SC5000

Mast climbing work platform

INSTRUCTION MANUAL

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SCANCLIMBER®

by Tractel®

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Original

EC DECLARATION OF CONFORMITY

(Directive 2006/42/EC, Annex II A)

Manufacturer:

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Herewith Scanclimber Oy and Scanclimber Sp. z o.o declare that mast climbing work platform

Scanclimber SC5000, serial number:_____

and all separately certified available equipments for SC5000 MCWP are in conformity with the provisions of the Machinery Directive 2006/42/EC, as amended, and with national implementing legislation; European Standard EN1495:1997+A2:2009 and all other directives and European standards which are mentioned and required to be used together with EN1495:1997+A2:2009.

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1. GENERAL INFORMATION

1.1 Scanclimber mast climbing work platforms

Scanclimber mast climbing work platforms (MCWP) are based on a flexible modular system that provides a solution for many kinds of high-rise tasks, e.g. façade work, bricklaying, plastering, painting, window installation, balcony work, etc. The mast climbing work platform can be erected rapidly. Its construction is simple and easily maintained. Scanclimber provides a large, stable and safe work area up to 100 m height when anchored, and 20 m for a freestanding mast; even greater heights are possible. Ask your dealer for more information.

Scanclimber MCWPs are provided in single or twin mast versions. The maximum platform length is 16,9 m with a single mast and 44,6 m with twin masts. The payload is up to 2700 kg on a single and 5000 kg on a twin mast platform.

There is a large variety of telescopic and fixed extensions that can be installed to the base platform, making it possible to shape the platform snugly around the façade.

Scanclimber MCWPs can be installed on a wheel or mini chassis. The wheel chassis gives a stable base for the platform and can be equipped with a driving motor for easy job site movement. The maximum freestanding height is 20 m with a wheel chassis. A mini chassis is used when the space for the chassis is limited.

Scanclimber provides a weather cover to ensure a comfortable working environment regardless of the weather conditions.

Scanclimber MCWPs consist of a chassis, lifting frame, platform sections, mast and anchoring.

1.2 Scanclimber technical specifications

1.2.1 General

The Scanclimber SC5000 is manufactured in Poland. The machine can be installed either for outdoor or indoor use.

1.2.2 Capacity

	Single	Twin
Max. platform length	16,9 m	40,6 m
Max. lifting capacity / platform length	2700 kg / 4,1 m	5000 kg / 12,6 m
	2300 kg / 7,3 m	3400 kg / 25,4 m
	1900 kg / 10,5 m	4100 kg / 27,0 m
	1500 kg / 13,7 m	1500 kg / 40,6 m
	1000 kg / 16,9 m	
Max. mast height, anchored mast	100 m	100 m
Max. mast height, freestanding mast	20 m	20 m
Max. anchor spacing	18 m	18 m
Vertical travel speed (5,5 kW)	11,27 m / min	11,27 m/min
Vertical travel speed (3 kW)	7,5 m / min	7,5 m / min
Chassis drive unit speed	13 m /min	
Platform height at the lowest position	1,55 m	1,55 m

1.2.3 Weights

Components	Weights
Wheel chassis	1900 kg
Minichassis	430 kg
Lifting frame, fully equipped	1500 kg
Mast section	82 kg
Mast bolts per one mast section	4 kg
Platform section 1,6 m	158 kg
Platform section 0,8 m	95 kg
Railing 1,6 m	12 kg
Railing 1,6 m, with gate	26 kg
Railing 0,8 m	8 kg
Ladder	10 kg
Maxianchor	56 kg
Maxianchor, vertically adjustable	110 kg
Telescopic extension set, 1,8 m, per one platform section, w/o plywood deck	83 kg
Telescopic extension set, 2,5 m, per one platform section, w/o plywood deck	180 kg

1.2.4 Safety equipment

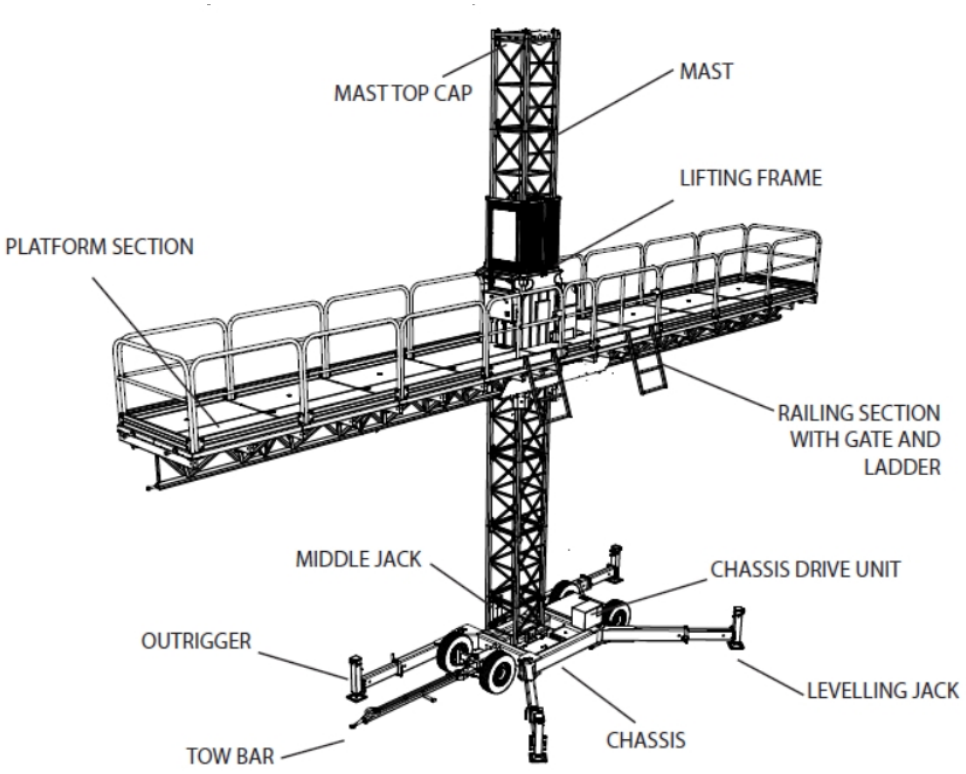
- Mechanical safety brake
- Manual lowering system
- Safety railing (h=1.10 m) and kickboard on the platform

- Functional limit switches at the top and bottom of the mast
- Final limit switches on the top and bottom of the mast
- Spring loaded disk brake torque 100 Nm
- Inductive mast detector
- Residual current device

1.2.5 Electrical installation

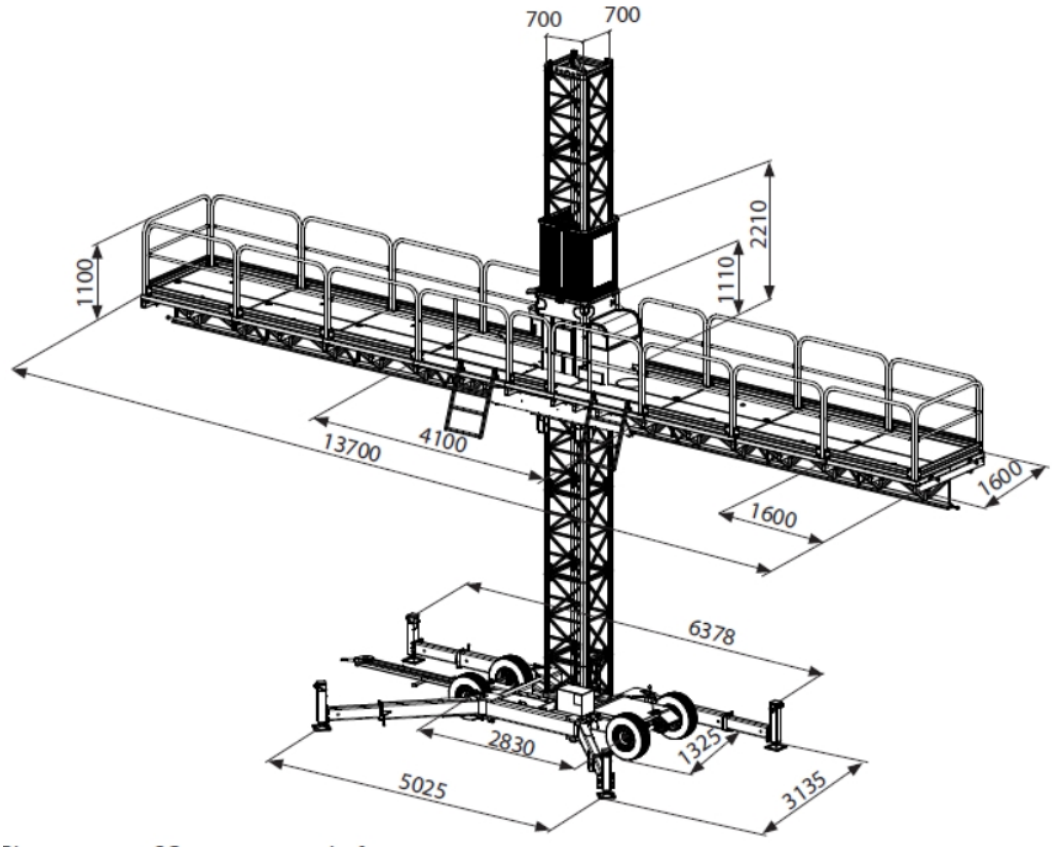
Lifting motors	2 x 3 kW	2 x 5,5 kW
Supply Voltage	400 V/ 50 Hz	400 V/ 50 Hz
Power Supply fuses	3 x 32 A	3 x 32 A
Needed Power supply	48 kVA	48 kVA
Max Starting Current	60 A	100 A
Control Voltage	8 VAC	48 VAC
Socket for hand tools	230 V /16 A	230 V /16 A

1.2.6 Basic unit

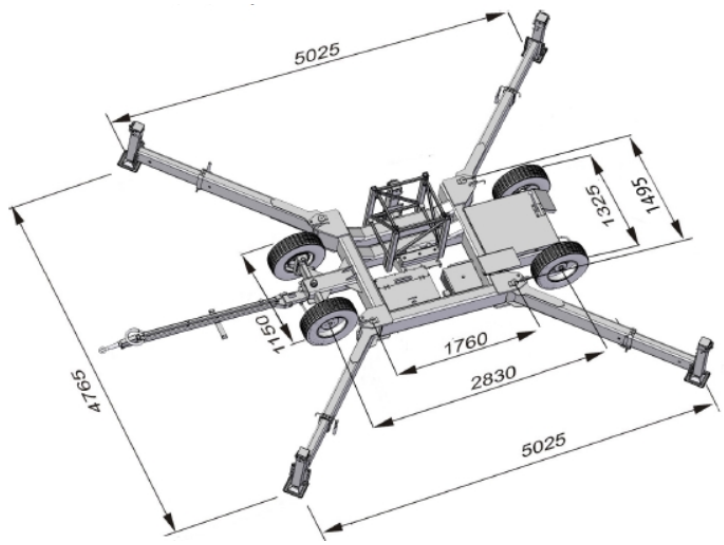


Picture. 1.2.6.1 SC5000 on wheel chassis, main components.

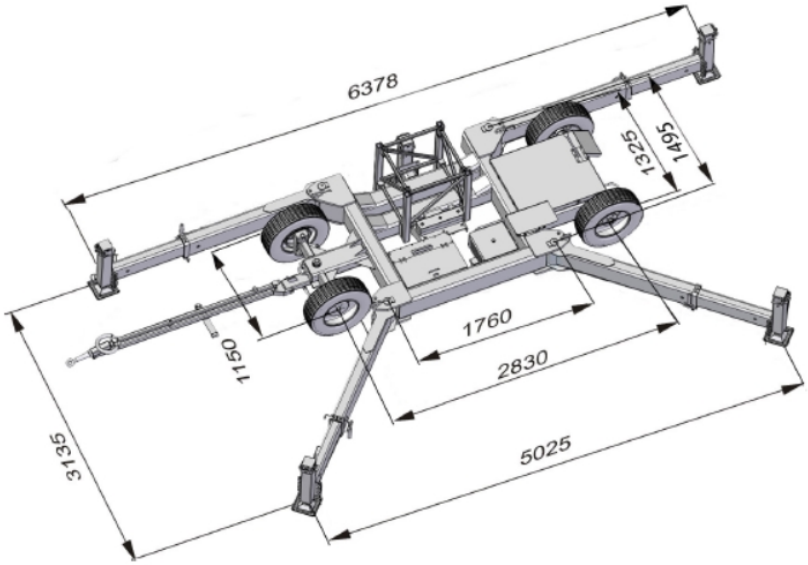
1.2.7 Measurements



Picture 1.2.7.1 SC5000 13.7 m platform.



Picture 12..7.2 SC5000 wheel chassis, X position



Picture 1.2.7.3. SC5000 wheel chassis, K position.

1.2.8 Optional equipment

Options can be found from a SC5000 Sales Component Catalogue. Please contact your dealer.
Examples of options:

- Twin mast synchrodrive system
- Telescopic extension 1.8 m
- Telescopic extension 2.5 m
- Telescopic extension 2.6 – 6.0 m
- Side platform adapter
- Snake platform
- Bricklayer's extension
- Lifting arm on top of the mast
- Cable guide

1.3 Warranty terms

The seller warrants new SCANCLIMBER mast climbing work platform is supplied free from defects in material and workmanship. The warranty is valid for six (6) months from the date of delivery. The warranty of the equipment and parts manufactured by subcontractors is limited to the warranty of their respective manufactures.

The warranty does not cover:

1. damage or loss caused by transportation

2. damage or loss caused by misconduct, misapplication or accident

3. damage or loss caused by negligence of instructions, service, maintenance or storage

4. normal deterioration of the equipment and damage resulting from wearing parts: and, aterial like rubber tyres, electrical equipment etc.

5. damage or loss caused by maintenance or repairs performed by a non-authorized service personnel

6. damage or loss caused by purchaser´s acts or omissions causing alternations to the quality or structure of mast climber

7. any such indirect damage or loss as loss of profit and downtime cost etc.

No claim will be accepted if non-original parts, not approved by the seller, have been used. Warranty claims should be done in writing describing the damage as completely as possible and sent to the address below within fourteen (14) days from the date of disclosure of the damage.

Address: SCANCLIMBER OY Turkkirata 26 FI-33960 PIRKKALA, FINLAND

The warranty liability is limited, at the sellers discretion to

1. replacing the damaged part or

2. repairing the damaged part by the seller or by a subcontractor or

3. granting a price reduction

The warranty of replaced or repaired part expires at the expiration time of the warranty of the mast climber. The purchaser is obliged to send the damaged part to the seller for inspection by a request. Replaced or refunded parts become the property of the seller.

2. SAFETY INSTRUCTIONS

2.1 General

The Scanclimber mast climbing work platform (MCWP) is designed and manufactured in accordance with the existing standards and safety regulations. Nevertheless, there is a risk of serious or fatal injury to the operator or third parties, or the MCWP may be damaged or cause other material damage, if the MCWP is used without due care or contrary to the instructions.

The MCWP must only be operated in accordance with the instructions and the machine must be in perfect technical condition. The operator must be informed about the possible risks involved in operating the MCWP. Any defects or faults affecting safety must be repaired immediately.

The MCWP is meant to move persons and material inside the platform railings only. It is forbidden to hang loads outside the platform. Only qualified persons are allowed to carry out any erection, dismantling and service work. The general, local and site-specific safety instructions shall apply. Prescribed safety equipment and clothing such as a hard hat, safety shoes, harness, eye protection, etc. shall be used.

The proper use of the MCWP requires a good knowledge and understanding of the operation and maintenance instructions, as well as strict adherence to them.

2.2 Safety instructions for MCWP operations

- Clarify and follow with local and site specific instructions.
- Read and learn the MCWP instructions and warning signs before operating.
- Carry out the daily inspection.
- Check the MCWP once a day before beginning the work in order to ensure there are no defects. Report any possible defects immediately to the person in charge of the MCWP operation, the site foreman or other person in charge of occupational safety. If necessary, the MCWP must be withdrawn from use until the fault or defect is repaired.
- Use only an inspected MCWP which is in perfect condition.
- Always ensure that no one's safety is at risk before operating an MCWP.
- Operating an MCWP is only permitted when all protective and safety equipment is installed and they are in perfect condition.
- All operations and working methods contrary to the instructions and involving a risk of accident are strictly forbidden!
- All tools and other loose items must be stored properly.
- Keep the passageways free and the platform, steps, railings and ladders free of dirt, snow and ice.
- Arrange adequate site lighting to illuminate the working area.
- It is forbidden to overload an MCWP. Note the maximum load in kilograms and the maximum number of persons on the platform. Refer to the loading tables
- Do not push or pull the platform.
- Do not lean against the railings.
- Fasten the mast guard when using the MCWP.
- Do not use ladders or scaffoldings on the platform.
- Stop the operation and drive the platform to the lowest position if the wind speed is over 12.7 m/s when working on a freestanding MCWP, and over 15.5 m/s when working on an anchored

MCWP.

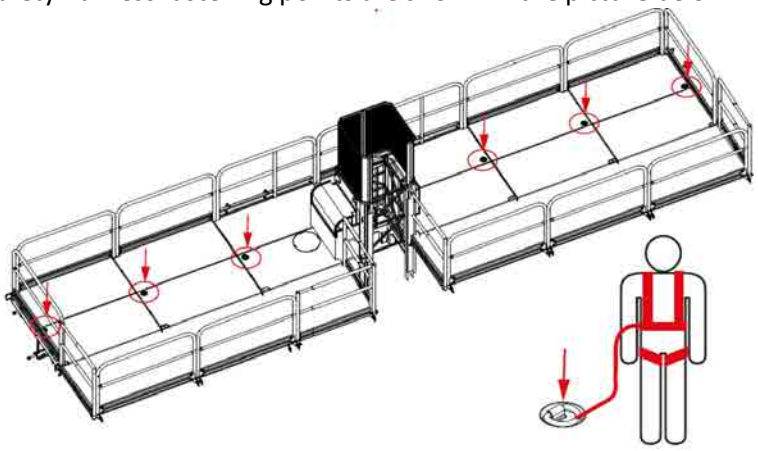
- After finishing the work, lock the MCWP to prevent undue and unauthorized use.

2.2.1 User requirements

- The persons working with the MCWP must be trained to use it and must be at least 18 years old.

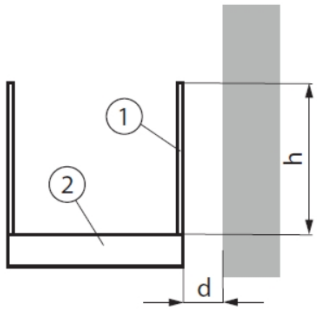
2.2.2 Fall protection

- The MCWP and MCWP extensions must alwasy be guarded with railings while working on them.
- If wider platforms are needed, use only Scanclimber's telescopic extensions. Remember to fasten the platform extension decks carefully.
- Scanclimber recommends to use a safety harness while erecting, dismantling and working on the MCWP.
- Safety harness fastening points are shown in the picture below



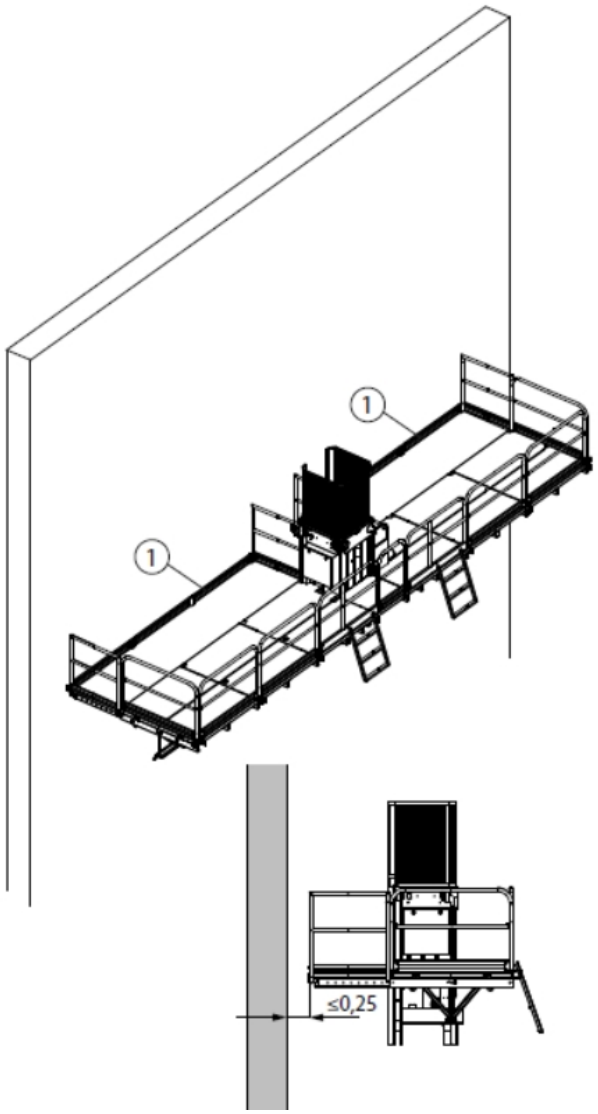
Picture *2.2.2.1. Harness Fastening Points*

- Height of the railings from wall site may be reduced according to the values shown in a table below



d(m)	≤0,25	0,25<d≤0,4	>0,4
h(m)	0,15	≥0,7	≥1,1

- The whole platfiorm must be guared with safety railings. It is forbiiden to work the the MCWP that does not have railings for saefty
- Do not reduce the height of the railings that are'nt on the side of the wall
- Even in caseswhen the MCWP is as close as 0,25 m from the wall, a safety apron of atleast 0,15 m must be used on the side of teh wall. (see pic 2.2.2.2)



Picture.2.2.2.2. Safety aprons

2.2.3 Protection against the falling objects

Protect MCWP users and other personnel on site against falling objects. Fence off the MCWP working area during operation

2.2.4 Protection against electric shock

- Keep all electric boxes closed.
- Observe the minimum distance to overhead power lines according to the table.

2.2.5 Erection and dismantling

- The working area must be secured and protected with a fence and warning signs during erection and dismantling operations.
- The wind speed must not exceed 12.5 m/s during erection and dismantling.
- Follow the erection, dismantling and anchoring instructions.
- Use only lifting equipment designed for high lifting heights. Do not use any part of the MCWP for lifting support.
- Carefully observe the MCWP chassis setup and anchoring instructions.
- Pay attention to stability when moving the machine with the wheel chassis. The outriggers must be swung out as wide as possible and the jacks must be lowered near the ground to prevent the machine tipping over.
- Always use wooden base plates under the outrigger jacks. Lock the jacks with Scanclimber's jack locks after setting up the chassis.
- Carry out the working phases carefully, one by one, and complete one phase before starting the next one or having a break.

2.2.6 Service and maintenance

- Keep the instruction and warning signs and stickers undamaged and readable. If necessary change them!
- Only qualified persons well familiar with the machine are allowed to carry out service and maintenance operations.
- Secure and protect the service area with fences and warning signs when necessary for occupational safety.
- It is forbidden to change the construction of the MCWP, to add any supplements or make other alterations without the permission of the manufacturer or the importer. This concerns both the design and the installation of the safety equipment as well as the welding of the constructions, including repair welding.
- All spare parts must be of equal quality as the original spare parts and be approved by the manufacturer or the importer of the MCWP. The user is obliged to check the quality of the spare part prior to its installation.
- Work done to the electrical equipment may only be carried out by qualified electricians familiar with the equipment.
- Follow the service instructions and service intervals given in the instruction manual.
- The MCWP is to be inspected at the intervals prescribed by law and local regulations.

3. OPERATING INSTRUCTIONS

3.1 Before operating

- Read the instruction and warning stickers. Check that they are fastened and readable.
- Complete the daily inspection every day before starting work..

Read the safety instructions in chapter 2.

3.1.1 Daily inspections

Before using the platform the operator shall carry out the daily inspections to ensure the safe use of the MCWP. The daily inspection actions are listed below. A daily inspection form shall be filled in when the inspection is done. The daily inspection form is in chapter 9.

1. Check that the working area is safely fenced off.
2. Check the working area.
3. Check the ground under the outriggers.
4. Check the outriggers.
5. Check the horizontal and vertical leveling of the platform and the mast.
6. Check the contact and the condition of the rack and the pinion mechanism.
7. Check the condition of the electric cables. Check also that the cables hang freely.
8. Check the platform section fixings and railings.
9. Check the mast rollers.
10. Check the mast guards.
11. Check the warning and instruction stickers.
12. Check the function of the limit switches and the cam fixings.
13. Check the safety brake
14. Check the function of the remote control.
15. Check the function of the emergency stop.
16. Check the function of the manual lowering.
17. Check the mast sections and bolts.
18. Check the wall anchorings.

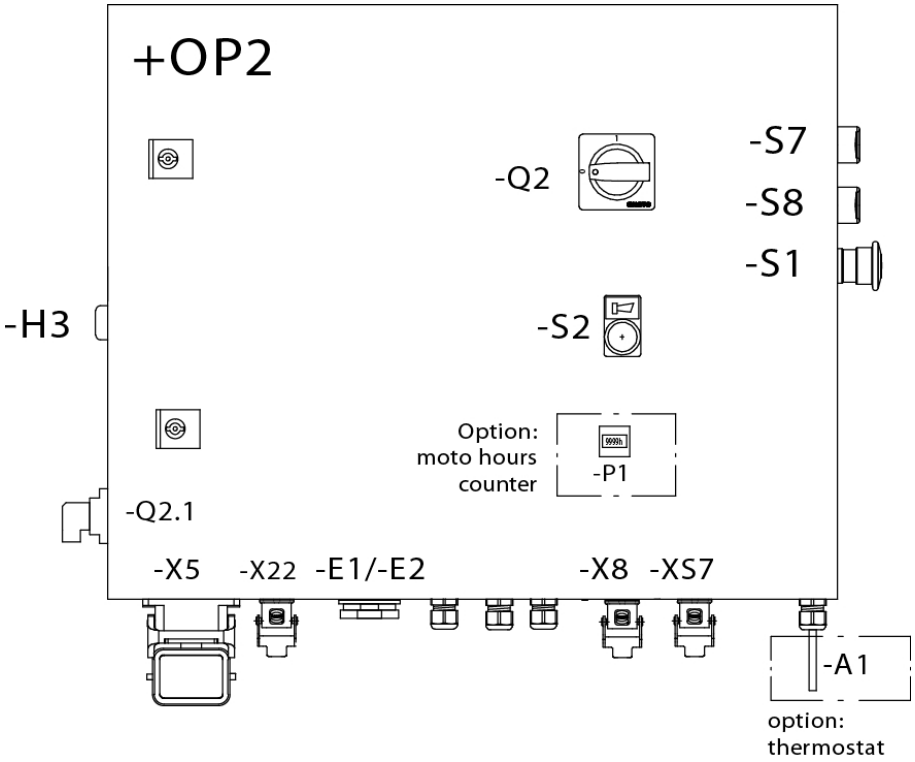
3.2 Operation

3.2.1 Loading

The load must be evenly distributed on the platform. The platform loading capacity depends on the platform length, optional platform extensions and the topmost anchor location. If the mast rollers on the top frame are running above the topmost anchor and the platform is longer than 12 m, the loading capacity is reduced. The permissible loadings are shown in the loading tables. The loading tables are in the chapter 6 and on the caution stickers.

3.2.2 Power connection

- Connect the power supply cable to the cable drum and then from the cable drum to the platform.
- Turn switch Q0 on the cable drum to position 1.
- Turn switch Q2 on the platform electric box to position 1.
- Check phase order lamp H3. If the lamp is on, the phase order is correct; if not, change the phase order using switch Q2.1.



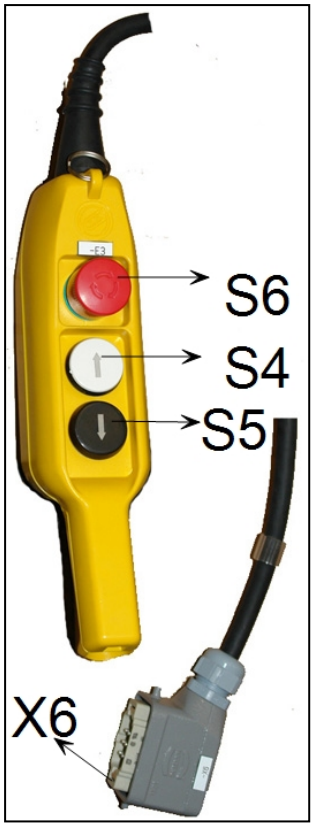
Picture 3.2.2.1 Platform electric box

Q1- Main switch
S2- Horn
X5- Remote control Pendant
H3- hase order lamp
E1,E2- 230V Sockets
X8- Safety brake test button
Q2.1 -Phase watch
XS7- External safety circuit
S7-Up
S8-Down
S1-Emergency stop
Q0-Main switch oncable drum

3.2.3 Up and down controls

- The platform is driven up or down by pushing the up or down button on the remote control or on the platform electric box.
- The platform moves until the button is released.

The horn also sounds when the platform moves below a height of 2 m. The remote control is connected to the platform electric box socket X5.



Picture 3.2.2.2. Remote control

S4- UP/ FORWARD
S5- DOWN/BACKWARD
S6- EMERGENCY STOP
X6/ PLUG

3.2.4 Horn

The horn on the platform can be used as a warning signal or to call for help. The horn sounds when the horn button on the platform electric box is pushed

3.2.5 Emergency stop

Emergency stop buttons are on the remote control and on the platform electric box.

3.2.6 Chassis drive unit

The chassis drive unit is used to move the MCWP on the job site. The chassis drive unit is optional equipment.
Only two mast sections can be mounted when moving the MCWP using the chassis drive unit. Also, the platform must be lowered manually to the lowest position on the rubber buffers.
The drive unit is used as follows:

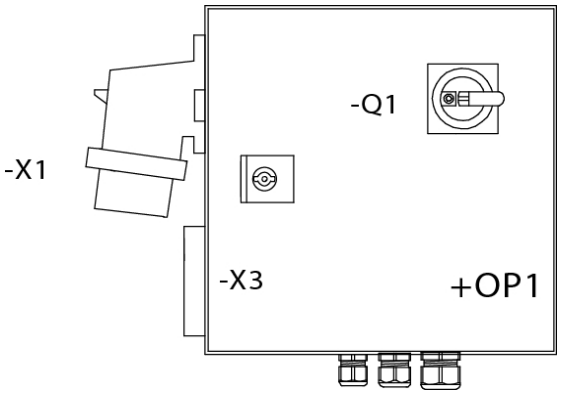
Only two mast sections can be mounted on the MCWP.

- Two persons must be available when moving the MCWP using the chassis drive unit.
- Manually lower the platform on to the rubber buffers.

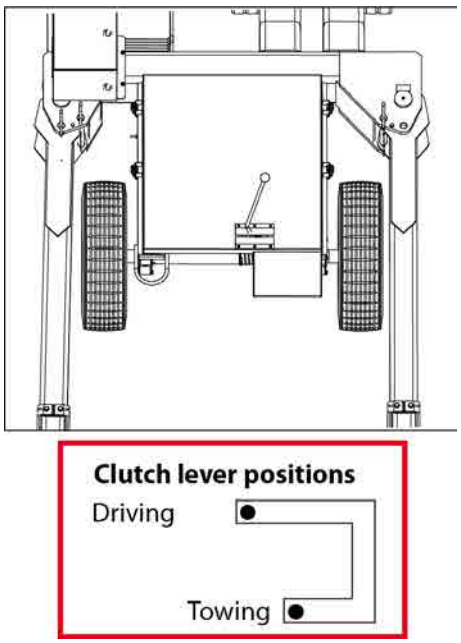
- Switch the clutch lever to the horizontal drive position. Note that the chassis has no brakes when the clutch lever is in the towing position.
- Extend and turn out all the outriggers as wide as possible.
- Keep the jacks as near to the ground as possible.
- Connect the remote control to the chassis electric box socket X3.
- Connect the power supply cable to the chassis electric box socket X1.
- Turn the chassis electric box main switch Q1 to position 1.
- The MCWP moves forward by pushing the up button and backwards by pushing the down button on the remote control.
- The chassis is steered by the towing bar.

After relocation:

- Extend and turn out all the outriggers as wide as possible
- Lower the jacks.
- Drive the platform up from the rubber buffers. The lower safety limit shall be bypassed when driving the platform from the buffers. The bypass switch is inside the platform's electric box.



Pic 3.2.6.1 Wheel chassis electric box



Pic 3.2.6.2 Drive unit clutch positions

3.2.7 Hand tool power socket

There are two 230 V power sockets for hand tools on the bottom panel of the platform electric b ox. The maximum load is 16 A.

3.3 End of operation

After finishing the work, the following actions must be carried out:

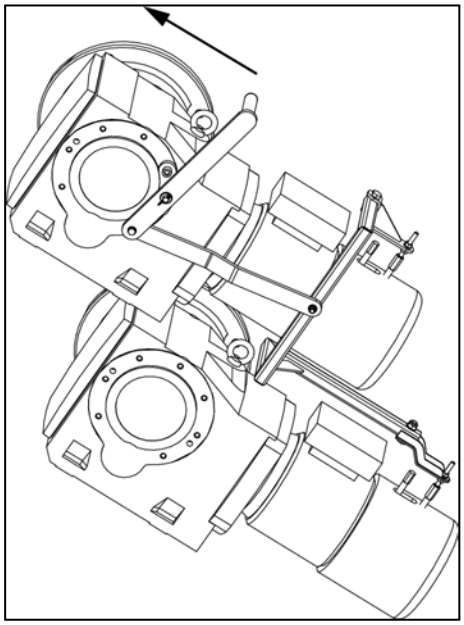
- Drive the platform to the bottom.
- Switch off the power supply from main switch Q2 on the platform.
- Clean the platform.
- Remove the remote control to avoid unauthorized use.

3.4 Manual lowering

The platform can be lowered manually if the driving motor does not work, for example, due to a power cut.

The manual lowering lever is located under the platform motor cover. The platform is lowered by pushing the lever carefully until the platform starts to move. Push the lever carefully to keep the speed under control. If the normal lowering speed is exceeded, the safety brake will activate. The brakes must be cooled for five minutes after every five-meter lowering.

A twin mast unit must be lowered so that the platform remains horizontally levelled. Both lifting frames must be lowered simultaneously.

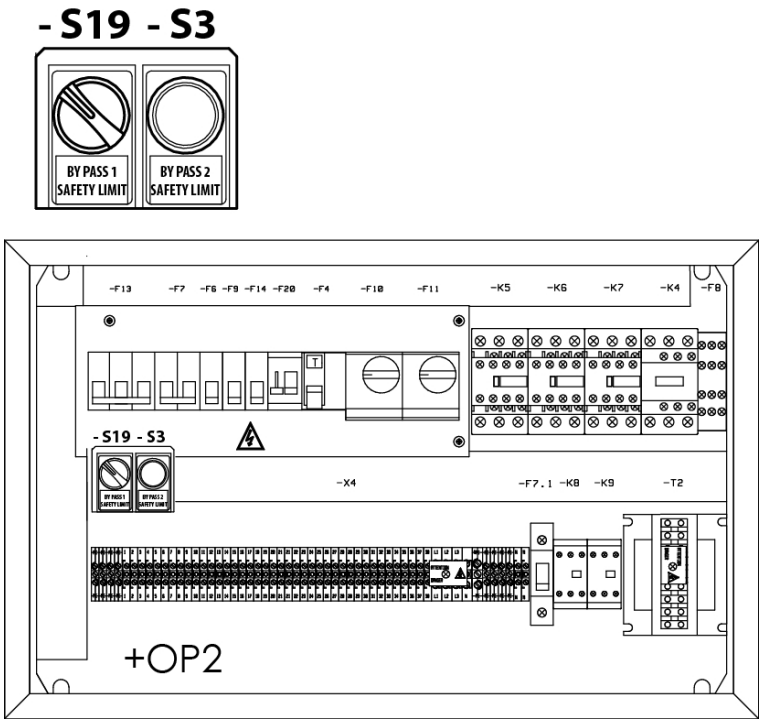


Pic.3.4.1 lowering lever

3.5 Limit switch bypass

The bypass button S3 and knob S19 for the lower safety limit are located inside the platform electric box. The platform is raised from the transport position by bypassing the safety limit. The upper safety limit is bypassed by lowering the platform manually to the normal operational range.

Operations must me only performed by trained personnel !



Pic. 3.5.1 Safety limit bypass switch inside the platform electric box.

4. TRANSPORT AND STORAGE

This chapter describes Scanclimber MCWP transport and storage instructions.

4.1 Lifting

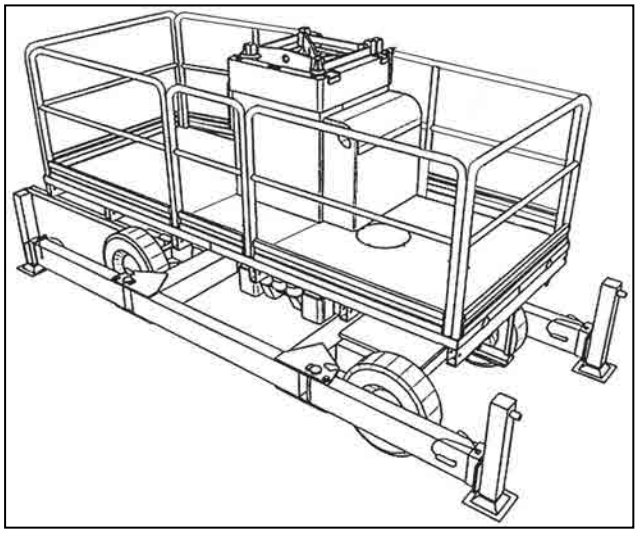
The whole machine with chassis can be lifted from the top cap or by forklift from under the chassis. The SC5000 top cap can take 6500 kg.

The machine must not be lifted by a forklift or a crane under the platform!

4.2 Transport instructions

An MCWP with a 7.3 m platform and a chassis can be transported by truck. The jacks must be screwed against the floor for stability during transportation.
Check the following before transportation:

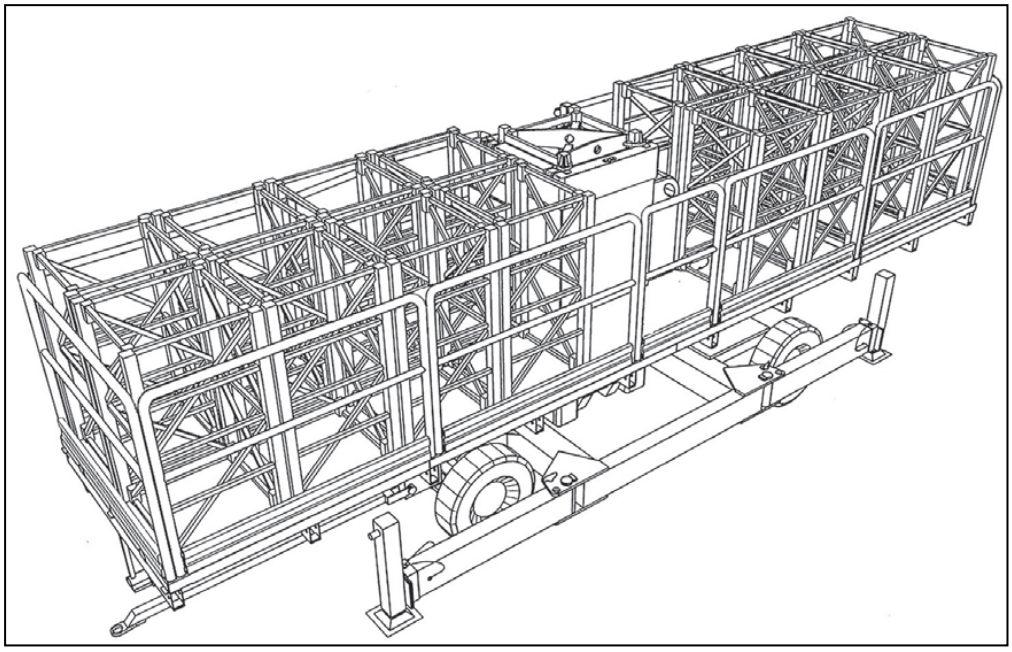
- There are no loose parts.
- Electric cables are not tangled.
- The jacks against the floor are screwed down.
- The MCWP has been fastened to the truck properly.



Pic. 6.2.1 Basic machine on wheel chassis

4.2.1 Mast sections

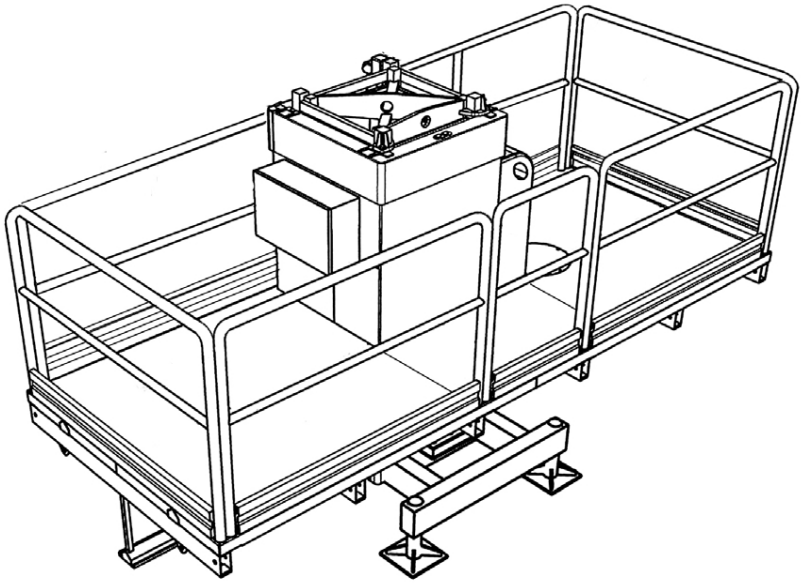
Mast sections can be transported on the platform. Place the mast sections on the platform so that the cones on the mast section tubes point upwards.



Pic. Machine on wheel chassis. 7,3 m playform and 16 mast sections.

4.2.2 Platform sections

Platform sections can be transported on the platform.



Pic. 3.2.3. Basic machine on mini chassis

4.2.3 Electric components

Pack all electric components carefully to avoid damage.

4.2.4 Transport measurements

The most common weights and dimensions are on the table below

Set	Length (m)	Width (m)	Height (m)	Weight (kg)
Basic machine 4,1 m platform+wheel chassis	5.13	1.74	2.43	3795
Basic machine 4,1 m platform+wheel chassis + 8 mast sections	5.13	1.74	2.49	4455
Basic machine 7,3 m platform+wheel chassis	7.30	1.74	2.43	4110
Basic machine 7,3 m platform+wheel chassis + 16 mast sections	7.30	1.74	2.49	5430
Basic machine 4,1 m platform on mini chassis	4.10	1.68	2.30	2335

4.3 Long-term storage instructions

When an MCWP is stored for a long time, it is important to protect it against corrosion and mechanical damage.
See the long-term storage instructions below.
Storage duration more than 6 months:

- The gearboxes have to be completely filled up with gearbox oil
- Rollers and other parts that contain bearings must be operated (turned by hand) about 2 – 4 times a year.
- The motor must be turned manually about 2 – 4 times a year. This is to avoid bearing damage and the brake pads binding to the discs.

Storage duration of more than 12 months:

- The safety brake must be stored in a temperate environment. The exchange period of four years still applies, even if it has not been in use.
- Switches and other electric components must be protected against rain, sunlight and dust. If possible, store the whole machine under roofed cover.
- All electric cables must be stored in a temperate environment and away from direct sunlight.
- All mechanical parts that may be affected by corrosion must be protected with anti-corrosion oil/grease.
- Rubber parts, such as cable guide springs and cables, can be affected by sunlight during long-term storage. In order to extend their life time, all rubber parts must be stored in a dark and cool environment.

5. SERVICE AND MAINTENANCE

5.1 General

Read the safety instructions, chapter 2, before starting the service.

Proper servicing is important to maintain the MCWP in perfect working condition and guarantee its trouble-free use. The service shall be done by qualified professionals only.

5.2 Safety brake

The safety brake must be replaced in every fourth year. The expiry date is marked on the safety brake type plate. The replacement interval does not depend on the working hours. A used safety brake can be sent to Scanclimber for overhauling. Ask your Scanclimber supplier for further information.

5.3 Washing

The MCWP can be washed with a high pressure washer. The water jet must not be directed at the electric boxes, motors or bearings. The machine must be lubricated after washing.

5.4 Lubrication

The platform must be driven down before any lubrication activities. Also, the electricity must be switched off.

Lubrication should be done according to the lubrication schedule in chapter 5.4.1. It includes all the necessary information on lubrication: intervals, lubrication points, oils and greases.

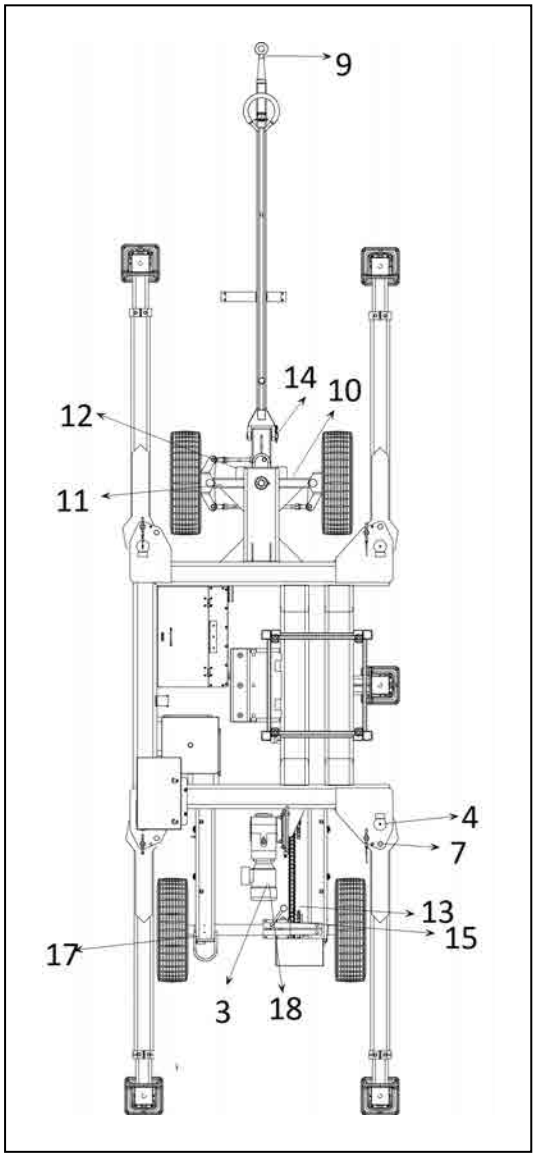
When lubricating slide bearings with a grease gun, make sure that grease enters both the surfaces. The grease should be pressed in until the surplus spills out.

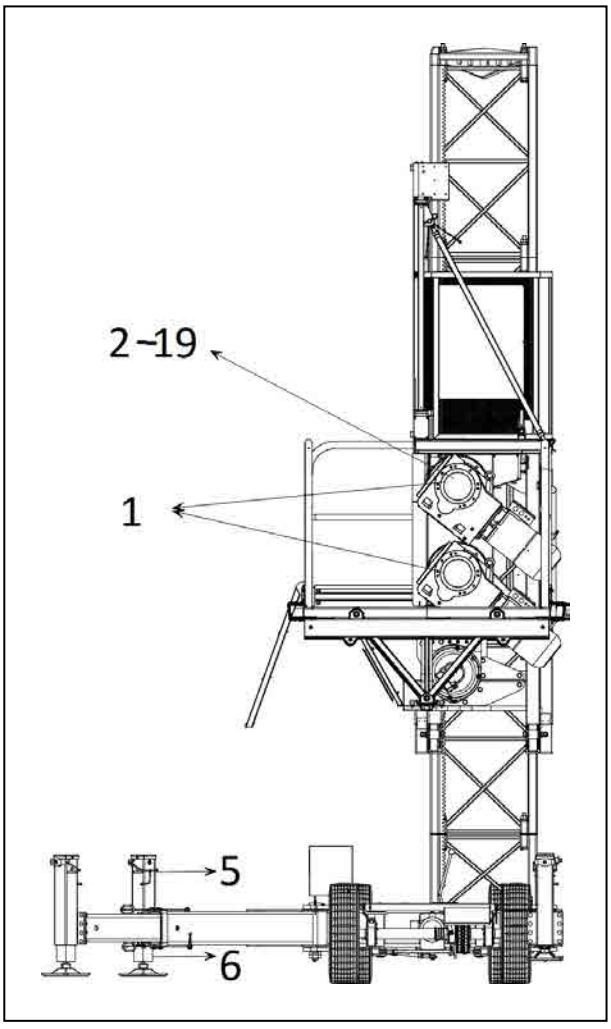
When lubricating the bearings the condition of bearing seals should be checked. Damaged seals must be replaced with new ones.

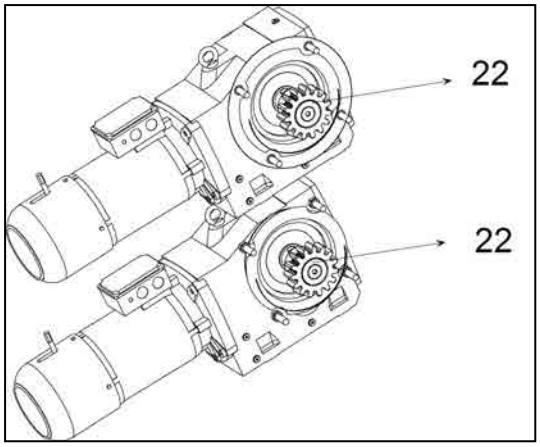
5.4.1 Lubrication Schedule

LUBRICATION	POSITION	NUMBER OF POSITIONS	OBJECT	TOOL /INSTRUCTION	LUBRICANT
30 h	1	all	rack, pinion	brush, spray	grease
	22	2	pinion coupling	grease gun	grease
120 h	2	2	lifting motor gear box	check oil level	Shell Tivela S220, Mobil Glygoule HE220
	3	1	wheel chassis drive unit gear box	check oil level	Shell Tivela S220, Mobil Glygoule HE220
360 h	4	4	outrigger axle	grease gun	grease
	5	5	jack screw	grease gun	grease
	6	5	jack ball joint	brush	grease
	7	4	outriggers pin	brush	grease
	8	1	twin levelling mechanism	brush, spray	machine oil
	9	1	towing bar	brush	grease
	10	1	wheel chassis steering system centre joint	grease gun	grease
	11	all	wheel chassis steering joints	grease gun	grease
	12	2	wheel chassis front axle	grease gun	grease
	13	1	clutch lever	grease gun	grease
	14	1	towing bar pin	grease gun	grease
	15	2	drive unit chain	spray	chain grease
		all	limit switches	spray	machine oil
1400 h	17	2	rear axle bearings	grease gun	grease
	18	1	drive unit gear box	oil change	Shell Tivela S220,Mobil Glygoule HE220
	19	2	lifting motor gear boxes	oil change	Shell Tivela S220,Mobil Glygoule HE220
	20	single mast 3 twin mast	limit switch arms and axles	spray	machine oil

		5			
1600h	23	2	drive shaft and flange	grease gun	AGIP GR MU EP2
160h	24	2	Teeth of the gear rim	grease gun	AGIP GR MU EP2
visual control during screw M20 tightening checking.	25	1	Inner surfaces of drive wheel	grease gun	AGIP GR MU EP2(code 10007908) or other machine/bearing grease
visual and noise control each day	26	1	Teeth of drive wheel	grease gun	Grafloscon CA 901 Ultra(code 10010916)or other high-adhesive graphite based and waterproof grease



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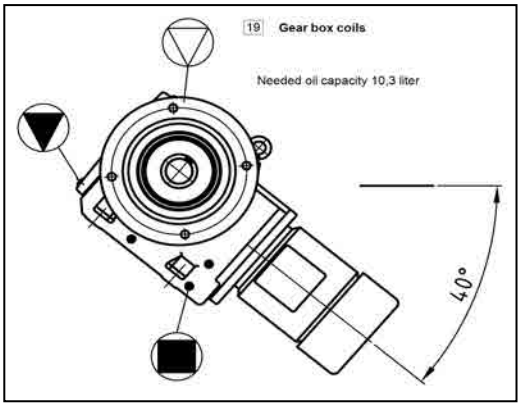
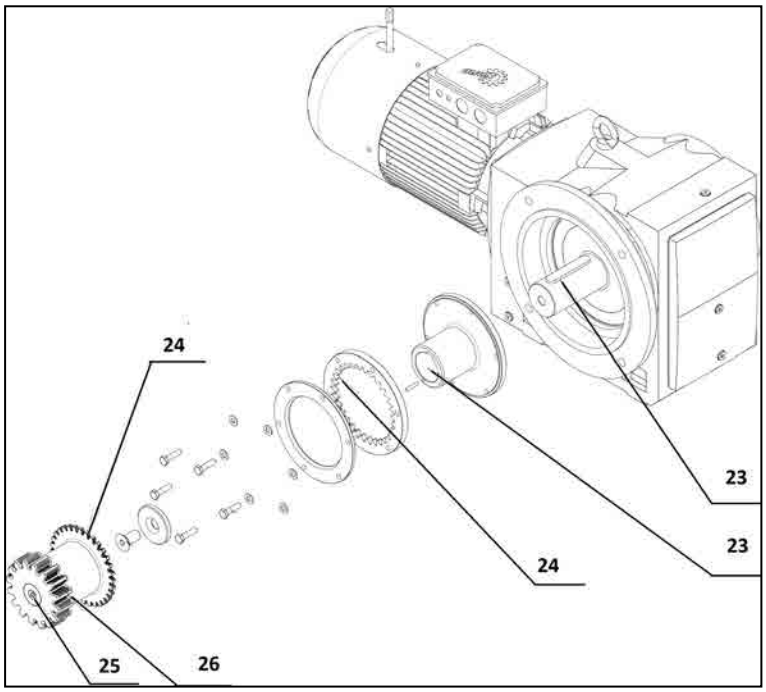
22

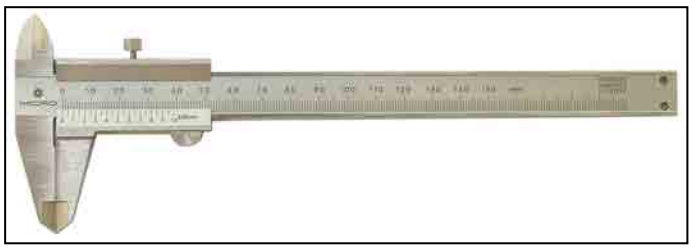

19 Gear box coils
Needed oil capacity 10,3 liter
40°


24
23
23
24
25
26

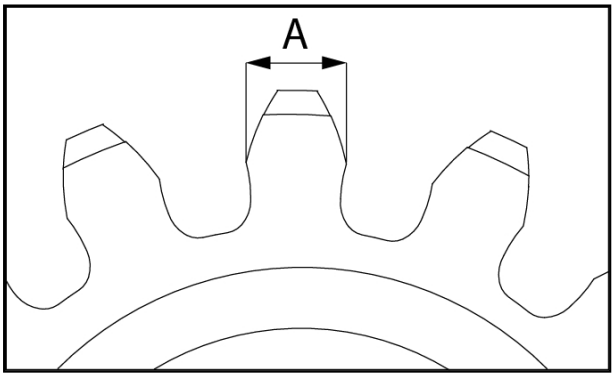
5.5 Adjustments

5.5.1 Pinion

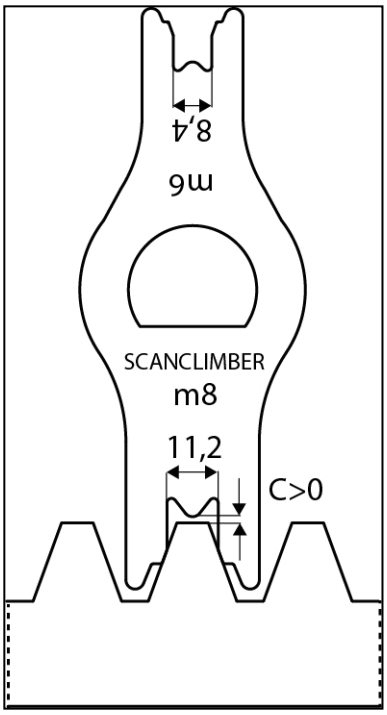
The pinion teeth are measured with slide caliper. In a new pinion A = 13.0 mm. The minimum allowed A = 12.0 mm. See picture **5.5.2.**



Pic. 5.5.1. Slide caliper



Pic 5.5.2. Pinion tooth measurement



Pic. 5.5.3 Rack measurement tool

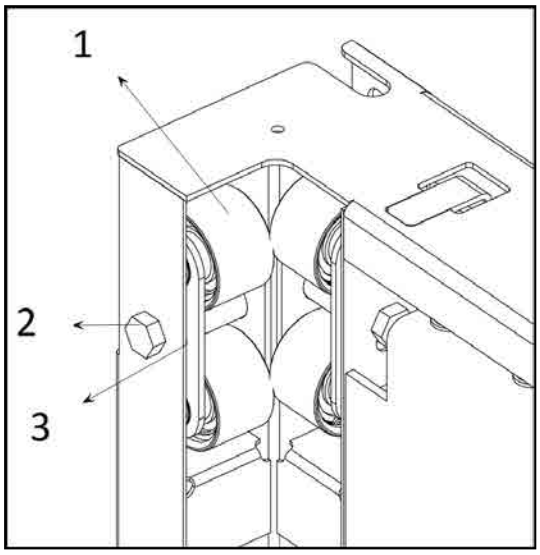
5.5.2 Rack

Scanclimber has a special tool for rack checking. For orders, please contact Scanclimber aftersales.

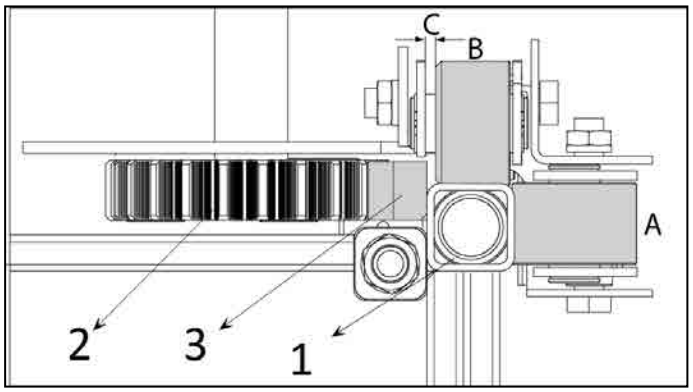
5.5.3 Mast rollers

The mast rollers shall be adjusted when the clearance between the mast corner tubes and the rollers exceeds 1.5 mm. The clearance is measured while the other roller of the pair lies on the corner tube. When adjusting the rollers, the platform must be unloaded. The adjustment is done as follows: loosen the roller bolt and nut. Turn the roller eccentric shaft with the special key. See picture **5.5.4.**

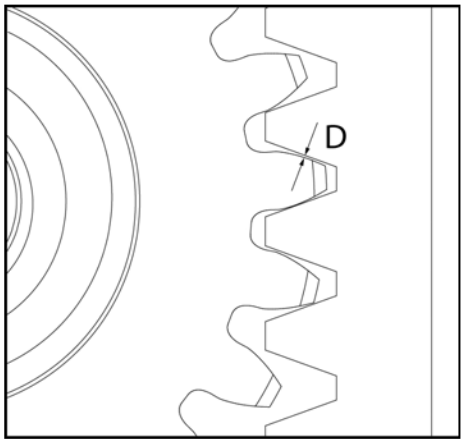
There are 24 pairs of rollers, 8 pairs on the top frame and 16 pairs on the lifting frame. Start the adjustment with rollers A (behind the rack), picture **5.5.5**. Adjust the clearances of the drive pinion-rack and safety pinion-rack by turning the eccentric shafts. Clearance D must be 1.3 – 1.7 mm (picture 7.5.6). There shall be a clearance C between the back of the rack and the rollers B, to avoid the rollers touching the rack (picture **5.5.5).**



Pic. 5.5.4. Mast rollers (1), roller bolt (2). Eccentric axle (3)



Pic. 5.5.5. Mast corner tube (1), pinion(2), rack (3)



Pic. 5.5.6. Rack and pinion clearance.

Next, adjust rollers B so that the pinions are in the middle of the rack. After these adjustments the rest of the rollers are adjusted so that the clearance between the rollers and the mast corner tubes is 1 mm.

5.5.4 Motor brake

The lifting motors have electromagnetically controlled brakes. These brakes must be inspected yearly. The optional chassis drive unit has similar brake which must be inspected regularly.

Check the following items concerning the lifting and the chassis drive motors:

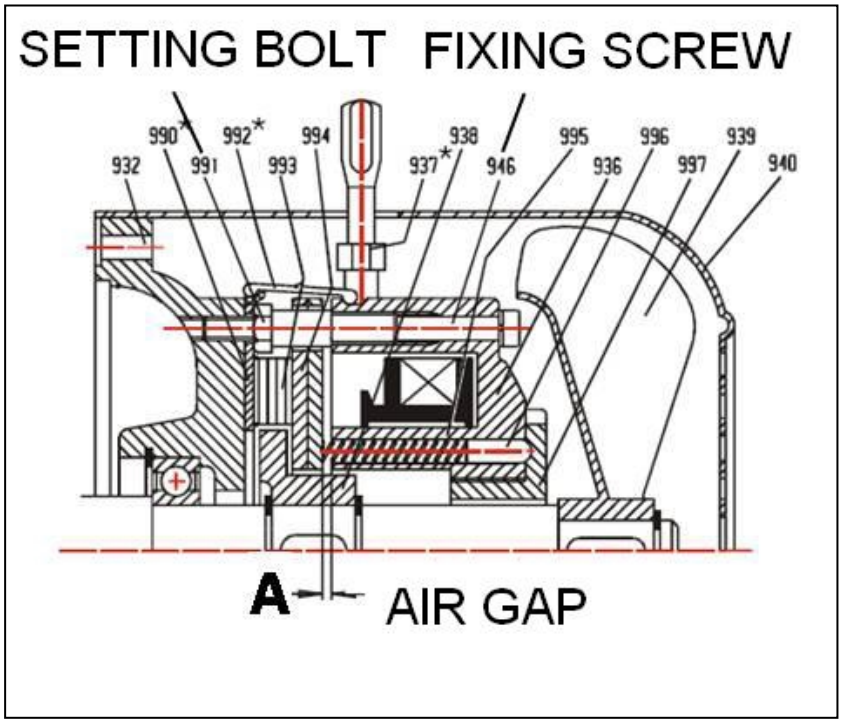
- overall condition of the brake
- the brake lining thickness
- the air gap between the magnet body and the anchor plate

Prepare the machine for the check as follows:

1. Manually lower the platform on to the rubber buffers.
2. Turn main switch Q2 to 0 on the platform electric box.
3. Remove the fan covers.
4. Remove any possible dust from the motor covers.

Measure the brake lining thickness. The minimum thickness is 11.5 mm. If the thickness is less, change the brake lining as follows:

1. Loosen the fixing screws.
2. Pull back the brake.
3. Replace the brake lining.
4. Reassemble the brake with the fixing screws.
5. Adjust the air gap as described in the following paragraph.



Pic. 5.5.7 Motor brake.

Measure and adjust the brake air gap as follows:

1. Measure the air gap (A).
2. Nominal air gap is 0.3 mm and readjustment is needed if the air gap is 1.0 mm.

3. Loosen the fixing screws
4. Adjust the setting bolts, all bolts evenly
5. Tighten the fixing screws
6. Measure the air gap with a feeler gauge at different positions

Reassemble the fan covers and lift the platform from the rubber buffers. Push the safety limit bypass button and up button simultaneously.

5.5.5 Limit switches

The limit switches shall be serviced regularly.

1. Clean the limit switch.
2. Check the proper connection of the limit switch arm to the cam and adjust the arm and cam if needed.
3. Lightly lubricate the limit switch arm, axle and roller.

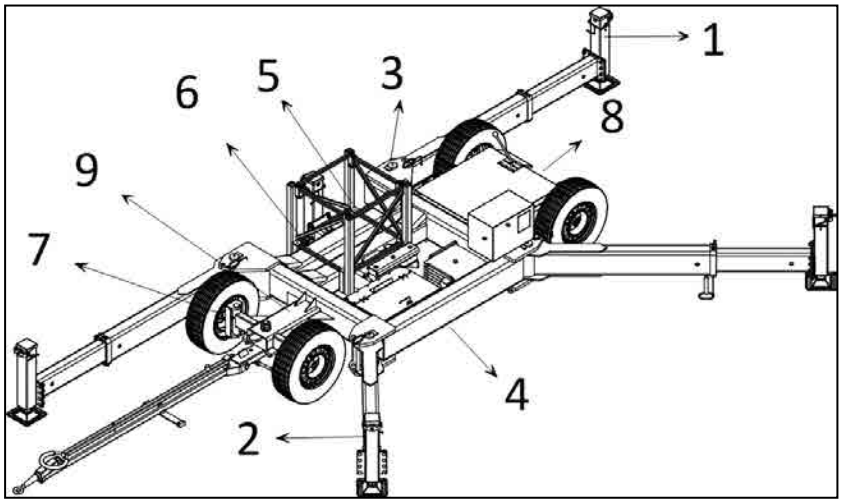
5.6 Corrosion protection

Scanclimber MCWPs have been protected against corrosion with galvanization, painting and an anti-corrosion agent.
All corrosion protection damage shall be repaired without delay to ensure proper protection. Galvanization damage can be repaired with a cold zinc spray, paint damage must be re painted and hollows protected with an anti-corrosion agent. Do not drill holes to any structure!

5.7 Inspections

The erection, daily and periodic inspections shall be done according to **Inspection forms.**

5.7.1 Wheel chassis



Pic.5.7.1 Check points of the wheel chassis

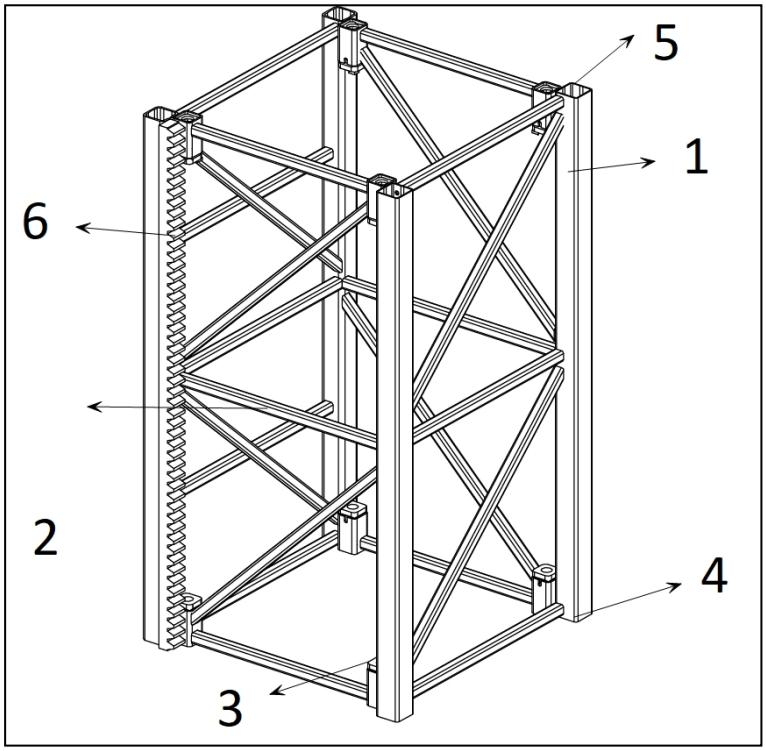
Check the following points of the wheel chassis:

1. Jack outrigger bolts
2. Outriggers
3. Pins
4. Chassis
5. Mast welding to the chassis

6. Tubes on the base mast. The tubes must be straight.
7. Wheels, bolts and tire pressure
8. Rear axle
9. Steering

5.7.2 Mast sections

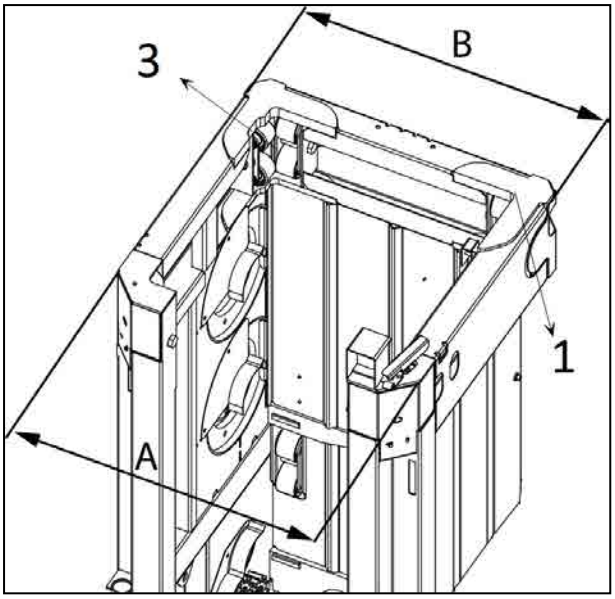
1. Corner tubes, possible dents
2. Horizontal and diagonal tubes and welds. The tubes must be straight.
3. Bolt pocket welding
4. Cones
5. Corner tube heads
6. Rack

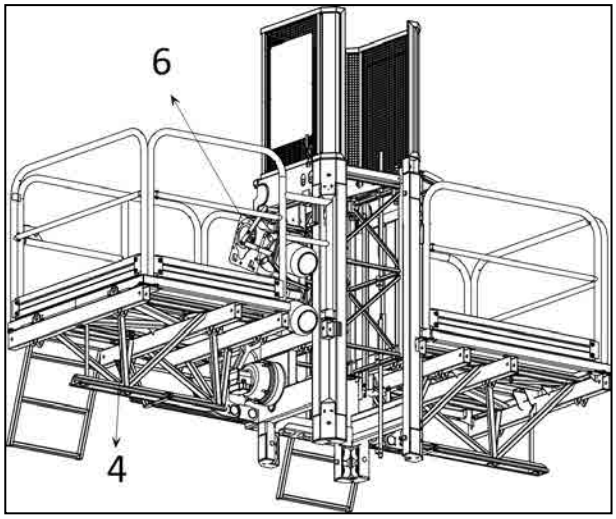


Pic.5.7.2. Check points of the mast section

5.7.3 Lifting frame

1. Corners, possible cracks
2. The frame shall be rectangular, dimension A = B
3. Mast rollers and bearings
4. Platform tubes and welds. The tubes must be straight.
5. Welding cracks
6. Gear motor and safety brake fastenings

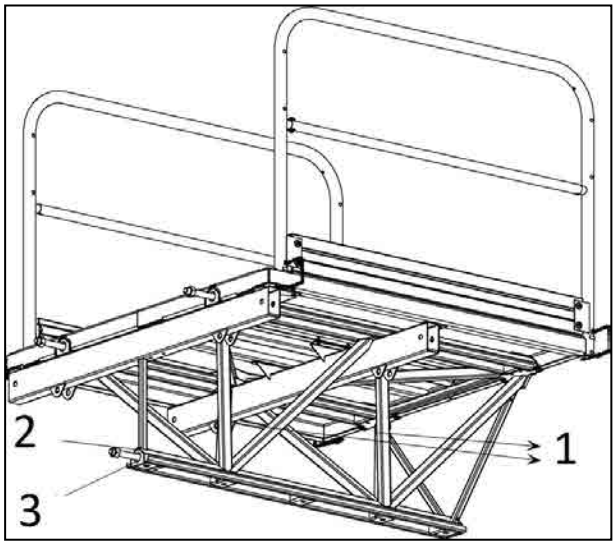




Pic.5.7.3. Check points of the lifting frame..

5.7.4 Platform sections

1. Platform tubes and welds. The tubes must be straight.
2. Bolt pocket welding
3. Guide cones



Pic.5.7.4 Check points of the platform sections.

SC5000

Mast climbing work platform

ERECTION & DISMANTLING MANUAL

Version: V1.1_EN_02_20

SCANCLIMBER® by Tractel®

SCANCLIMBER OY

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6. ERECTION

This chapter describes the mast climbing work platform erection.

6.1 General

Planning in advance saves erection time and ensures that the MCWP configuration is suitable for the work being done.

Read the safety instructions (chapter 2) before erection.

6.2 Before erection

6.2.1 Job site visit

It is worth visiting the job site before the MCWP is delivered. The following issues must be resolved:

1. The kind of work that is going to be done and for what purpose the MCWP will be used.
2. The loading capacity required, and the height and size of the working area.
3. The Scanclimber configuration required.
   - Basic units
   - Mast heights
   - Platform lengths
   - Platform extensions
   - Weather covers
   - Optional lifting equipment
4. Exact measurements of the working area, drawings.
5. Routes to move the MCWP to its position. Possible obstacles, either on the transportation route or platform working area, hoists or cranes required.
6. Exact locations of the machines and outriggers.
7. Distance from the wall and suitable anchors.
8. Anchor fastening points on the wall or other structures.
9. Power supply near machines, 400 V / 32 A.
10. Packing list of all the Scanclimber components required.

6.2.2 Tools

The tools needed for MCWP erection:

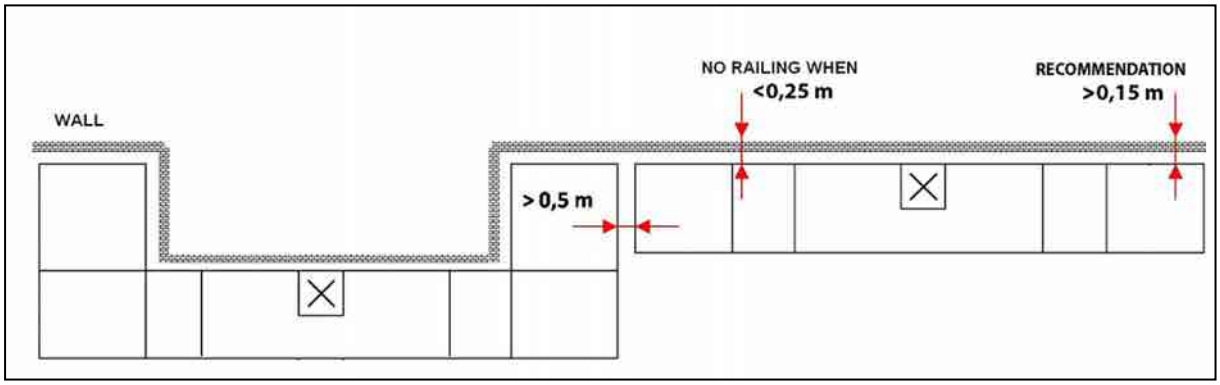
- Ratchet ½”
- Bolt gun ¾” +36 mm swivel socket
- Bolts and nuts set
- Multi-tester
- Test pen
- Electric box keys
- Drill + drill bits
- Wedge anchors for wall anchor fastenings
- Iron bar
- Shovel
- Level eye

Use	Bolt size	Tool size	Sockets ½ "	Wrench
Mast bolt	M24	36 mm	X long	X
Platform bolt	M24	36 mm	X long	X
Railing screw	M10	15 mm		X
	M8	13 mm		X
	M6	10 mm		X

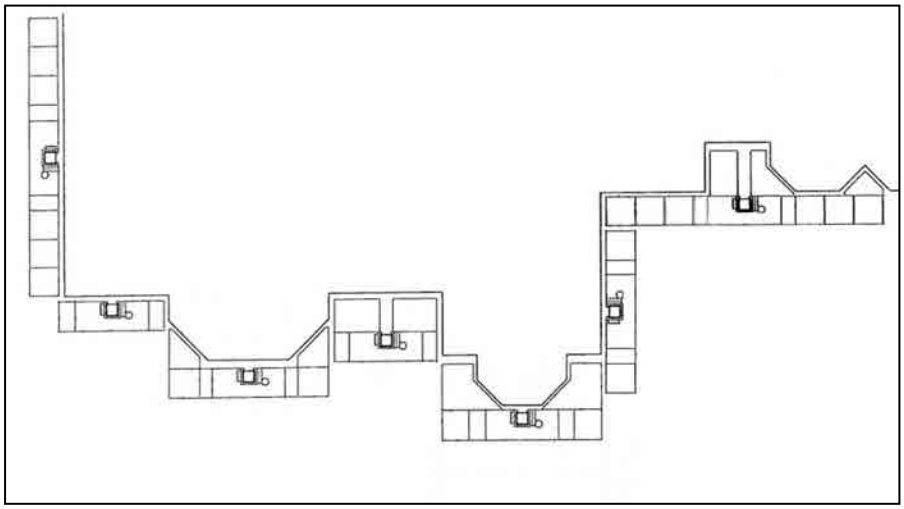
6.2.3 Tightening torques

Mast section bolts	350 Nm
Platform section bolts	240 Nm
Mast rollers	200 Nm

6.2.4 Layout examples



Picture 6.2.1 MCWP distance from the wall and other MCWPs



Picture 6.2.2 Several MCWPs and telescopic extensions located around a multi shape facade

6.3 Loading tables

A loading table shows the permissible platform loading for the platform layouts. In case the required platform layout differs from the examples, contact the Scanclimber supplier for further information.

The most common platform layouts and their corresponding loading tables are shown on the following pages. There are separate chapters for single and twin mast machines, as well as for the machines with telescopic extensions.
Note the following:

- The platform loading capacity depends on the platform length.
- The load must be evenly distributed on the platform.
- The maximum freestanding mast height depends on the platform length and the wheel chassis outrigger positions

With an anchored mast the platform loading is different if the top frame is above or below the topmost anchor. Loading tables for both cases are shown in the following pages.

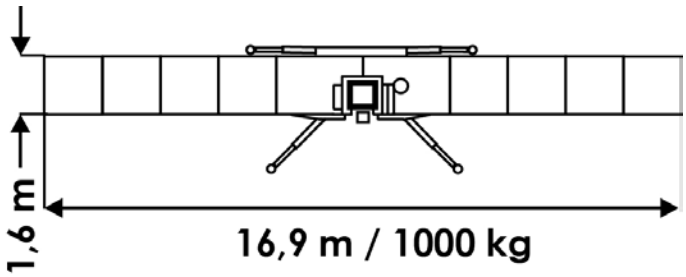
6.3.1 Loading Tables Single Mast

6.3.1.1 Loading table 1, freestanding mast on wheel chassis, outriggers in K-position

- MAST SIDE TURNED OUT
- MAX. WIND SPEED 12.7 m/s
- MAX. PLATFORM HEIGHT 9 m / PLATFORM LENGTH 16.9 m
- MAX. PLATFORM HEIGHT 10,5 m / PLATFORM LENGTH 13.7 m
- MAX. PLATFORM HEIGHT 12 m / PLATFORM LENGTH 10.5 m
- MAX. PLATFORM HEIGHT 13,5 m / PLATFORM LENGTH 7.3 m
- MAX. PLATFORM HEIGHT 15 m / PLATFORM LENGTH 4.1 m
- MAX. POINT LOAD 200 kg ON 0.1 m x 0.1 m AREA

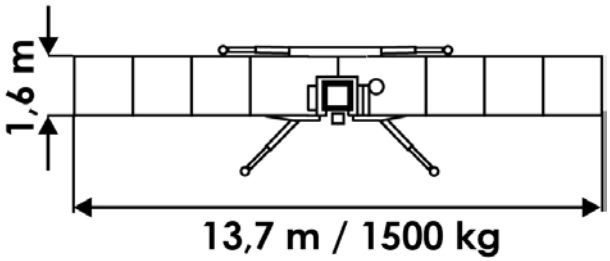
MAX. LOADING 1000 kg COMPOSED OF:

- evenly distributed loading 680 kg
- freely positioned loading 3 persons 320 kg



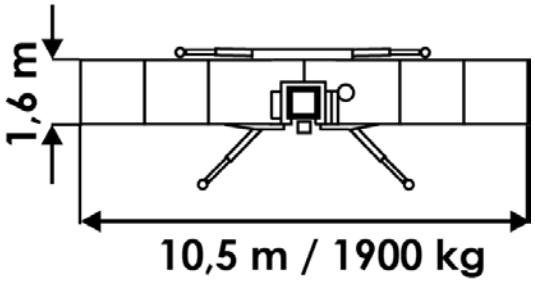
MAX. LOADING 1500 kg COMPOSED OF:

- evenly distributed loading 1180 kg
- freely positioned loading 3 persons 320 kg



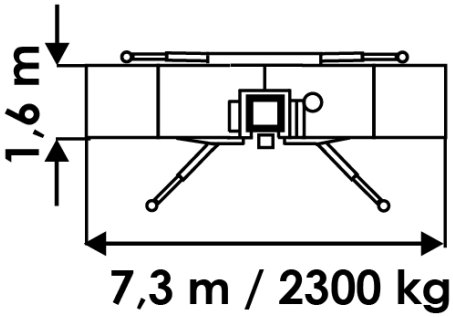
MAX. LOADING 1900 kg COMPOSED OF:

- evenly distributed loading 1580 kg
- freely positioned loading 3 persons 320 kg



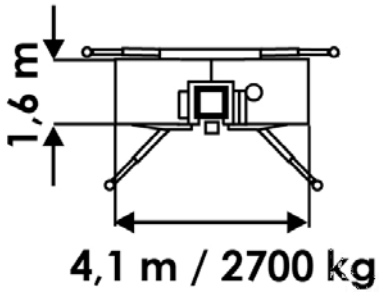
MAX. LOADING 2900 kg COMPOSED OF:

- evenly distributed loading 2580 kg
- freely positioned loading 3 persons 320 kg



MAX. LOADING 2700 kg COMPOSED OF:

- evenly distributed loading 2380 kg
- freely positioned loading 3 persons 320 kg

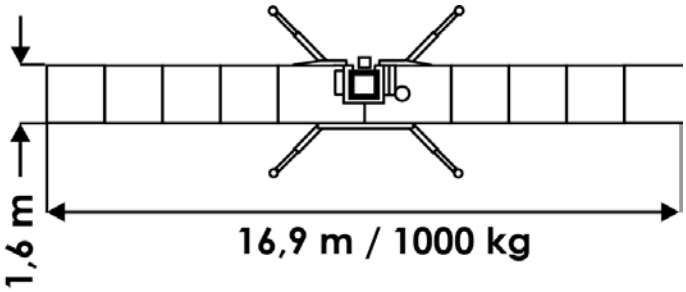


6.3.1.2 Loading table 2, freestanding mast on wheel chassis, outriggers in X-position.

- - MAX. WIND SPEED 12.7 m/s
- - MAX. PLATFORM HEIGHT 18 m/PLATFORM LENGTH 16.9 m
- - MAX. PLATFORM HEIGTH 20 m/PLATFORM LENGTH 4.1 -13.7 m
- - MAX. POINT LOAD 200 kg ON 0.1 m x 0.1 m AREA

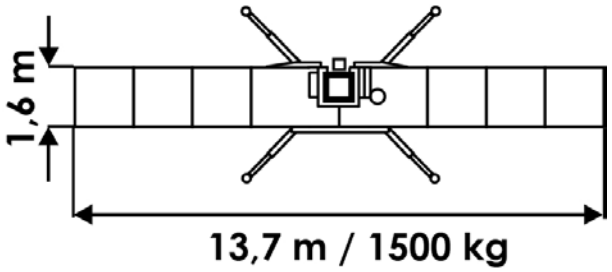
MAX. LOADING 1100 kg COMPOSED OF:

- evenly distributed loading 780 kg
- freely positioned loading 3 persons 320 kg



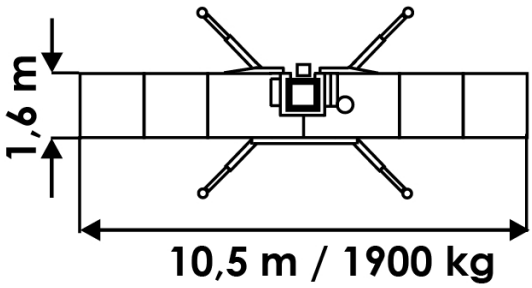
MAX. LOADING 1700 kg COMPOSED OF:

- evenly distributed loading 1380 kg
- freely positioned loading 3 persons 320 kg



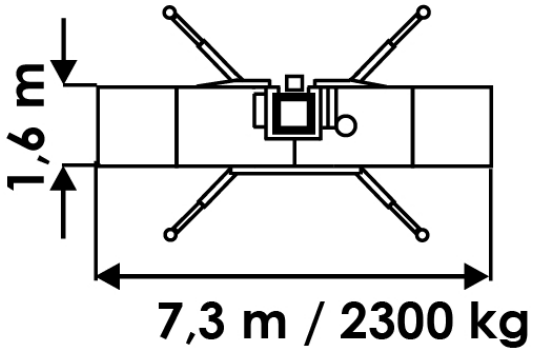
MAX. LOADING 2300 kg COMPOSED OF:

- evenly distributed loading 1980 kg
- freely positioned loading 3 persons 320 kg



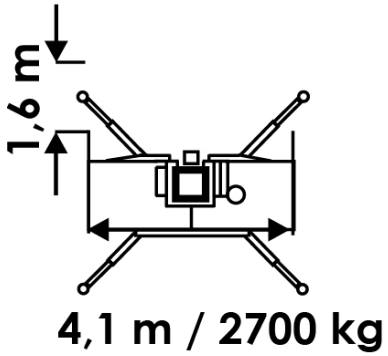
MAX. LOADING 2900 kg COMPOSED OF:

- evenly distributed loading 2580 kg
- freely positioned loading 3 persons 320 kg



MAX. LOADING 2700 kg COMPOSED OF:

- evenly distributed loading 2380 kg
- freely positioned loading 3 persons 320 kg



6.3.2 Loading Tables Twin Mast

6.3.2.1 Loading table 3, freestanding or anchored twin mast

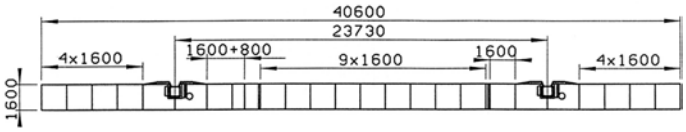
Allowed layouts and loadings

- max point load 200kg on 0,1 m x 0,1 m

Please contact the supplier if you require a layout that is not present in this manual.

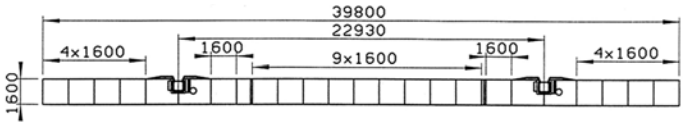
MAX. LOADING 1500 kg COMPOSED OF:

- evenly distributed loading 1100 kg (43 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



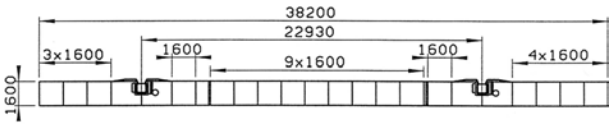
MAX. LOADING 1600 kg COMPOSED OF:

- evenly distributed loading 1200 kg (48 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



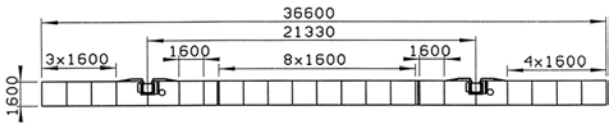
MAX. LOADING 1800 kg COMPOSED OF:

- evenly distributed loading 1400 kg (58 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



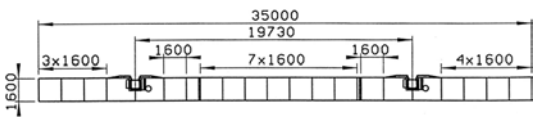
MAX. LOADING 2000 KG COMPOSED OF:

- evenly distributed loading 1600 kg (70 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



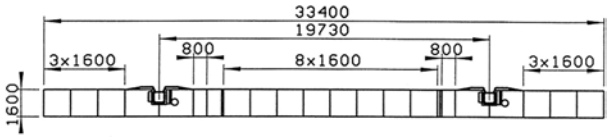
MAX. LOADING 2200 KG COMPOSED OF:

- evenly distributed loading 1800 kg (82 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



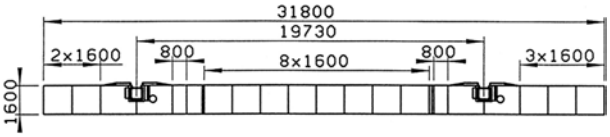
MAX. LOADING 2400 kg COMPOSED OF:

- evenly distributed loading 2000 kg (95 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



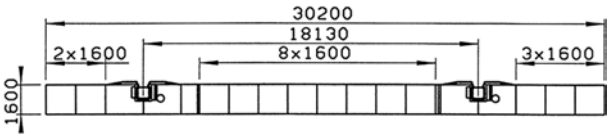
MAX. LOADING 2600 kg COMPOSED OF:

- evenly distributed loading 2200 kg (110 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



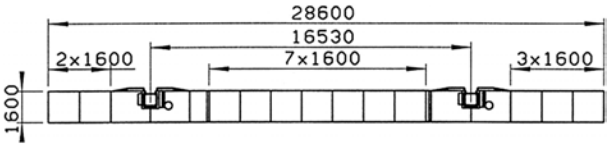
MAX. LOADING 2800 kg COMPOSED OF:

- evenly distributed loading 2400 kg (127 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



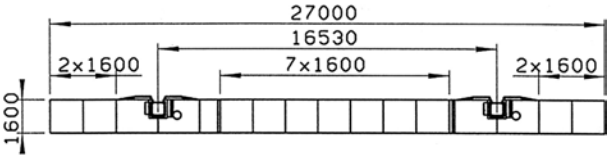
MAX. LOADING 3000 kg COMPOSED OF:

- evenly distributed loading 2600 kg (145 kg/1,6 m section)
- freely positioned loading 4 persons 400 kg



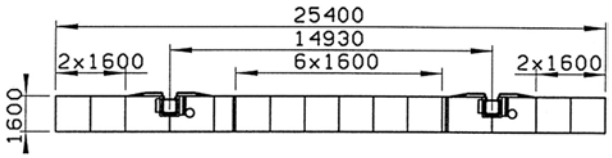
MAX. LOADING 3200 kg COMPOSED OF:

- evenly distributed loading 2800 kg (166 kg/1,6 m section)
- freely positioned loading 4 persons 400 kg



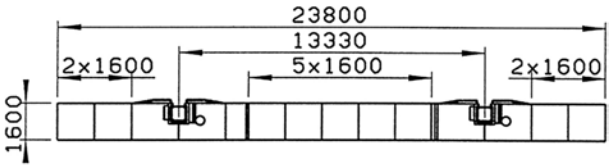
MAX. LOADING 3400 kg COMPOSED OF:

- evenly distributed loading 3000 kg (189 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



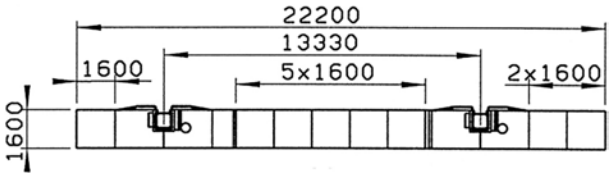
MAX. LOADING 3600 kg COMPOSED OF:

- evenly distributed loading 3200 kg (215 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



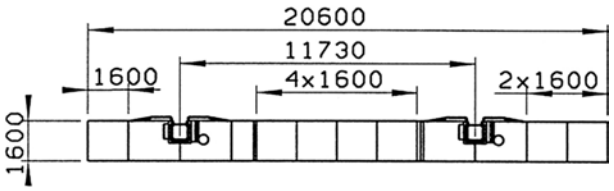
MAX. LOADING 3800 kg COMPOSED OF:

- evenly distributed loading 3400 kg (245 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



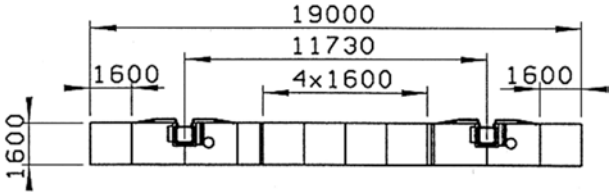
MAX. LOADING 4000 kg COMPOSED OF:

- evenly distributed loading 3600 kg (280 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



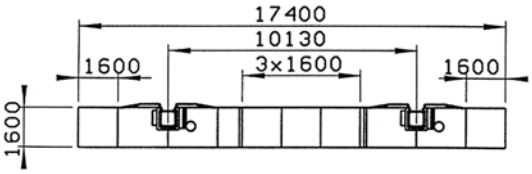
MAX. LOADING 4200 kg COMPOSED OF:

- evenly distributed loading 3800 kg (320 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



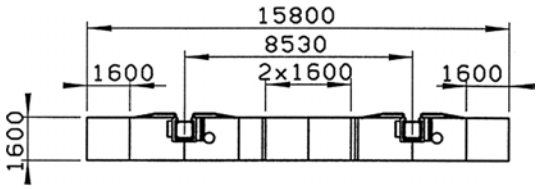
MAX. LOADING 4400 kg COMPOSED OF:

- evenly distributed loading 4000 kg (369 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



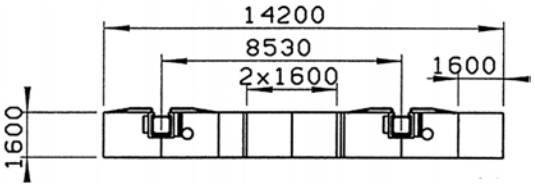
MAX. LOADING 4600 kg COMPOSED OF:

- evenly distributed loading 4200 kg (425 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



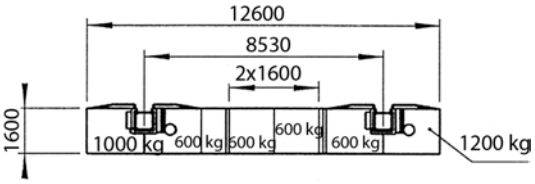
MAX. LOADING 4800 kg COMPOSED OF:

- evenly distributed loading 4400 kg (495 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



MAX. LOADING 5000 kg COMPOSED OF:

- evenly distributed loading 4600 kg as shown in picture
- freely positioned loading 4 persons 400 kg



6.3.3 Loading Tables for Platform with Extensions.

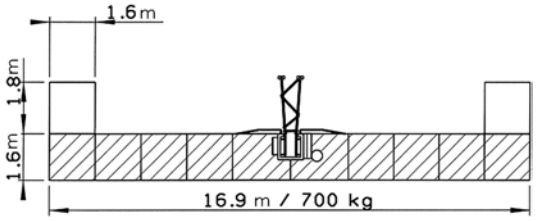
6.3.3.1 Loading table 4, anchored single mast, 1,8 m telescopic extensions

- - MAX. WIND SPEED 15.5 m/s
- - MAX. POINT LOAD 200 kg ON 0.1 m x 0.1 m AREA

Maximum load on telescopic extension is 2 persons + tools (240 kg) per 1,6 m platform section.

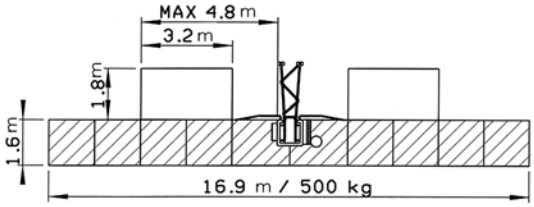
MAX. LOADING 700 kg COMPOSED OF:

- evenly distributed loading 380 kg on hatched area
- freely positioned loading 3 persons 320 kg



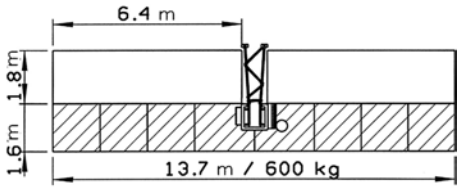
MAX. LOADING 500 kg COMPOSED OF:

- evenly distributed loading 180 kg on hatched area
- freely positioned loading 3 persons 320 kg



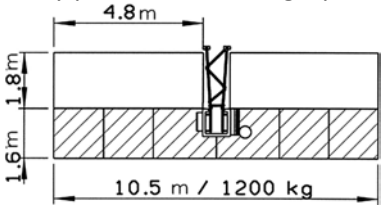
MAX. LOADING 600 kg COMPOSED OF:

- evenly distributed loading 280 kg on hatched area
- freely positioned loading 3 persons 320 kg



MAX. LOADING 1200 kg COMPOSED OF:

- evenly distributed loading 880 kg on hatched area
- freely positioned loading 3 persons 320 kg



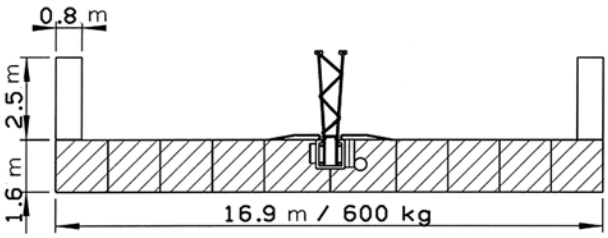
6.3.3.2 Loading table 5, anchored single mast, 2,5 m telescopic extensions, top guiding rollers below the topmost anchor

- - MAX. WIND SPEED 15.5 m/s
- - MAX. POINT LOAD 200 kg ON 0.1 m x 0.1 m AREA

Maximum load on telescopic extension is 2 persons + tools (240 kg) per 1,6 m platform section.

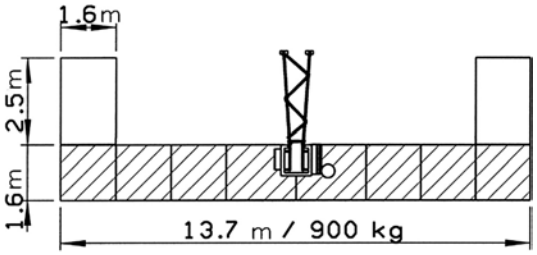
MAX. LOADING 600 kg COMPOSED OF:

- evenly distributed loading 280 kg on hatched area
- freely positioned loading 3 persons 320 kg



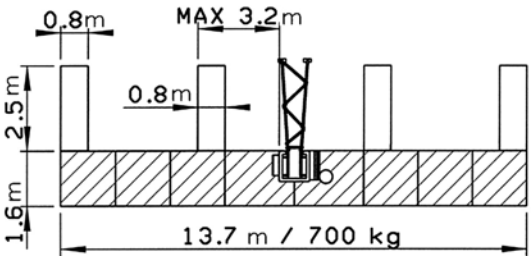
MAX. LOADING 900 kg COMPOSED OF:

- evenly distributed loading 580 kg on hatched area
- freely positioned loading 3 persons 320 kg



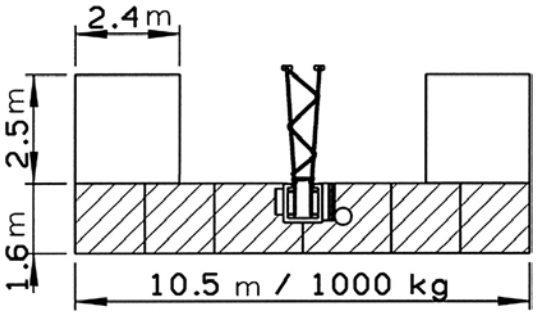
MAX. LOADING 700 kg COMPOSED OF:

- evenly distributed loading 380 kg on hatched area
- freely positioned loading 3 persons 320 kg



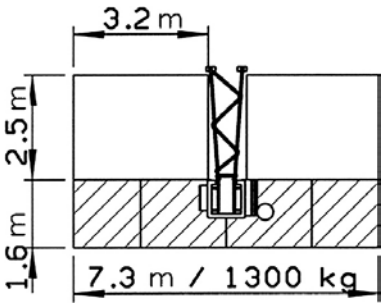
MAX. LOADING 1200 kg COMPOSED OF:

- evenly distributed loading 880 kg on hatched area
- freely positioned loading 3 persons 320 kg



MAX. LOADING 1000 kg COMPOSED OF:

- evenly distributed loading 680 kg on hatched area
- freely positioned loading 3 persons 320 kg



6.3.3.3 Loading table 6, anchored twin mast, 1,8 m telescopic extensions

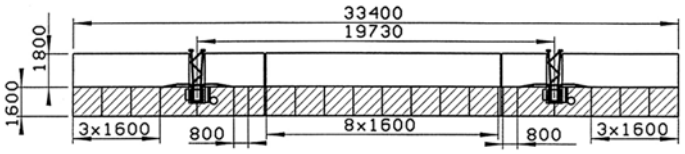
Allowed layouts and loadings

- max point load 200kg on 0,1 m x 0,1 m

Maximum load on telescopic extension is 2 persons + tools (240 kg) per 1,6 m platform section.

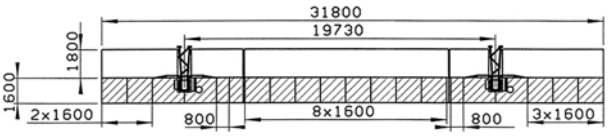
MAX. LOADING 700 kg COMPOSED OF:

- evenly distributed loading 300 kg on hatched area (15 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



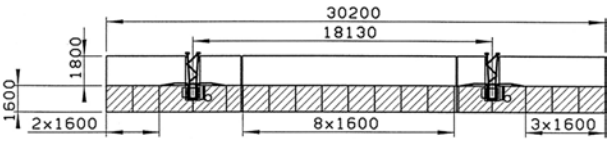
MAX. LOADING 1000 kg COMPOSED OF:

- evenly distributed loading 600 kg on hatched area (30 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



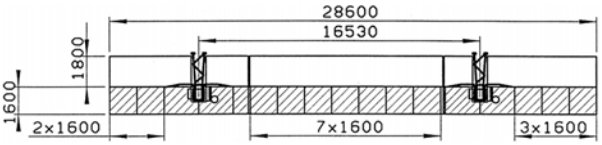
MAX. LOADING 1250 kg COMPOSED OF:

- evenly distributed loading 850 kg on hatched area (45 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



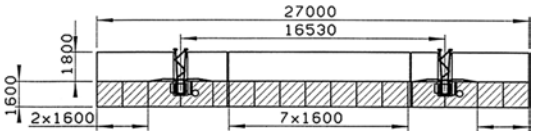
MAX. LOADING 1500 kg COMPOSED OF:

- evenly distributed loading 1100 kg on hatched area (60 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



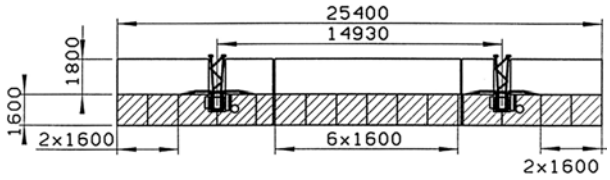
MAX. LOADING 1800 kg COMPOSED OF:

- evenly distributed loading 1400 kg on hatched area (85 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



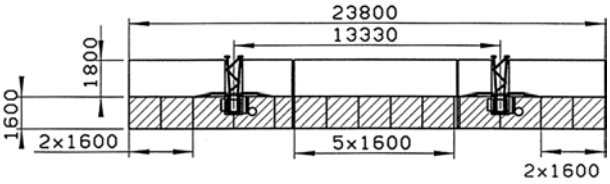
MAX. LOADING 2100 kg COMPOSED OF:

- evenly distributed loading 1700 kg on hatched area (107 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



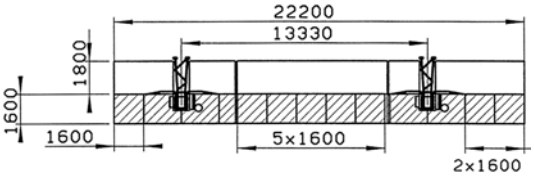
MAX. LOADING 2400 kg COMPOSED OF:

- evenly distributed loading 2000 kg on hatched area (135 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



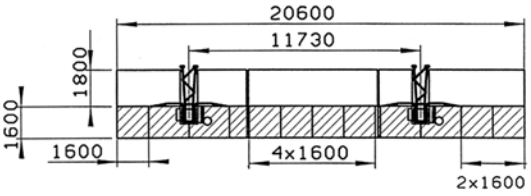
MAX. LOADING 2700 kg COMPOSED OF:

- evenly distributed loading 2300 kg on hatched area (165 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



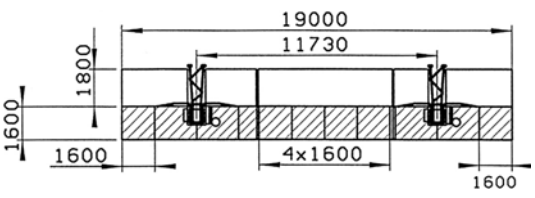
MAX. LOADING 2900 kg COMPOSED OF:

- evenly distributed loading 2500 kg on hatched area (195 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



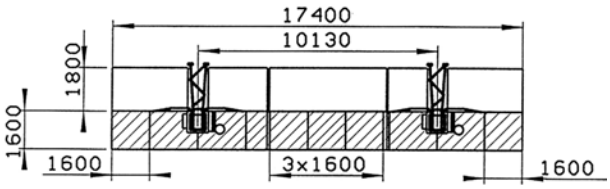
MAX. LOADING 3200 kg COMPOSED OF:

- evenly distributed loading 2800 kg on hatched area (235 kg / 1,6 m section)
- freely positioned loading 4 persons 400 kg



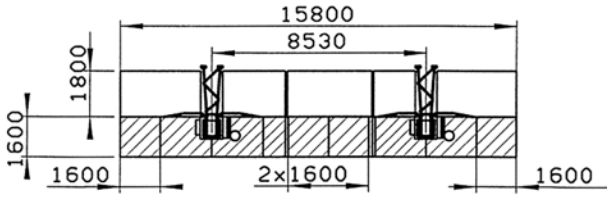
MAX. LOADING 3500 kg COMPOSED OF:

- evenly distributed loading 3100 kg on hatched area (285 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



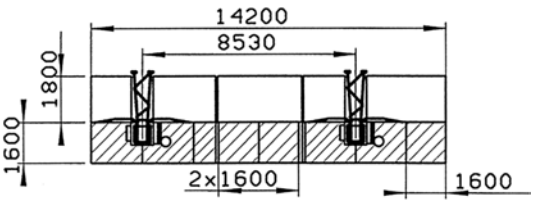
MAX. LOADING 3750 kg COMPOSED OF:

- evenly distributed loading 3350 kg on hatched area (340 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



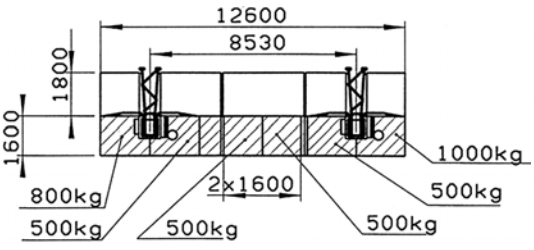
MAX. LOADING 3950 kg COMPOSED OF:

- evenly distributed loading 3550 kg on hatched area (400 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



MAX. LOADING 4200 kg COMPOSED OF:

- evenly distributed loading 3800 kg on hatched area positioned as shown in picture
- freely positioned loading 4 persons 400 kg



6.3.3.4 Loading table 7, anchored twin mast, 2,5 m telescopic extensions

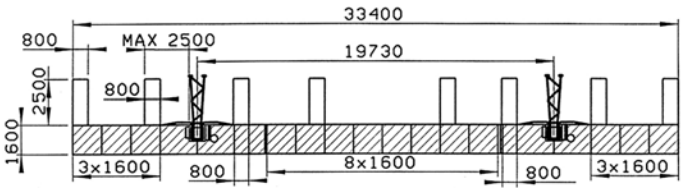
Allowed layouts and loadings

- max point load 200kg on 0,1 m x 0,1 m

Maximum load on telescopic extension is 2 persons + tools (240 kg) per 1,6 m platform section.

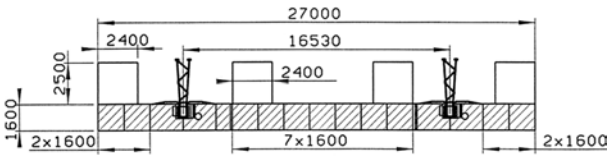
MAX. LOADING 1000 kg COMPOSED OF:

- evenly distributed loading 600 kg on hatched area (28 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



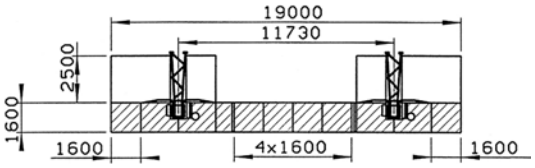
MAX. LOADING 2000 kg COMPOSED OF:

- evenly distributed loading 1600 kg on hatched area (95 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



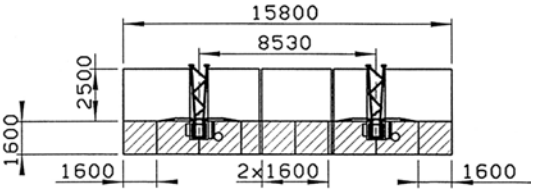
MAX. LOADING 2800 kg COMPOSED OF:

- evenly distributed loading 2400 kg on hatched area (200 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



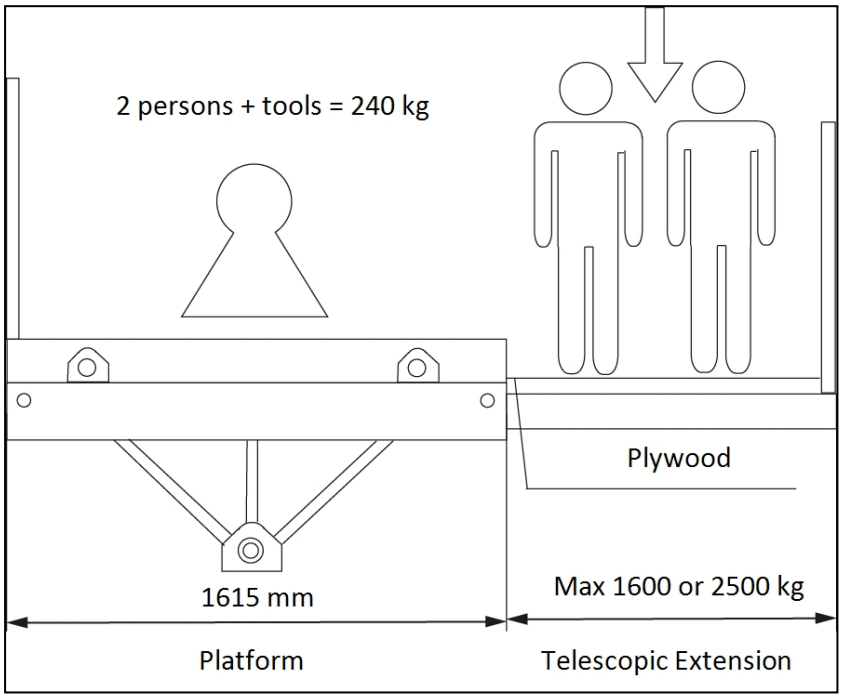
MAX. LOADING 2800 kg COMPOSED OF:

- evenly distributed loading 2400 kg on hatched area (240 kg /1,6 m section)
- freely positioned loading 4 persons 400 kg



6.4 Telescopic extension

The maximum load on a telescopic extension is two persons + tools (240 kg) per 1.6 m platform section. A plywood deck, minimum thickness 22 mm, must be used on the telescopic extension tubes. The plywood decks must be fastened properly. Railings must be used with the telescopic extension



Picture 6.4.1 Telescopic extensions

6.5 Freestanding mast heights

An MCWP can be used in freestanding configuration on a wheel chassis only! The maximum freestanding mast height depends on the platform length according to tables 6.5.1 and 6.5.2.

	Maximum freestaning mast height, Single mast	
Platform lenghth	**Wheel chassis outriggers extended on mast side tured out (K position)**	**Wheel chassis outriggers extended and turned out X position**
4,1 m	15 m	20 m
7,3 m	13,5 m	20 m
10,5 m	12 m	20 m
13,7 m	10.5 m	20 m
16,9 m	9 m	18 m

	Macimum freestanding mast height, Twin mast	
Platform Length	Wheel chassis outriggers extended on mast side tured out (K position)	Wheel chassis outriggers extended and turned out X position
12,6-14,2 m	15 m	20 m
15,8-22,2 m	12m	20 m
23,8-30,2 m	10, 5 m	20 m
31,8-40,6 m	9 m	9 m

6.6 Top anchored mast heights

An MCWP can be used in top anchored configuration on a wheel chassis only! The maximum mast height with a top anchor is 26 m for both single and twin mast machines.

The maximum mast height with a top anchor does not depend on the platform length. The loading tables for an anchored mast, top frame below the topmost anchor, are valid for top anchored machines.

6.7 Erection

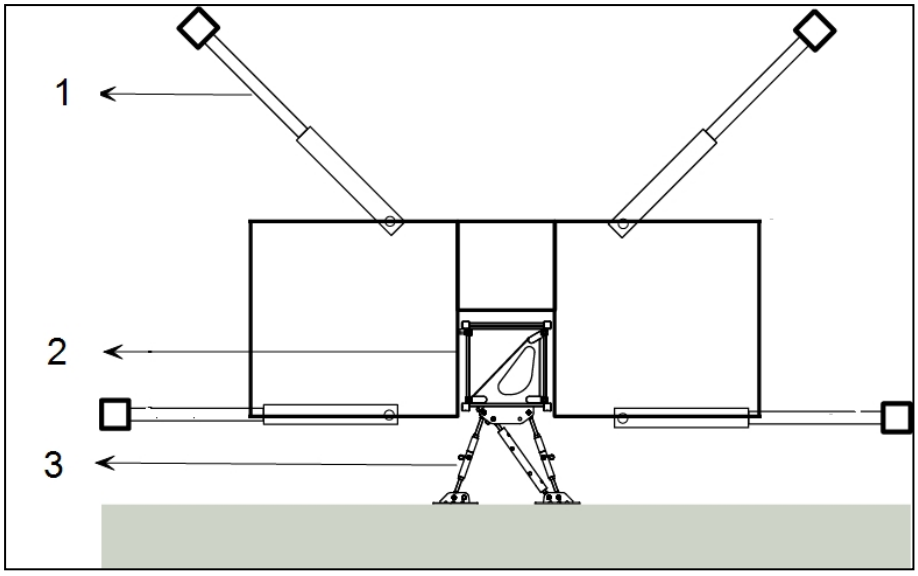
6.7.1 Chassis positioning and leveling

The chassis positioning depends on the anchoring method used. The mast shall be towards the wall when several anchors are used. The mast can be opposite the wall if it is top anchored. If the machine is freestanding (without anchoring) the chassis shall be positioned so that the platform position is optimal for the work.

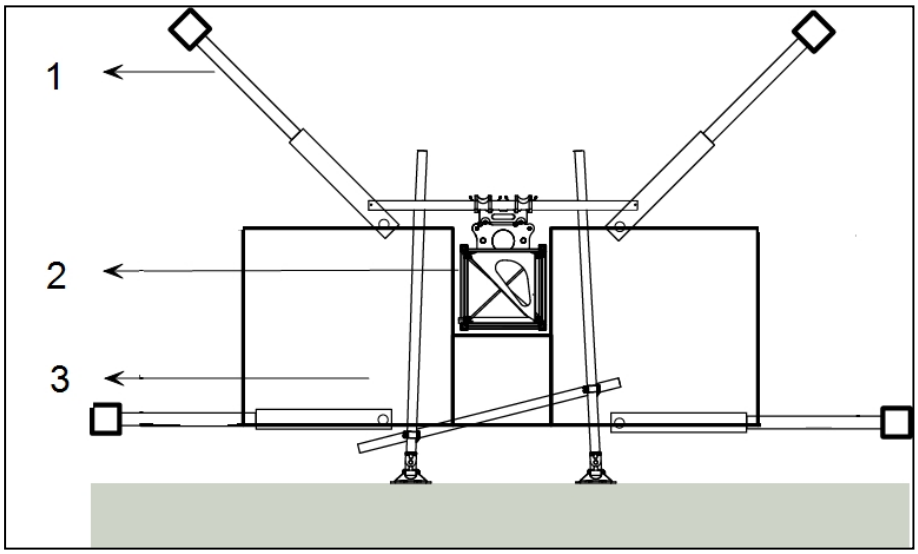
Locate the chassis so that the distance between the platform and the final wall surface is suitable. Check any possible wall bays and eaves that may prevent the platform or top frame movement. The outriggers can be used either in a K or X position. Check that there is enough space to extend and turn the outriggers to the required positions.

If railings are not used on the wall side of the platform, the distance between the platform and wall must be less than 250 mm. The recommended distance is less than 150 mm. The gap between two MCWP platform edges must be at least 500 mm.

The chassis shall be positioned onto firm and leveled ground. The chassis is leveled using the outrigger jacks. Use wooden plates under the jacks. Pay special attention to frozen ground and possible thawing. The maximum load is 60 kN per jack



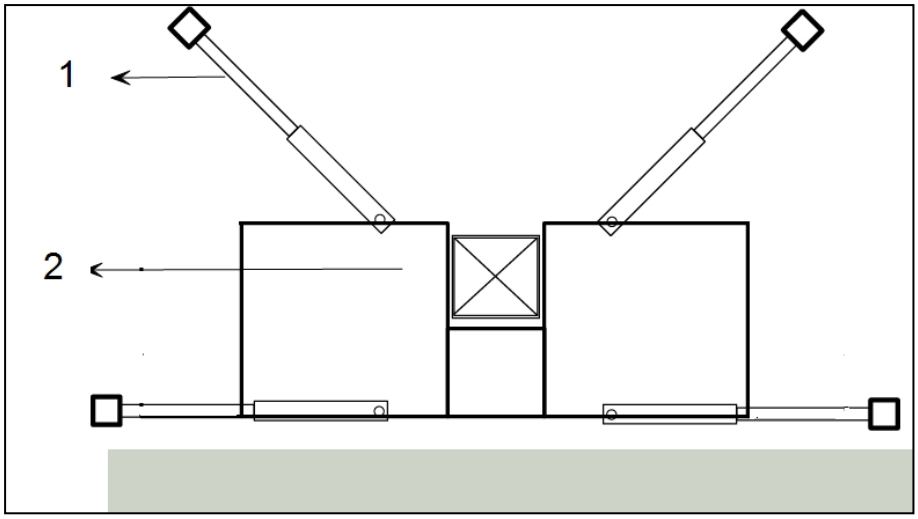
Picture 6.7.1 Anchored mast, outriggers in K-position. Outrigger (1), mast (2), anchor (3)



Picture 6.7.2 Top anchored mast. Outrigger (1), mast (2), anchor (3)

The wheel and mini chassis are leveled as follows:

1. Move the chassis to the correct position. Check that the platform will be in line with the wall.
2. Extend the outriggers. Swing them out and lock with pins (wheel chassis).
3. Place the wooden ground plates under the jacks.
4. Level the chassis with the outrigger jacks. A spirit level is installed on the chassis to help with leveling.
5. Lower the centre jack (wheel chassis).
6. Lock the jacks.



Picture 6.7.3 Freestanding mast. Outrigger (1), mast (2).

6.7.2 Fencing

The area around the MWCP must be fenced off to prevent unauthorized access to the working area. The fenced area must be wide enough to allow protection from falling objects.

6.7.3 Power supply

Place the cable drum under the platform and connect the cable from the cable drum to the platform's electric box, socket E5. Connect a supply cable from the site's switch board to the cable drum. Check that the supply cable has a sufficient cross section, at least 5 x 6 mm^2. Check that all fuses on the site's switch board are OK.

6.7.4 Platform

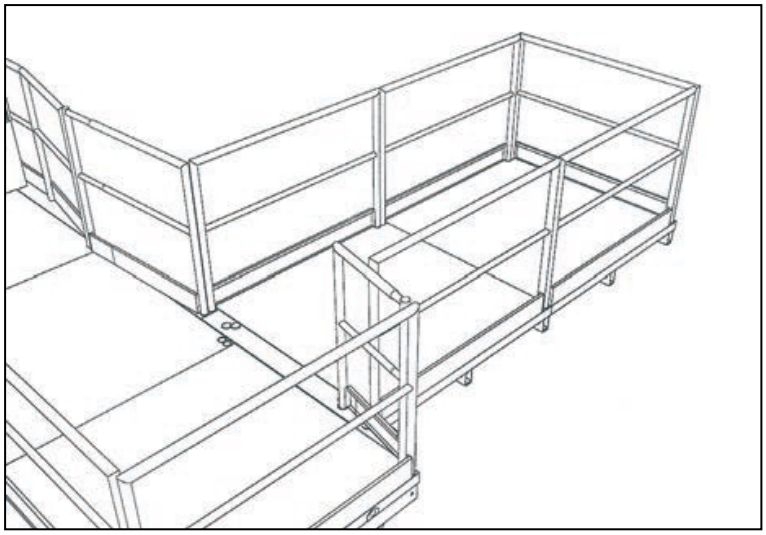
All platform sections and extensions must be assembled when the platform is in the lowest position.
Determine the required platform layout before starting the platform assembly.
If the mast is top anchored, the maximum platform length during the mast erection is 4.1 m before the anchor is fastened.
If the MCWP is on a mini chassis, the maximum platform length is 4.1 m before the third anchor is fastened.

6.7.4.1 Platform sections

The platform sections are fastened with M24 X 245 bolts. The platform sections can be lifted by a crane or an assembly rack can be used.
The railings are assembled after the platform sections.

6.7.4.2 Side platform

A side platform requires a side platform adapter. The standard platform sections can be rotated 90° with the side platform adapter. The adapter is assembled between the normal and the rotated platform.



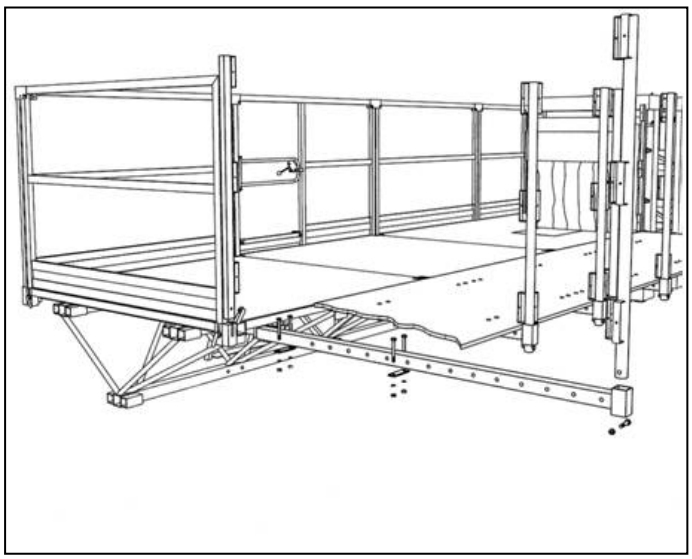
Picture 6.7.4.1 Side platform adapter fastened

6.7.4.3 Telescopic extensions

A platform can be extended with telescopic extensions.

The extensions are assembled as follows:

1. Put the telescopic extension tubes into the pockets in the platform sections.
2. Lock the extension tubes with pins.
3. Put the pre-cut plywood deck (min. thickness 22 mm) on the extension tubes.
4. Fasten the plywood properly to the tubes.
5. Install railings on the extensions



Picture 6.7.4.2 Telescopic extension tubes and plywood deck fastened

6.7.5 Mast

The mast can be erected either section by section or in longer parts, several mast sections together. When erecting the mast section by section, load the mast sections on the platform and distribute them evenly on both sides of the mast. Take the mast sections equally from both sides of the mast. An optional mast assembly crane arm can be used.

Longer mast pieces can be made on the ground by bolting several mast sections together. These pieces are lifted to the top of the mast by an external crane. Note that maximum length for a piece of connected mast sections is 18.75 m (15 mast sections).
The mast sections are connected together as follows:

1. Lift a mast section on to the previous section so that the guides at the corner tubes are downwards.
2. Check that there is no dirt on the surfaces of the mast connections.
3. Put the bolts in place and tighten the nuts to 350 Nm.

See the anchoring instructions in chapter 6.7.10.

6.7.6 Top cap lifting

An MCWP is delivered with the mast top cap. The top cap has three purposes:

- it can be used to lift the machine
- it allows the top frame mast rollers to go above the mast end
- it is a mechanical top limit

Fasten the top cap immediately after the mast is erected. The whole machine, including chassis, can be lifted from the top cap. The top cap lifting capacity is 5500 kg.

6.7.7 Safety brake test

The purpose of safety brake test is to ensure that it works properly and that the machine is safe to use during the erection and normal use.

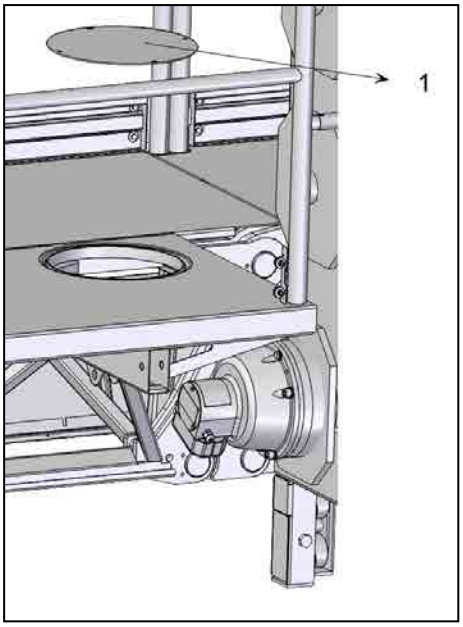
The safety brake test can be done when at least three mast sections have been installed. The safety brake test is done with full loading according to the platform layout in question.
The test is done as follows:

1. Fully Load the platform according to the platform layout.
2. Connect the safety brake test button to socket X8 on the platform electric box.
3. Exit from the platform and ensure that there is nobody on the platform or under it.
4. Drive the platform up to a height of 2.5 m using the remote controller
5. Push the safety brake test button to release motor brakes.
6. The platform falls downwards.
7. The safety brake should activate when the platform exceeds its normal driving speed. Release the test button if the safety brake has not activated before reaching a height of 1.5 m.
8. If the safety brake activates, see the chapter ‘Safety brake release’, 6.7.9, to release it.
9. If the safety brake did not activate. Drive the platform down and change the safety brake. Send the faulty unit to Scanclimber for repair.

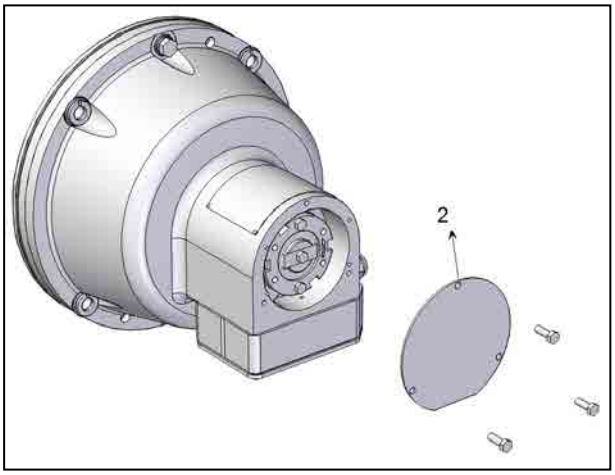
6.7.8 Safety brake release

Before releasing the safety brake, the reason for its activation must be determined.
The safety brake is released as follows.

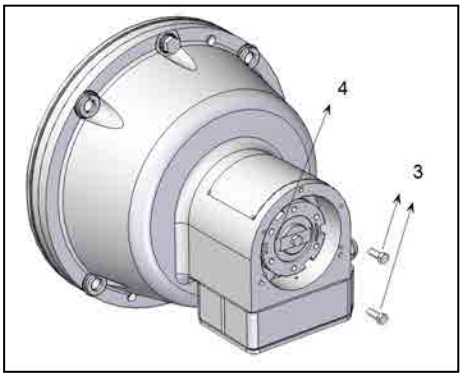
1. Open the hatch on the platform (1).



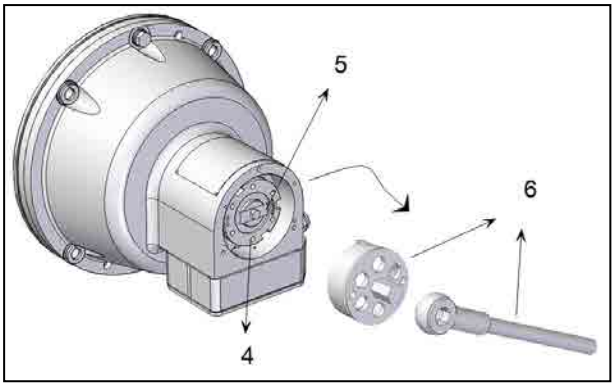
2. Open the safety brake cover (2) with a 10 mm wrench.



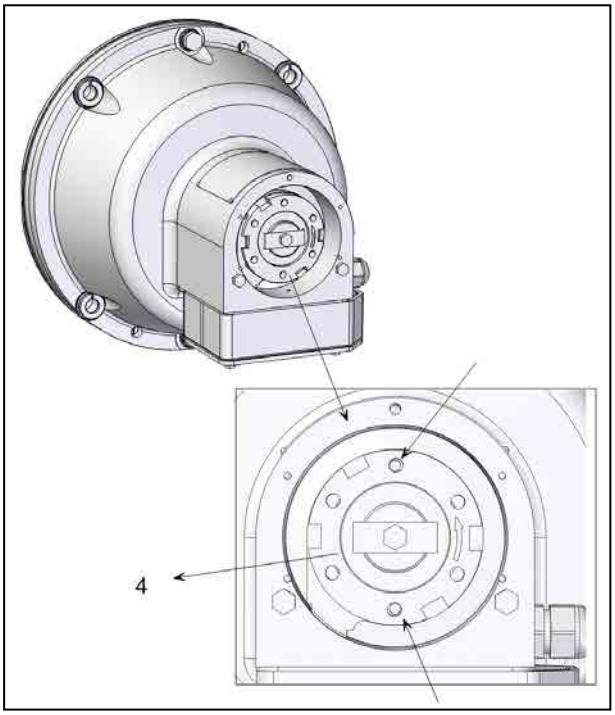
3. Open the two screws (3) of the bronze nut (4) with a 10 mm wrench.



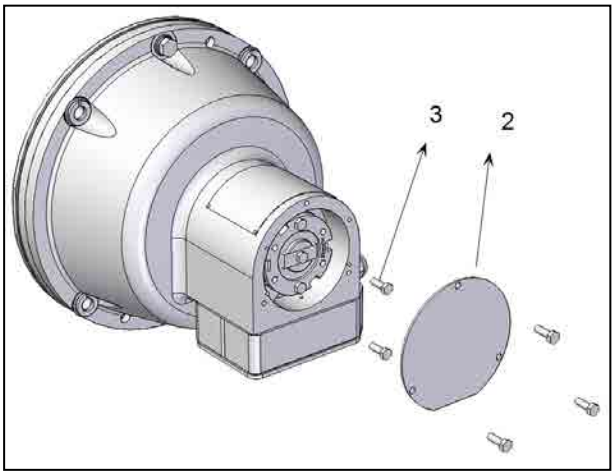
4. Rotate the bronze nut clockwise (unscrew) using the special tool (6) until it rests against the top plate (5). Do not bend the plate.



5. Rotate the bronze nut (4) counterclockwise by hand to align the two screws.



6. Install the two screws (3).



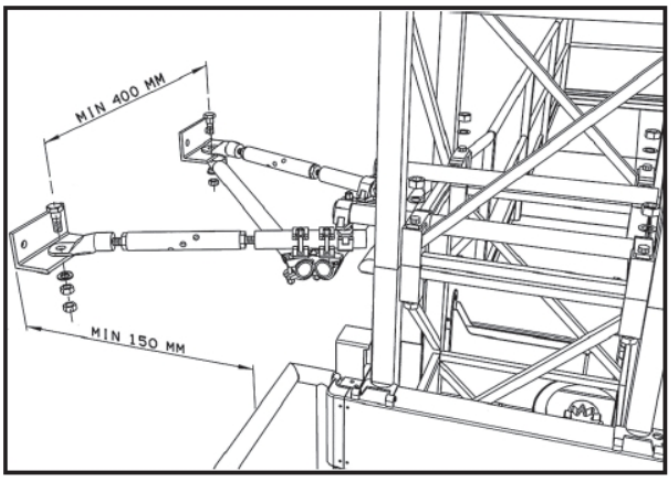
7. Install the cover (2).

8. Finalize the safety brake release by driving the platform upwards about half a meter.

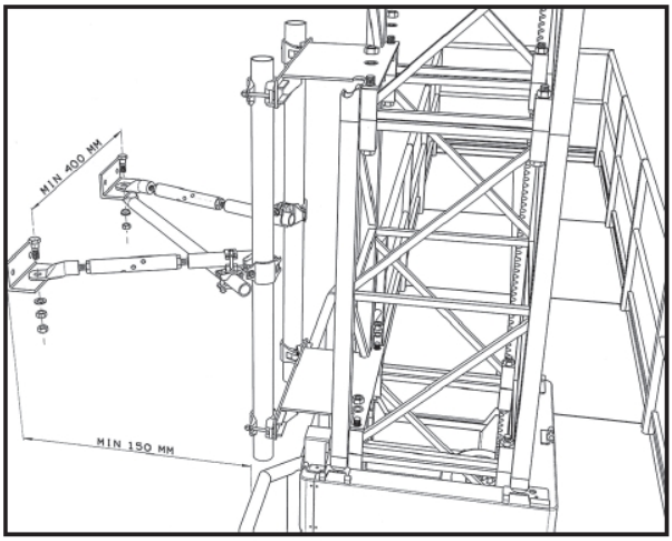
6.7.9 Anchoring

The mast must be anchored when its height is more than the permissible freestanding height, and always when the mini chassis is used.

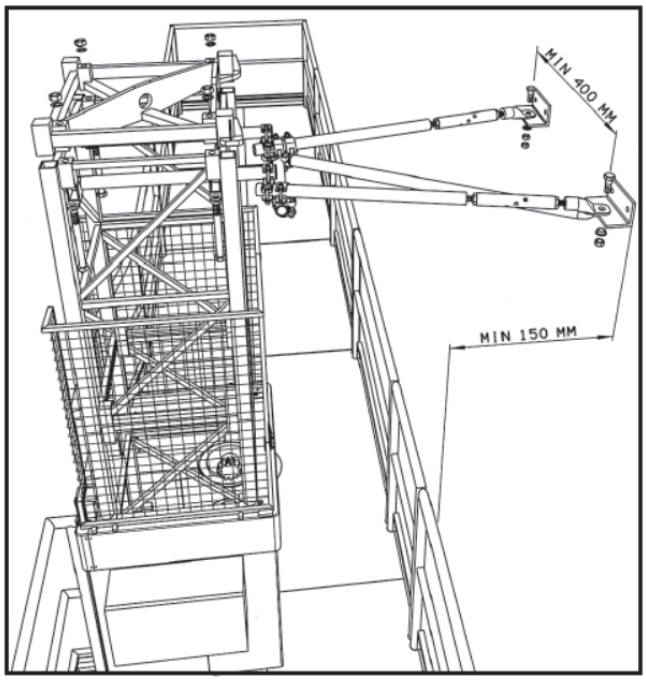
Read carefully the anchoring instructions shown on the following drawings Also carefully read through the loading tables. The anchoring force indicates how much one anchoring has to hold.



Picture 6.7.9.1.1. Standard anchoring

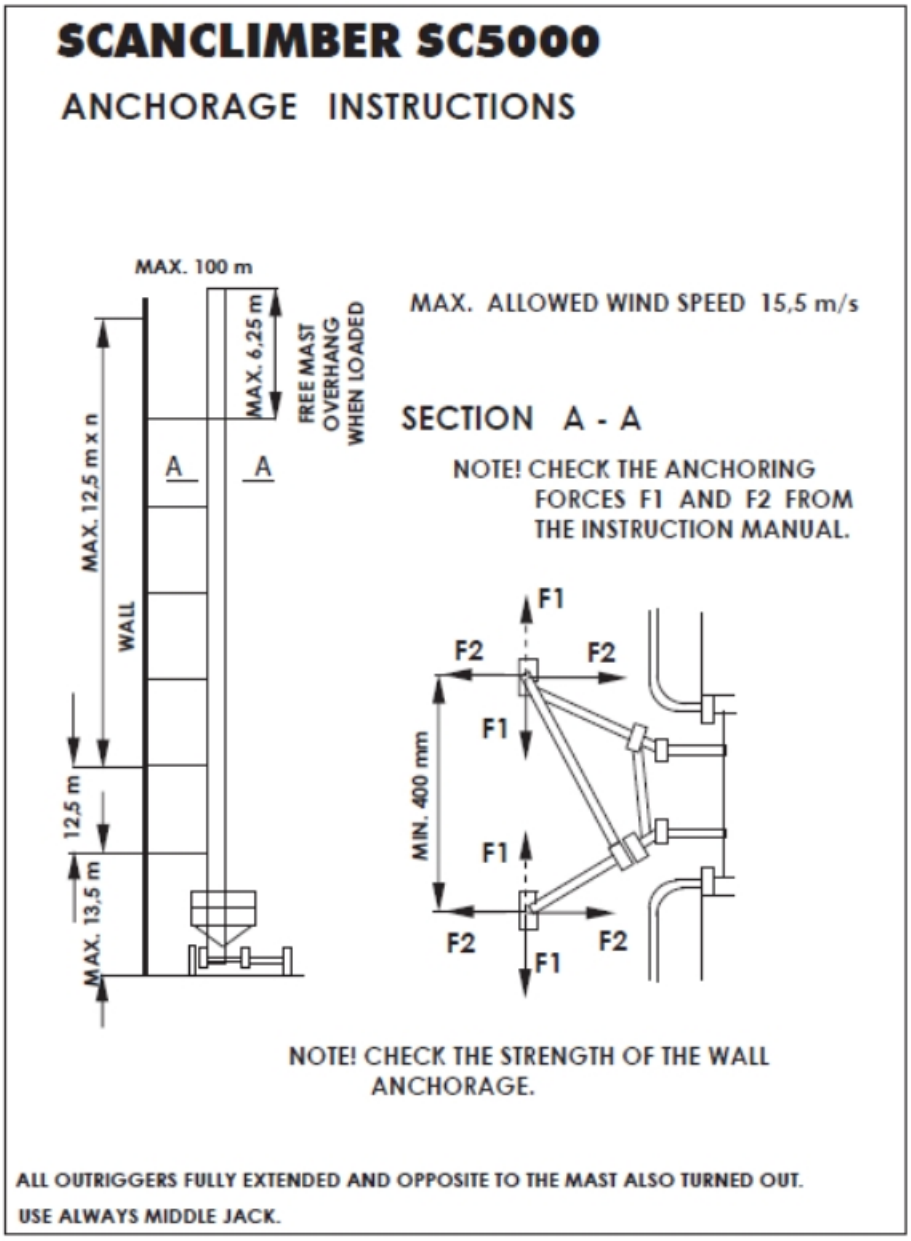


Picture 6.7.9.1.2. Vertically adjustable anchoring.

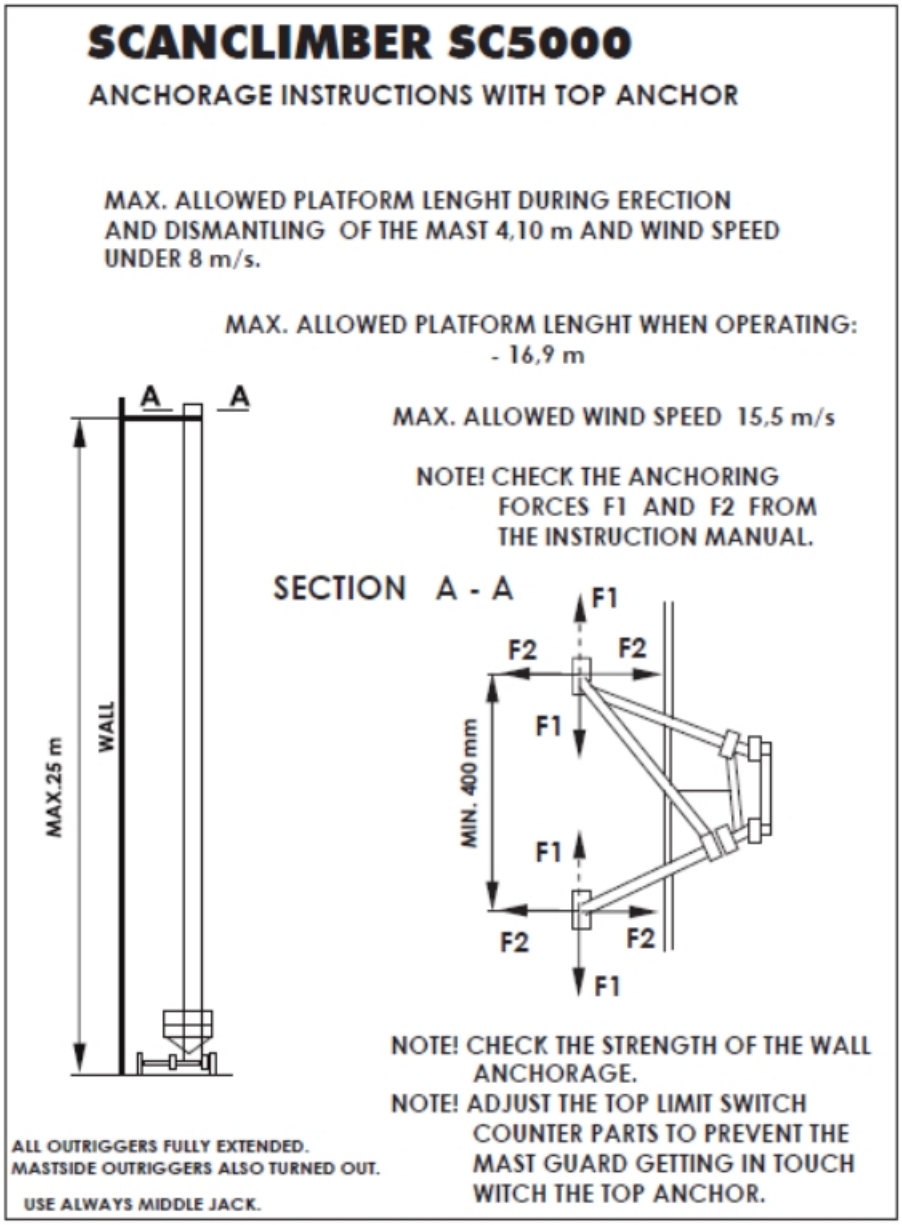


Picture 6.7.9.1.3. Vertically adjustable anchoring.

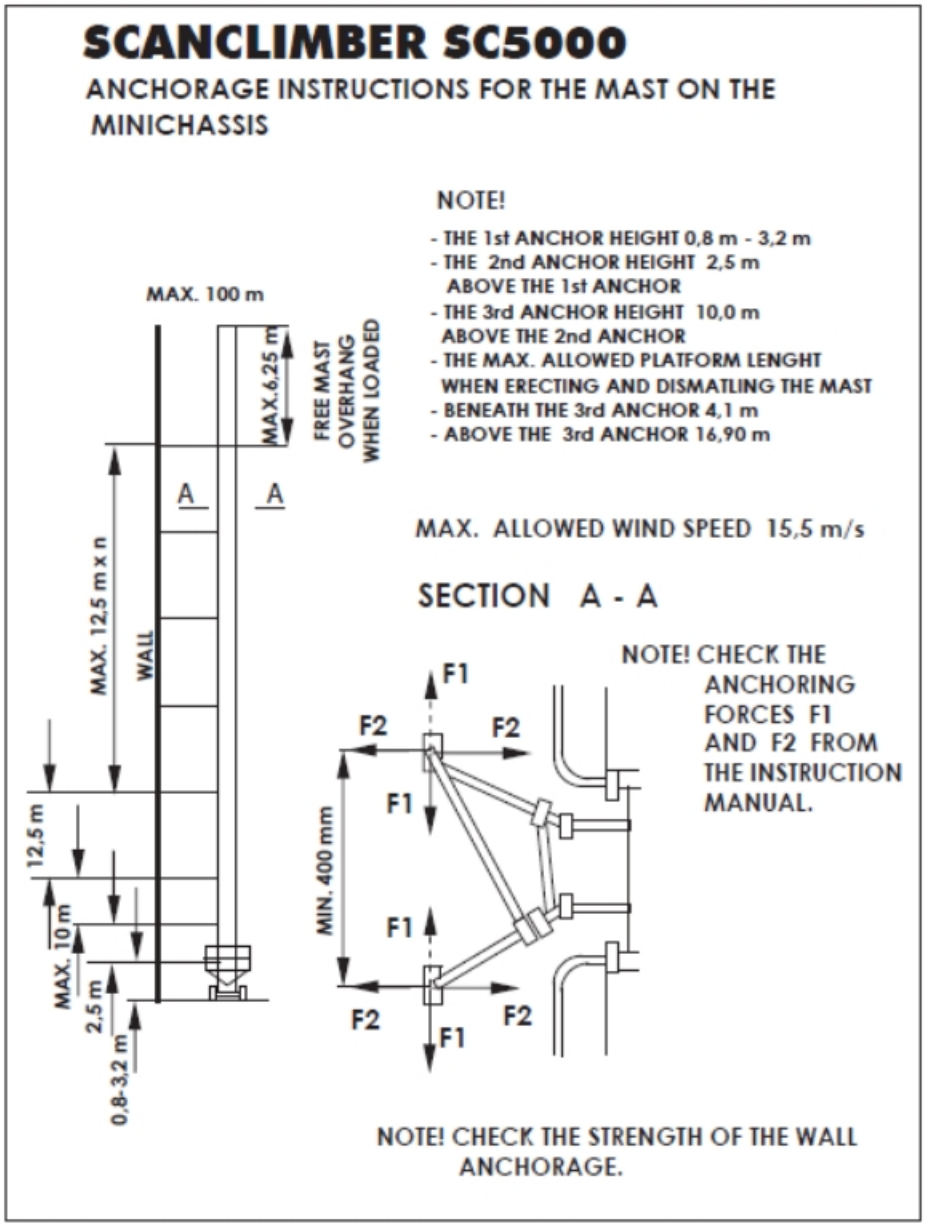
6.7.9.1 Anchorage instructions



Picture 6.7.9.1.4 Wall anchorage instructions for wheel chassis



Picture 6.7.9.1.5 Wall anchorage instructions with top anchor

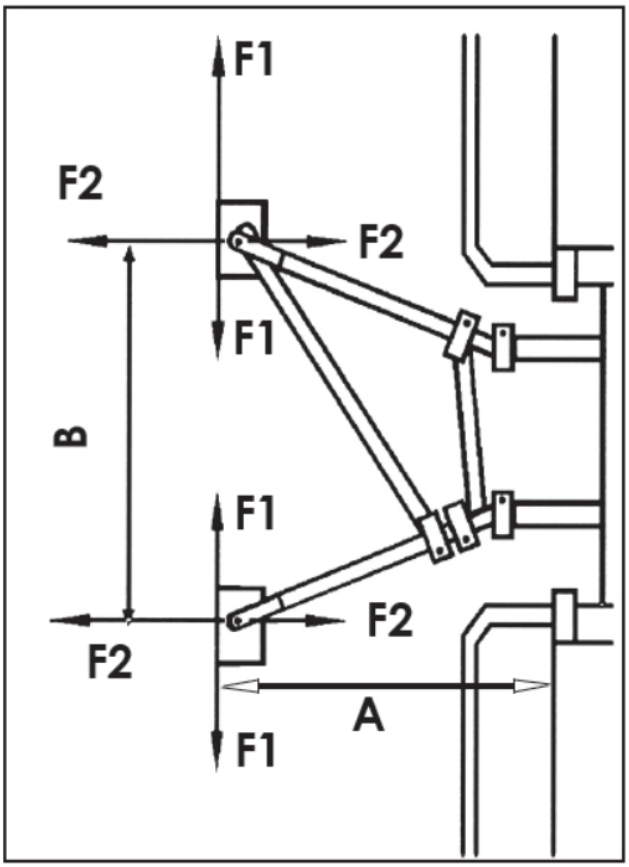


Picture 6.7.9.1.6 Wall anchorage instructions for minichassis

6.7.9.2 Anchoring forces

Ensure that the wall structure in strong enough to take the anchoring forces!

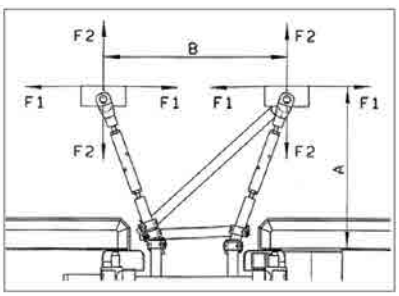
Manufacturer of the anchoring screws is obliged to inform the pull-out strength of the anchoring screws. Anchoring forces appearing on one anchoring set (anchoring distance 12.5 m) is shown on the following drawings. See the figures of A/B and F1/F2 on the following tables.

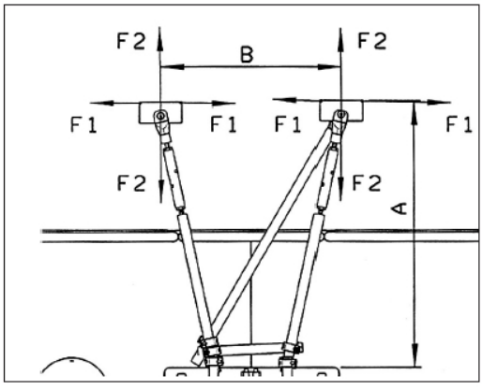


Picture 6.7.9.2. Anchoring forces

6.7.9.2.1 Anchoring forces SC5000 with 16,9 m platform

MAX. WIND SPEED 15,5 m/s
MAX. 3 PERSONS ON THE PLATFORM





WITH TOP ANCHOR

FORCE F2 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

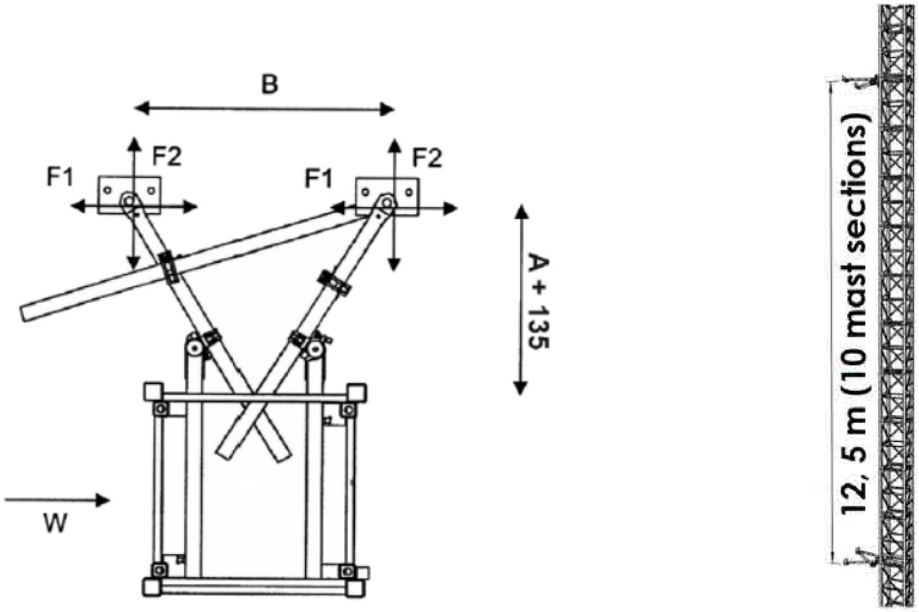
B A	150	300	450	600	900	1200	1500	2000	2500	3000
400	10309	11365	12421							
500	8491	9336	10180	11025	12715					
700	6412	7016	7619	8223	9430	10636	11843	14865	17937	21008
900		5727	6196	6666	7604	8543	9482	11562	13951	16340
1100		4907	5291	5675	6443	7211	7979	9460	11414	13369
1300		4339	4664	4989	5639	6289	6939	8022	9658	11312
1500			4204	4486	5049	5612	6176	7114	8370	9804
1700				4101	4598	5095	5592	6420	7385	8650
1900				3798	4242	4687	5132	5873	6614	7740
2100					3954	4356	4759	5429	6100	7002
2300					3716	4083	4451	5063	5675	6393
2500					3516	3854	4192	4755	5318	5882

FORCE F2 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

B A	150	300	450	600	900	1200	1500	2000	2500	3000
400	3651	4003	4081							
500	5893	2745	3153	3332	3497					
700	11995	4747	3146	2443	2755	2905	2993	3078	3128	3161
900		6312	4168	3227	2358	2533	2644	2752	2816	2858
1100		7496	4934	3808	2770	2296	2422	2544	2617	2664
1300		8476	5561	4280	3099	2543	2268	2401	2479	2530
1500			6105	4687	3380	2764	2405	2295	2378	2432
1700				5052	3629	2958	2568	2215	2301	2357
1900				5388	3856	3134	2714	2303	2240	2298
2100					4068	3297	2848	2410	2190	2250
2300					4268	3450	2974	2509	2235	2210
2500					4460	3596	3093	2602	2313	2177

6.7.9.2.2 Anchoring forces in storm conditions

Platform down Anchoring distance 12,5 m and max. wind speed 42 m/s



FORCE F2 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

B A	250	300	450	600	750
400	12230	13130	16600	19530	24930
500	10940	11620	14170	16480	20270
700	8800	9270	10810	12410	14590
900	7180	7550	8650	9890	11340
1200	5480	5770	6580	7530	8460
1400	3760	4940	5650	6480	7040

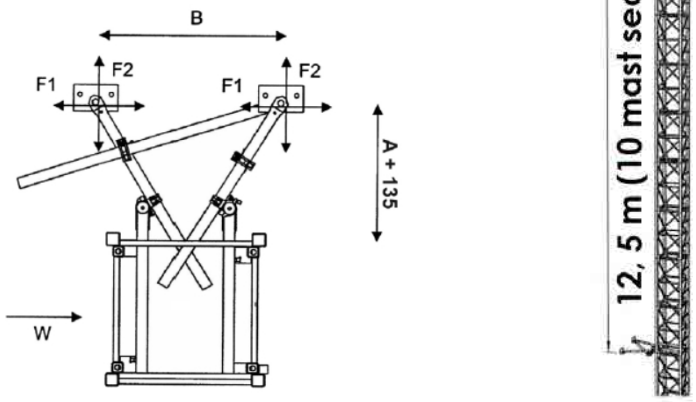
B A	250	300	450	600	750
400	4130	4710	7410	7490	8150
500	4120	4130	6380	6540	7040
700	4120	4120	4820	5190	5580
900	4120	4120	4440	4300	4660
1200	4130	4120	5360	4730	4430
1400	4110	4120	5720	5080	4660

Forces with anchoring distances less than 12.5 m or other wind speeds can be found from formula:

F	$(AD/12,5) \times (W/42)^2 \times F_{table}$
AD	Anchoring distances in meters(m)
W	Wind speed(m/s)
$F_{taulukko}$	Force from the table(N)

4.7.9.2.3 Anchoring forces in storm

Platform down Anchoring distance 12,5 m and max. wind speed 42 m/s



FORCE F2 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

B A	250	300	450	600	750
400	4380	4330	4260	4120	4130
500	4280	4230	4140	4120	4120
700	4140	4110	4140	4170	4190
900	4130	4140	4180	4190	4210
1200	4170	4170	4200	4190	4220
1400	4190	4180	4200	4190	4160

FORCE F1 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

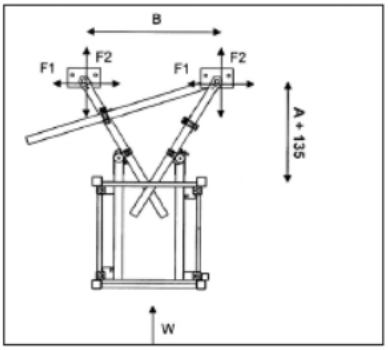
B A	250	300	450	600	750
400	50	130	190	40	50
500	900	710	310	310	320
700	2540	2140	1240	980	830
900	4100	3510	2140	1640	1340
1200	6340	5480	3490	2650	2130
1400	6820	6760	4400	3320	2750

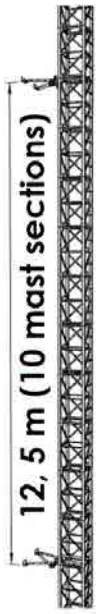
Forces with anchoring distances less than 12.5 m or other wind speeds can be found from formula:

F	$(AD/12,5) \times (W/42)^2 \times F_{table}$
AD	Anchoring distances in meters(m)
W	Wind speed(m/s)
$F_{taulukko}$	Force from the table(N)

6.7.9.2.4 Anchoring forces in storm

Platform down Anchoring distance 12,5 m and max. wind speed 42 m/s





FORCE F2 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

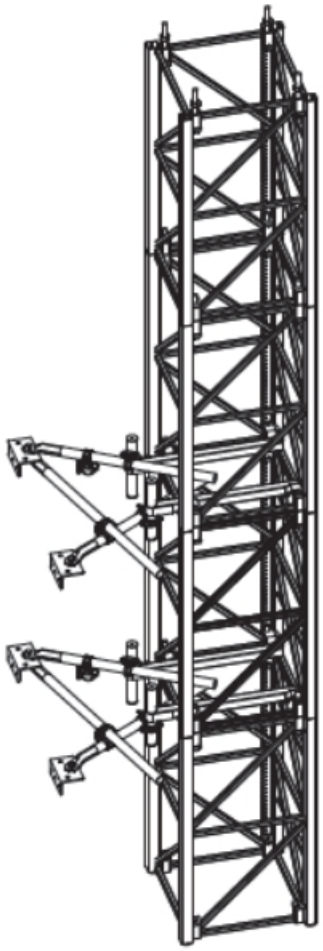
B A	150	300	450	600	900	1200	1500
400	9713	12008	14302				
900		5337	6356	7376	9416	11455	13495
1300		3694	4400	5106	6518	7931	9343
1700			3365	3905	4985	6064	7144
2100				3161	4035	4909	5783
2500					3389	4124	4858

FORCE F1 WITH DIFFERENT A AND B VALUES (A and B in mm & F2 in N (1N = 0.1kp))

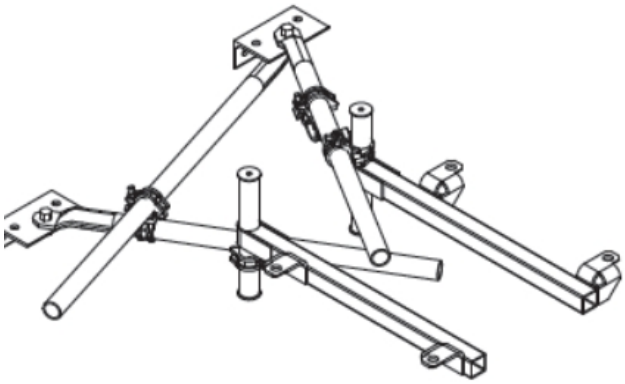
BA	150	300	450	600	900	1200	1500
400	5090	5658	5784				
500	5393	3706	4365	4654			
700	10383	4642	3375	3300	3813	4055	
900		5882	4276	3571	3198	3504	3683
1300		7216	5246	4381	3583	3207	3130
1700			5760	4810	3934	3521	3281
2100				5075	4151	3715	3462
2500					4299	3847	3585

Forces with anchoring distances less than 12.5 m or other wind speeds can be found from formula:

F	$(AD/12,5) \times (W/42)^2 \times F_{table}$
AD	Anchoring distances in meters(m)
W	Wind speed(m/s)
$F_{taulukko}$	Force from the table(N)



- ***Maximum load to anchor system swivel couplers is 5.5 kN. The limit is same also for top anchoring.***
- ***Maximum load to anchor system swivel couplers is 5.5 kN. The limit is same also for top anchoring.***
- ***Maximum load to anchor system couplers with fixed angle in new anchoring is 9.5 kN except for diagonal 5.5 kN, when a swivel coupler is used in diagonal. Picture below describes the anchoring code PG100166.***



- If load is too big for anchoring, double anchoring canbe used. In this case results are divided by 1,5.

6.7.10 Limit switch cams

Scanclimber MCWP has two limit switches and four limit switch cams for the platform's vertical drive. Additionally, it has one switch and one cam for the optional chassis drive unit and a cam for the warning horn inductive sensor. The platform vertical drive cams are:

- lower normal limit
- upper normal limit
- lower safety limit
- upper safety limit.

The lower and upper normal limit cams and corresponding limit switch S11 stop the platform when it reaches its lowest or highest position. The lower and upper safety limit cams and corresponding safety switch S12 stop the platform if it for some reason it fails to stop at the normal limit. Besides the upper safety limit switch, there is an inductive mast limit sensor B1. This stops the platform if the lifting frame is going over the top-most mast section.

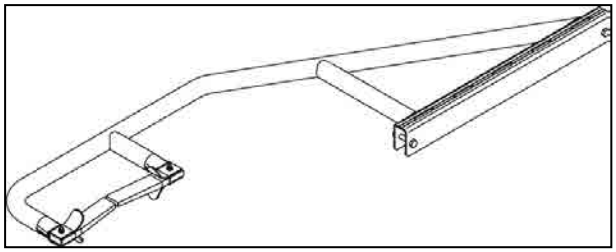
The inductive sensor B2 is for a warning horn. The horn sounds when the platform moves and its height is less than two meters. The chassis drive unit limit switch S10 prevents the chassis drive use if the platform is not lowered on to the rubber buffers.
Limit switch cams are installed as follows:

1. The lower limit and lower safety limit cams are fastened on the first mast section. Fasten the cam frame first to the mast and then adjust the actual cams to their proper heights.
2. The chassis drive unit limit switch is installed on the opposite side of the mast than the lower limit cam.
3. Check the distance between inductive sensor B1 and the mast tube. The distance should be approximately 10 mm and can be adjusted by turning the nuts on the sensor. Test the sensor by lifting the platform so high that the sensor goes over the topmost mast section. The platform must stop immediately when the sensor goes above the mast section.
4. The warning horn inductive sensor cam can be installed when two mast sections have been erected. Adjust the distance between the sensor and the cam plate by turning the nuts on the sensor. The distance should be 10 mm. Test the inductive sensor by driving the platform down, the horn should sound.
5. Test the lower limit cam by driving the platform down. The platform must stop when lower limit switch S11 reaches the cam.
6. Test the lower safety limit as follows: manually lower the platform on to the rubber buffer and try to drive the platform by pushing the up button. The platform drive must not operate. Lift the platform from the safety limit area, bypassing the safety limit and pushing the up button. The limit switch bypass button is inside the platform's electric box OP2.
7. The upper limit and upper safety limit cams are installed when the mast has been fully erected. Fasten the cam frame first to the mast and then adjust the actual cams to their proper heights. If the mast is top anchored, the upper limit cams must be installed so that no part of the platform touches the anchoring tubes. Test the upper limit switch by driving the platform upwards until limit switch S11 reaches the cam. The platform must stop.

6.7.11 Cable guides

The cable guides are used with high mast heights. Cable guides keep the power cable (cable from the drum to the platform) in its correct position and prevent it becoming entangled with the mast. The distance

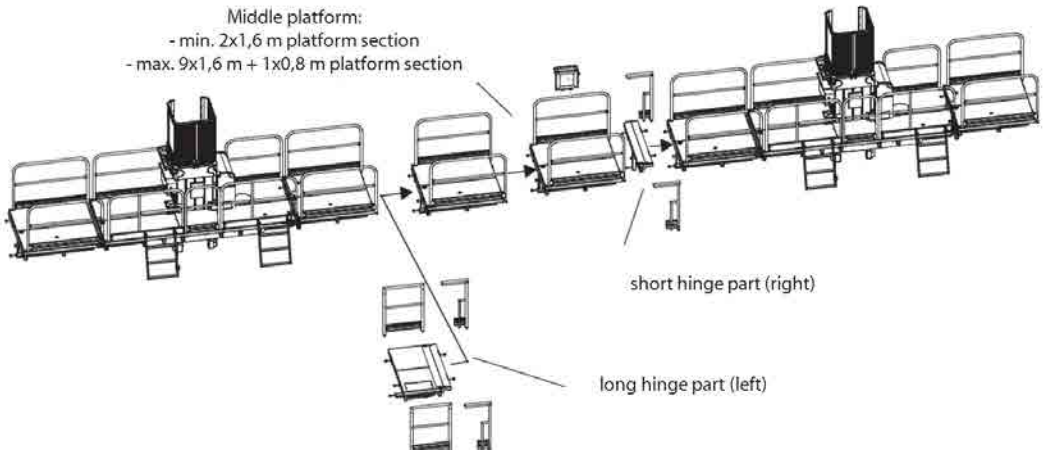
between cable guides is 4 to 6 meters



Picture 6.7.11 Cable guide

6.7.12 Twin unit

When two single mast units are connected together as a twin unit, the working area and lifting capacity can be extended. The synchro drive system is needed to connect two single mast units. Check the loading table for the required platform configuration and note the position of the hinge parts. The hinge parts must be installed in the position shown in the loading table.

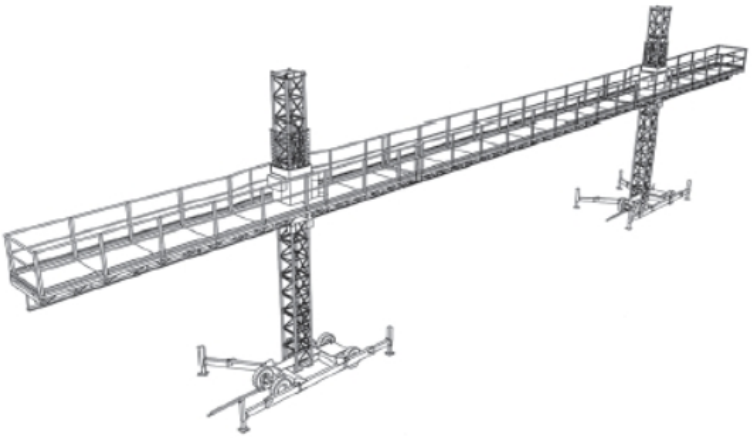


The units are connected as follows:

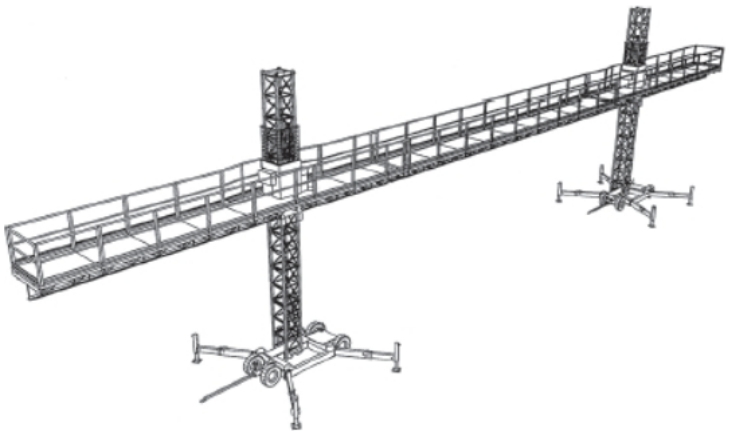
1. Erection of the masts have to be done on well prepared base at a suitable distance of the wall. The suitable distance between the machine and the wall is approx. 150-250 mm.
2. Lift the chassis by turning the jack screws equally so that the tyres do not touch the ground.
3. Level the chassis and a mast on vertical position with the level indicator, use the wooden ground plates under jacks to lock jack`s axle.
4. Screw the platform sections (the railings included) symmetrically to each other with the help of a special tool which has been designed for platform assembly. Use only screws delivered by the manufacturer. Tighten the screws 240 Nm (picture 6.7.12C).
5. Assemble the first mast section on each unit.
6. Use only screws delivered by the manufacturer. Tighten the screws 300 Nm.
7. Fasten the shorter hinge part to the first platform. The assembly of the middle platform can be continued by using the special assembly tool. The middle platform shall also be supported underneath from needed points during the assembly e.g. by using mast sections. The needed amount of platform sections (min. 2, max. 9,5) will be assembled to the middle platform.
8. After the needed length of middle platform has been achieved assemble the longer hinge part. Drive then the second unit towards the middle platform section so that the longer hinge part

(left) can be fastened with screws to this basic unit.

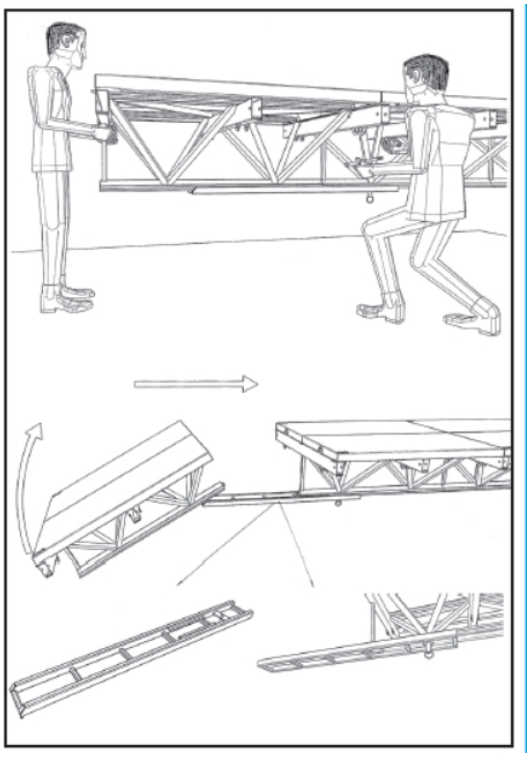
9. Support the other work platform with outriggers as per point 2.



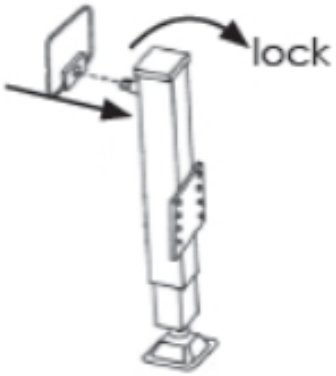
Picture 6.7.11 a. SC5000 TWIN Freestanding Max. lifting height/platform length: 9 m/43 m Max. wind speed: 12,7 m/s. All outriggers extended and locked with pins. Set the chassis and outriggers like shown on the picture above (K - position).



Picture 6.7.11.b. SC5000 TWIN Freestanding Max. lifting height/platform length: 12m/43 m Max. wind speed: 12,7 m/s. All outriggers extended and locked with pins. Set the chassis and outriggers like shown on the picture above (X - position).



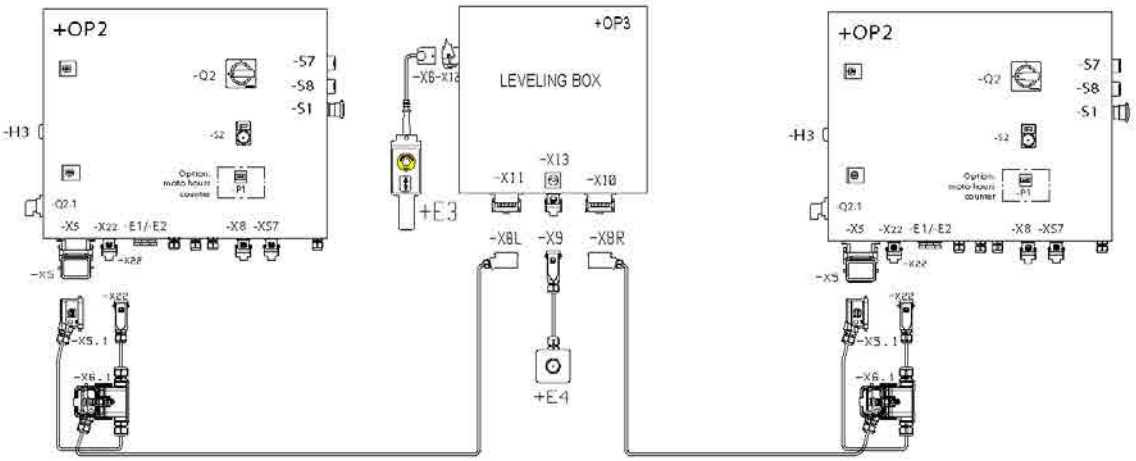
Picture 6.7.12 C Use of special assembly tool



Axle of all jacks shall be locked!

6.7.12.1 Twin electric components

- Install the synchro drive electric box under the platform.
- Connect the cables from the both platform electric boxes (socket X5) to the synchro drive electric box sockets. Tie the cables to the platform structure.
- Connect the remote control to the synchro drive electric box socket.
- Connect the leveling system limit switch to the synchro drive electric box.



4.7.12.2 Twin leveling system

The following instructions are for the electronic twin leveling.

1. There is a tilt device inside the twin leveling box. This tilt device is programmed to stop (travel limit) the faster platform, if middle platform is 1,5 degrees out of level and stop (final limit) both the platforms, if middle platform is out of level 3 degrees.
2. Connect power to both the units.
3. Raise the lifting frames one by one from their transport position.
4. Check both the lifting frames are running as a single unit first by moving them 0,5m up and down. Then move the single units so that the middle platform is horizontal.
5. Connect twin cables between the electric boxes.
6. The twin leveling box has a push button S0. S0 is a zero adjustment button for the horizontal middle platform. Press S0 for 5 seconds.
7. You can now run the twin unit with one remote control.
8. When the middle platform goes 1,5 degrees out of level, the faster lifting frame stops. The lifting frames start to run together after they both are at the same level.
9. Function of the leveling system can be checked by lowering one lifting frame at a time out of level with manual lowering (3.4) and checking how the leveling works and final limit cuts the controls.
10. After masts are erected, adjust the lower and upper limit switch cams so that both the lifting frames stop at the same level.

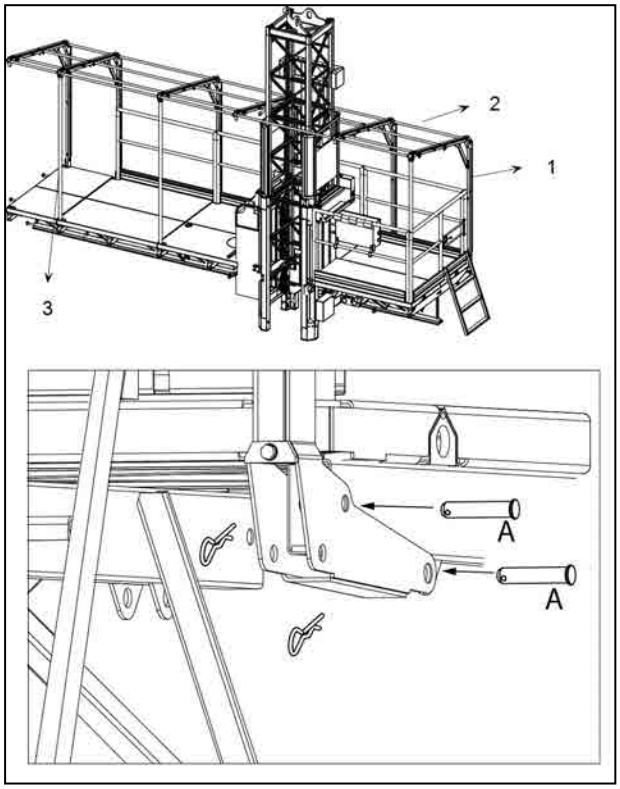
6.7.13 Dirty work protection

The machine shall be protected when dirty work e.g. plastering, painting or bricklaying is done. The chassis shall be covered for example, by plywood or canvas against falling plaster and paint.

6.7.14 Weather cover

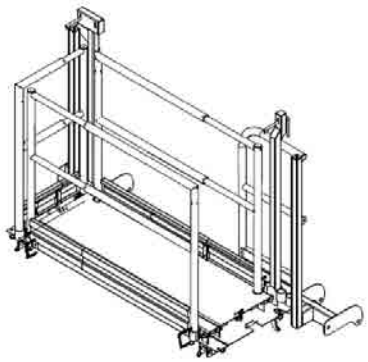
An SC5000 weather cover is installed as follows:

- Fasten the weather cover frames (1) to the platform with pins (A)
- Fasten the cover supporting bars (2) between the frames (1) and fasten with pins.
- Fasten the front support tubes (3) if needed.
- Fasten the canvas on the frame

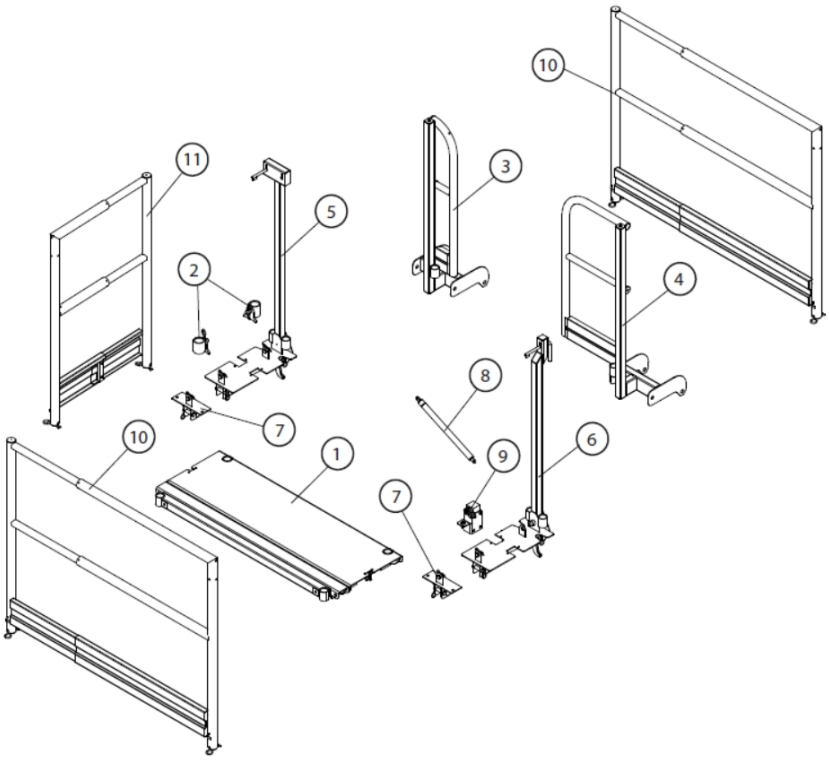


6.8 Extension Bridge

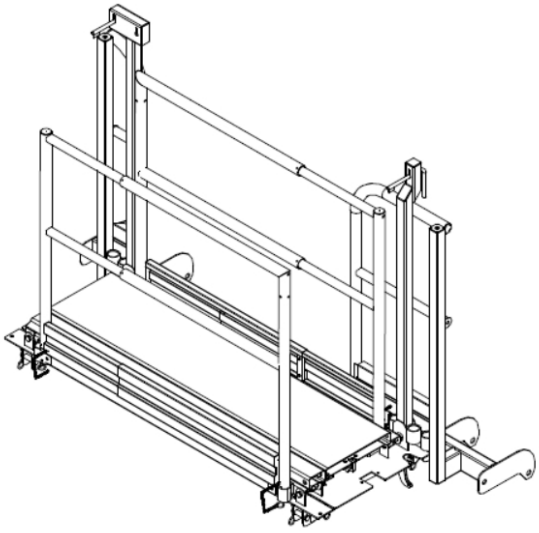
Description of device: Extension bridge is an optional equipment meant for Scanclimber MCWPs, SC5/6/8/1000. The bridge enables different kind of works that need to be carried out between mast and wall. Maximum capacity of the bridge is 240kg.



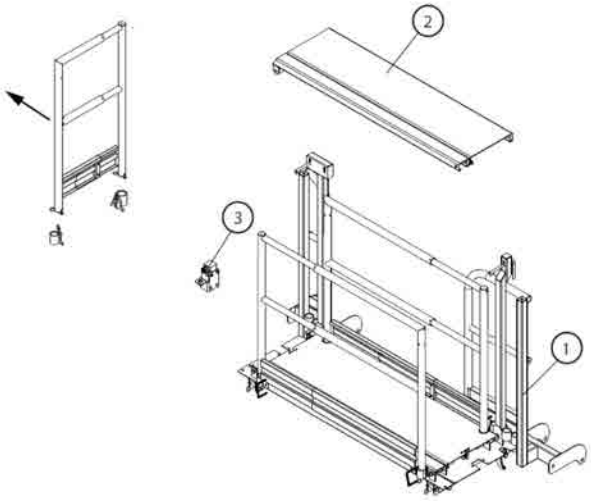
Picture 6.8.1 Extension bridge single base deck PG189424



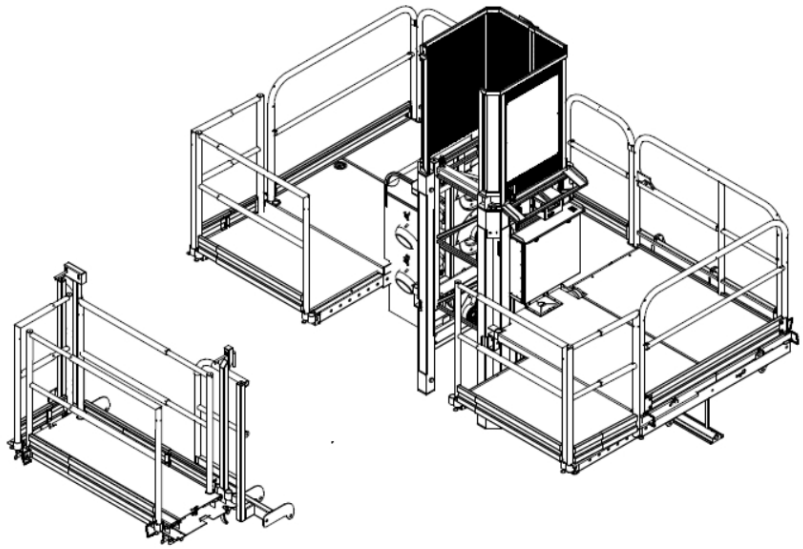
No.	Description	Part No.	Qty
01	Lower deck panels	PG189389	1
02	Railing adapter	PG189318	2
03	Root railing short	PG189345	1
04	Root railing	PG189335	1
05	Base for upper deck	PG189295	1
06	Base for lower deck	PG189290	1
07	Base for side panels	PG189261	2
08	Gas springs set		1
09	Limit switches set		1
10	Adjustable railing 980-1820	PG114499	2
11	Adjustable railing 460-740	PG174067	1



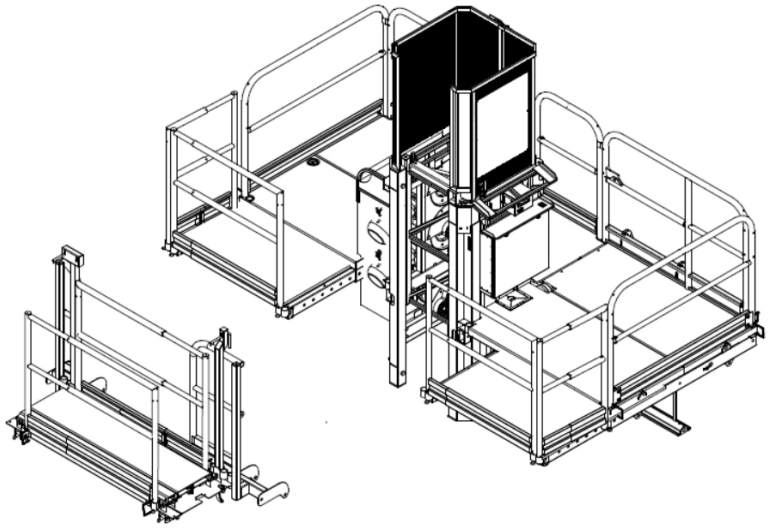
Picture 4.8.2 Extension bridge double base deck PG189425



No.	Description	Part No.	Qty
01	Extension bridge single base deck	PG189424	1
02	Upper deck panels	PG189388	1
03	Limit switches set		1



Picture 6.8.3 Extension bridge (single) on standard extension beams

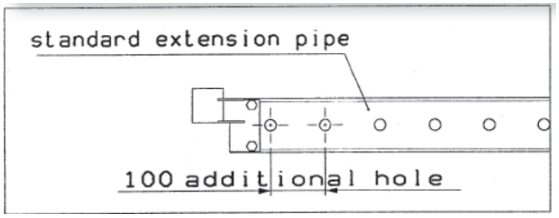


Picture 6.8.4 Extension bridge (double) on standard extension beams

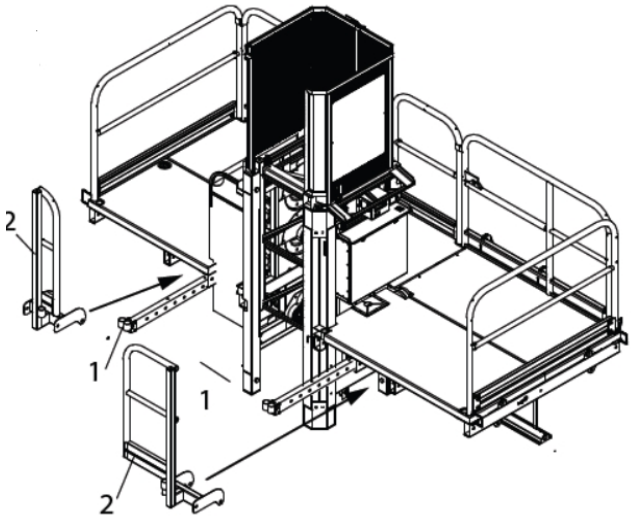
6.8.1 Description and order of assembly

A. When the bridge is fixed on standard extension beams:

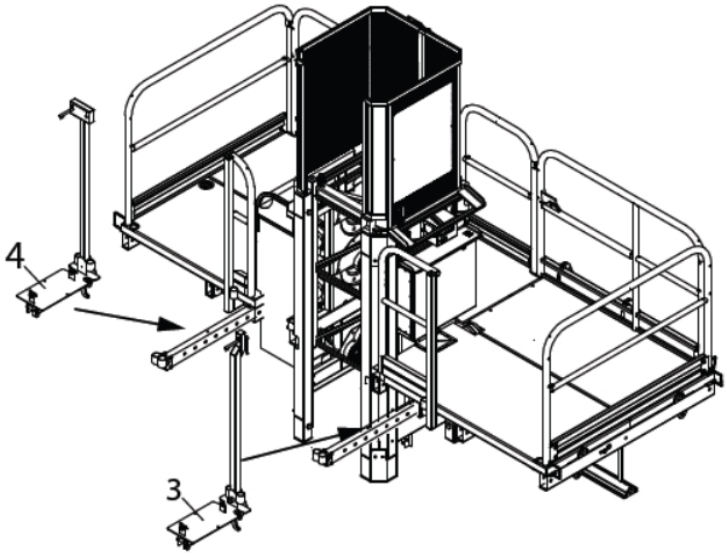
Before fixing extension beam, drill an additional hole as shownin drawing below



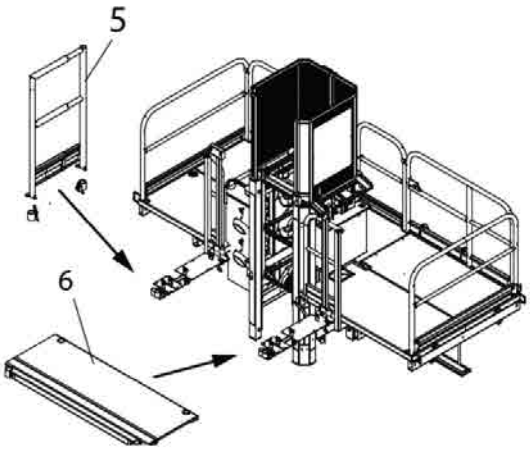
- Fix two extension beams (1) in the MCWP platform pockets as shown on the picture; adjust extension length and fix beams to pockets by safety pins



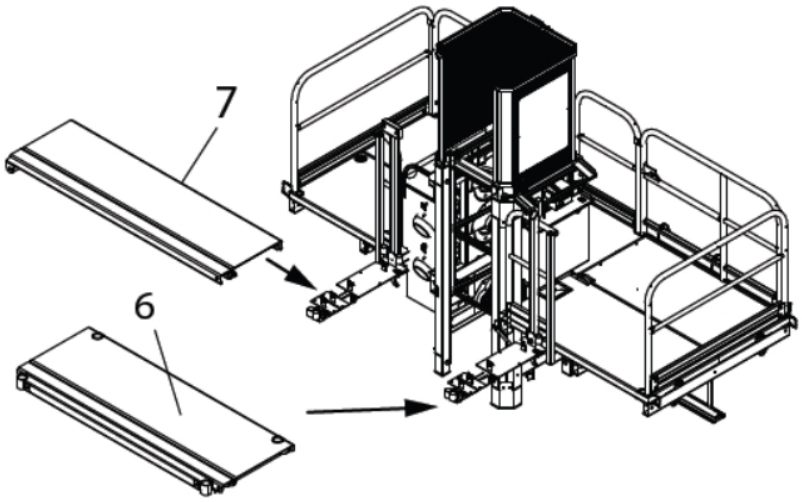
- Fix root railings (2) to cover gap on drive and control box sides



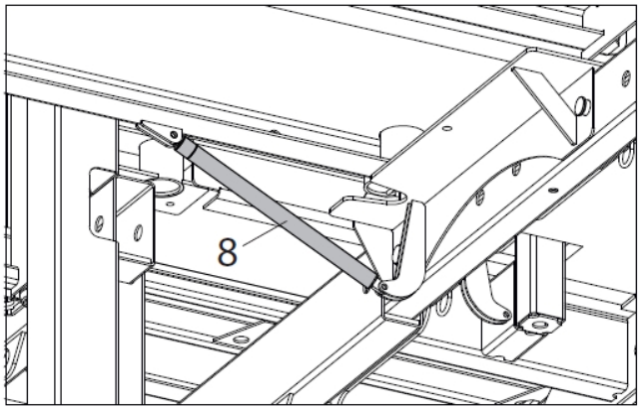
- Fix lower deck base (3) to extension on control box side and upper deck base (4) to extension on drive side



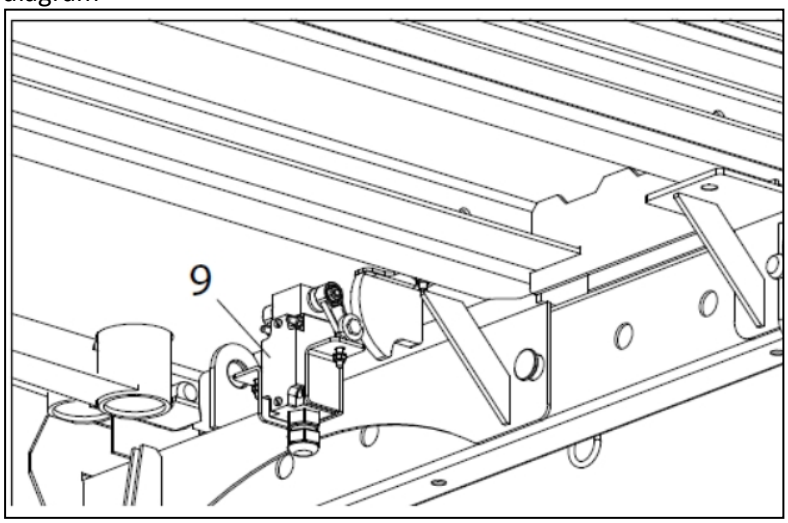
- Fix railing with adapters (5) to the base; fix lower deck (6) (or deck's set) to the base- Extension bridge (single)



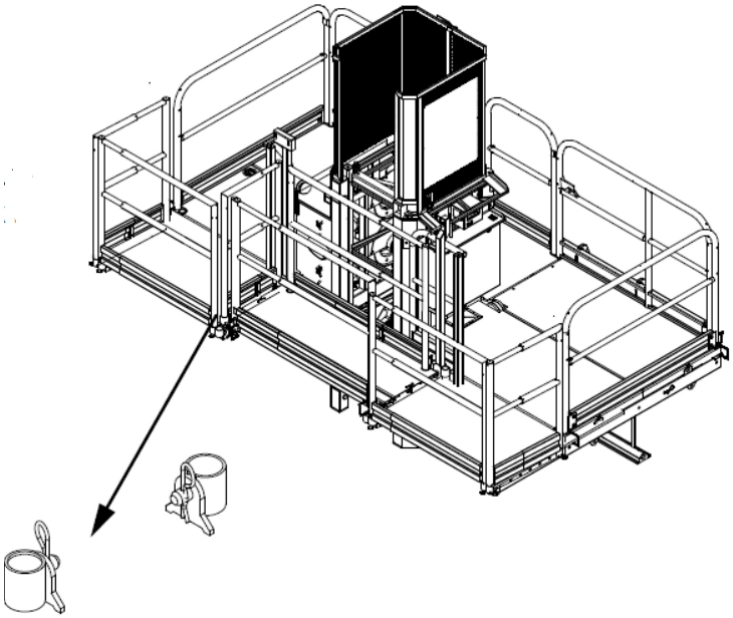
- Fix upper deck (7) (or deck's set) to the base; fix lower deck (6) (or deck's set) to the base- Extension bridge (double)
- Fix gas spring (8) between lower deck (or decks set) and deck base



- Fix limit switches (9) for both decks (deck's sets)and connect to control box according to electric diagram

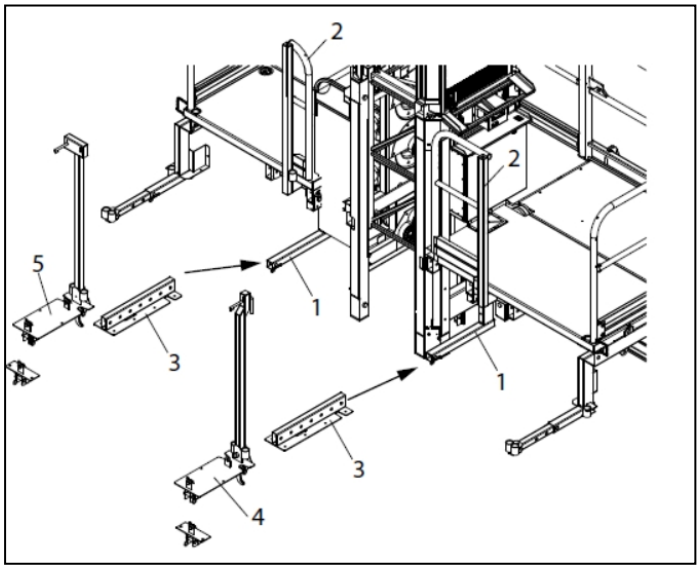


- Optionally fix railing adapters and adjustable railing on drive side if only lower deck is predicted to be used

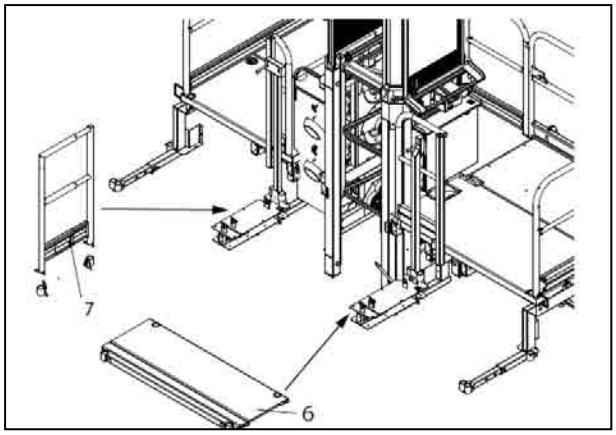


B. When the bridge is fixed on the bricklayer extension beams:

- Fix two bricklayer extension beams (1) in the MCWP platform pockets as shown below; fix beams to pockets by safety pins
- Fix root railings (2) to cover gap on drive and control box sides
- Fix bricklayer extension adapters (3) to extension beams; fix lower (4) and upper (5) deck's base to the adapters

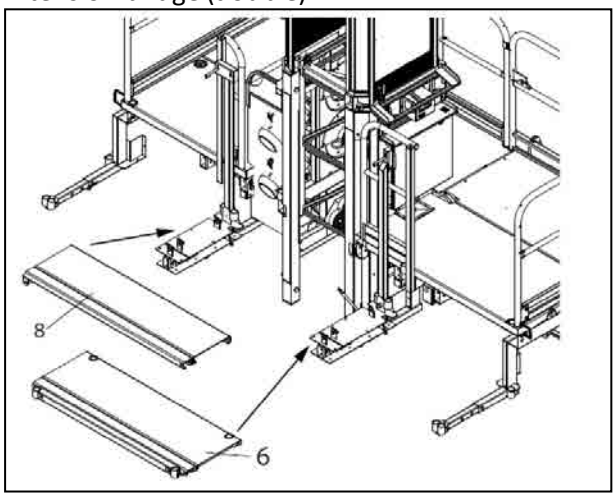


- Fix railing with adapters (5) to the base; fix lower deck (6) (or deck's set) to the base- Extension bridge (single)



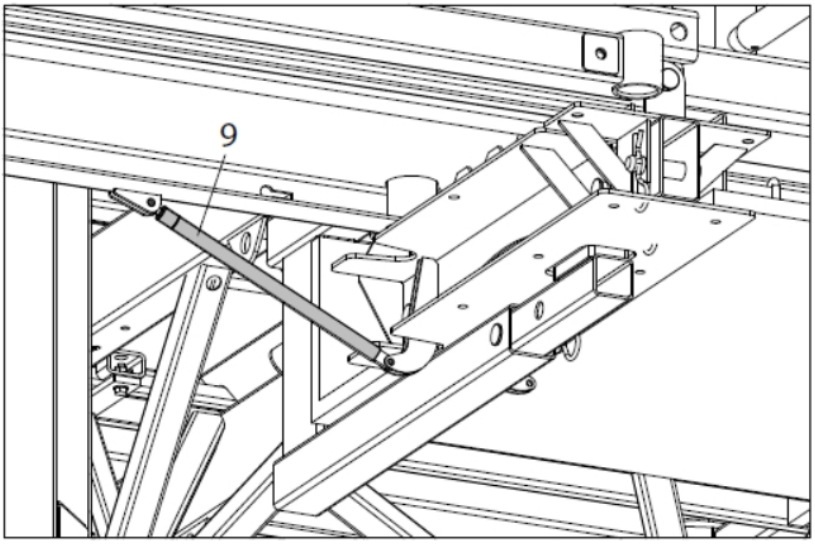
Extension Bridge (Single)

- Fix lower deck (6) (or deck's set) to the base and fix upper deck (8) (or deck's set) to the base -- Extension bridge (double)

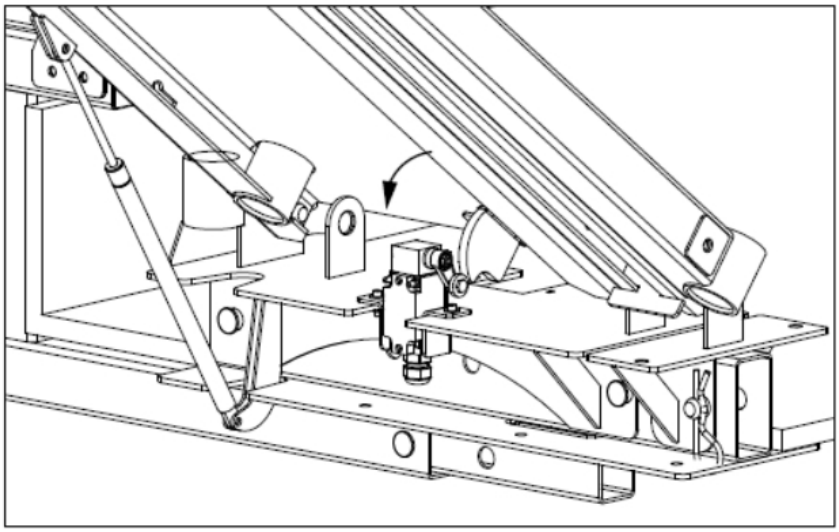


Extension Bridge (Single)

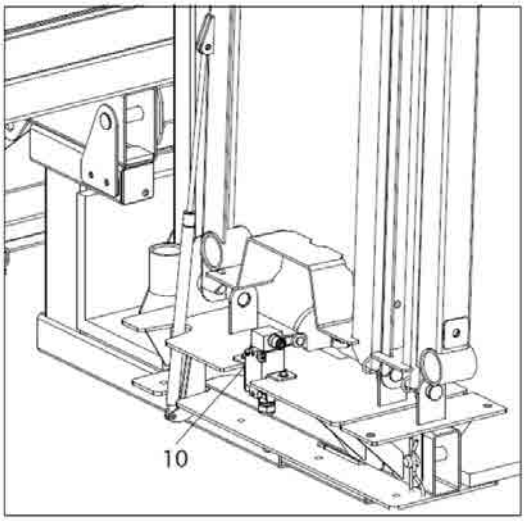
- Fix gas spring (9) between lower decks set and adapter



- Fix limit switches (10) for both decks sets and connect to control box according to electric diagram 30000502

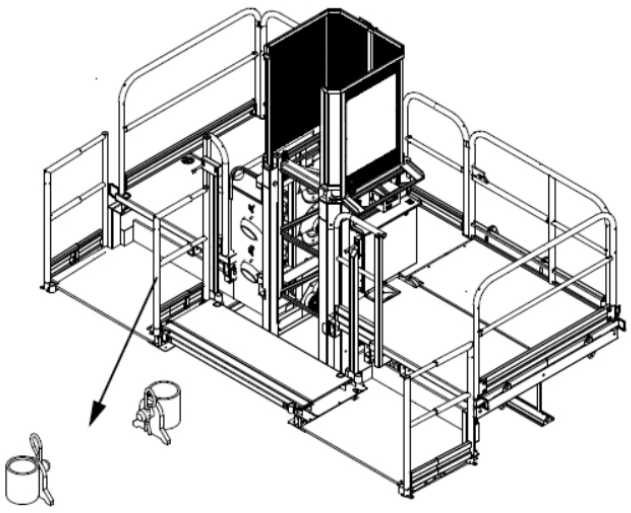


Limit switch position - when extension bridge is lowering (the platform cannot move).



Limit switch position - when extension bridge is closed (the platform can drive)

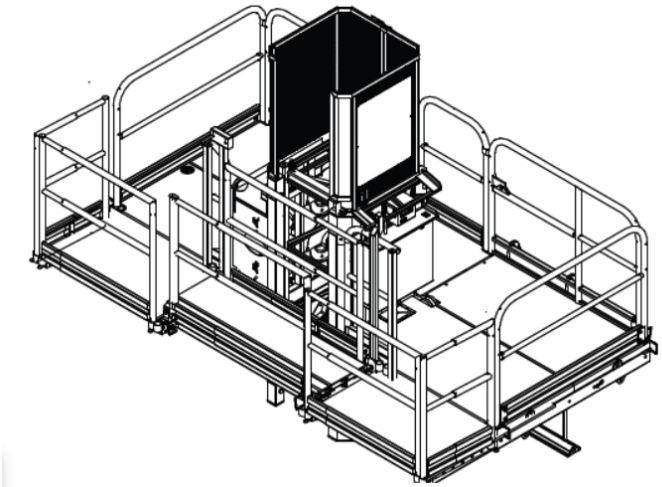
- Optionally fix railing adapters and adjustable railing on drive side if only lower deck's set is predicted to be used



6.8.2 Usage instructions

Before using the bridge extension, check the follwing points

- Fixing of extension beams
- Fixing of hinges for decks
- Presence and fixing of all necessary railings
- Presence and functioning of limit switches
- Functioning of locking for decks



Pic. 6.8.2.1 Extension bridge (double) on standard extension beams ready to use

Before raising platform equipped with anchoring bridge check its functioning properly.

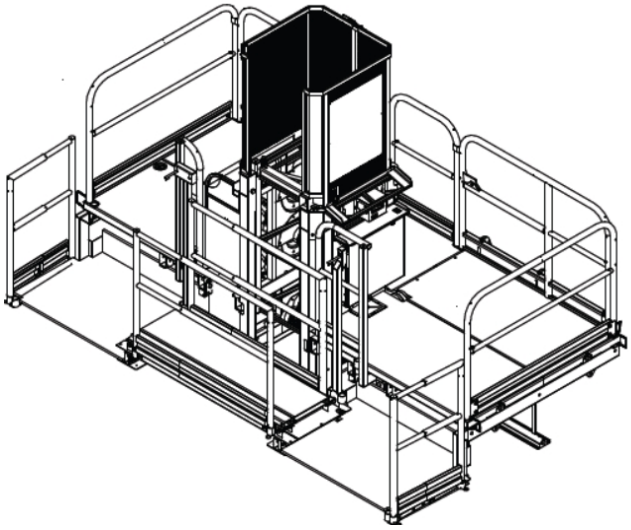
Even if one of the deck isn't locked to the railing , left down MCWP must not be able to move up/down. If MCWP is able to move up/down(with left decks) check limit switches for both decks.

Scanclimber's extension bridge enables easy access to area behind MCW.. It simplies the acces to the area where the anchoring is done between the mast and the wall (of the building)

In order to use the extension bridge correctly please follow the instructions listed below:

- Ensure bridge's decks are locked to railing's posts
- Raise MCWP platform nearly area where work is predicted to be performed
- Switch off emergency stop button on control box or remote control panel
- Unlock lower deck of bridge and lay it down
- Unlock upper deck and lay it down
- Fix safety railings from wall and mast side

Now extension bridge is ready to use!

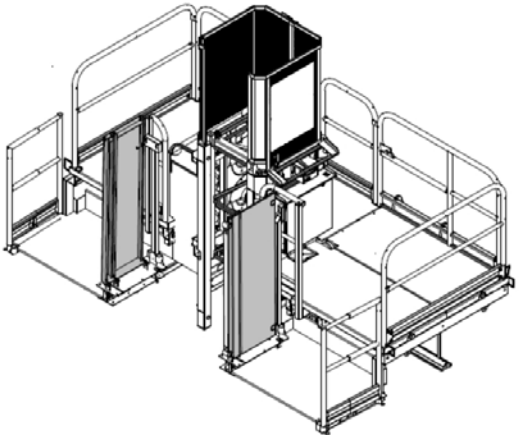


Pic. 6.8.2.2 Extension bridge (double) on bricklayer extension beams ready to use

When work is finished please follow theinstructiomns listed below:

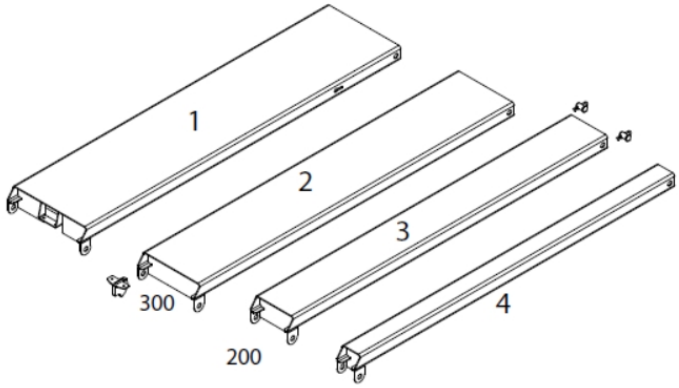
- Dismantle railings from mast and wall side
- Raise up the upper deck and lock it
- Raise up the lower deck and lock it
- Switch on emergency stop button on control box or remote control panel

Now MCWP platform is ready to travel back to ground level or to be raised up to the next working area

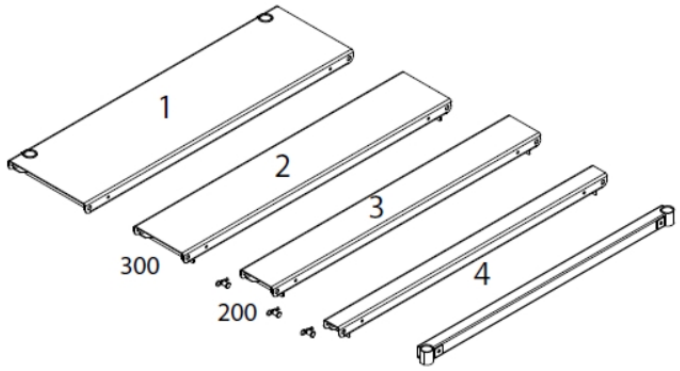


PIc. 6.8.2.3 Extension bridge (double) on bricklayer extension beams ready to travel

There is a possibility to widen make the upper and lower deck depending on the requriements.'

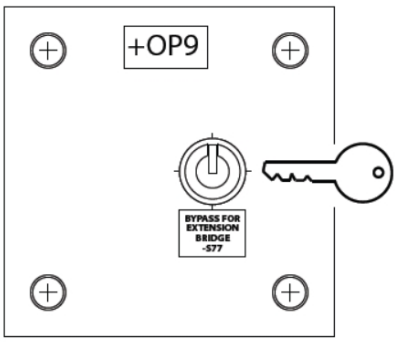


No.	Description	Part No.	Qty
01	Base panel	PG189382	1
02	Panel 300	PG189383	1
03	Panel 200	PG189385	1
04	Base panel	PG189386	1

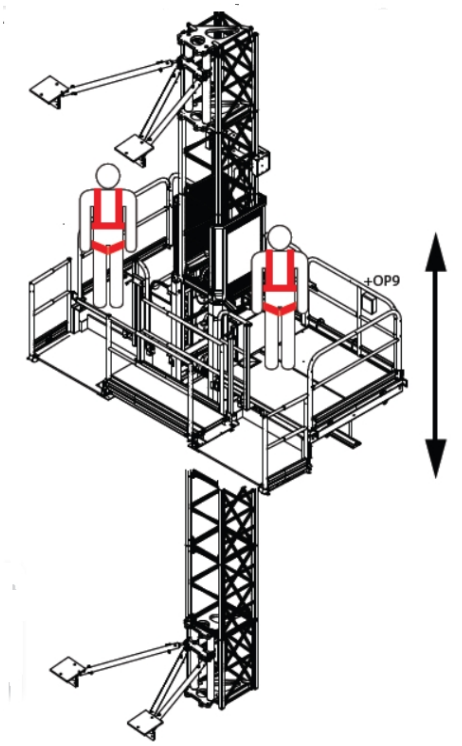


No.	Description	Part No.	Qty
01	Base panel	PG189377	1
02	Panel 300	PG189378	1
03	Panel 200	PG189379	1
04	Base panel	PG189380	1

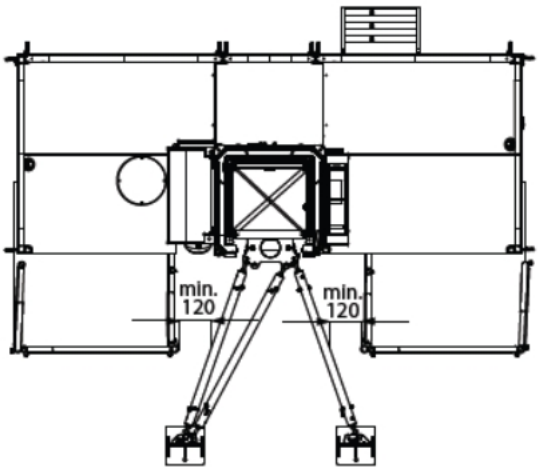
To be able to move MCWP under the anchor, when the extension bridge is down, extension bridge limit switch(es) must be bypassed. Turn and hold the key switch S77 and press control buttons S7 UP or S8 DOWN. This operation bypasses extension bridge limit switches and allow to move up and down.



Warning!!! Movement up and down with extension bridge down, requireS caution and attention while approaching the anchor.



Keep a minimum of 120 mm distance bwteen anchoring pipes and bridge railings!



Itt is forbidden to sstand on the extensions when the MCWP is moving!!!

6.9 Finalizing

The erection inspection must be done before the machine is used.

6.8.10 Erection inspection

The platform must be inspected after it is fully assembled. The inspection is done by a qualified technician. Check the following after the inspection and fill the Erection Form (chapter 9).

1. Platform working area
2. MCWP is free from unnecessary equipment
3. Outriggers are fully extended, turned and locked with pins
4. Jacks are screwed down and locked
5. Centre jack is screwed down and locked
6. Ground plates under jacks and ground loading capacity
7. Platform and mast are vertically and horizontally adjusted
8. Lower limit switch cams
9. Distance between platform and wall
10. No visible damage in platform structures
11. Weather cover
12. Instruction manual available
13. All signs and warning decals found and readable
14. Platform railing
15. Mast guard
16. Plywood deck on telescopic extensions (min. thickness 22 mm)

17. Rack and pinion contact
18. Guiding roller clearances
19. Electric cables hanging freely and straight
20. Up and down push buttons and emergency stop buttons
21. Motor brakes
22. No unusual noise from mechanisms or motors
23. No oil leaks from gear boxes
24. Lower limit switches function
25. Manual lowering
26. Twin platform leveling system
27. Safety brake expiration date
28. Safety brake test
29. Static and dynamic test
30. Rack is clean and lubricated
31. Mast section bolts, tightened to 350 Nm
32. Anchoring, all parts fastened properly
33. Upper limit switch cams
34. Upper limit switch function
35. Top cap
36. Operators have been trained to use the unit.

7. DISMANTLING

Read the safety instructions (chapter 2) before the dismantling

This chapter describes the dismantling of the Scanclimber MCWP.

The wind speed must be under 12.7 m/s when dismantling the platform.

Do not overload the platform when dismantling the mast.

The mast can be shortened section by section or several mast sections at once.

The dismantling is done as follows:

1. The max. platform length is 4.1 m when dismantling a unit which is freestanding, top anchored or stands on a mini chassis. Remove the additional platform section at bottom position.
2. Remove the mast guards.
3. Remove the top frame.
4. Remove the top limit switch cams.
5. Fasten the optional mast assembly crane to the mast, if needed.
6. Loosen the mast bolts and lift the mast section or sections. Distribute the mast sections evenly on the platform if they are placed on the platform during the dismantling.
7. Shorten the mast to the topmost anchor.
8. Remove the topmost anchor.
9. Shorten the mast and remove the anchors.
10. Lower the platform on to the rubber buffers manually by releasing the motor brakes.
11. Remove the electric cables
12. Remove railings.
13. Remove the platform sections.
14. Screw the jacks in.
15. Shorten the outriggers and swing them in (wheel chassis).

SC5000

Mast climbing work platform

TROUBLE SHOOTING & INSPECTION FORMS

Version: V1_EN_11_2018

SCANCLIMBER®
by Tractel®

SCANCLIMBER OY
Turkkirata 26, Pirkkala, Finland , 33960
Tel. +358 10 680 7000
Fax. +358 10 680 7033

8. TROUBLESHOOTING

This chapter provides information on the most common problems.

8.1 First check that:

- The power supply cable is connected to the cable drum.
- The power supply cable is connected from the cable drum to the platform electric box.
- Cable drum main switch Q0 is in position 1.
- The platform electric box main switch Q2 is in position 1.
- The emergency push buttons are released.
- Phase order lamp H3 in the platform electric box is on. If it is not, change the phase order switch to the other position.
- All fuses and motor protection relays in the electric boxes are in position 1.
- If the power supply cable is connected and the pilot lamps are on, check that the power supply cable has a sufficient cross section, at least 5 X 6 mm2.

8.2 The chassis drive unit does not work

- The power supply cable is connected to the chassis electric box socket X1.
- The main switch Q1 in the chassis electric box is in position 1.
- The remote control is connected to the chassis electric box socket X3.
- The platform is manually lowered on to the rubber buffers and the drive unit limit switch is activated.
- The drive unit clutch is turned to driving position.

8.3 The platform does not move up - platform drive motor groans

The groaning sound may occur if the supply voltage is too low or if one phase is missing. Check that the power supply cable cross section is at least 5 X 6 mm2 and that all the fuses in the power supply board are ok.

8.4 The platform does not move

- The remote control is connected to the platform electric box socket X5.
- If the remote control is not used, check that the blind plug is connected to socket X5 on the bottom of the platform electric box.
- Main fuse F13. If the fuse has tripped, turn it to position 1.
- Motor protection relays F10 and F11 in the platform electric box. If the relays have tripped, turn them to position 1.
- Control voltage fuse F7 in the platform electric box. If the fuse has tripped, turn it to position 1.
- If the platform has been lowered on to the rubber buffers, the lower safety limit switch is on. Bypass the safety limit switch with S3 and drive the platform upwards.
- Safety limit switch S12 stuck or broken, check the limit switch.

8.5 The platform moves up but not down

- Lower limit switch S11 stuck or broken, check.
- Remote control down-button does not work the limit switch. Try to control with platform electric box down-button.

8.6 The platform moves down but not up

- Upper limit switch S11 stuck or broken. Check.
- Inductive sensor B1 broken, or not adjusted correctly. The distance between the mast tube and the sensor should be about 10 mm.
- Remote control up-button broken, try to control with platform electric box up-button

8.7 230 V socket is dead

- The residual current device F4 in the platform electric box tripped. Turn it back to position 1.
- Fuse F14 in the platform electric box tripped. Turn it back to position 1.
- If the residual current device on fuse F14 switches off again, check the electric tool used.

INSPECTION FORMS

Erection form

WORKSITE:_____
TYPE OF MACHINE: _____SERIAL NO.:_____
PLATFORM LENGTH: _____ MAX. LIFTING CAPACITY _____ HEIGHT:_____
ERECTOR: _____
PERSON IN CHARGE: _____TEL.:_____
ORDERER: _____
PERSON IN CHARGE: _____TEL.:_____

Check Point	Ok	Note
GROUND PLATES UNDER JACKS		
OUTRIGGERS FULLY TURNED, EXTENDED AND LOCKED WITH PIN		
JACKS SCREWED DOWN AGAINST GRO		
PLATFORM AND MAST ARE VERTICALLY AND HORIZONTALLY ADJUSTED		
CENTRE JACK SCREWED DOWN AGAINST GROUND PLATE AND LOCKED		
PLYWOOD BOARD ON TELESCOPIC EXTENSIONS (MIN. 22 MM) PROPERLY FASTENED		
DISTANCE BETWEEN PLATFORM AND WALL		
RAILINGS ASSEMBLED		
MAST GUARD NET ASSEMBLED		
MAST SECTION BOLTS TIGHTENED -350 Nm		
COUNTERPARTS FOR LIMIT SWITCHES (TOP AND BOTTOM)		
TOP CAP ASSEMBLED		
FUNCTION OF THE EMERGENCY STOP		
FUNCTION OF THE UP AND DOWN PUSH-BUTTONS		
FUNCTION OF THE LIMIT SWITCHES (TOP, BOTTOM, MAST ASSEMBLY)		
FUNCTION OF THE EMERGENCY LOWERING		
FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)		
WALL ANCHORING		
FASTENING OF THE ANCHORING BOLTS -200 Nm		
CLEARANCE OF THE GUIDING ROLLERS		
MEASURE THE VOLTAGE IN POWER SUPPLY CABLES		
ELECTRIC CABLES ARE HANGING FREE AND STRAIGHT		
RACK AND PINION CONTACT		
FUNCTION OF THE SAFETY BRAKE		
PLATFORMS STATIC AND DYNAMIC TEST		
FUNCTION OF THE BRAKES		
NO UNUSUAL NOISE OR LEAKS FROM MECHANISMS AND MOTORS		
RACKS ARE CLEAN AND LUBRICATED		

WORK SITE FENCED OFF		
EXPIRATION DATE OF THE SAFETY BRAKE, MUST BE REPLACED EVERY FOUR (4) YEARS		
UNIT FREE FROM UNNECESSARY EQUIPMENT		
ASSEMBLY OF WEATHER COVER		
OPERATORS HAVE GOT ENOUGH INFORMATION AND TRAINING IN THE USE OF THE UNIT		
INSTRUCTION MANUAL AVAILABLE IN ITS BOX		
ALL SIGNS AND LABELS POSITIONED AND READABLE		

DATE: _____

_____ PERSON IN CHARGE (ERECTOR)

_____ PERSON IN CHARGE (ORDERER

Daily Inspection form

WORKSITE: _____

TYPE OF MACHINE: _____SERIAL NO._____

PLATFORM LENGTH: _____MAX. LIFTING CAPACITY:_____

PERSON IN CHARGE:_____TEL.:_____

NOTE!

- FILL UP AND SIGN THIS FORM BEFORE YOU START WORKING WITH THE UNIT
- MARK WITH CROSS THE CHECKINGS CARRIED OUT
- WRITE ANY REMARKS IN THE LAST COLUMN

V = VISUAL INSPECTION
T- TEST

YEAR_____ WEEK NO._____		MON	TUE	WED	THU	FRI	SAT	SUN	NOTE
BASEMENT GROUND	V								
TURNING, EXTENSION, SUPPORT AND LOCKING OF OUTRIGGERS	V								
HORIZONTAL/VERTICAL POSITION OF PLATFORM	V								
FUNCTION OF THE REMOTE CONTROL	T								
FUNCTION OF THE EMERGENCY STOP	T								
FUNCTION OF THE EMERGENCY LOWERING	T								
RACK AND PINION CONTACT	V								
CONDITION OF THE ELECTRIC CABLES	V								
FIXING AND RAILINGS OF PLATFORM SECTIONS	V								
MAST SECTIONS AND FIXING SCREWS	V								
FUNCTION OF THE LIMIT SWICHES	T								
CONNECTION OF THE SAFETY BRAKE	V								
ANCHORING WITH CONNECTIONS	V								
CONNECTION OF MAST GUARDS	V								
LOOSE OR MISSING PARTS	V								
WORKSITE SAFETY FENCED	V								
WARNING/INSTRUCTION PLATES POSITIONED	V								
WORKING AREA	V								
INSTRUCTION MANUAL	V								
LOADING PLATE	V								

DATE:_____

_____

INSPECTOR

Frequent Inspection Form

WORKSITE:_____
TYPE OF MACHINE: _____ SERIAL NO._____
PLATFORM LENGTH: _____MAX. LIFTING CAPACITY:_____ HEIGHT:_____
INSPECTOR:_____
PERSON IN CHARGE:_____TEL.:_____
ORDERER: _____
PERSON IN CHARGE:_____TEL.:_____

W = WEEKLY - MARK WITH CROSS CHECKINGS CARRIED OUT
M = MONTHLY
Q = QUARTERLY- WRITE ANY REMARKS IN THE LAST COLUMN
Y = YEARLY

CHECK POINT	W	M	Q	Y	NOTE
CONDITION OF THE RACK AND THE PINION	o				
CLEANLINESS OF THE GUIDING ROLLERS	o				
CONDITION OF THE WELDED JOINTS	o				
OIL LEAKS	o				
BOLTED JOINTS OF ANCHORING	o				
PERFORM LUBRICATIONS	o	o	o	o	
CONDITION OF THE PLATFORM SECTIONS	o				
TIGHTENING THE MAST SECTION BOLTS -350 Nm		o			
TIGHTENING THE PLATFORM SECTION BOLTS -240 Nm		o			
TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm		o			
TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm		o			
CONDITION OF THE CONDUCTORS IN ELECTRIC BOXES		o			
CONDITION OF THE ELECTRIC INSTALLATION IN EL. BOXES		o			
TIGHTENING THE WHEEL NUTS -100 Nm, WHEEL PRESSURE 4,5 BAR		o			
FUNCTION OF THE ELECTROMAGNETIC BRAKE			o		
CLEANLINESS OF THE COVER LATTICE AT THE FAN BONNET			o		
CONDITION OF THE RACK AND PINION, MEASURE TOOTH			o		
FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)			o		

TESTING OF THE SAFETY BRAKE			o		
CONNECTIONS OF THE ELECTRIC CABLES,				o	
CONDITION OF THE ELECTRIC SYSTEM					
FACTORY OVERHAUL OF THE SAFETY BRAKE EVERY 4 YEARS				4.	

DATE: _____

_____ INSPECTOR

_____ PERSON IN CHARGE (WORK SITE)

SC5000

Mast climbing work platform

STICKERS/DECALS

Version: V1.1_EN_02_20

SCANCLIMBER®
by Tractel®

SCANCLIMBER OY

Turkkirata 26, Pirkkala, Finland , 33960
Tel. +358 10 680 7000

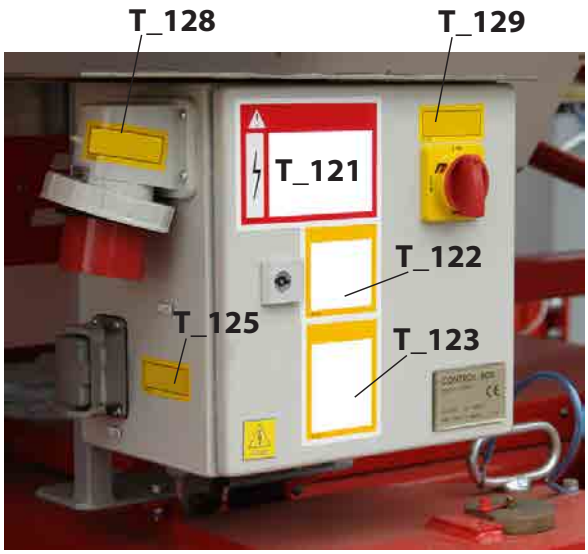
INSTRUCTIONS AND WARNING STICKERS

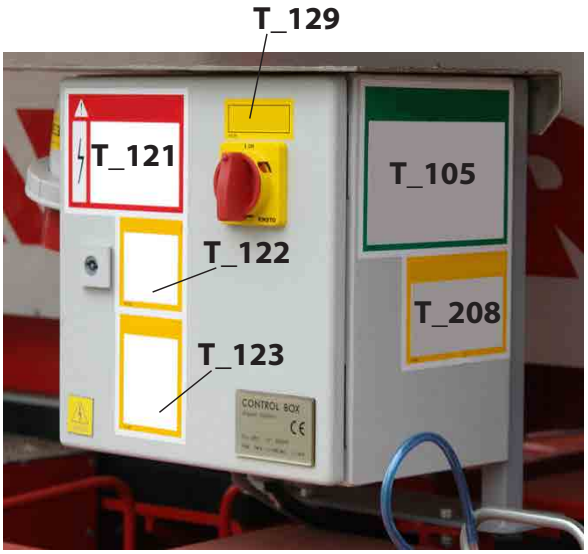
The instruction and warning stickers must not be removed from the machine. All stickers shall be clean and readable. New stickers can be ordered from the supplier. The decal locations are shown in the following drawings.

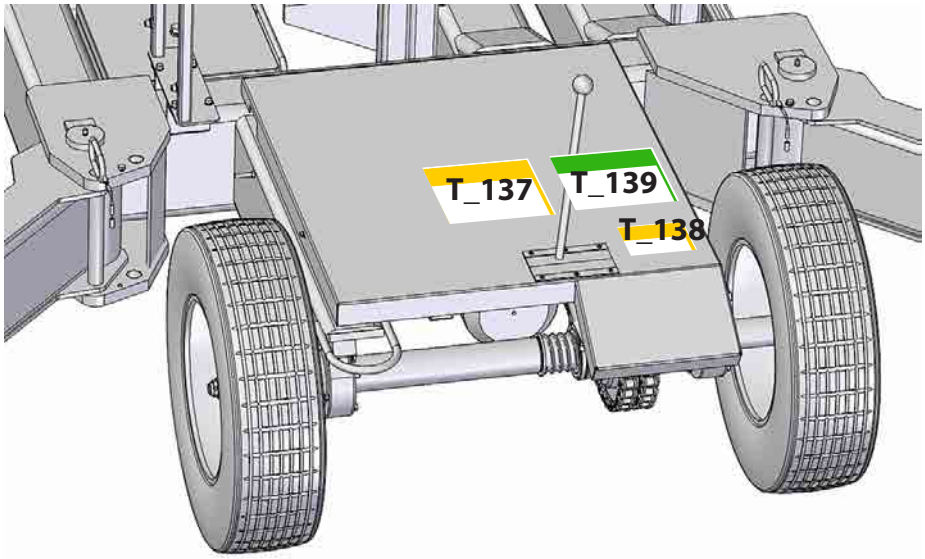
New stickers must be ordered from the supplier if the stickers are damaged or are not readable.

Number	Decal	Description	Quantity
Ta101	Warning	Wind speed	
Ta103	Caution	Operator instructions	
Ta105	Caution	Daily inspection	
Ta118	Danger	High voltage lines	
Ta120	Caution	Emergency lowering	2
Ta121	Danger	Energized objects	2
Ta122	Caution	Operating instructions	
Ta123	Caution	Before transportation	
Ta124	Information	Horn	
Ta125	Information	Remote control socket	2
Ta127	Information	Safety switch	
Ta128	Information	Main current switch	
Ta137	Warning	Brakes	
Ta138	Warning	Driving	
Ta139	Caution	Towing	
Ta142	Caution	230 V	
Ta144	Danger	Safety switch	
Ta154	Information	Phase switch	
Ta201	Caution	Platform loadings	
Ta202	Caution	Platform loadings	
Ta203	Caution	Platform loadings	
Ta204	Caution	Platform loadings	
Ta205	Caution	Anchorage instructions	
Ta206	Caution	Anchorage instructions	
Ta207	Caution	Anchorage instructions	
Ta208	Caution	Transport dimensions	
Ta209	Caution	Telescopic extensions	
Ta210	Caution	Platform loadings	
Ta211	Caution	Platform loadings	
Ta212	Caution	Platform loadings	

Ta311	Information	Instruction manual	
T196	60 kN	jack sticker	4
T195	6500 kg	top cap	2

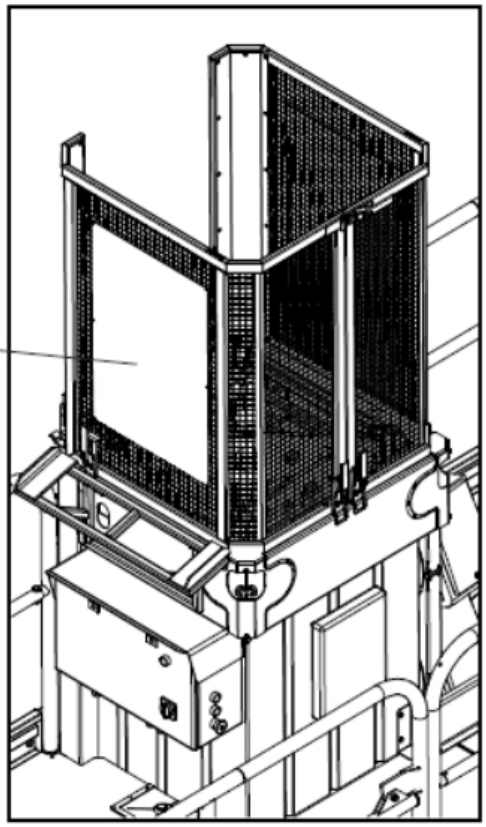


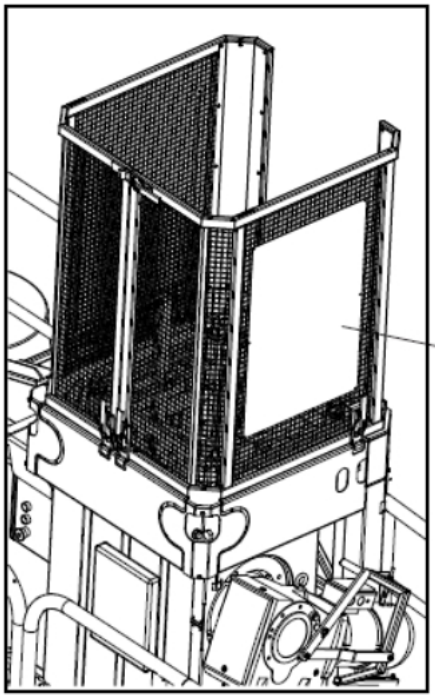




T_205 T_206 T_207

T_103 T_209





T_210 T_211 T_212

T_201 T_202 T_203

T_204

WARNING

DO NOT OPERATE WHEN WIND SPEED EXCEEDS
12,7 m/s - freestanding
15,5 m/s - mast anchored

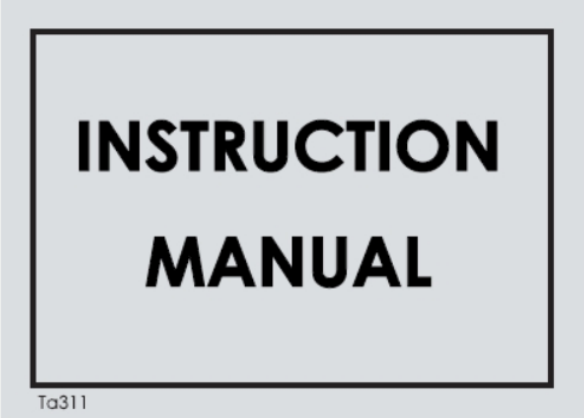
Ta101

CAUTION

INSTRUCTIONS FOR THE OPERATORS

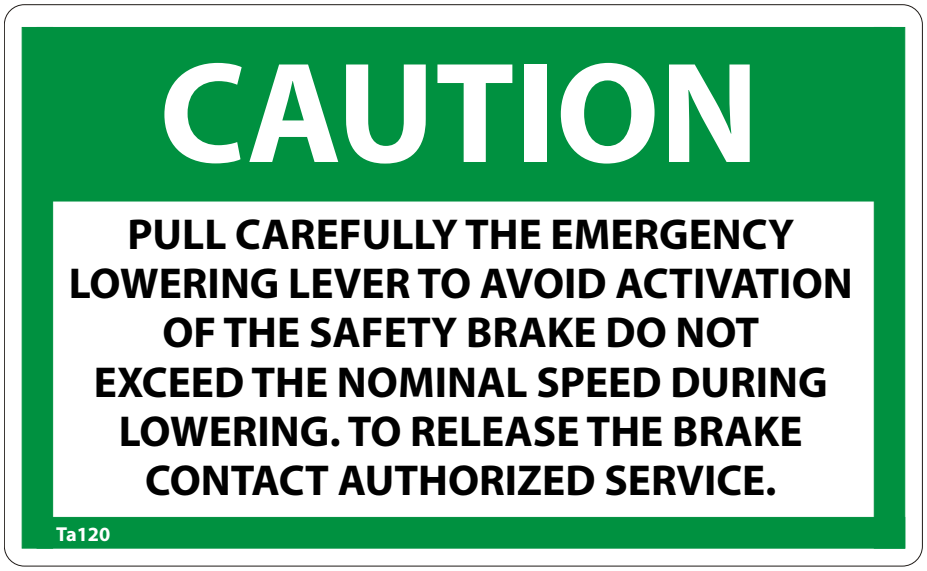
- Operator must be trained for the operation
- Become acquainted with the operating instructions
- Follow the safety regulations
- Check ground is suitable for load bearing
- Check the jacks are against ground and outrigger jack pins are locked
- Use ground plates under jacks
- Check chassis levelling
- Do not exceed safe working load and height limitation
- Distribute load evenly
- Place load inside the railings
- Limit manual force 400 N/2 persons
- Do not use the mast climber when wind speed exceeds:
  - 12,7 m/s , 28 mph - freestanding
  - 15,5 m/s , 35 mph - mast anchored
- Check railing and mast guard connections
- Pay attention to the operation temperature
- Do not lean over platform railings
- Do not use ladders or scaf olding on the platform
- Follow minimum distances to the electric lines nearby
- Be careful with the obstacles on the working side of platform
- Do not use faulty machine
- Do not work if your physical condition is not well or you have fear of heights
- Prevent unauthorised use of platform
- Carry out the daily inspections
- Report on all faults

Ta103


INSTRUCTION
MANUAL
Ta311

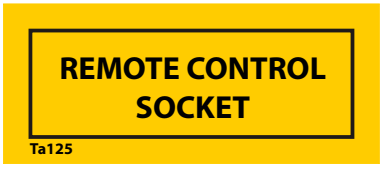

CAUTION
DAILY INSPECTION
- BASEMENT GROUND
- OUTRIGGERS
- HORIZONTAL AND VERTICAL POSITION OF PLATFORM AND MAST
- FUNCTION OF REMOTE CONTROL
- FUNCTION OF EMERGENCY STOP
- FUNCTION OF EMERGENCY LOWERING
- CONTACT AND CONDITION OF RACK AND PINION
- CONDITION OF ELECTRIC CABLES/ CABLES ARE HANGING FREE
- PLATFORM FIXING AND RAILINGS
- MAST SECTION AND FIXING BOLTS
- FUNCTION OF LIMIT SWITCHES COUNTERPARTS
- GUIDING ROLLERS
- SAFETY BRAKE
- WALL ANCHORING
- MAST GUARDS
- LOOSE OR MISSING PARTS
- THAT WORKSITE IS SAFETY FENCED
- WORKING AND INSTRUCTION PLATES
- WORKING AREA
Ta105


DANGER
CAUTION
IT IS ILLEGAL TO OPERATE THIS EQUIPMENT
TOO NEAR TO HIGH VOLTAGE LINES
SEE THE MINIMUM SAFE DISTANCES FROM
THE TABLE BELOW.
VOLTAGE RANGE (phase to phase)
MINIMUM SAFE APPROACH DISTANCE
300 V - 50 kV
3,1 m / 10 FT
50 kV - 200 kV
4,6 m / 15 FT
200 kV - 350 kV
6,1 m / 20 FT
350 kV - 500 kV
7,7 m / 25 FT
500 kV - 750 kV
10,7 m / 35 FT
750 kV- 1000 kV
13,8 m / 45 FT
Ta118


CAUTION
PULL CAREFULLY THE EMERGENCY LOWERING LEVER TO AVOID ACTIVATION OF THE SAFETY BRAKE DO NOT EXCEED THE NOMINAL SPEED DURING LOWERING. TO RELEASE THE BRAKE CONTACT AUTHORIZED SERVICE.
Ta120


DANGER
WARNING !
DEATH OR SERIOUS INJURY
CAN RESULT FROM
CONTACT WITH ELECTRICALLY
ENERGIZED OBJECTS.
Ta121


CAUTION
STOP
READ AND UNDERSTAND SAFETY AND OPERATION INSTRUCTIONS BEFORE OPERATING MACHINE. SAFETY AND OPERATION INSTRUCTIONS ARE IN THE MANUAL BOX.
Ta122


REMOTE CONTROL SOCKET
Ta125


CAUTION
LOWER THE PLATFORM
USING THE EMERGENCY
LOWERING ON TO
RUBBER BUFFERS
FOR TRANSPORTATION.
Ta123


HORN
Ta124


SAFETY SWITCH
FOR MAIN
AND CONTROL
POWER
Ta127


INLET
Ta128


MAIN SWITCH
Ta129


PHASE SWITCH
Ta154


6500 kg
T195


60 kN

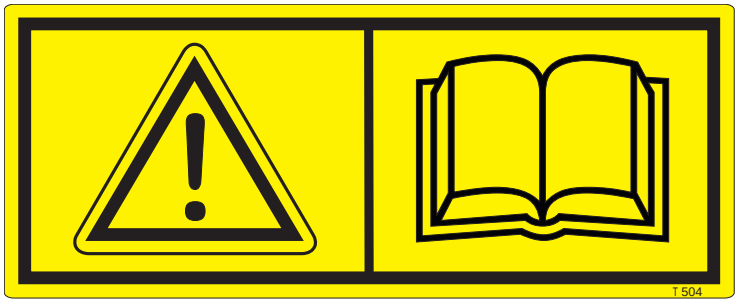

WARNING
THE MACHINE
HAS NO BRAKES
AFTER RELEASING
THE PARKING BRAKE
Ta137

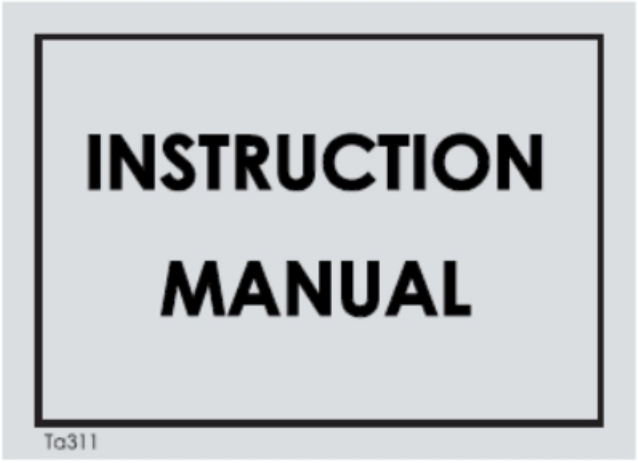

WARNING
DON'T DRIVE THE
CHASSIS WITH
MORE THAN TWO
MAST SECTIONS
Ta138

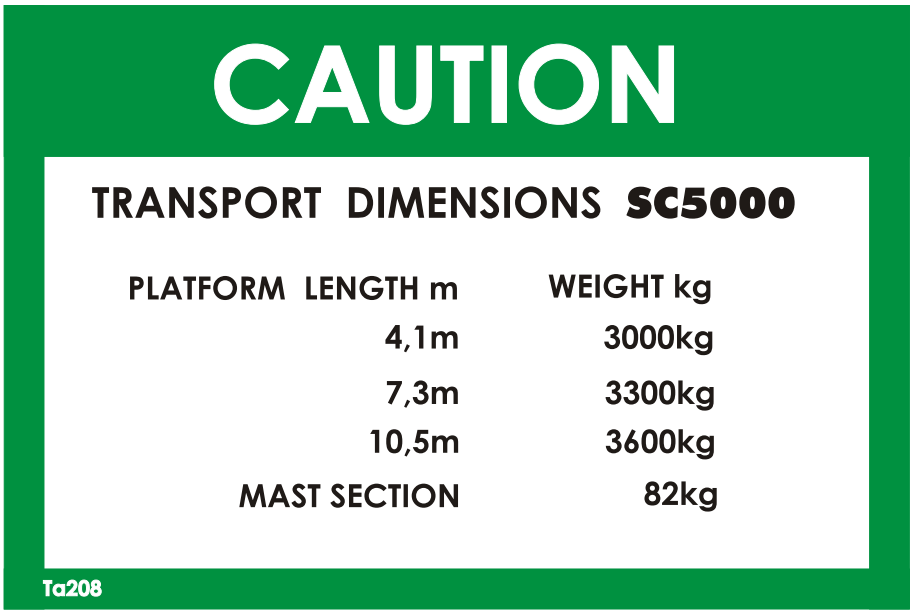

CAUTION
RELEASE THE
PARKING BRAKE
FOR TOWING
Ta139


DANGER
WARNING !
SAFETY SWITCH DOES NOT
DISCONNECT POWER TO
230 V SOCKETS AND HORN
Ta144


CAUTION
230 V
Ta142


T 504

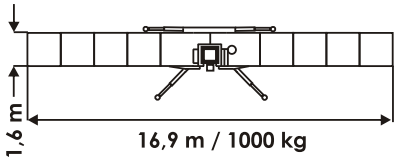

INSTRUCTION
MANUAL
Ta311


CAUTION
TRANSPORT DIMENSIONS SC5000
PLATFORM LENGTH m
WEIGHT kg
4,1m
3000kg
7,3m
3300kg
10,5m
3600kg
MAST SECTION
82kg
Ta208

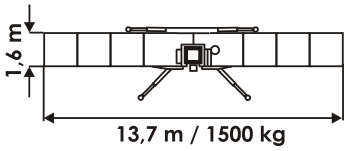
CAUTION

LOADING DIAGRAM / SC5000

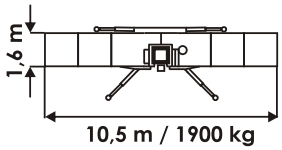
PLATFORM LOADINGS ON WHEEL CHASSIS
OUTRIGGERS EXTENDED AND AT K-POSITION
-FREESTANDING
-MAST SIDE OUTRIGGERS TURNED OUT
-MAX. WIND SPEED 12,7 m/s
-MAX. PLATFORM HEIGHT 9 m / PLATFORM LENGHT 16,9 m
-MAX. PLATFORM HEIGHT 10,5 m / PLATFORM LENGHT 13,7 m
-MAX. PLATFORM HEIGHT 12 m / PLATFORM LENGHT 10,5 m
-MAX. PLATFORM HEIGHT 13,5 m / PLATFORM LENGHT 7,3 m
-MAX. PLATFORM HEIGHT 15 m / PLATFORM LENGHT 4,1 m
-MAX. POINT LOAD 200kg ON 0,1 m x 0,1 m AREA



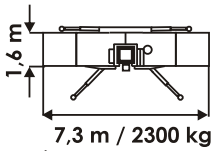
TOTAL LOADING **1000kg** COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 680kg
- 3 PERSONS=320kg FREELY POSITIONED



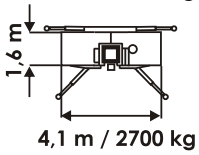
TOTAL LOADING **1500kg** COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 1180kg
- 3 PERSONS=320kg FREELY POSITIONED



TOTAL LOADING **1900kg** COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 1580kg
- 3 PERSONS=320kg FREELY POSITIONED



TOTAL LOADING **2300kg** COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 1980kg
- 3 PERSONS=320kg FREELY POSITIONED



TOTAL LOADING **2700kg** COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 2380kg
- 3 PERSONS=320kg FREELY POSITIONED

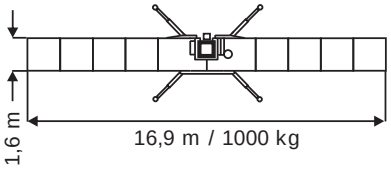
Ta201_2013

CAUTION

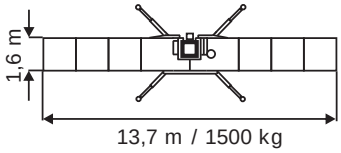
LOADING DIAGRAM / **SC5000**

PLATFORM LOADINGS ON WHEEL CHASSIS
OUTRIGGERS EXTENDED AND AT X-POSITION

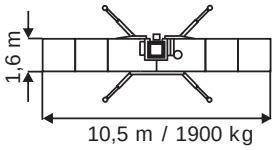
-FREESTANDING
-MAST SIDE TURNED OUT
-MAX. WIND SPEED 12,7m/s
-MAX. PLATFORM HEIGHT 18m/ PLATFORM LENGHT 16,9m
-MAX. PLATFORM HEIGHT 20m/ PLATFORM LENGHT 4,1-13,7m
-MAX. POINT LOAD 200kg ON 0,1m X 0,1m AREA



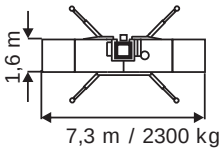
TOTAL LOADING
1000kg COMPOSED OF:
- EVENLY DISTRIBUTED
LOADING 680kg
- 3 PERSONS=320kg
FREELY POSITIONED



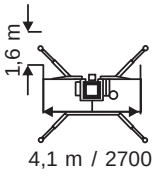
TOTAL LOADING
1500kg COMPOSED OF:
- EVENLY DISTRIBUTED
LOADING 1180kg
- 3 PERSONS=320kg
FREELY POSITIONED



TOTAL LOADING
1900kg COMPOSED OF:
- EVENLY DISTRIBUTED
LOADING 1580kg
- 3 PERSONS=320kg
FREELY POSITIONED



TOTAL LOADING
2300kg COMPOSED OF:
- EVENLY DISTRIBUTED
LOADING 1980kg
- 3 PERSONS=320kg
FREELY POSITIONED



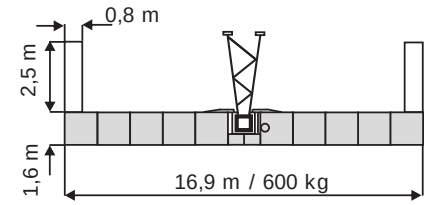
TOTAL LOADING
2700kg COMPOSED OF:
- EVENLY DISTRIBUTED
LOADING 2380kg
- 3 PERSONS=320kg
FREELY POSITIONED

Ta202

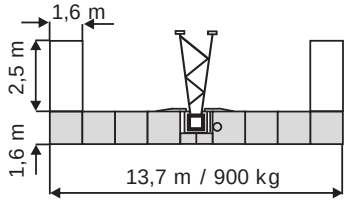
CAUTION

LOADING DIAGRAM / **SC5000**

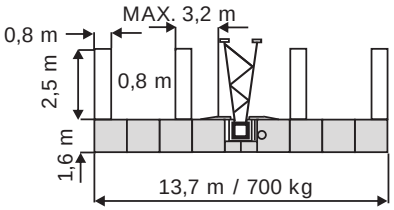
PLATFORM LOADINGS WITH 2,5m EXTENSIONS.
MAST ANCHORED.
-MAX. WIND SPEED 15,5m/s
-MAX. POINT LOAD 200kg ON 0,1m X 0,1m AREA
-NOTE: MAX. 2 PERSONS ALLOWED ON ONE TELESCOPIC EXTENSION FOR ONE PLATFORM SECTION (LENGTH 1,6m)



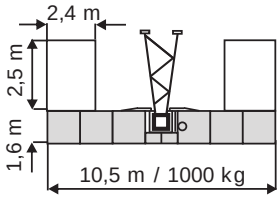
TOTAL LOADING
600kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 280kg
ON HATCHED AREA
- 3 PERSONS=320kg
FREELY POSITIONED



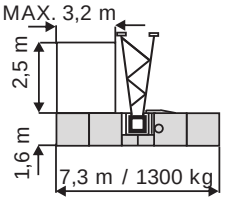
TOTAL LOADING
900kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 580kg
ON HATCHED AREA
- 3 PERSONS=320kg
FREELY POSITIONED



TOTAL LOADING
700kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 380kg
ON HATCHED AREA
- 3 PERSONS=320kg
FREELY POSITIONED



TOTAL LOADING
1000kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 680kg
ON HATCHED AREA
- 3 PERSONS=320kg
FREELY POSITIONED



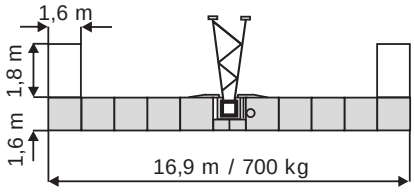
TOTAL LOADING
1300kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 980kg
ON HATCHED AREA
- 3 PERSONS=320kg
FREELY POSITIONED

Ta203

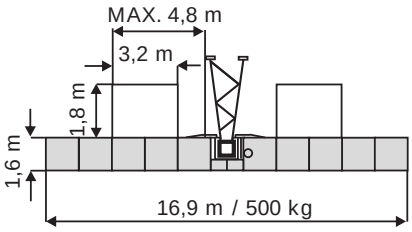
CAUTION

LOADING DIAGRAM / **SC5000**

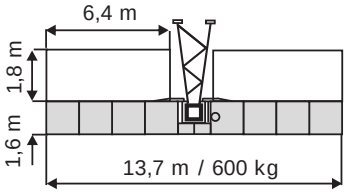
PLATFORM LOADINGS WITH 1,8m EXTENSIONS.
MAST ANCHORED.
-MAX. WIND SPEED 15,5m/s
-MAX. POINT LOAD 200kg ON 0,1m X 0,1m AREA
-NOTE: MAX. 2 PERSONS ALLOWED ON ONE TELESCOPIC EXTENSION FOR ONE PLATFORM SECTION (LENGTH 1,6m)



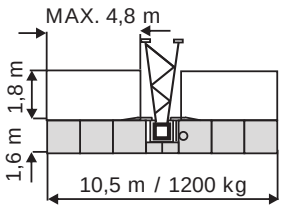
TOTAL LOADING
700kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 380kg ON HATCHED AREA
- 3 PERSONS=320kg FREELY POSITIONED



TOTAL LOADING
500kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 180kg ON HATCHED AREA
- 3 PERSONS=320KG FREELY POSITIONED



TOTAL LOADING
600kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 280kg ON HATCHED AREA
- 3 PERSONS=320kg FREELY POSITIONED



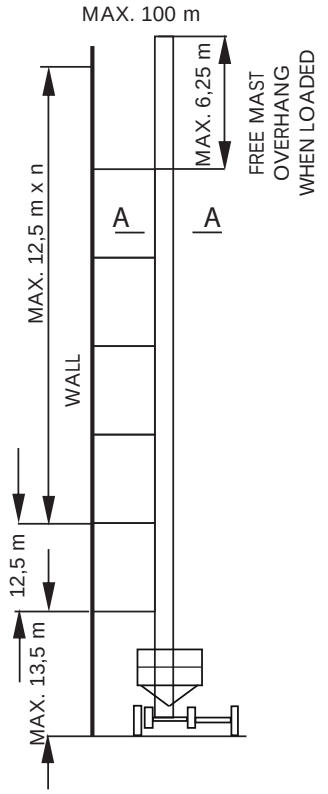
TOTAL LOADING
1200kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 880kg ON HATCHED AREA
- 3 PERSONS=320kg FREELY POSITIONED

Ta204

CAUTION

SCANCLIMBER SC5000

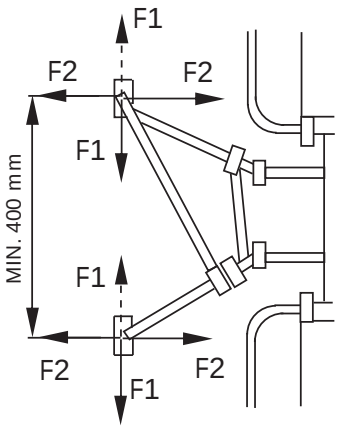
ANCHORAGE INSTRUCTIONS



MAX. ALLOWED WIND SPEED 15,5 m/s

SECTION A - A

NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.



NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

ALL OUTRIGGERS FULLY EXTENDED AND OPPOSITE TO THE MAST ALSO TURNED OUT.

USE ALWAYS MIDDLE JACK.

Ta205

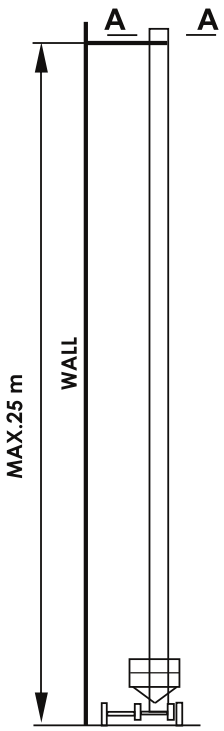
CAUTION

SCANCLIMBER SC5000

ANCHORAGE INSTRUCTIONS WITH TOP ANCHOR

MAX. ALLOWED PLATFORM LENGHT DURING ERECTION AND DISMANTLING OF THE MAST 4,10 m AND WIND SPEED UNDER 8 m/s.

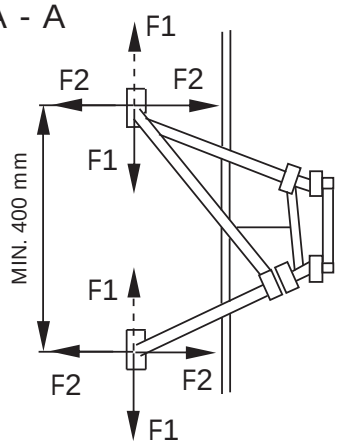
MAX. ALLOWED PLATFORM LENGHT WHEN OPERATING:
- 16,9 m



MAX. ALLOWED WIND SPEED 15,5 m/s

NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.

SECTION A - A



ALL OUTRIGGERS FULLY EXTENDED.
MASTSIDE OUTRIGGERS ALSO TURNED OUT.

USE ALWAYS MIDDLE JACK.

NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

NOTE! ADJUST THE TOP LIMIT SWITCH COUNTER PARTS TO PREVENT THE MAST GUARD GETTING IN TOUCH WITCH THE TOP ANCHOR.

Ta206

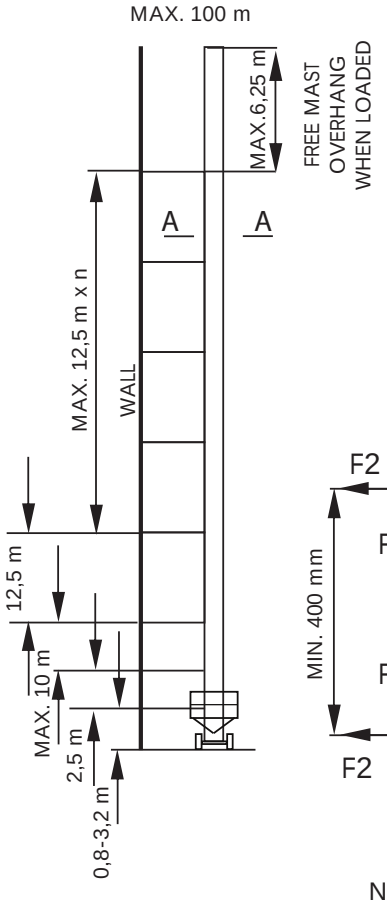
CAUTION

SCANCLIMBER SC5000

ANCHORAGE INSTRUCTIONS FOR THE MAST ON THE MINICHASSIS

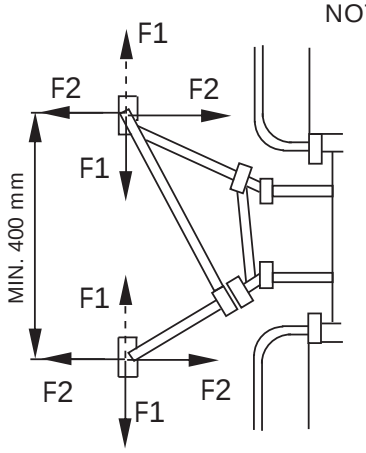
NOTE!

- THE 1st ANCHOR HEIGHT 0,8 m - 3,2 m
- THE 2nd ANCHOR HEIGHT 2,5 m ABOVE THE 1st ANCHOR
- THE 3rd ANCHOR HEIGHT 10,0 m ABOVE THE 2nd ANCHOR
- THE MAX. ALLOWED PLATFORM LENGHT WHEN ERECTING AND DISMATLING THE MAST
- BENEATH THE 3rd ANCHOR 4,1 m
- ABOVE THE 3rd ANCHOR 16,90 m



MAX. ALLOWED WIND SPEED 15,5 m/s

SECTION A - A



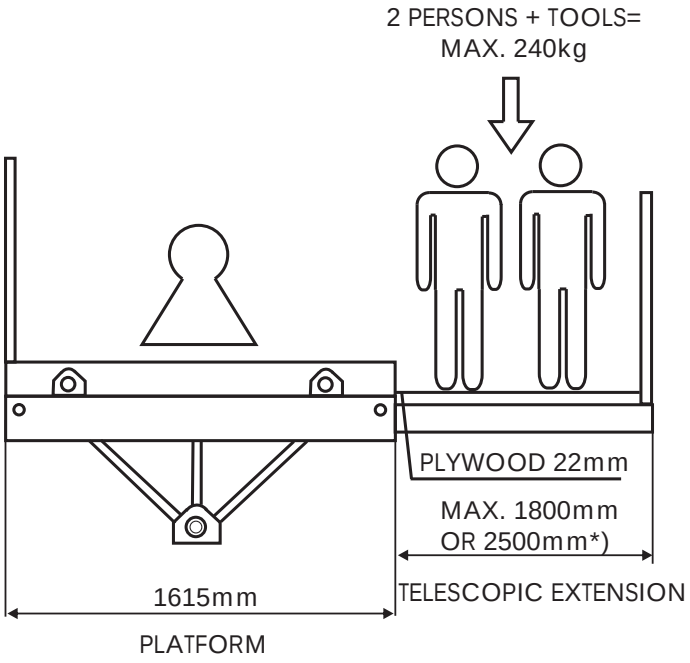
NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.

NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

Ta207

CAUTION

TELESCOPIC EXTENSION / **SC5000**



THE LOAD ON TELESCOPIC EXTENSION RESPECTIVELY REDUCES THE MAX. LOAD CARRYING CAPACITY OF THE PLATFORM. RAILINGS SHALL BE USED.

*) THE LENGHT OF THE TELESCOPIC EXTENSION IS DEPENDING ON THE TYPE OF USED TELESCOPIC TUBE.

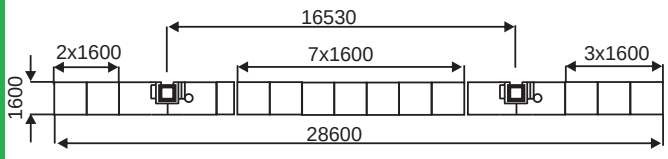
Ta209

CAUTION

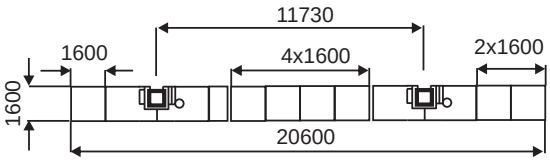
LOADING DIAGRAM / **SC5000 TWIN**

NOTE: WHEN THE NEEDED SOLUTION DIFFERS FROM THE SOLUTIONS SHOWN HERE, PLEASE CONTACT THEN ALWAYS THE SUPPLIER.

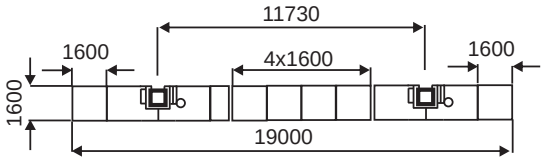
ALLOWED LAYOUTS AND LOADINGS
-MAX. POINT LOAD 200kg ON 0,1m X 0,1m AREA



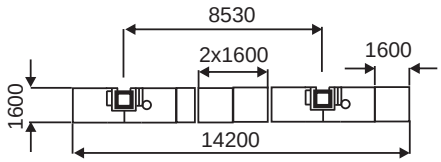
TOTAL LOADING
3000kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 2600kg (=145kg/1600 mm SECTION)
- 4 PERSONS=400kg FREELY POSITIONED



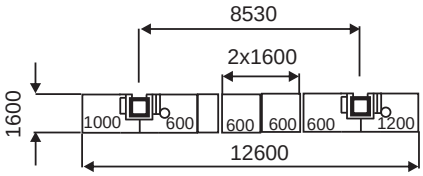
TOTAL LOADING
4000kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 3600kg (=280kg/1600 mm SECTION)
- 4 PERSONS=400kg FREELY POSITIONED



TOTAL LOADING
4200kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 3800kg (=320kg/1600 mm SECTION)
- 4 PERSONS=400kg FREELY POSITIONED



TOTAL LOADING
4800kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 4400kg (=495kg/1600 mm SECTION)
- 4 PERSONS=400kg FREELY POSITIONED



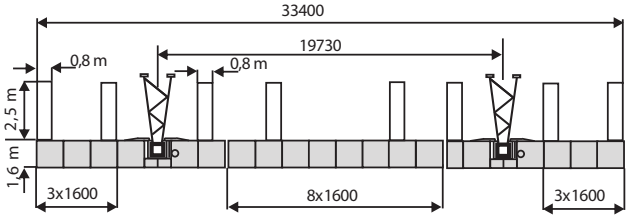
TOTAL LOADING
5000kg COMPOSED OF:
- EVENLY DISTRIBUTED LOADING 4600kg POSITIONED AS SHOWN IN PICTURE
- 4 PERSONS=400kg FREELY POSITIONED

Ta210

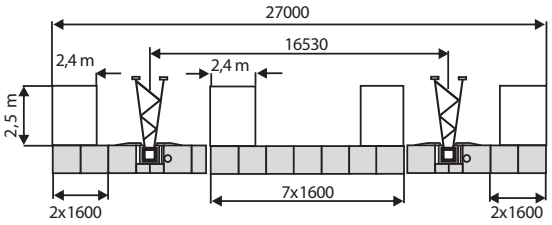
CAUTION

LOADING DIAGRAM / **SC5000 TWIN**

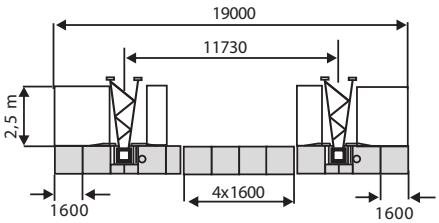
PLATFORM LOADINGS WITH 2,5m EXTENSIONS.
NOTE: WHEN THE NEEDED SOLUTION DIFFERS FROM THE SOLUTIONS SHOWN HERE, PLEASE CONTACT THEN ALWAYS THE SUPPLIER.
ALLOWED LAYOUTS AND LOADINGS
-MAX. POINT LOAD 200kg ON 0,1m X 0,1m AREA
*) MAX. 2 PERSONS (240kg) ALLOWED ON ONE TELESCOPIC EXTENSION



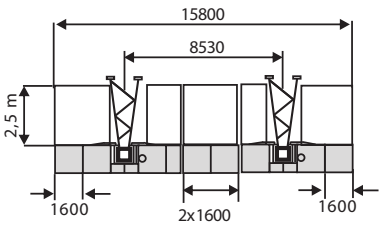
TOTAL LOADING
1000kg COMPOSED OF:
- EVENLY DISTRIBUTED
ON HATCHED AREA 600kg
(=28kg/1600mm)
- 4 PERSONS=400kg
FREELY POSITIONED*)



TOTAL LOADING
2000kg COMPOSED OF:
- EVENLY DISTRIBUTED
ON HATCHED AREA 1600kg
(=95kg/1600mm)
- 4 PERSONS=400kg
FREELY POSITIONED*)



TOTAL LOADING
2800kg COMPOSED OF:
- EVENLY DISTRIBUTED
ON HATCHED AREA 2400kg
(=200kg/1600mm)
- 4 PERSONS=400kg
FREELY POSITIONED*)



TOTAL LOADING
2800kg COMPOSED OF:
- EVENLY DISTRIBUTED
ON HATCHED AREA 2400kg
(=240kg/1600mm)
- 4 PERSONS=400kg
FREELY POSITIONED*)

Ta211

CAUTION

LOADING DIAGRAM / **SC5000 TWIN**

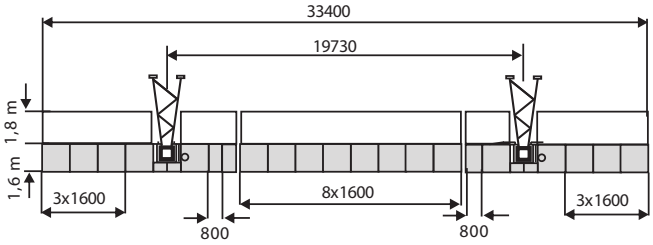
PLATFORM LOADINGS WITH 1,8m EXTENSIONS.

NOTE: WHEN THE NEEDED SOLUTION DIFFERS FROM THE SOLUTIONS SHOWN HERE, PLEASE CONTACT THEN ALWAYS THE SUPPLIER.

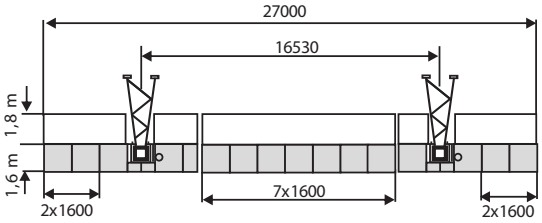
ALLOWED LAYOUTS AND LOADINGS

-MAX. POINT LOAD 200KG ON 0,1m X 0,1m AREA

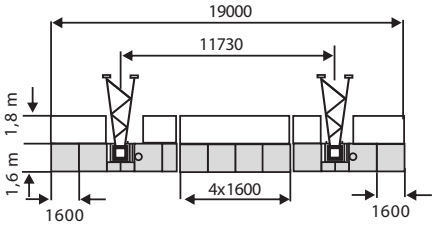
*) MAX. 2 PERSONS ALLOWED ON ONE TELESCOPIC EXTENSION FOR ONE PLATFORM SECTION (LENGTH 1,6m)



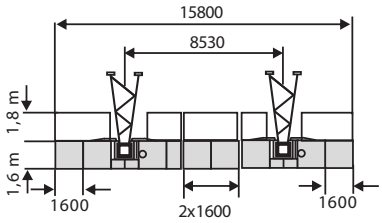
TOTAL LOADING
700kg COMPOSED OF:
- EVENLY DISTRIBUTED ON HATCHED AREA 300kg (=15kg/1600mm)
- 4 PERSONS=400kg FREELY POSITIONED*)



TOTAL LOADING
1800kg COMPOSED OF:
- EVENLY DISTRIBUTED ON HATCHED AREA 1400kg (=85kg/1600mm)
- 4 PERSONS=400kg FREELY POSITIONED*)



TOTAL LOADING
3200kg COMPOSED OF:
- EVENLY DISTRIBUTED ON HATCHED AREA 2800kg (=235kg/1600mm)
- 4 PERSONS=400kg FREELY POSITIONED*)



TOTAL LOADING
3750kg COMPOSED OF:
- EVENLY DISTRIBUTED ON HATCHED AREA 3350kg (=340kg/1600kg)
- 4 PERSONS=400kg FREELY POSITIONED*)

Ta212