior to use and only trained personnel should use the equipment as described in the user manual.

#### Modifications and use of components made by other manufacturers.

We recommend only using Molift components and spare parts. Declaration of conformity is not valid and Etac is not responsible for warranty if any modifications are made to the product. Etac shall not be liable for faults or accidents that can occur when using components made by other manufacturers.



Only certified personnel are allowed to perform repairs.



Only suitable trained people should install this equipment. The work contains handling of heavy loads.

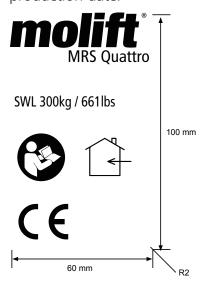
## Warranty

2-year warranty against defects in workmanship and materials of our products. For Terms and conditions, see www.etac.com

#### Product identification

#### Product label

The Product label contain article number and production date.



#### Warning labels and Symbols

Symbols used on the product, explained in more detail:



CE marked



Refer to user manual



Indoor Use only

# **Technical Data**

#### Safe Working Load (SWL)

300 kg (661 lbs)

# Weight of unit

Boom Kg/m: 4,2 kg/m/8,8 lbs/m

Leg with adjustable foot: 8,5 kg/18,7 lbs

Corner: 2,7kg/6,0 lbs

Total weight (Complete unit):

110,95kg (3x3m) 131,55kg (4x4m)

## Available boom lengths (A):

3m or 4m

#### Dimensions:

Width (D): 3,16 - 4,16m

Height (B): 2,33m (2,33-2,38m

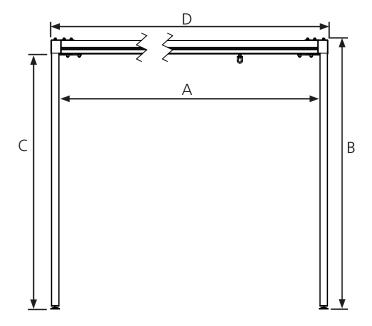
with adjustable foot)
Depth (E): 3,16 - 4,16 m
Max internal space (AxC):
3x3m or 4x4m

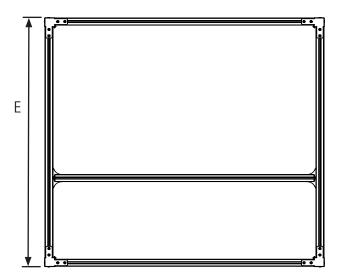
#### Material:

Steel, Anodized Aluminum, Plastic

## **Expected Lifetime:**

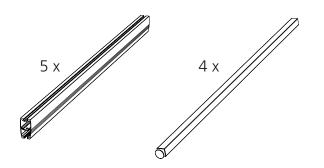
The MRS Quattro has an expected lifetime of 10 years

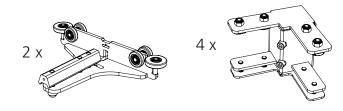


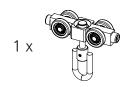


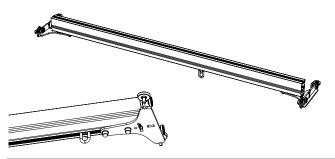
## Supplied parts

Make sure the following parts are included in the package.





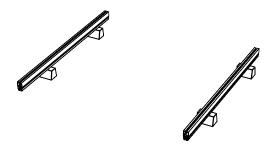




## **Mounting Quattro Frame**

Tip: To facilitate the installation, make 4 support blocks, approximately 150 mm high.

- 1. Make sure you have free space of aprox.. 3x4 meters in the room where the MRS Quattro will be mounted.
- 2. Place the support blocks on the floor.
- 3. Place two MRS Booms on support blocks as picture below shows.



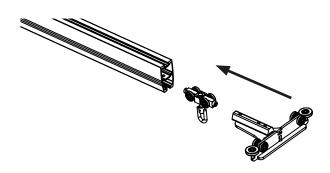


Beware of sharp edges at the ends of the boom.

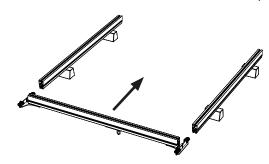
the boom.

# Mounting of Traverse boom

- 1. Lay boom on the floor.
- 2. Insert trolley for the hoist into the boom.
- 3. Mount the traverse trolleys in each end of the traverse boom.
- 4. Tighten the bolts loosely



4. Slide in the Traverse Boom into a mid position.

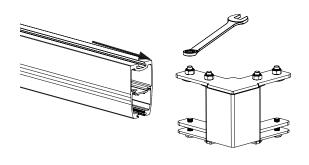




5. Mount two MRS Quattro Corners to each of the other booms.



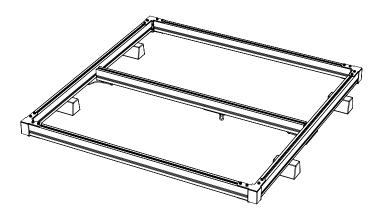
- 6. Attach booms with mounted corners on to the other two boom.
- 7. Tighten all the bolts and nuts with a spanner.



8. Make sure all bolts are properly thightened.



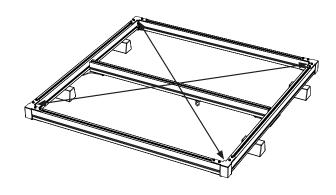
Secure that bolts are thightened properly. Loose bolts may cause collapse of the Quattro when it is raised!



## Tip: Perpendicular frame.

If possible, use a tape measure to check that the Quattro Frame is perpendicular.

- 1. Measure the diagonal length corner-to-corner. The length shall be the same both ways.
- 2. If not; loosen the bolts and adjust.
- 3. When the readings is the same the frame is square (or rectangle).
- 4. Tighten all bolts and nuts.

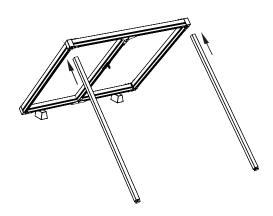




Warning for lifting of heavy loads. Dropping the frame can cause injury.

# Mounting of legs, Ceiling height > 2,4 meter

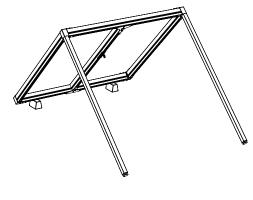
1. Lift the Quattro frame at one side and fit legs in the corners.

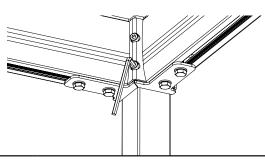


2. Use an Allen key to tighten the bolts for fastening the legs



Note! Secure the boom and trolley from running free. Use a strap or tape.

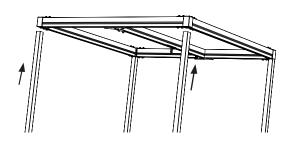






Before raising MRS Quattro, secure that you use rigid supports preventing Quattro from falling during the work.

3. Lift the frame to an upright position and attach legs at the opposite corner

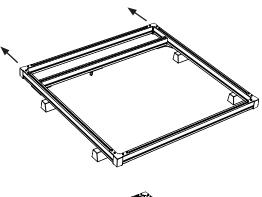


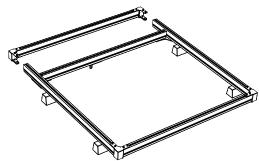


# Mounting of legs, Ceiling height = 2.4 m

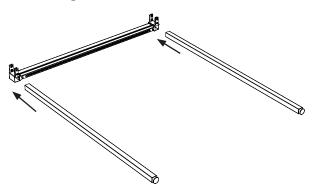
Start from step: Perpendicular frame.

- 1. Detach one boom and keep the corners on.
- 2. Move the traverse boom to a position close the open ends.

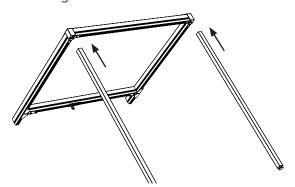


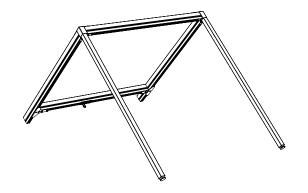


- 3. Secure the traverse boom and trolley from moving before raising the frame.
- 4. Attach legs to boom with corners.



- 5. Raise up the open frame.
- 6. Attach legs to corners.



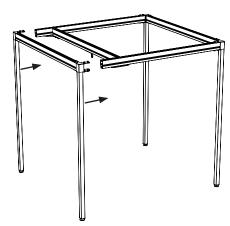


7. Tighten the bolts with an Allen key.



Before raising MRS Quattro, secure that you use rigid supports preventing Quattro from falling during the work and that the boom is secured.

- 8. Rise up the frame with legs to an upright position.
- 9. Attach the boom with legs to the open frame.



- 10. Tighten the bolts and nuts.
- 11. Release the traverse boom.

## Check list before use



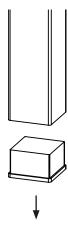
Don't start using MRS Quattro before completing control according to checklist after assembly.

Use this checklist to verify that the MRS Quattro is properly installed and can operate correctly and safely before use.

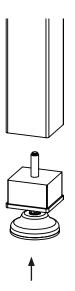
- 1. Make sure all bolts in all corners are properly fastened.
- 2. Make sure all four bolts on boom are propearly fastened.
- 3. Make sure the Quattro is levelled correctly for easy movement of boom and hoist trolley.

## Accessories - adjustable foot

1. Remove the feet from the MRS quattro.



1. Attach the adjustable feet.



2. Adjust the levelling feet for horizontal position of MRS Quattro.



Unscrewing the foot too much can cause the foot to come loose.

# How to use MRS Quattro

# Lifting user

Read the user manual for Molfit Air or Nomad before lifting patient.



Never lift the user higher than necessary to carry out a lift.



Never leave a user unattended in a lifting situation.

## Transport and storage

MRS Quattro can be stored and transported under temperatures between -25 - 70 °C and Relative Humidity between 15 - 93 %.

# **Accessories**

## Battery charger

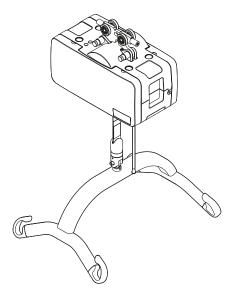
Molift Air or Molift Nomad ceiling hoist is charged through the hand control. The hand control charger can be mounted on the MRS Quattro.



Charger for hand control Molift Nomad/AIR. Art. no.: 1240100

## Molift Air

Molift Air 205 and Molift Air 300 is suitable for use with MRS Quattro.



Molift Air is available with or without propulsion, with 205 or 300 kg SWL.

- Molift Air 205
- Molift Air 300
- Molift Air 205 Propulsion
- Molift Air 300 Propulsion

#### Trolley for Molift Air

MRS Trolley Basic

Art. no.: 2520000 MRS Trolley Propulsion Art. no.: 2500103

#### Molift Nomad

Molift Nomad portable hoist is suitable for use with MRS Quattro.



Molift Nomad is available with 160, 205, 230 or 255 kg SWL.

- Molift Nomad 160 kg SWL
- Molift Nomad 205 kg SWL
- Moilft Nomad 230 kg SWL
- Molift Nomad 255 kg SWL

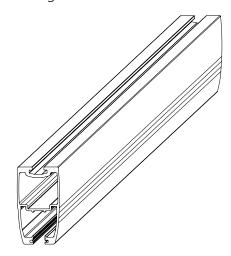
#### **Trolley for Molift Nomad**

Trolley with brake

Art. no.: 1109109

#### Boom

MRS Quattro can be delivered with 2 different boom lengths from 3 - 4 meters.



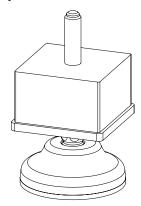
Boom for MRS Quattro:

Art. no.: 1610030 - 3 m Art. no.: 1610035 - 4 m

# Accessories

# Adjustable foot

Adjustable feet are available for MRS Quattro.



Adjustable foot for MRS Quattro Art. no.: 1610200

# In Rail Charging System

Possible to use the in rail charging system with the MRS Quattro. Contact supplier or molift.com for more info.

# Maintenance

## Cleaning and disinfection

Clean on a regular basis. Clean surfaces with a damp cloth using an appropriate pH-neutral detergent. Do not use solvents or strong liquids, this may damage surfaces. Disinfection when needed; use isopropyl alcohol. Avoid abrasive cleaning products.



Make sure not to damage or remove labels when cleaning.

## Reconditioning

MRS Quattro can be re-used. Follow assembly instruction to dismount and re-assembly.

# Recycling

MRS Quattro can be disposed of as metal waste without battery charger. Battery charger must be removed and disposed of as Electrical equipment.

#### **Spare Parts**

A list of spare parts is available on request.

# **Periodic Inspection**

## Periodic Inspection Scope

Periodic inspection is a visual examination (particularly of the MRS Quattro structure, bolts and person-support devices according to Periodic Inspection Report for MRS Quattro. This can be found on www.etac.com.



In the event of danger to safety, the MRS Quattro shall immediately be taken out of service and marked clearly with "out of order" and shall not be used until the MRS Quattro is repaired

Periodic Inspection shall be performed at least once a year or more frequently if required by local requirements. The inspection should be performed by service personnel authorized by Etac. Contact Etac for training and authorization or recommendation of an approved service partner.

When performing a periodic inspection, the inspector shall fill out the inspection report for MRS Quattro. The reports should be retained by the person(s) responsible for servicing the hoist. If the inspection reveals defects and damages, the owner shall be notified and a copy of the report should be sent to Etac, molift@etac.com.

When periodic inspection is completed the inspector shall mark the MRS Quattro with a sticker on the control label showing the date when periodic inspection is performed and a label (with 6-digit ID from Etac or distributor) showing who has performed the periodic control. The control label can be found on the post, and this will then indicate when next service should be performed.



# Troubleshooting

| Symptom                                 | Possible Cause/Action   |
|---|---|
| Wobbly between leg and frame.           | Check bolts in corner. Make sure bolts is properly thightened.                  |
|   | Adjustable foot adjusted up too much  |
| Wobbly between Traverse boom and frame. | Check bolts between bracket and boom. Make sure bolts are properly thightened.  |
|   | Control bolts between bracket and post. Make sure bolts is properly thightened. |
| MRS Quattro jams                        | Loose bolts on traverse boom  |
|   | Damaged wheels on traverse boom   |
|   |   |



