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1

### **INTRODUCTION**

#### Installation, operation and maintenance manual for the PT-series personnel/material platform.

Manual code: version 1.1 PT1000/1500/2000

MACHINE NUMBER: \_\_\_\_\_

Manufacturer:

DE JONG's *liften b.v.* Constructiestraat 6 Postbus 25 4140 AA Leerdam Telephone: + 31 (0)345-636000 Facsimile: + 31 (0)345-636005

#### WARNING

Do not use the elevator before carefully reading this manual. The majority of accidents that happen are due to not respecting or not knowing how to use the equipment properly. Most accidents can be avoided by strictly following the warnings and guidelines. You are then in a better position to avoid incidents that can cause bodily harm.

Thank you for choosing the PT1000/1500/2000 personnel/material elevator designed for transporting materials with a vertically driven elevator.

The equipment you have bought is a Dutch-made product, resulting from a long research programme and in complete compliance with the highest quality guidelines. Both operating and safety features use the newest available technology for this type of equipment. During the design and production of these elevators the most stringent safety regulations have been followed which guarantee a maximum of safety to the people maintaining, operating or travelling with the elevator. We hope that you will be fully satisfied with the elevator and we advise you to first read this manual carefully before using the elevator. The part concerning safety is of particular interest and importance. The lift should only be operated and maintained by properly qualified staff. It is strictly forbidden to allow operation or maintenance by non-qualified staff at any time. De PT1000/1500/2000 series has been designed to transport materials conform the maximum weight restrictions. It is therefore of great importance to be fully aware of these regulations and of the safety-norm pertaining to the safe operation of the elevator. Regular maintenance intervals are also of great importance to avoid accidents. Our technicians are at your disposal to answer any questions in the case of problems.

Before assembling the elevator please read carefully the relevant chapters of this manual as it contains important information concerning mounting, maintenance and operation of the elevator. Take care that this manual is available at all times to you staff. In the case of the elevator being sold-on it is of great importance that the manual is also provided. The manufacturer does not take any responsibility for incidents arising due to non-conformation of the regulations.

DE JONG's liften b.v.

## **1. DESCRIPTIONS**

#### 1.1 Introduction

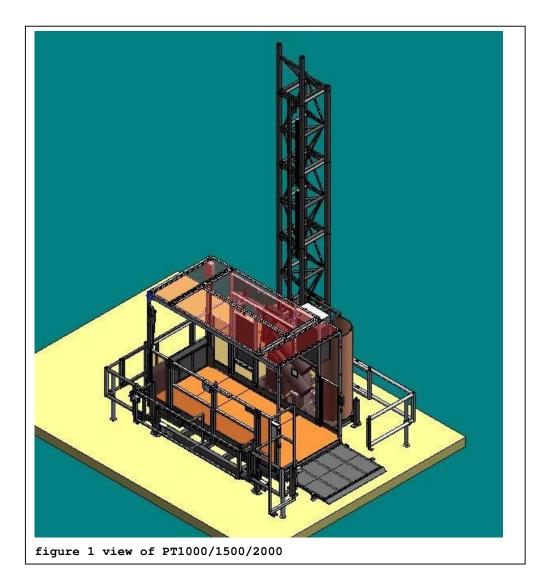
The PT1000/1500/2000 is an elevator installation that can be used for two types of application:

#### 1. Use as a personnel elevator

The personnel elevator is an installation used for transporting people or large volume materials to one or multiple landings.

#### 2. Use as a material elevator

The elevator is an installation set up for the transport of materials (transport of people is strictly forbidden) to one or multiple landings.



We can differentiate the elevator by maximum load capacity or platform measurements:

#### **Type PT1000:**

| type             | Platform measurements (lxw) | Max. allowed passengers |  | Max. legal loading<br>capacity |  |
|------------------|-----------------------------|-------------------------|--|--------------------------------|--|
| PT1000 (2 speed) | 2200x1500 mm                | 12                      |  | 1000                           |  |
| PT1000 (2 speed) | 3200x1500 mm                | 12                      |  | 1000                           |  |
| PT1000 (2 speed) | 4200x1500 mm                | 12                      |  | 1000                           |  |

#### **Type PT1500:**

| type             | Platform measurements (lxw) | Max. allo<br>passenge |      |
|------------------|-----------------------------|-----------------------|------|
|                  |                             |                       |      |
| PT1500 (2 speed) | 2200x1500 mm                | 15                    | 1500 |
| PT1500 (2 speed) | 3200x1500 mm                | 18                    | 1500 |
| PT1500 (2 speed) | 4200x1500 mm                | 18                    | 1500 |

#### **Type PT2000:**

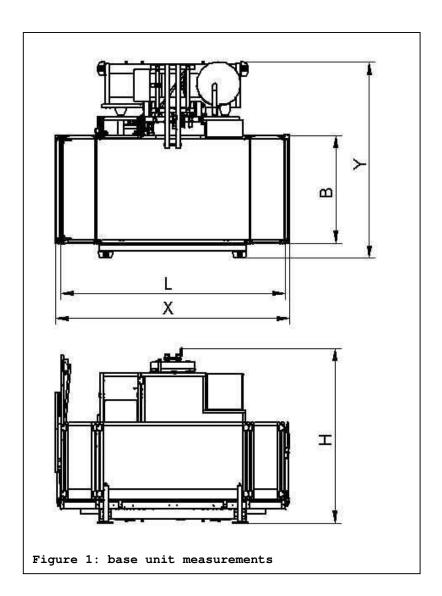
| type             | Platform measurements (lxw) | Max. allowed passengers |  | Max. legal loading capacity |  |
|------------------|-----------------------------|-------------------------|--|-----------------------------|--|
|                  |                             |                         |  |                             |  |
| PT2000 (2 speed) | 2200x1500 mm                | 15                      |  | 2000                        |  |
| PT2000 (2 speed) | 3200x1500 mm                | 22                      |  | 2000                        |  |

- Rack and pinion, module 8.
- Low maintenance as the unit is mostly galvanised.
- Temperature range 25 to  $50 \text{ C}^{\circ}$
- Landing control through landing-stops and 'stop' button on landing.
- Unit equipped with a build-up platform

#### 1.2 Technical specifications

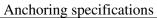
**Basic specifications** 

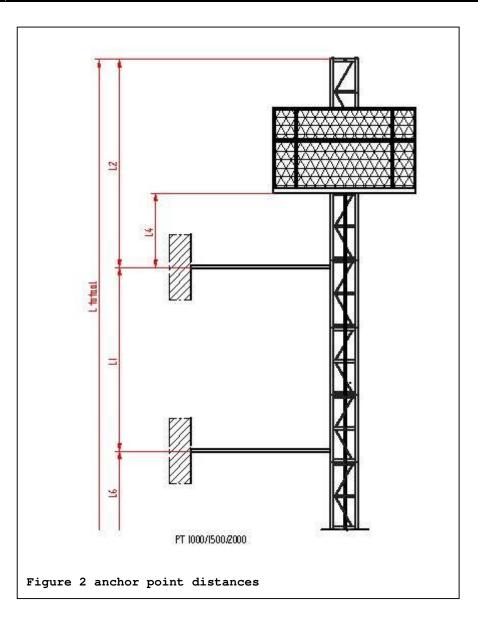
| type        | Platform  | Measurement    | Weight    | Elevation |
|-------------|-----------|----------------|-----------|-----------|
|             | size      | base unit      | base unit | speed     |
|             | (BxL) mm  | (XxYxH) mm     | kg        |           |
| PT1000-2,2  | 1500x2200 | 2330x2790x2480 | 1842      | 0,4 m/s   |
| PT 1000-3,2 | 1500x3200 | 3330x2790x2480 | 2007      | 0,4 m/s   |
| PT 1000-4,2 | 1500x4200 | 4330x2790x2480 | 2078      | 0,4 m/s   |
| PT 1500-2,2 | 1500x2200 | 2330x2790x2480 | 1842      | 0,4 m/s   |
| PT 1500-3,2 | 1500x3200 | 3330x2790x2480 | 2007      | 0,4 m/s   |
| PT 1500-4,2 | 1500x4200 | 4330x2790x2480 | 2078      | 0,4 m/s   |
| PT 2000-2,2 | 1500x2200 | 2330x2790x2480 | 1842      | 0,4 m/s   |
| PT 2000-3,2 | 1500x3200 | 3330x2790x2480 | 2007      | 0,4 m/s   |



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| type    | Max. mast<br>length<br>freestanding<br>(w/o<br>anchors) | Max. mast<br>length<br>(anchored)<br>=L total | Distance<br>between<br>anchor points<br>L1= | 1 <sup>e</sup> anchor point<br>at<br>=L6 | Free mast height<br>above last anchor<br>point<br>=L2 |
|---------|---|---|---|--|---|
| PT1000  | 0 m   | 150 m   | 12 m  | 6 m                                      | 4 m   |
| PT 1500 | 0 m   | 150 m   | 12 m  | 6 m                                      | 4 m   |
| PT 2000 | 0 m   | 150 m   | 12 m  | 6 m                                      | 4 m   |
|         |   |   |   |  |   |





Electrical specifications

|                                  |         | PT1000  | PT1500     | PT2000  |
|----------------------------------|---------|---------|------------|---------|
|                                  | 2-speed | 2-speed | 2-speed    |         |
| Capacity                         | KW      | 2/3     | 5,5/7,5    | 5,5/7,5 |
| <b>Control current/frequency</b> | V/Hz    | 400/50  | 400/50     | 400/50  |
| Electrical connection            | Amp     | 63 slow | 63 slow    | 63 slow |
| Connection cable                 |         |         | $5x10^{2}$ |         |
| Socket current (platform)        | V       |         | 230        |         |

Accessories (either delivered as part of the base unit or as an optional)

- Cable guides
- Landing slide doors
- Landing stops
- End stop (standard with base unit)
- Anchoring supplies
- Lifting eye for loading/unloading/positioning with a crane
- Auxiliary crane with manual winch for mast assembly
- Extension mast of 1, 5 m.
- Electrical cable
- Landing control units extension leads
- Landing 'call and send' buttons with extension leads
- 'Drop-test' control-unit

(See chapter 8 for more extensive description and article number)

| EMERGENCY STOPS   | Platform movement is stopped and blocked.   |
|---|---|
| ELECTRICALLY SECURED RAMPS,<br>TURNSTILES AND SLIDING DOORS | The platform can not be activated or remain active if a ramp or sliding door is not completely closed in position.  |
| END STOP  | Safety through mechanical stop-skates and emergency upper<br>limit-switch.<br>Mechanically forced stop by missing rack part.<br>Lower stop limit is secured by a mechanical stop-skate and<br>emergency lower limit-switch.         |
| DIRECTION OF ROTATION                                       | By means of a phase protector the correct rotation direction is guaranteed.<br>Furthermore, the controls of the personnel elevator/ transport platform are switched off if one or more phases are missing.                          |
| ELECTRICAL OVERLOAD (MAINS)                                 | The thermal protection ensures the motor switches off if electrically overloaded.   |
| ELECTRICAL OVERLOAD (CONTROL<br>CURRENT)                    | If control current is overloaded it will automatically switch-off.  |
| MECHANICAL LIMITATION OF<br>DESCENT VELOCITY                | If the max. descent velocity is superseded; the safety brake will<br>activate thus forcing the platform to stop and to hold its<br>position. Furthermore the elevator controls are blocked after<br>activation of the safety brake. |
| DESCENDING MOVEMENT   | The platform will, when reaching a 2 meter height above ground-level, stop for 3 seconds before continuing its descent.   |
| PROTECTION  | Moving parts are secured and protected conform the regulations in force.  |

#### 1.3 Safety features

## 2. SAFETY REGULATIONS

#### 2.1 General

A DE JONG elevator guarantees complete safety with either mounting or dismounting under normal conditions of use. All components have been designed following stringent in-house and external rules and regulations. This notwithstanding dangerous situations can arise while operating a transport platform/personnel elevator.

This is why anybody concerned with mounting, dismounting, operating, maintenance and reparation of the elevator should read and understand this users' manual.

- The personnel/material elevator may only be used if there is no danger of items dropping off the platform.
- A personnel/material elevator should at all times be well maintained (including galvanised areas).

Repairs should only be affected with proper materials and equipment.

- Maintenance and repairs are only allowed to be made by specialised personnel while the personnel/material elevator is at a complete stop.
- The personnel/material elevator may only be operated by personnel accustomed to operate the elevator. These personnel should, by strength of law, be at least 18 years of age.

#### 2.2 Regulations

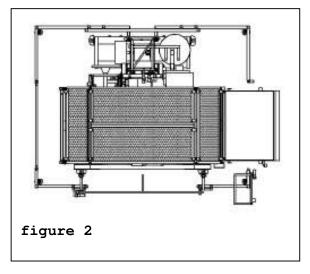
#### 2.2.1 MOUNTING

Please ensure that:

- 1. All guide-rollers, brackets, etc. which ensure the platform keeps it correct position in correspondence to the mast are fitted properly without any deformations.
- 2. The safety brake has been checked for proper operation. (
- 3. All rack-elements are correctly fixed to the mast
- 4. All the material used with anchoring (bolts, nuts and other anchoring materials) have the correct measurements and quality as specified by the manufacturer.
- 5. Ensure all extension masts are correctly installed before use.
- 6. The platform does not move higher on an anchored mast element as described in this manual.
- 7. That after the mounting of all extension-elements the mast-end is fitted which activates all the end-switches.
- 8. The rear elevator protective panel and roof are mounted.
- 9. At storm conditions (windforce 8 or higher) all mouding and dismounting activitas are prohibited

The personnel/material elevator should be assembled conform the regulations. Important points are:

- The elevator should be positioned as vertical and stable as possible. The carriage should be supported sufficiently against subsiding. The supporting material should not consist of stone-like materials.
- The platform should have sufficient free space (minimal 500mm) around the unit. This to avoid any obstructions.



• Around the assembly point there should be sufficient space for people to safely walk around the unit.

Please note that the unit should never be positioned in front of openings, doors or other places where there is a continuous flow of people.

- Please note that fencing of the unit with construction-site fences is recommended.
- The controls at the landings and ground floor should be positioned in such a way that a view on the trajectory of the platform is guaranteed.
- The unit should be anchored according to the rules provided by the manufacturer (see chapter 6)
- Alongside all landing-stops shut-offs should be positioned at a minimum of 0, 5 m form the platform trajectory.
- The unit should be assembled in such a way that there is never any danger to the personnel.
- THE ELEVATOR SHOULD BE INSPECTED 6 MONTHS AFTER FIRST ACTIVATION. AFTER THAT THE UNIT SHOULD BE INSPECTED AT LEAST EVERY 6 MONTHS BY AN ACCREDITED INSTITUTION APPOINTED BY THE MINISTRY OF SOCIAL AFFAIRS AND EMPOLYMENT FOR THE INSPECTION OF LIFTING EQUIPMENT WHICH CAN BE USED FOR TRANSPORTING PEOPLE AND WHERE THERE IS THE POSSIBILTY OF A FREE-FALL OF MORE THAN 3 METRES. (APPENDIX IV, A16, GUIDELINE NR. 98/37/EG)

#### 2.2.2 OPERATION

The locker with the electrical switchboard should always be locked after working hours with mains-switch de-activated. This is also mandatory during work interruptions (i.e. breaks) when the unit is operating in a residential area and is out of the line of sight.

The platform should not be made larger than the specifications made by the manufacturer.

Loads should be placed carefully on the platform to ensure the loads, or parts of it, shift position or fall off. Small or loose material should always be transported in boxes or in other types of containers.

# When there is a storm (wind force 8 or higher) the unit should be deactivated. This means that the platform should be brought back to the lowest stop (ground floor) and the current should be cut.

The user should ensure proper illumination of the platform trajectory taking special care with the shaft entrances and ground floor base.

#### 2.2.3 DISMOUNTING

When disassembling the unit special care should be taken with the following:

- 1. Have all safety components been checked for proper operation?
- 2. Are the rack-elements fixed properly to the extensions masts?
- 3. Has the unit been properly anchored?
- 4. The mast bolts and anchors should never be removed before the platform has descended beyond that point.

#### 2.2.4 ELEVATOR INSPECTIONS

#### 1. Daily inspections

#### VISUAL:

- No oil leakage.
- The trajectory is free of obstacles.
- The rack and pinions are in good conditions.
- The bolts of the extension masts are in good condition.
- The anchoring of the unit is in order.
- The towing cable is in good condition are winds correctly on the drum.
- The unit may not be used in very adverse weather conditions (wind force 8 or higher).

#### **DURING OPERATION:**

- The motor and the electro-magnetic brakes operate correctly.
- The electro-magnetic locks of the platform ramps work properly.
- The landing/upper/lower stops function correctly
- The maintenance and greasing intervals have been executed.
- Never allow personnel to work with the unit before reading this instruction manual.
- Never allow material to be transported larger than the platform.
- Never allow the unit to be overloaded.

#### 2. WEEKLY INSPECTIONS

If a transport platform/ personnel elevator is used intensively, the unit should be revised once a week taking into special consideration the greasing of moving parts and rack and to the correct functioning of the brake and end-switches.

#### 3. AFTER MOUNTING AND HALF YEARLY INSPECTION

THE ELEVATOR SHOULD BE INSPECTED 6 MONTHS AFTER FIRST ACTIVATION. AFTER THAT THE UNIT SHOULD BE INSPECTED AT LEAST EVERY 6 MONTHS BY AN ACCREDITED INSTITUTION APPOINTED BY THE MINISTRY OF SOCIAL AFFAIRS AND EMPOLYMENT FOR THE INSPECTION OF LIFTING EQUIPMENT WHICH CAN BE USED FOR TRANSPORTING PEOPLE AND WHERE THERE IS THE POSSIBILTY OF A FREE-FALL OF MORE THAN 3 METRES. (APPENDIX IV, A16, GUIDELINE NR. 98/37/EG)

#### 4. ANNUAL INSPECTION

The PT elevator must be subjected to an expert inspection at least once a year. In accordance with this inspection the testing-form (appendix B) should be compiled. This inspection should be made by an accredited technical engineer of the owner, user, manufacturer or supplier. This inspection can also be made by an external independent institution. If the unit passes this annual inspection the year, month and day should be struck into the plate affixed to the chassis.

A copy of the forms, used according to appendix A and B should be archived together with any notes taken and placed in the technical dossier of the revised unit.

# 3. MOUNTING/DISMOUNTING OF THE ELEVATOR

# THE INSTRUCTIONS SHOULD BE READ CAREFULLY BEFORE STARTING ANY WORK.

For mounting and dismounting the following regulations are in force:

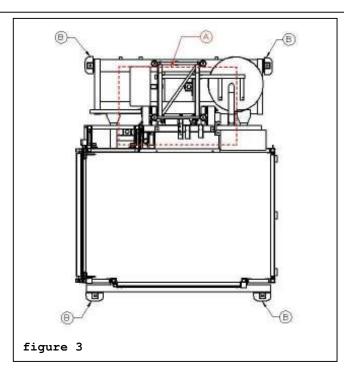
- 1. Mounting/dismounting of the unit should only be done by expert personnel who are at least 18 years of age.
- 2. The engineers should be protected against falling by means of a safety-harness.
- 3. While using a build-up platform a safety-harness should be used at all times.
- 4. In adverse weather conditions (wind force 8 or higher) no mounting or dismounting may take place.

#### 3.1 MOUNTING

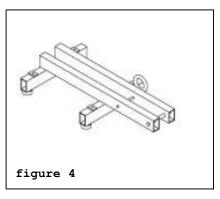
# • MOVING THE ELEVATOR TO THE SITE OR SCAFFOLD AND SUBSEQUENT PLACEMENT

The erection site should be flat and sufficiently strong to carry the unit (including any load) with reference to figure 1 and table 1 for the occurring stabilisation forces at different mast heights.

|                                      | PT1000 |      | PT1500 |      | PT2000 |      |
|--------------------------------------|--------|------|--------|------|--------|------|
| Mast height                          | Area   | jack | Area   | Jack | Area   | Jack |
| (m)                                  | A      | B    | А      | В    | А      | В    |
| 10                                   | 3018   | 323  | 3543   | 380  | 4018   | 431  |
| 20                                   | 3531   | 378  | 4056   | 435  | 4532   | 486  |
| 30                                   | 4045   | 433  | 4570   | 490  | 5045   | 541  |
| 40                                   | 4558   | 488  | 5083   | 545  | 5558   | 596  |
| 50                                   | 5071   | 543  | 5596   | 600  | 6072   | 651  |
| 60                                   | 5585   | 598  | 6110   | 655  | 6585   | 706  |
| 70                                   | 6098   | 653  | 6623   | 710  | 7098   | 761  |
| 80                                   | 6611   | 708  | 7136   | 765  | 7612   | 816  |
| 90                                   | 7125   | 763  | 7650   | 820  | 8125   | 871  |
| 100                                  | 7638   | 818  | 8163   | 875  | 8638   | 926  |
| 110                                  | 8151   | 873  | 8676   | 930  | 9152   | 981  |
| 120                                  | 8665   | 928  | 9190   | 985  | 9665   | 1036 |
| 130                                  | 9178   | 983  | 9703   | 1040 | 10178  | 1091 |
| 140                                  | 9691   | 1038 | 10216  | 1095 | 10692  | 1146 |
| 150                                  | 10205  | 1093 | 10730  | 1150 | 11205  | 1201 |
| note: all weights are in kilogrammes |        |      |        |      |        |      |



- APPLYING SUPPORT MATERIAL Stone-like materials are prohibited. The support material should have the correct measurements to withstand the stabilisation pressures. The spindles should been extended until the unit is level.
- LEVELLING THE ELEVATOR Measurements should be taken along the mast. It should be mounted completely perpendicular to the ground.
- DISMOUNTING THE LIFTING-EYE (if supplied)



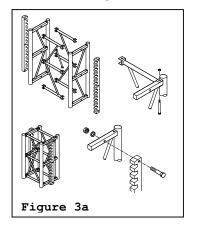
• PLACING THE DAVIT (if no use is made of an external crane) The davit should be placed in the pre-existing slots and in such a way no obstruction can occur.

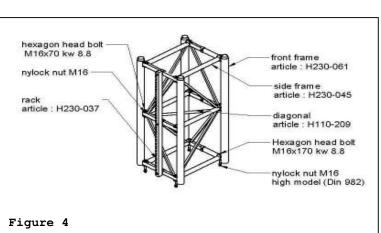
<u>PLEASE NOTE:</u> the davit connection-point is fitted with a limit-switch which ensures the elevator can not move unless the davit is in its neutral position (out of the mast trajectory)

• MOUNTING CONTROLS

During the mounting of the elevator the controls on the platform can be used. To achieve this, the unit has to be set into 'personnel'-mode. (See chapter 4)

• PLACING THE MAST SECTIONS ON THE PLATFORM <u>PLEASE NOTE</u>: One mast section weighs about 110 kg. and should be moved by 2 persons and if possible by using a trolley. If the sections have not been assembled they should be (figure 5a and 6.)





BRING THE PLATFORM TO WORKING HEIGHT

The platform is at working height if the top of the (emergency) upper limit-switches and the initiator are approx. 5 cm from the top of the uppermost mounted mast section.

• ATTENTION

As there is not upper stop-skate installed during mounting as well as no emergency stop-skate, the platform trajectory is not controlled by a mechanical switch. The only safety present is the initiator. This should be seen as an aid and not as a definitive guarantee. Be aware at all times not to let the platform run off the mast. This is why the controls are fitted with 'hold' buttons and, as an extra precaution, an emergency "blocking switch" (emergency stop).

• BLOCKING THE PLATFORM AUTOMATICALLY

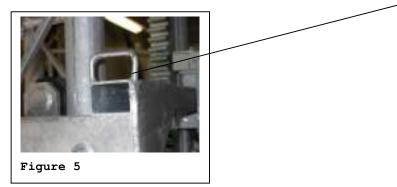
Due to security concerns, the emergency button should be pressed and the control-switch should be set to "0" before mounting the mast sections, when there is a risk that body parts could be caught between the mast and the platform.

• PLACING AND SECURING THE MAST SECTION LIFTING AID ON THE PLATFORM

Carefully check that the mast section can not accidentally drop out of the lifting aid.

PLACING AND BOLTING THE MASTSECTION

To achieve this, the build-up platform can be used to tighten all the bolts of the mast. ATTENTION: Always wear a safety harness and connect this to the hook of the platform

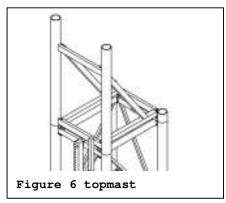


Use only the following bolts and nuts: -Bolt DIN 931 M 16 kw. 8.8 length 170 mm -Nylocnut DIN 982 M 16 kw 10 -Torque max. 195 N.M.

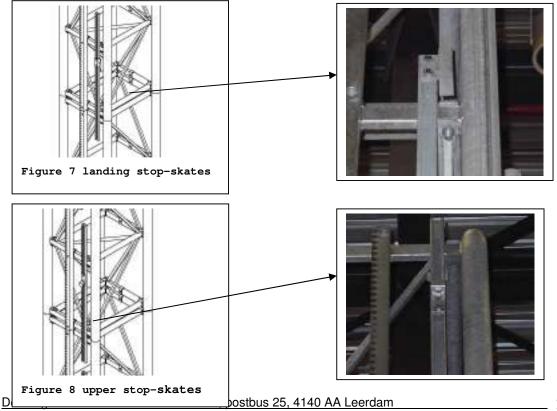
- ALWAYS FIX THE MAST SECTIONS BEFORE DISCONNECTING THEM FROM THE CRANE.
- TURN DAVIT AWAY AND PLACE IT ITS NEUTRAL POSITION. ATTENTION: The davit described above is electronically secured.
- DISENGAGING THE BLOCKING SWITCH The blocking switch should be disengaged by turning it in the direction of the arrows and by placing the control switch in position "1".

- ANCHORING The mast should be anchored at the specified intervals as indicated in chapter 6.
- MAST SECTIONS AND ANCHOR POINTS SHOULD BE PLACED UNTIL THE DESIRED MASTLENGTH IS REACHED. Repeat above actions until not further necessary. ATTENTION: Due to safety concerns the platform should have a free run up to the top of the last mast section of 0, 5 meter.
- PLACING THE SAFETY MAST TOP • On the uppermost mast section the safety mast top should be mounted using: -Bolts DIN 931 M 16kw 8.8 length 170 mm. -Nylocnut DIN 982 M 16 kw 8

The emergency stop skate is integrated into the safety mast top.

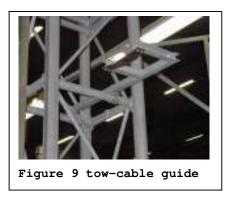


• MOUNTING LANDING STOP-SKATES AND UPPER STOP-SKATES. The landing stop-skates and upper stop-skates should be mounted:



#### MOUNTING CABLE GUIDES

The cable guides should be mounted at intervals of 4, 5 meters and in the manner according to figure 11.



• PLACING LANDING SLIDE-DOORS

At each landing sliding doors should be placed. The type of slide-door is dependant on the laws and regulations of the country where the unit is in operation. As a standard the slide-doors depicted in the figure below are supplied.

Please ensure that the extended plug is placed in the upper slide-door.



- CLOSE-OFF GROUND AREA Be advised to close-off the ground area
- **REMOVING DAVIT** ٠
- MOUNTING REAR ELEVATOR PANELS AND ROOF
- FILLING OUT CHECKLIST (SEE APPENDIX A)
- SET THE ELEVATOR EITHER AS A MATERIAL OR PERSONNEL ELEVATOR AND TEST THE UNIT FOR PROPER FUNCTIONING.
- COMMISSIONING THE ELEVATOR

• DELIVER THE MANUAL AND KEYS TO THE PERSON RESPONSABILE FOR THE UNIT WHEN IN OPERATION.

#### **3.2 DISMOUNTING**

#### • MOUNTING CONTROLS

During the mounting of the elevator the controls on the platform can be used. To achieve this, the unit has to be set into 'transport platform'-mode. (See chapter 4)

 PLACING THE DAVIT (if no use is made of an external crane) The davit should be placed in the pre-existing slots and in such a way no obstruction can occur.
 PLEASE NOTE: the davit connection-point is fitted with a limit-switch which ensures the

elevator can not move unless the davit is in its neutral position (out of the mast trajectory)

- DISMOUNT THE SAFETY TOP MAST
- BRING PLATFORM TO WORKING HEIGHT TO DISMOUNT MAST SECTION Working height is approx. 5 cm below the upper mast connection.

# Attention! The mast bolts and anchors should never be removed before the platform has moved below that specific anchor-point.

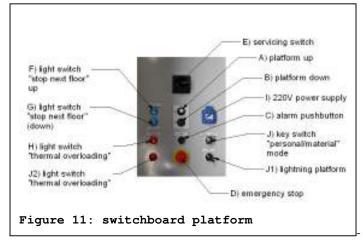
- BLOCKING THE PLATFORM ELECTRICALLY For all work taking place from the platform the emergency stop button should be engaged at all times and the control-switch S2 should be deactivated.
- PLACING AND SECURING THE LIFTING AID IN THE UPPER MAST SECTION
- DISMOUNTING THE MASTSECTIONS. After removing the mast bolts the now loose mast section can be placed on the platform by using the davit.
- DISMOUNT THE MAST UNTIL THE BASE MAST SECTION
- BRING PLATFORM TO THE LOWEST POSITION
- REMOVE SUPPORTING MATERIAL AND (if supplied) WIND IN THE SPINDLES The elevator is now ready for transport
- MOUNT LIFTING EYE Mount the lifting eye with M16x240 bolts allowing the unit to be loaded on a truck.

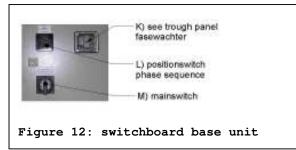
# 4. CONTROLS

We can distinguish two types of elevator usage with the PT1000/1500/2000:

- 1. Use as a personnel/material elevator
- 2. Use as a material elevator

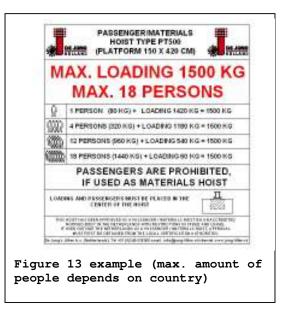
#### 4.1 Use as a personnel elevator





The personnel/material elevator should be connected to pre-described current after which the mains switch (M) should be switched on (position "1").

If the current is correct the LED of the phase protector will light up (K). If not, the direction of the current can easily be changed by turning the phase sequence switch (L) positioned on the switchboard of the carriage.



When used as a personnel/material elevator the unit should be fitted with notices denoting the maximum allowable load and the maximum number of people (see figure 16 as an example). By using a switch the unit can be set to either material elevator or personnel elevator.

After setting the unit to one or the other mode take out the key so that other user cannot change it.

#### ASCENDING:

- Press and hold the button "platform UP" (A) and press this button twice (2 clicks) and the unit will move upwards
- If you want to stop at a certain landing the same button should be released slightly (the button has to settings). The unit will now stop at the next platform.

#### **DESCENDING:**

- Press and hold the button "platform DOWN" (B). By pressing this button fully the unit will start to descend.
- If you want to stop at a certain landing the same button should be released slightly (the button has to settings). The unit will now stop at the next platform.
- If you want to descend to the ground floor the button "platform DOWN" should be pressed and held. When the unit is approx. 2 meters above the ground floor the unit will stop approx. 4 seconds and acoustic signal will start to sound. After this the unit will descend further to the ground floor.

#### EMERGENCY STOP (D):

If an emergency stop becomes necessary the button marked "EMERGENCY STOP" should be pressed after which the unit will come to an immediate and complete halt.

#### **RESTART AFTER AN EMERGENCY STOP:**

Check for any possible malfunctions, disengage the emergency brake and press the buttons "platform UP" or "platform DOWN" depending on the direction desired.

#### BUTTON TO ACTIVATE THE ALARMSIGNAL (C)