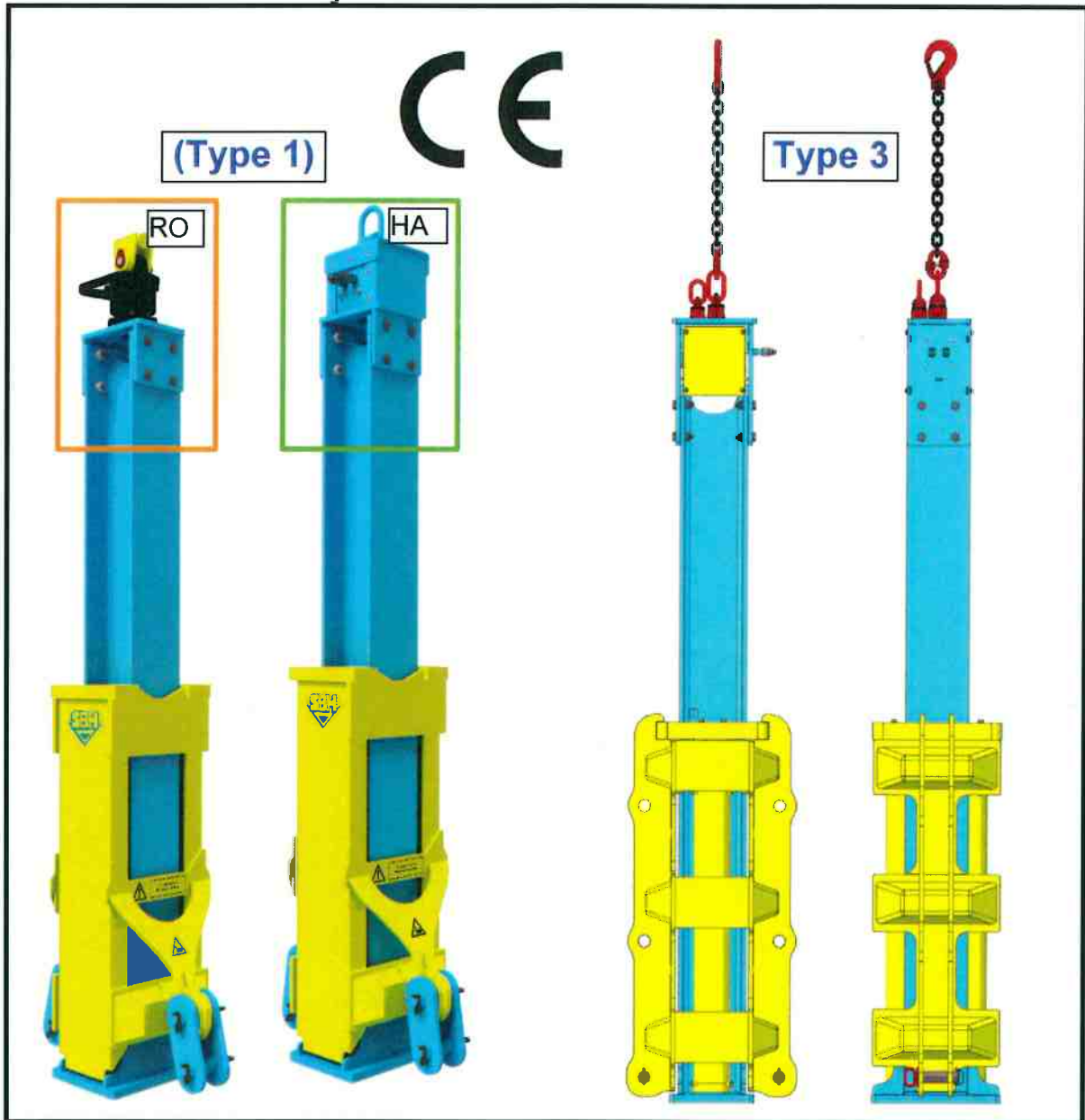


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Original operating instructions
Hydralifter T100 Type3
safety instructions and user manual



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Preface

Please read the operating instructions very carefully before using the equipment for the first time.

You will thereby avoid any incorrect handling of the machine.

Pass on all the safety instructions and briefings to other users of the machine too.

The operating instructions describe how to handle the **Hydralifter T100-Type3** as intended on the building site and when transporting it etc.

It therefore belongs in the document compartment in the excavator cab.

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1 Intended use

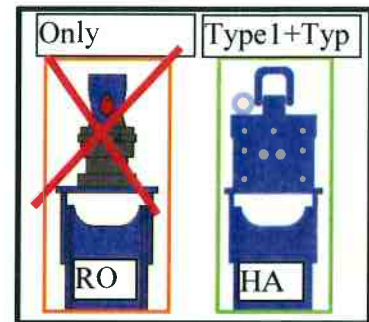
The **Hydralifter T100-Type3** was only designed as an attachment for use in the commercial sector:

- RO version: rotation motor
(Type1, *only for spare parts*)
- HA version with a hydraulic adapter + chain

The **Hydralifter T100-Type3** is designed to loosen and lift up the internal base and extension panels in the double slide rail shoring 750 series - whilst exactly taking the method of procedure described here into account.

The **Hydralifter T100-Type3** (is also referred to below as an attachment or accessory) can only be used with a hydraulically driven excavator or in conjunction with a crane. In this function, the **Hydralifter T100-Type3** represents an attachment for the carrier (excavator or crane with hydraulic unit). The Hydralifter cannot and must not be used alone.

Any other use beyond this is not deemed as appropriate. The manufacturer will accept no responsibility for any resulting damage. The risk is borne entirely by the user.



1.1 Foreseeable misuse



The attachment must not be used to lift or transport the shoring units.

The Hydralifter T100-Type3 is not designed to remove pairs of rolling struts or rolling strut and support frames. Its use in connection with other manufacturers' shoring systems is not intended and therefore not appropriate.

1.2 Reading this protects lives!

Intended use also includes complying with all the specifications prescribed by the manufacturer in these instructions:

- Handover with initial briefing.
- Safety information and regulations (read before use)
- Comply with and check operating, maintenance and repair conditions

The attachment may only be used and maintained by persons who are familiar with it and have been informed about the risks.

Maintenance work is described in this document, repair work is only allowed by the manufacturer!

Unauthorised modifications exclude any liability of the manufacturer for resulting damage.

The relevant and country-specific accident prevention regulations as well as the other generally accepted safety, occupational healthcare and road traffic regulations must be complied with.

Manufacturers, dealers, owners and operators are all responsible for safety.

Bear in mind that the life of the user and of others may depend on correct and safety-conscious operation.

The operators must be trained at least to the level of an experienced excavator driver or machine operator.

Annual maintenance or safety inspection work may only be carried out by experts or by the manufacturer.

**SAFETY
INSTRUCTIONS**

2 Safety information and accident prevention

Before starting work, the users and the machine operator must familiarise themselves with all the operating elements and their functions. It is too late for this when the work is being done!



The warning sign draws attention to safety information in these operating instructions.

Non-observance can lead to danger to life and limb of persons, as well as to damage or destruction of material.

2.1 General safety information

- Besides the information in these operating instructions, bear in mind the generally applicable safety, accident prevention and legal regulations!
- The attached warning and information signs provide important information for operation without risk and indicate danger areas on the machine. Observing them is in the interest of your safety!
- When using public thoroughfares, the relevant provisions (e.g. StVO, RSA) must be observed!
- Staying in the working area, as well as in the turning and pivoting range, is forbidden as a matter of principle!
- Secure the working area accordingly before starting work!

2.2 Safety information relating to operation

▲WARNING

Load attachment equipment and hooks must be matched to the maximum tensile load in Chapter 5.7 Overview of required tensile loads.

Only load hooks with safety catches must be used in order to prevent the load from unintentionally becoming unhooked when pulling it.



Persons are not allowed to stay under suspended loads or in the machine's danger area!

When manually aligning the attachment, there is an increased risk of falling! It is essential that you favour alignment using machinery!

▲WARNING

Never allow a person to move the attachment by hand! Risk of injury (crushing of the hands and feet)! Also prohibited is any guidance with a fixed connection e.g. bar!

If unavoidable, then a thin, soft synthetic rope used for manual alignment has proven useful, which can be pulled/balanced from two sides in a targeted manner (like a tug of war)



- Pay attention to the information signs and markings on the danger areas and machinery!
- When using the appliance, the operator must make sure that hazards to others are excluded! (We recommend using video technology for a safe all-round view, especially, however, for areas not visible from the cab.)
- Before starting up and before putting the appliance into operation, the vicinity must be checked!
- Only put appliances into operation if all safety devices are attached and in the protective position!
- Operating the appliance is prohibited when safety devices have been removed.

▲WARNING

When pivoting, avoid unnecessary and jerky movements!

Drive carefully and look ahead!



On power-operated (e.g. hydraulically moved parts) there are crushing and shearing points!

Please observe the information signs attached to the danger areas!

2.3 Hydraulic unit

The hydraulic unit is under high pressure (max.280 bar). In the event of pressure loss, the unit must be checked immediately.

For connecting the hydraulic cables to the carrier, its operating instructions must also be observed.

- When connecting hydraulic cylinders, attention must be paid to how to connect hydraulic hoses safely as prescribed!
- When connecting the hydraulic hoses to the excavator hydraulics, care must be taken that the hydraulics are depressurised on both the machine and appliance side and that the excavator's engine is switched off!
- In the case of hydraulic connections **between** the carrier vehicle and appliance, coupling sleeves and connections should be clearly marked so that operating errors are ruled out. If the connections are mixed up, the opposite function occurs (e.g. extend/retract). **Risk of accidents!**
- The hydraulic hose lines must be checked regularly and replaced if damaged or aged (every 6 years at the latest). The replacement lines must meet the appliance manufacturer's technical requirements!
- When looking for leaks, suitable aids must be used due to the risk of injury.
- Liquids (hydraulic oil) escaping under high pressure can penetrate the skin and cause serious injuries. Seek medical attention immediately in case of injury! **Risk of infection!**
- Do not inhale the vapours occurring due to heating!
- In case of gas tanks, only use nitrogen to fill them – **Risk of explosion!** They must be filled in the specialist workshop or directly at the manufacturer!
- If the diaphragm accumulator loses pressure, it must be taken to the workshop immediately!
- Before working on the hydraulic unit, put the appliance down, depressurise the unit and switch off the engine!

2.4 Safety when doing maintenance work

- Repair, maintenance and cleaning work as well as rectifying functional problems must only be done when the drive mechanism is switched off and the parts are at a standstill (bear coasting down in mind)!
- When carrying out maintenance work on the lifted appliance, always use suitable support elements (e.g. gantry) to secure it!
- During the dismantling of safety devices during maintenance work there is an increased risk of accidents! So that the safety devices can fulfil their function, these must be fastened properly again after the maintenance.
- Oils and greases must be disposed of properly and in an environmentally-friendly manner!
- Check that nuts and bolts are tight on a regular basis (at least once a year) and tighten them if need be!
- Before putting the machine into operation, it must be inspected for worn and corroded areas! These must be replaced, otherwise there is a danger from inadequate mechanical stability!
- Please bear in mind that all welding seams must be visually checked for cracks every day and after overloading situations, impact etc.
Checking for cracks saves larger repairs and prevents accidents.
- All maintenance and repair work not outlined in the operating instructions may only be carried out in the specialist workshop, otherwise no warranty shall apply!
- When using spare parts, care should be taken that only original spare parts supplied by **SBH Tiefbautechnik GmbH** are used, otherwise you will lose your claim under guarantee! The manufacturer also assumes no liability for damage caused by installing improper spare parts.

3 Spare part orders!

The following must be specified:

- Appliance and type number (on nameplate)
photos of the parts being replaced also help
- The spare part number (SPNo.), visible in the spare parts list of the operating instructions.
- Please check precisely which extra equipment/additional versions specified in the spare parts list apply to your machine.
- Despatch method: Parcel service, haulage. Clear and exact address to where the consignment should be sent. Specify postcode.
- Enquiry also possible using the following email address:
info@sbh-tiefbautechnik.com
+49 (0) 245 9104 0
+49 (0) 245 9104 50
- In case of loss, the current version of the operating instructions can also be requested by email.
- If the operating instructions are lost, a current edition is available by email request or can be downloaded from the SBH website.
- All repairs within the guarantee period of 12 months may only be carried out with the manufacturer's consent. If repairs are made without the manufacturer's consent, the operating licence expires (at your own risk).

4 Intended cases of operation

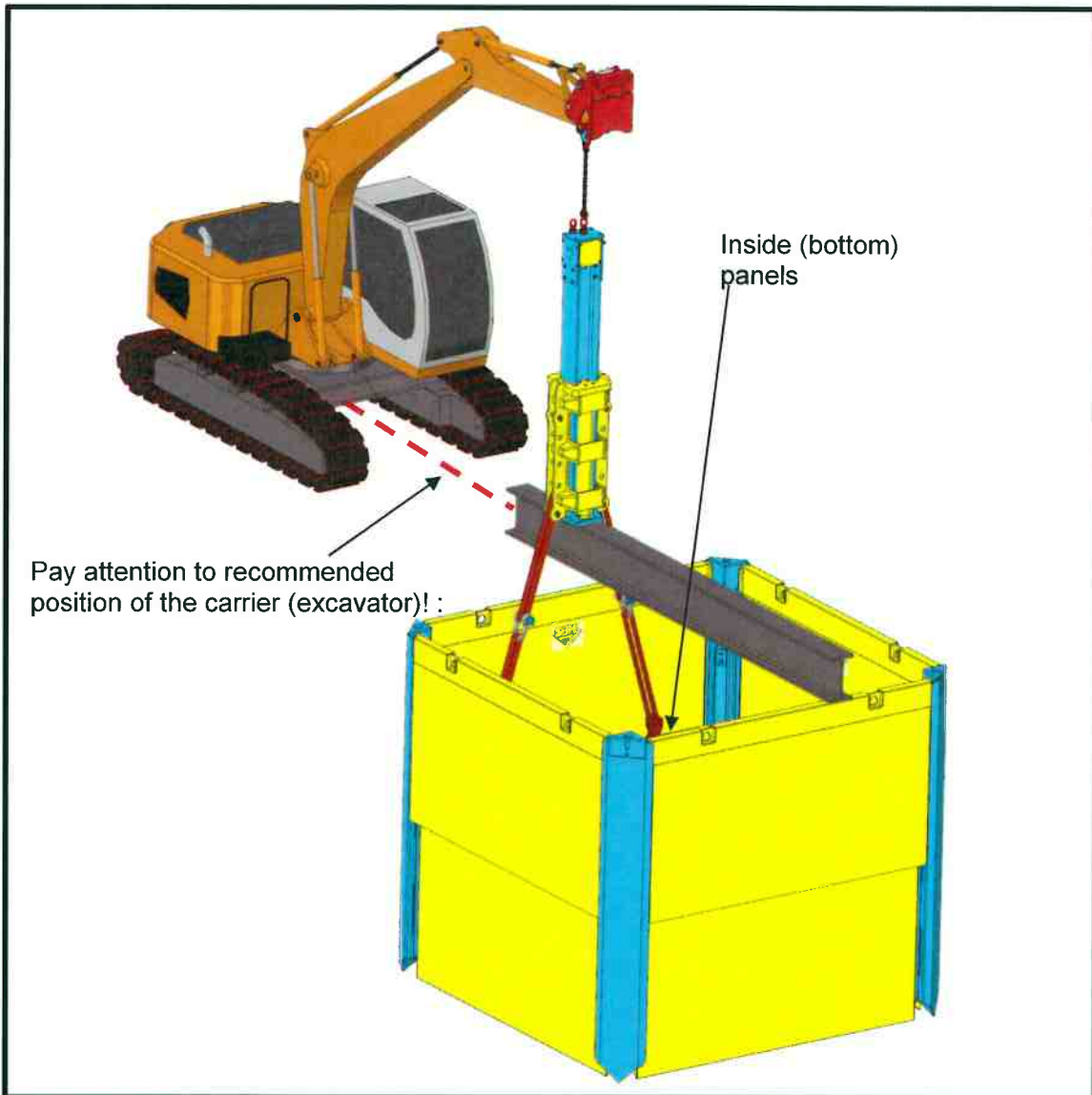
The Hydralifter T100-Type3 may only be used for the cases of operation described here. Others applications must be discussed beforehand with our technical department. Chapter 5.7 Overview of required tensile loads is to be observed

4.1 Case of operation 1: Slide rail shoring / pit, pulling inside panels



WARNING

50 % load per side - Pulling only permitted with **attachment point for lifting rings!** Working pressure on the carrier **max. 280 bar.**



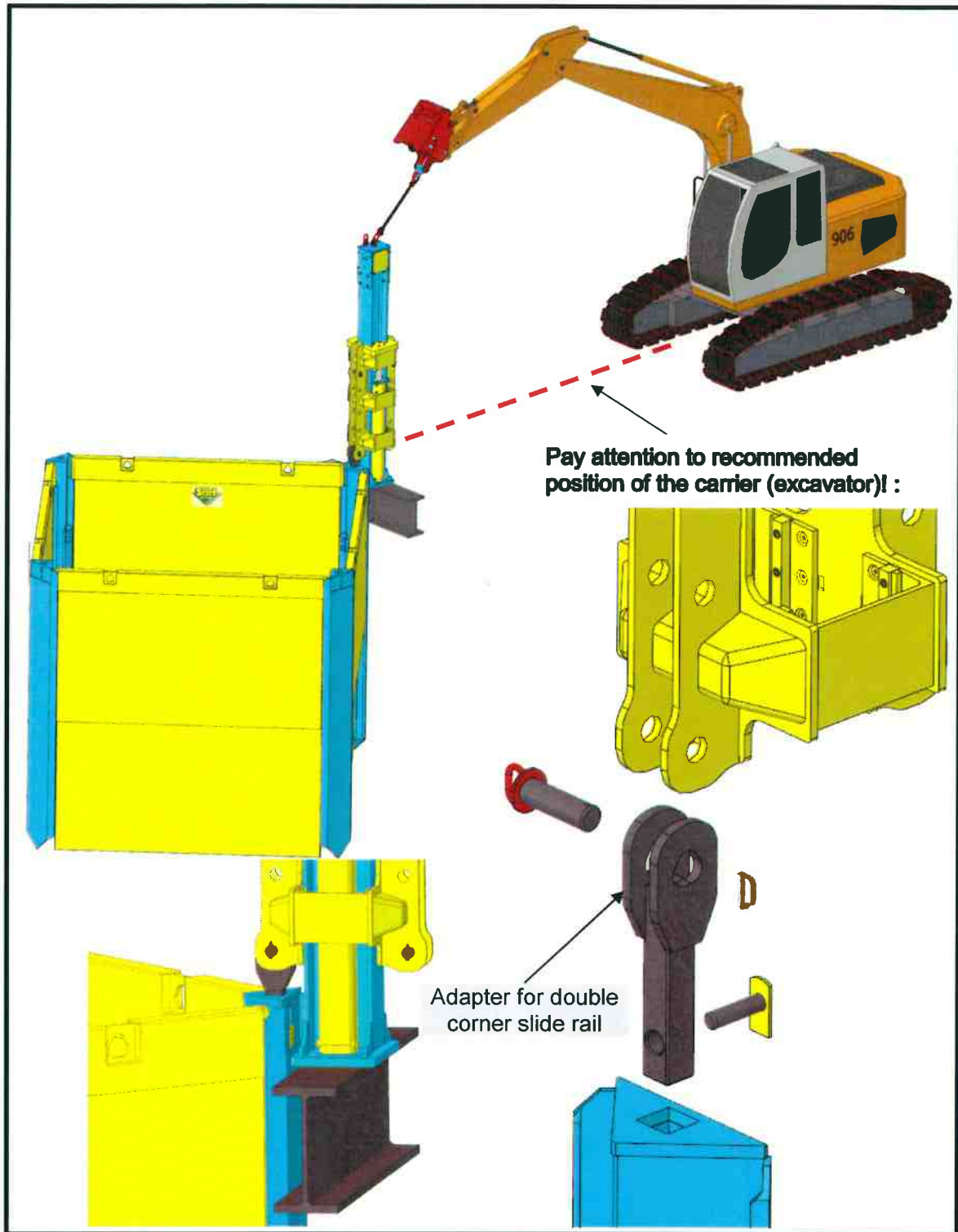
In some circumstances there is no need to use a carrier and the **Hydralifter T100-Type3** can be directly placed onto the outer panel.

This is to be discussed with the responsible SBH employee before starting.

4.2 Case of operation 2: Slide rail shoring / pit, pulling double corner slide rail

⚠ WARNING

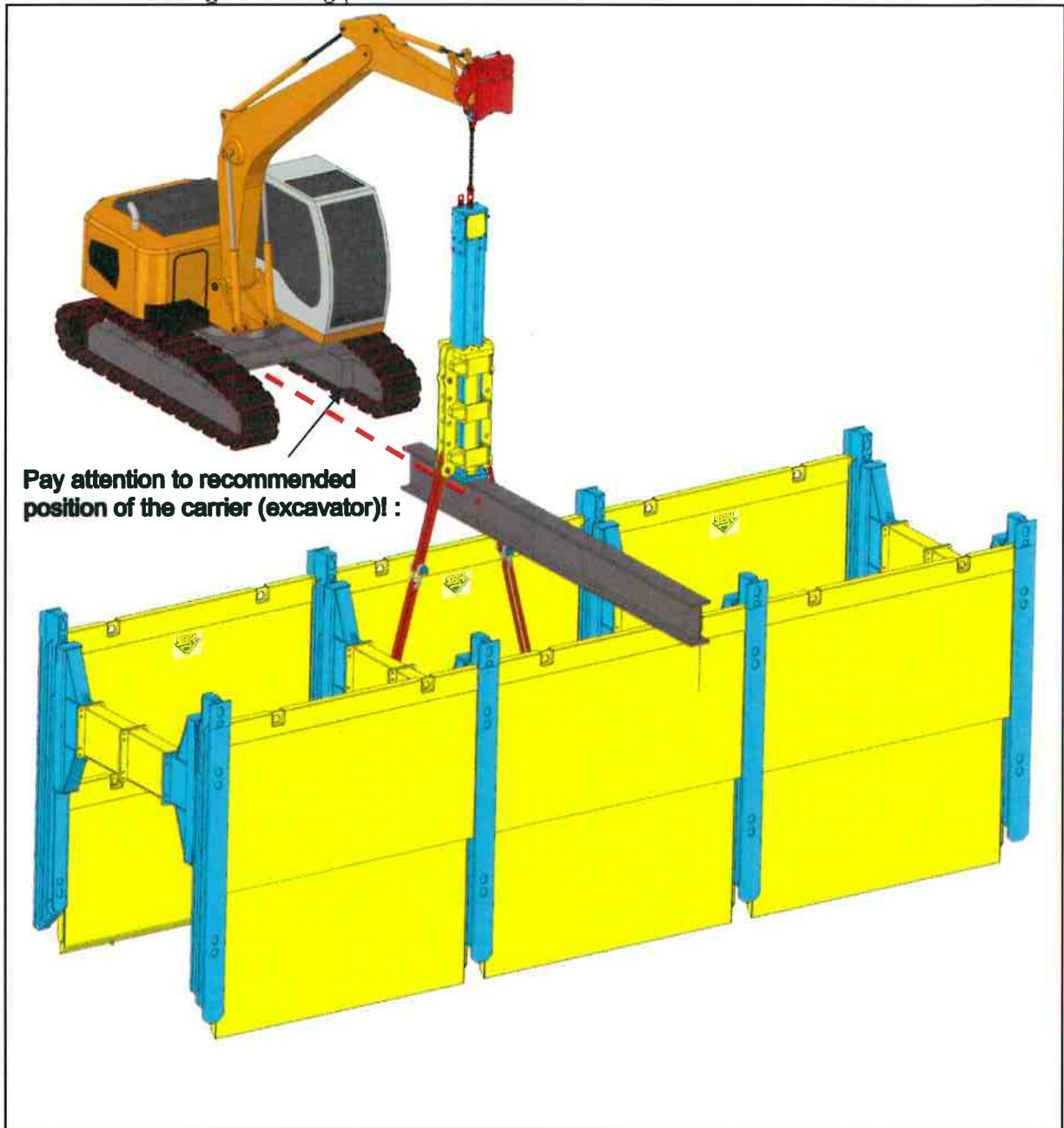
Pulling only permitted with **adapter for double corner slide rail!**
Working pressure on the carrier **max. 140 bar.**



4.3 Case of operation 3: Shoring / continual trench, pulling inside panels



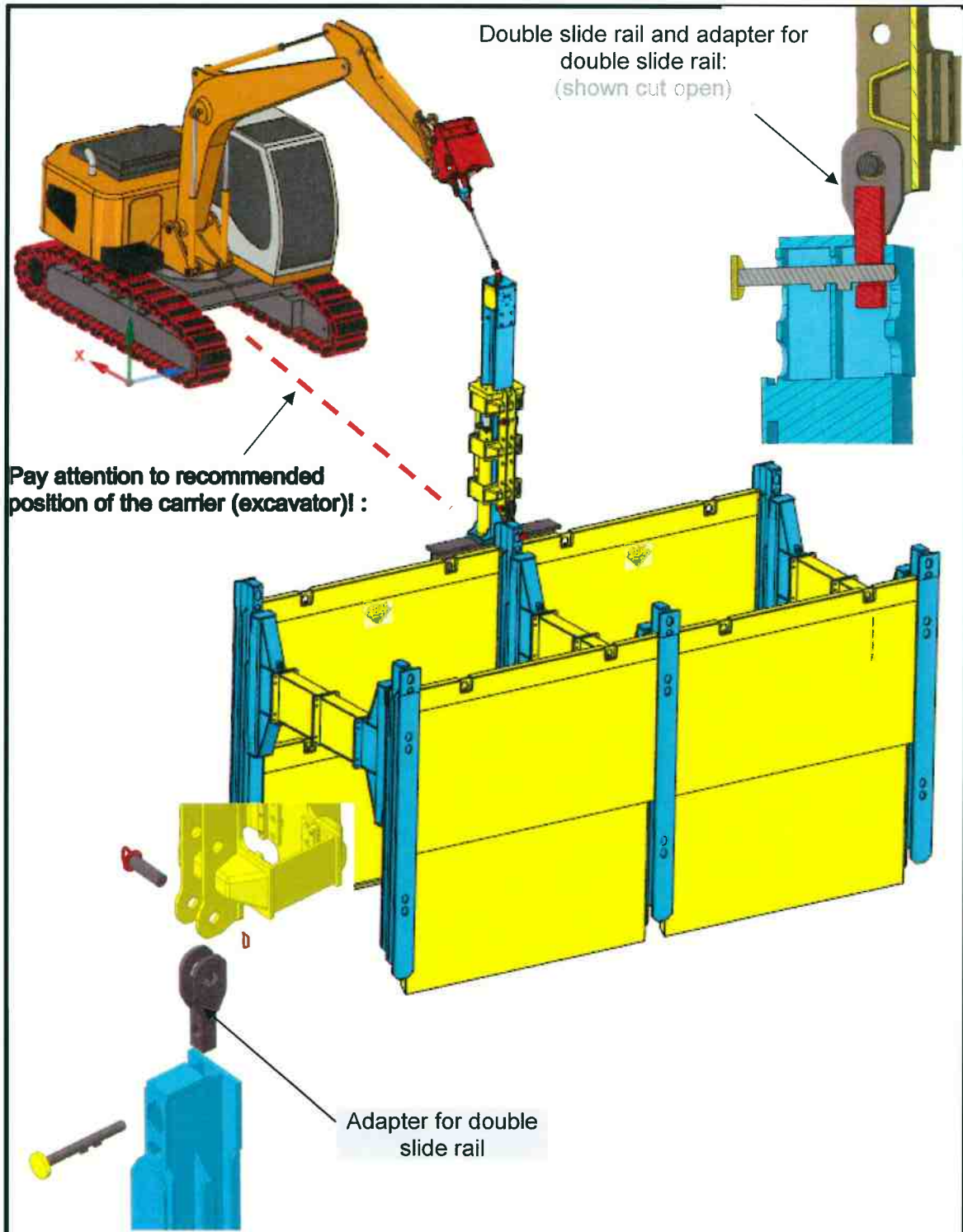
WARNING 50 % load per side - Pulling only permitted with **attachment point for lifting rings!** Working pressure on the carrier **max. 280 bar.**



4.4 Case of operation 4: Slide rail shoring, pulling double slide rail or corner rail

WARNING

Pulling only permitted with **adapter for double slide rail**
Working pressure on the carrier **max. 140 bar**.

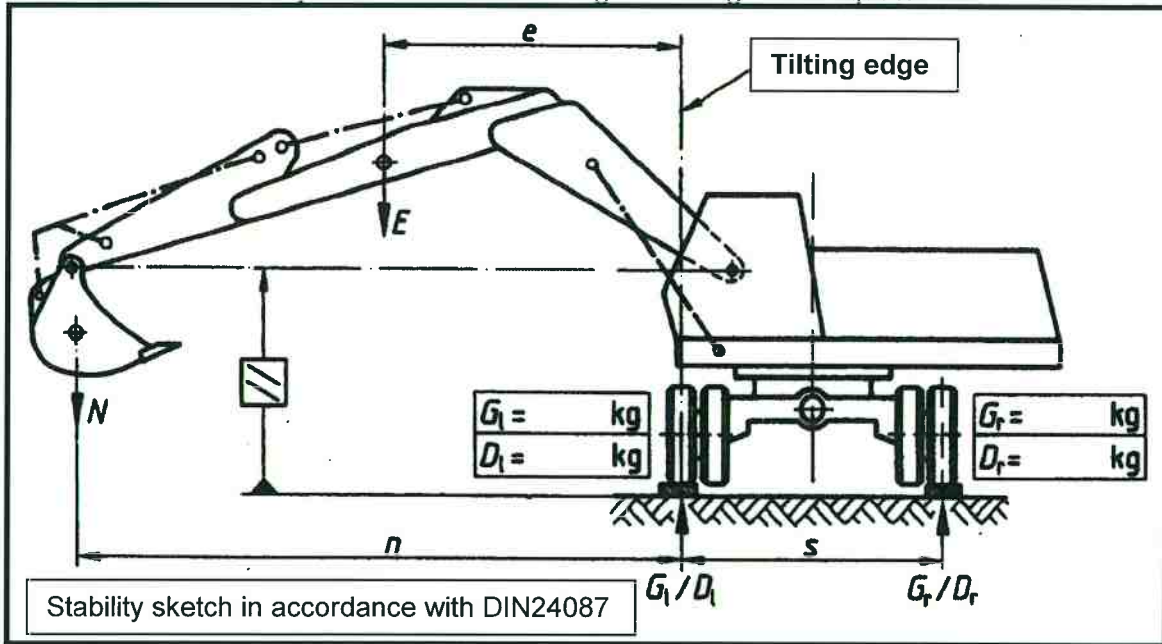


4.5 Bear in mind adequate stability

Due to the type of construction, the main tensile force remains inside the **Hydralifter T100-Type3** and is not applied to carrier vehicle (excavator or crane incl. hydraulic unit).

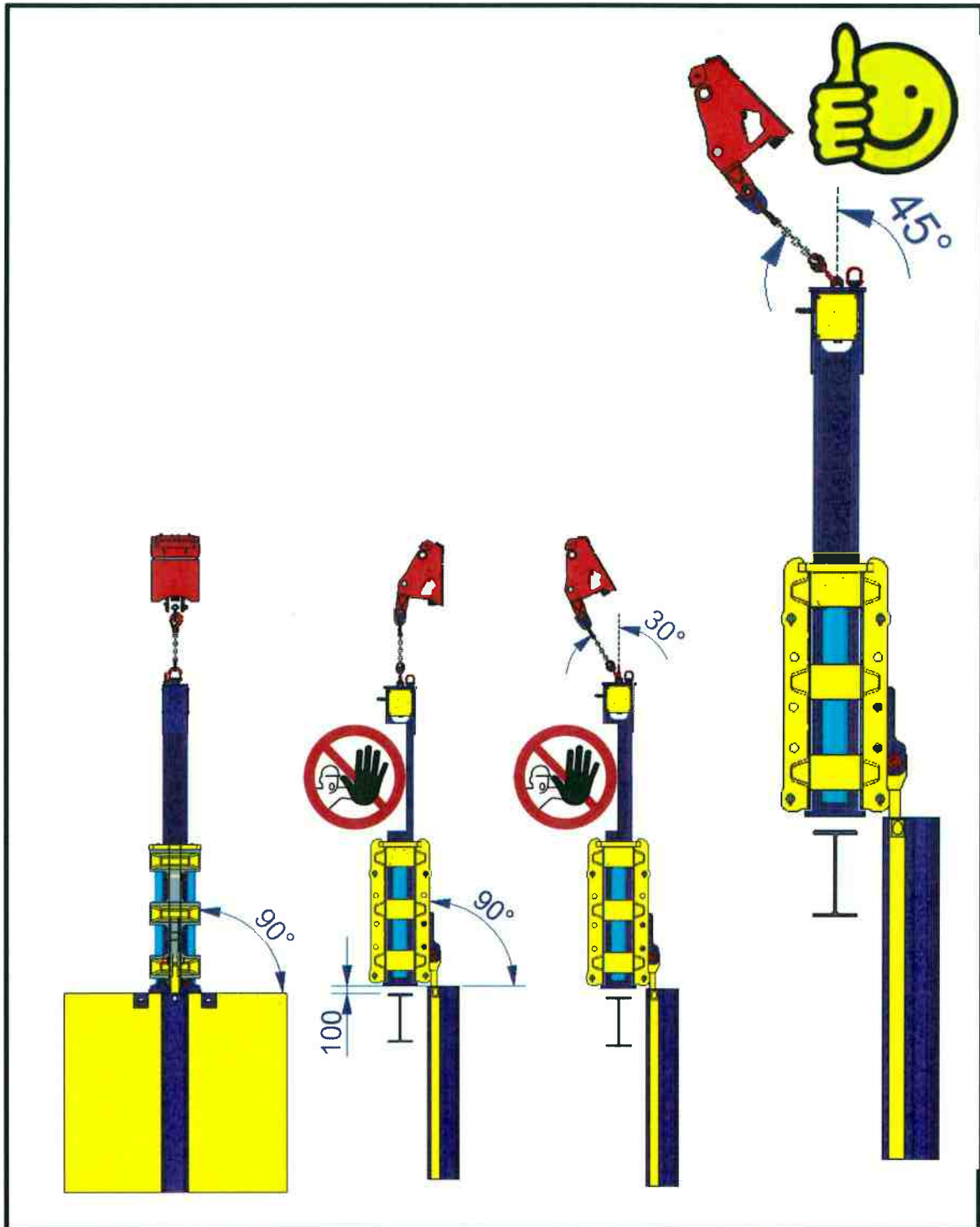
The weight force of the attachment must be able to be safely (e.g. no tilting or sliding) absorbed by the carrier in the respective site.

It is essential to check before every operation whether the load bearing capacity of the substrate and the safety of the carrier vehicle against tilting are adequate.



4.6 To be considered when working with the chain

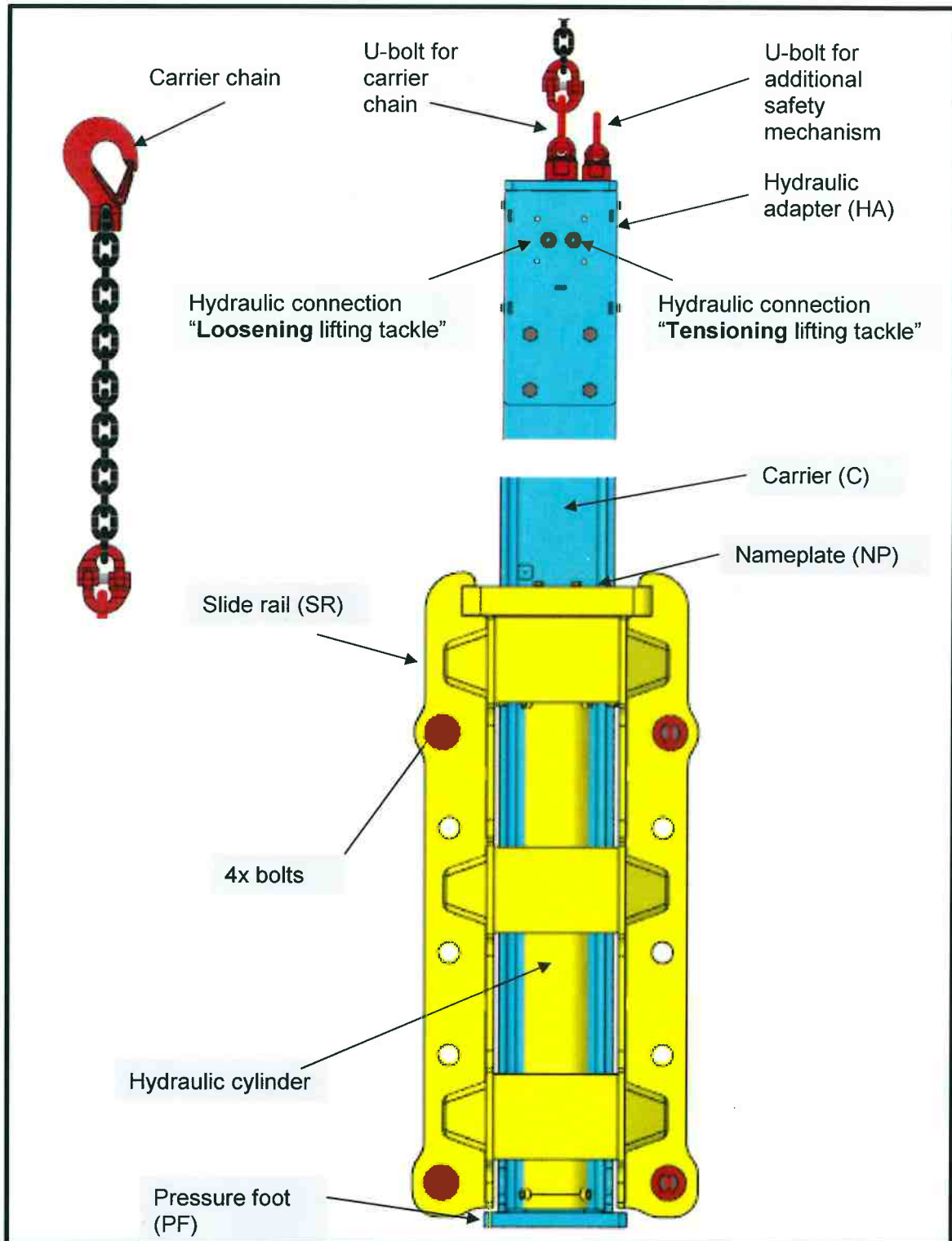
The chain must not get any cylinder forces, but instead should only prop up a tilting movement of the Hydralifter. For this purpose, the angle to the plumb vertical should be approx. 45°.



5 Getting to know the machine

5.1 Main components

The Hydralifter T100-Type3 has the following main components:



5.2 Transport and storage

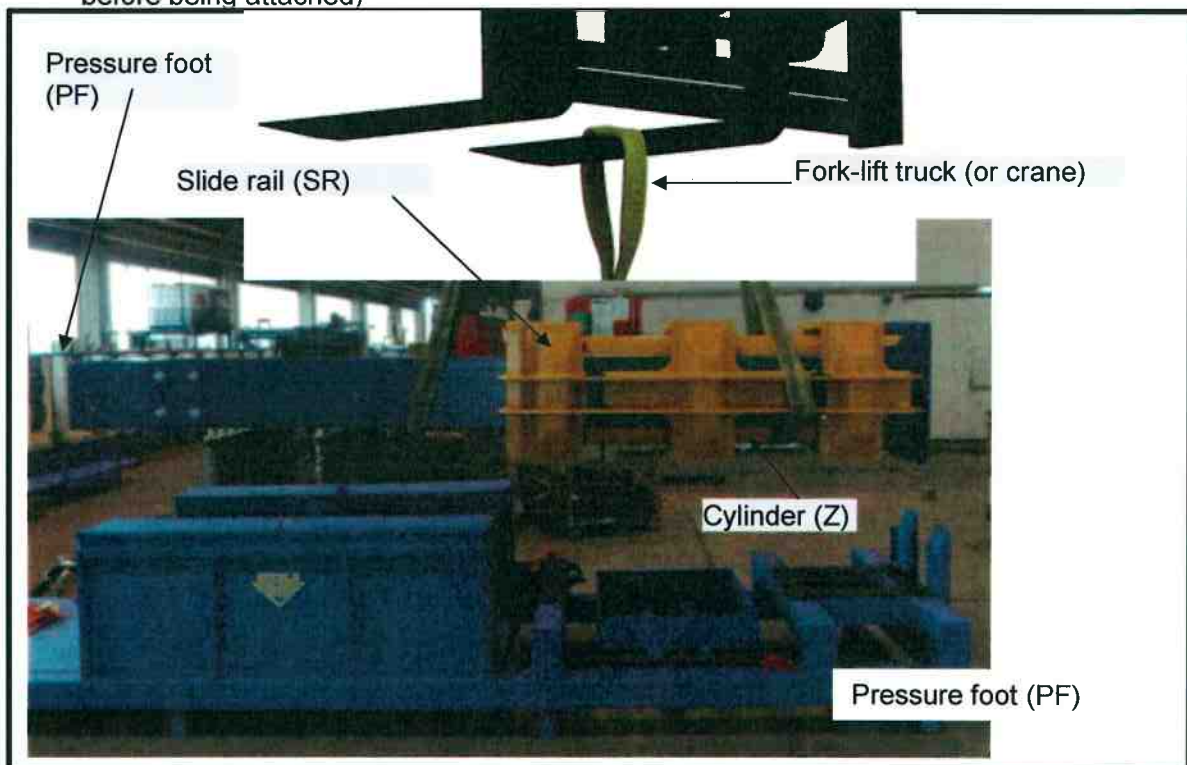
⚠ DANGER

Never transport the attachment whilst it is standing on the pressure foot!
There is a risk that the attachment will fall over or tilt! Risk of fatality!

⚠ DANGER

Never set the attachment down unsecured on the pressure foot!
There is a risk that the attachment will fall over or tilt! Risk of fatality!

- When the attachment is disconnected from the carrier, it must be placed on an even, firm substrate.
- When transporting using a forklift truck, care should be taken that the attachment rests safely on the means of transport (safety against tilting etc.). Only lift the attachment as far as absolutely necessary for transportation.
- The easiest and safest way to transport the **Hydralifter T100-Type3** is with the SBH transport equipment. All the required lashing material and all loose parts can be stored in secure steel crates.
- If the attachment cannot be coupled/connected to a carrier with the lifting chain (HA), the attachment needs to be safely fastened with a round sling for transportation purposes, as shown below. To do so, move the slide rail (SR) right down and guide the round sling on one side between the slide rail (SR) and the carrier (C). The cylinder must not be damaged during the process! ((must be compl. retracted before being attached))



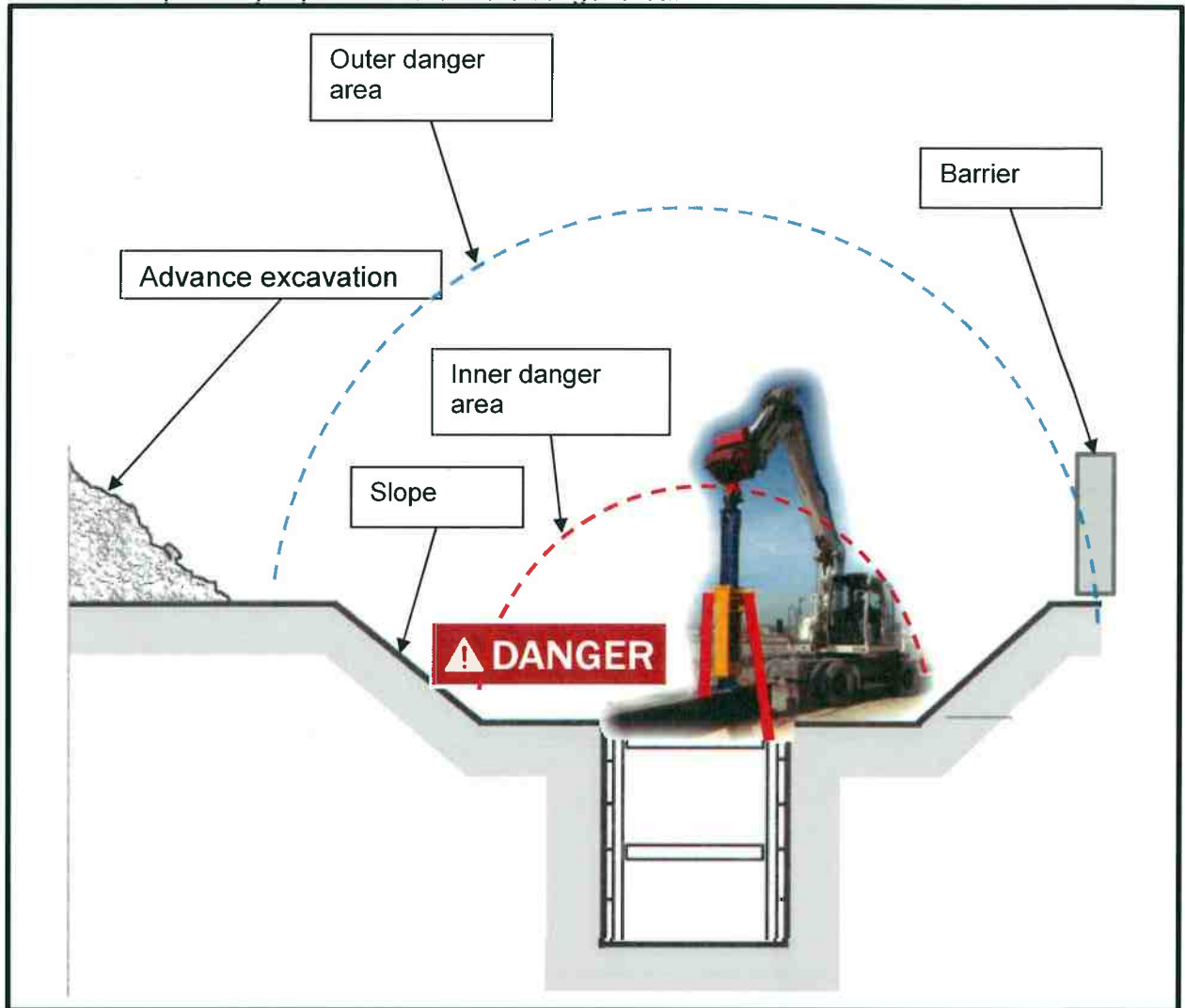
5.3 Recognising + securing danger areas

The general risks of civil engineering will not be mentioned here again.

Risks such as sliding vehicles are considerably improved by using the **Hydralifter T100-Type3**.

Due to the high tensile force, however, there are additional (but preventable) risks in the case of fixed installations:

- Damaged or poorly maintained tension elements can pull out / tear off and emit their energy in undefined directions.
- Make sure that no persons stay in the inner danger area (the excavator driver should also protect himself with a suitable window pane)
- Use advance excavation and barriers to secure an outer danger area
- Do not park any expensive cars in the danger area!



You can make your contribution to safety:

- Do not turn up the oil pressure in every operation to the maximum permitted level. A fraction is often enough. You will also look after the shoring system in this way.
- Execute test plans as specified.
- Handle tensile elements carefully and do not misuse them

5.4 Commissioning

- The **Hydralifter T100-Type3** may only be put into operation by expert, trained and briefed personnel.
- We recommend that the initial operation is performed by the manufacturer or by an authorised dealer.
- All work may only be carried out when the machinery is switched off and secured and the drive and hydraulic units are switched off.
The hydraulic system must be **depressurised!**
- Organic hydraulic oils protect the environment and are prescribed as mandatory for some applications.
- Never mix mineral oil and organic oil systems (time-consuming cleaning/rinsing necessary).
- For assembly purposes, the attachment must be set down on an even, firm and clean substrate. Also the quick change adapter (QA), if available.
- The attachment features a hydraulically controlled working function for lifting up or lowering the slide rail.

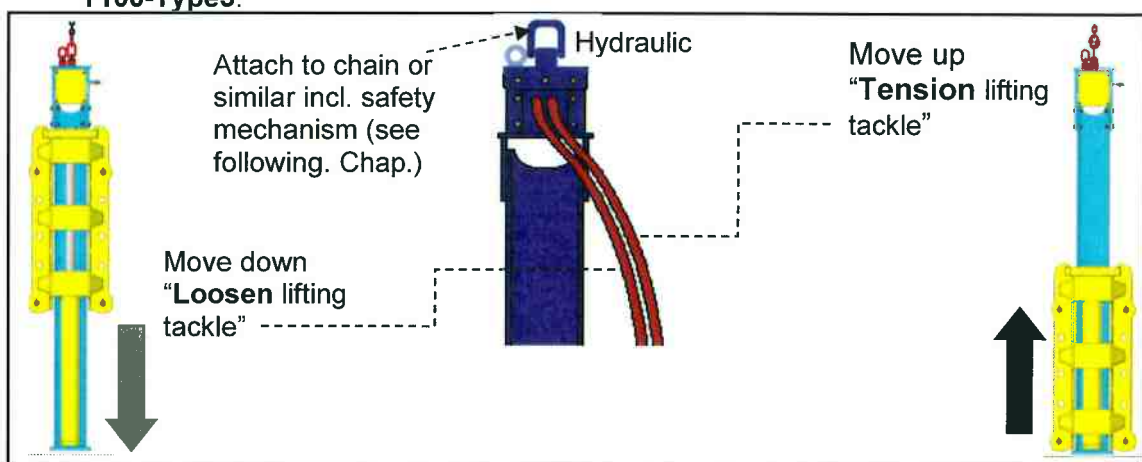
The working pressure to be set on the carrier to control the attachment is determined by the permitted cases of operation described under Chapter 4.

Set the working pressure on the carrier as described below:

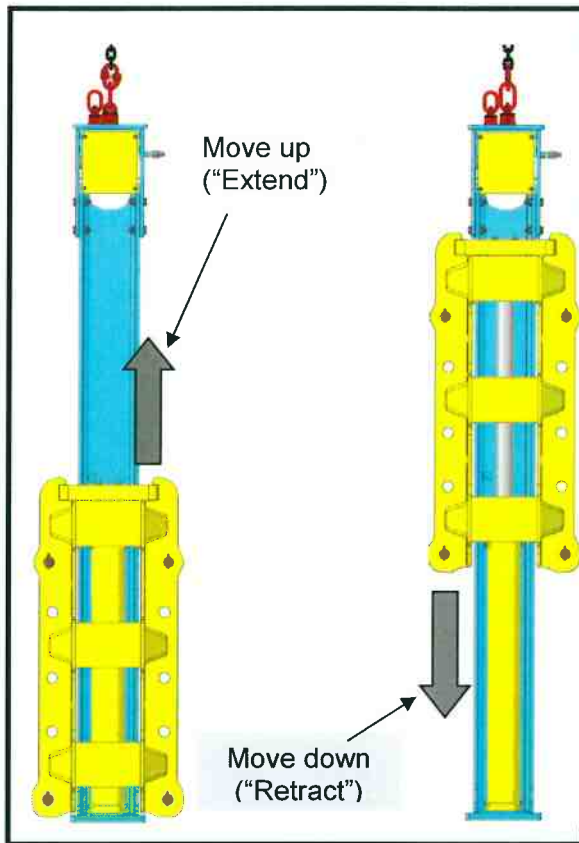
Please also observe the carrier's operating instructions for this.

Case of operation 1 and 3	Case of operation 2 and 4
Pull slide rail panels inwards	Pull double slide rails and double corner slide rails
max. 280 bar	max. 140 bar

- The carrier must be equipped with a quick, direct way of limiting the pressure (change "at press of a button"). **Otherwise work may only generally be carried out at max. 140 Bar (for all cases of operation).**
- Connect the two hydraulic hoses on the external hydraulic unit to the two hydraulic connections ("Loosen lifting tackle" and "Tension lifting tackle") on the **Hydralifter T100-Type3**:



Test whether the working function of the attachment can be controlled by the hydraulic controls in the carrier, as described in the carrier's operating instructions:



5.4.1 Testing working function

If the working function of the attachment cannot be controlled as described in the carrier's operating instructions:

- Use the carrier's operating instructions to check the settings for controlling the hydraulic attachments.
- If the slide rail is "moved down" instead of "moved up" or "moved up" instead of "moved down", check the setting for the hydraulic controls in the carrier and return this to the standard setting. (swap hoses over if nec.) Then repeat the functional test.

Familiarise yourself with the controls described under Chapter 6 (Rectifying faults) relating to the working function of the carrier's attachment.



Never allow persons to stay in the carrier's danger and safety area!



- Then check that all hydraulic components are tight by means of a visual inspection.
- Check the set **max. working pressure** for controlling the attachment on the carrier using the table below. The working pressure is determined by the permitted cases of operation described under Chapter 4.

Case of operation 1 and 3 (pull on two sides)	Case of operation 2 and 4 (pull on one side) Not with Type 2!
Pull base panels at bottom	Pull double corner slide rails
max. 280 bar	max. 140 bar

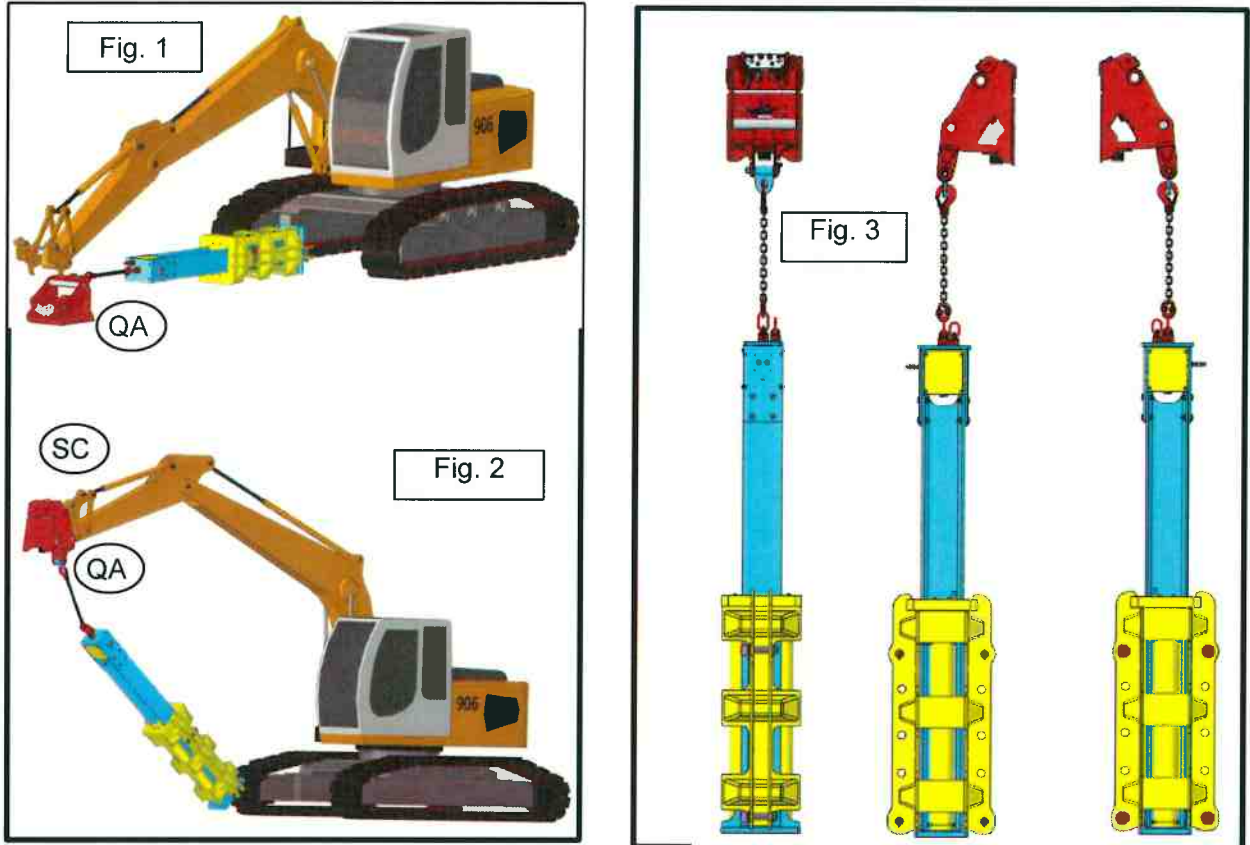
The carrier must be equipped with a quick, direct way of limiting the pressure (change “at press of a button”). **Otherwise work may only generally be carried out at max. 140 Bar (for all cases of operation).**

The screws on the rotary motor must be **tightened** with a torque of **250 Nm** after **10 operating hours!**

5.5 Connecting and functional test on the attachment

The attachment must be connected to the carrier using the hydraulic quick-change system before every use.

When doing so, observe the operating instructions for the quick-change system and for the carrier!



1.

Set down the attachment within range of the excavator boom as shown.

Set the working pressure and flow volume on the carrier for controlling the attachment depending on the case of operation:

- **280 Bar and 80 litres a minute** flow volume for case of operation 1+2.
- **140 Bar and 40 litres a minute** flow volume for case of operation 3+4.

2.

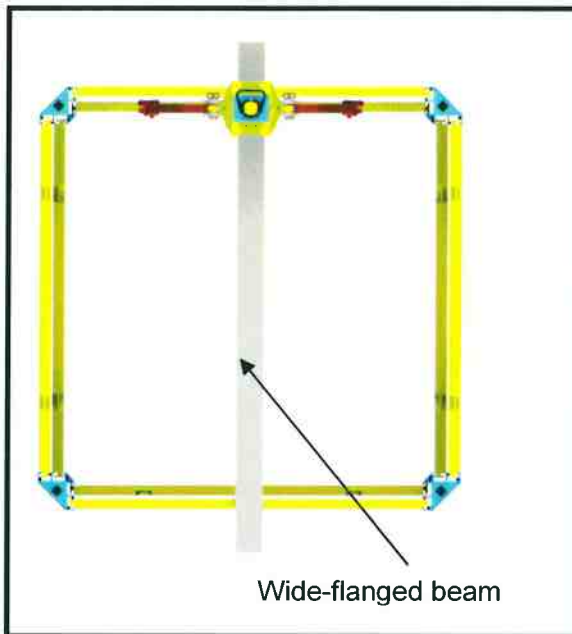
After connecting, the quick-change adapter (QA) must be put into the illustrated position by the carrier's machine operator by **pulling in the scoop closing cylinder (SC)**.

Observe the instructions for the quick-change adapter when doing this.

3.

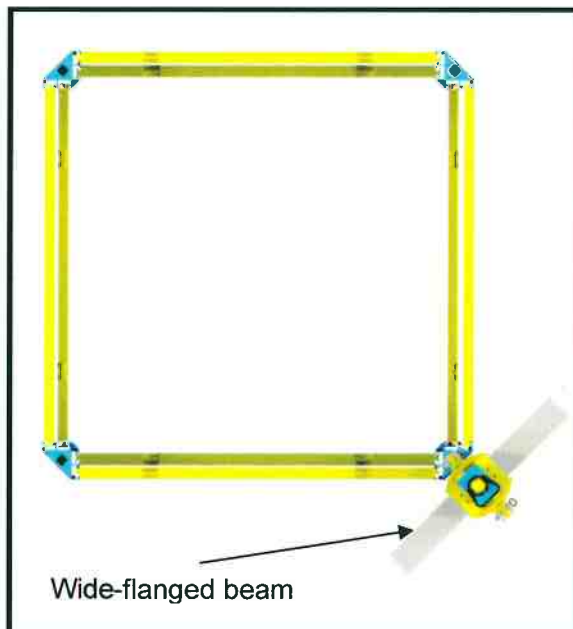
Then the **attachment** can be **lifted further**.

5.6 Positioning Hydralifter T100-Type3 correctly for use



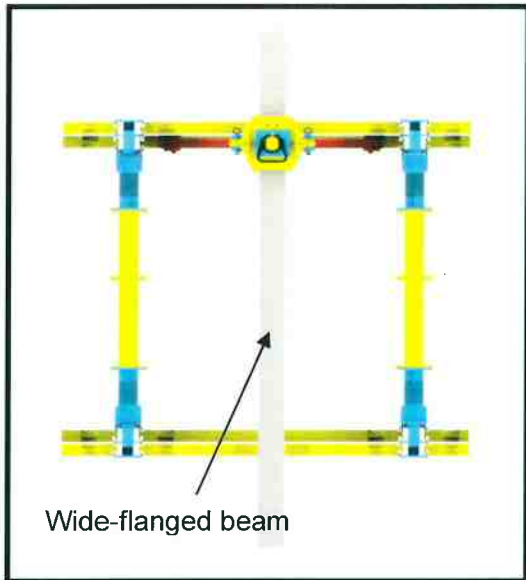
5.6.1 Case of operation example 1: Slide rail shoring / pit, pulling inside panels

Place suitable wide-flanged beam (e.g. HEB 600 or bigger) centrally above the trench box. The wide-flanged beam must be **supported on a firm substrate** at least 0.8 - 1.0 m outside the formwork. Position the **Hydralifter T100-Type3** on the wide-flanged beam so that both **attachment points for lifting rings** are centred as far as possible, with the same distance to the vertical axis of symmetry of the inside shoring panel.



5.6.2 Case of operation example 2 Slide rail shoring / pit, pulling double corner slide rail

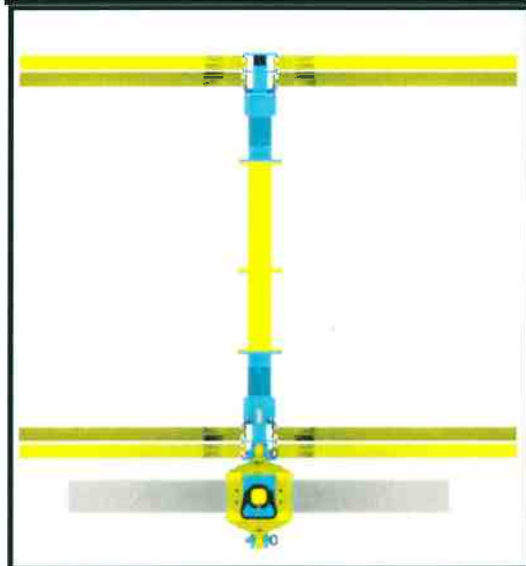
Lay a suitable wide-flanged beam (e.g. HEB 600 or bigger) or a steel panel at least 30 mm thick as shown, outside the trench box **on a firm substrate**. Bolt together the adapter for double corner slide rails with the Hydralifter using the corresponding bolt. (see figure)



5.6.3 Case of operation example 3: Slide rail shoring / continual trench, pulling inside panels

Place suitable wide-flanged beam (e.g. HEB 600) centrally above the shoring. The wide-flanged beam must be **supported on a firm substrate** at least 0.8 to 1 m outside the formwork.

Position the Hydralifter on the wide-flanged beam so that both **attachment points for lifting rings** are centred as far as possible, with the same distance to the vertical axis of symmetry of the inside shoring panel.



5.6.4 Case of operation example 4 Slide rail shoring / continual trench, pulling double slide rails

Lay a suitable wide-flanged beam (e.g. HEB 600) or a steel panel at least 30 mm thick as shown, outside the shoring on a **firm substrate**.

Bolt together the **adapter for double slide rails** with the belt adapter on the Hydralifter using the corresponding bolt. (see figure)

5.7 Overview of necessary tensile loads

Load attachment equipment and hooks must be designed for the maximum tensile loads occurring. Bear in mind the manufacturer's specifications for the selected lifting equipment in this respect.

Doubled for case of operation 2 and 4 (pull **on one side**), there **max. 140 bar!**

The load bearing capacity of the lifting equipment must at least meet the tensile loads specified in the following table.

Application	Oil pressure on the excavator	Tensile load per side
<p>Case of operation 1 and 3</p> <p>⚠ DANGER</p> <p>Shoring panel must be attached at 2 lifting rings each with one set of lifting tackle!</p>	80 bar	14.5 t
	100 bar	18.0 t
	120 bar	21.6 t
	140 bar	25.2 t
	160 bar	28.8 t
	180 bar	32.5 t
	200 bar	36.0 t
	220 bar	39.6 t
	240 bar	43.3 t
	260 bar	47.0 t
280 bar	50.4 t	



Belts must be able to take the above-mentioned tensile loads per side. This must be checked before each use!

Chains or ropes are not permitted here!

There is a risk of fatality if unsuitable lifting tackle is used!

Short lengths are preferable (less energy stored)

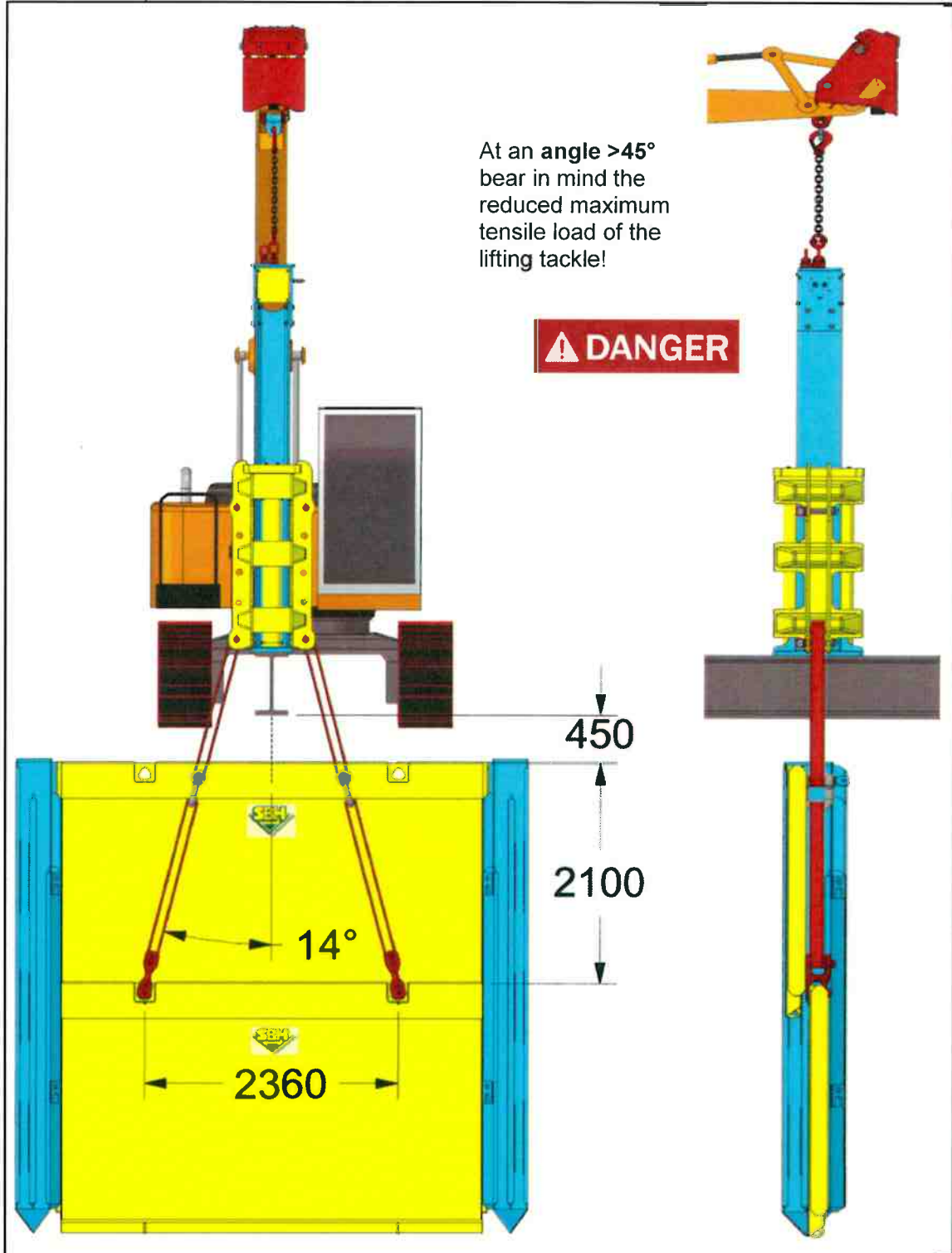


The lifting tackle supplied may only be used for the work described here and is not lifting tackle for lifting loads!

This lifting tackle (round slings, shackles and Hydralifter attachment point for lifting rings) are part of the machine and have no CE marking! Any use in suspension equipment mode is prohibited!

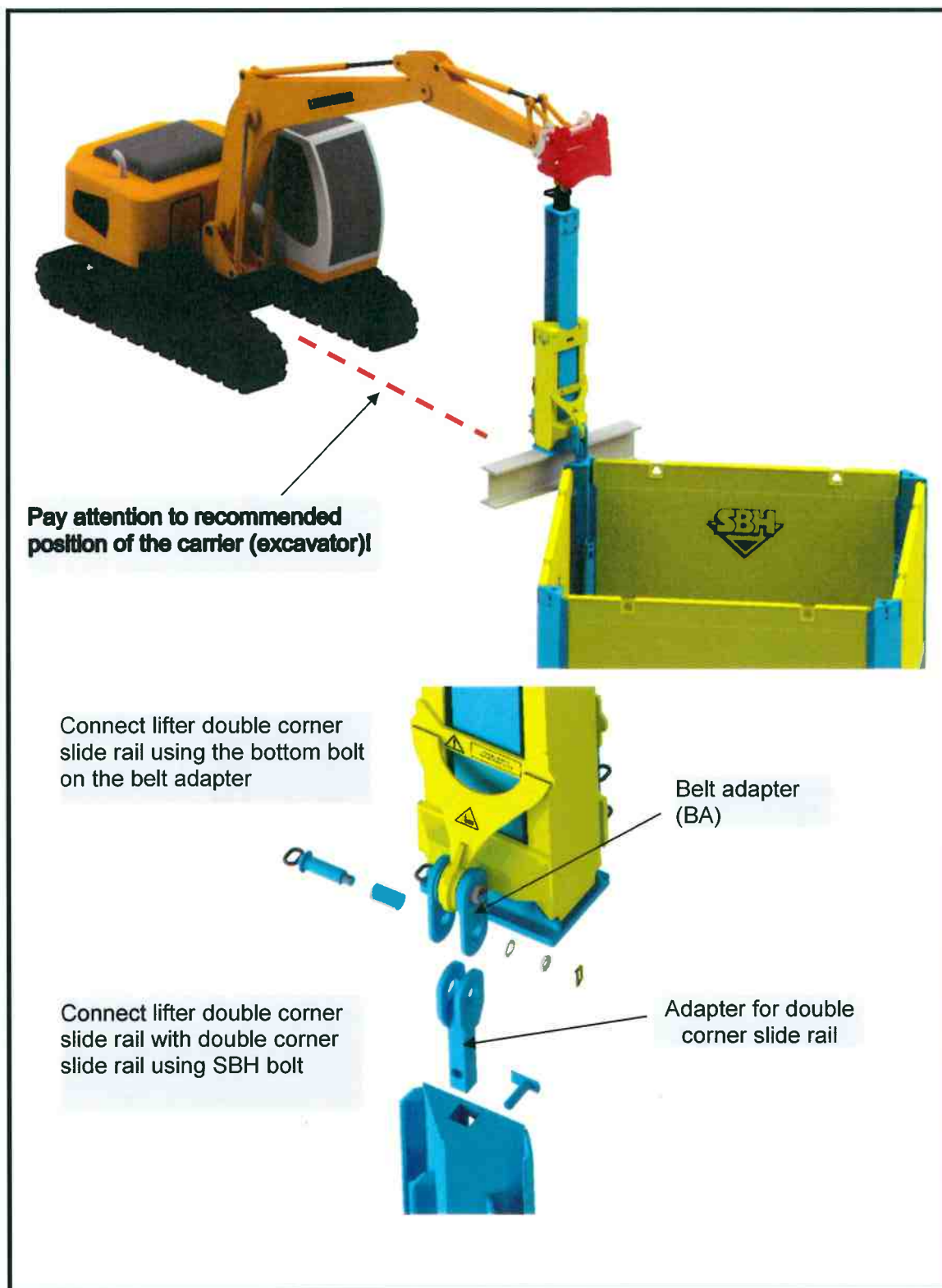
5.8 Attaching inside panels

Move the slide rail (SR) right down with tools. Keep lifting tackle as short as possible. Attach the base panel to the rings provided. To attach the lifting tackle, the tensile elements supplied must be used on the two rings for the bottom base panel.



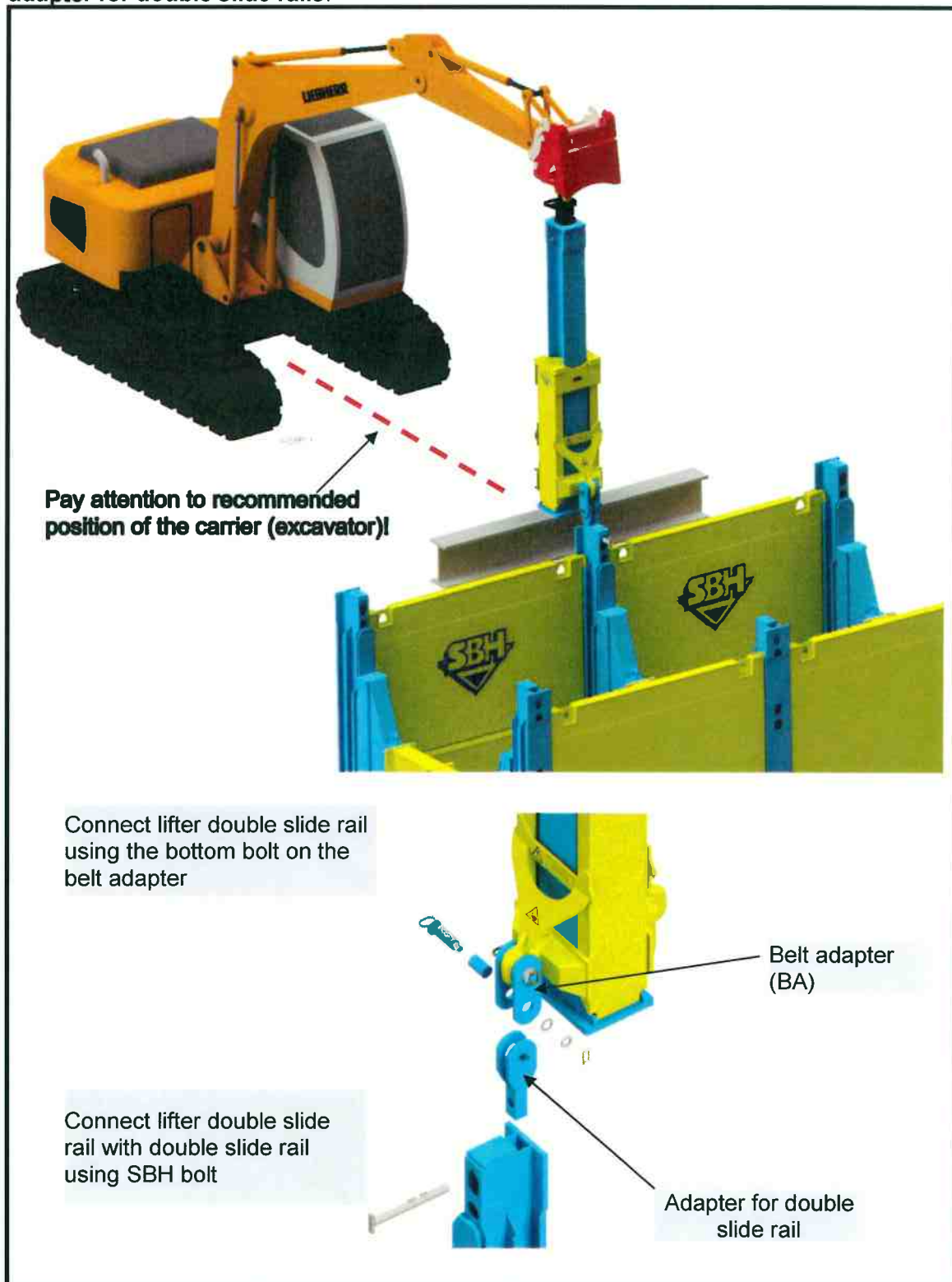
5.9 Correctly attaching double corner slide rails

Push **adapter** for double corner slide rails from above into the double corner slide rail and secure with the **Ø40 x 145 mm bolt for extension double corner slide rail**. Connect belt adapter for the **Hydralifter T100** with the adapter for double corner slide rails.



5.10 Correctly attaching double slide rails

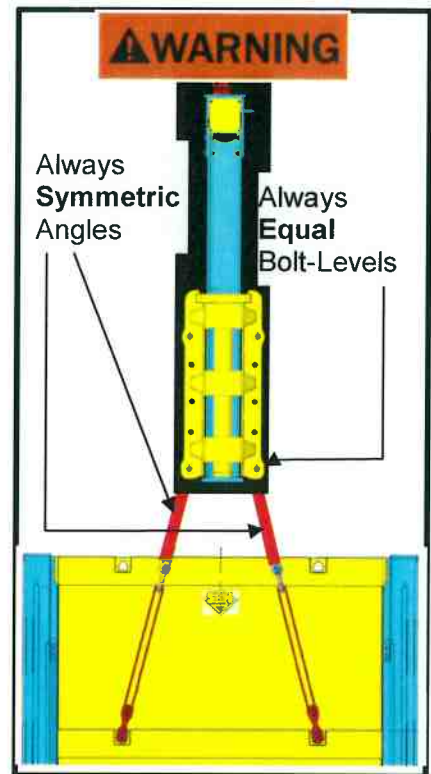
Push adapter for double slide rails from above into the double slide rail and secure with the $\text{\O}47 \times 470 \text{ mm}$ bolt. Connect belt adapter for the Hydralifter T100-Type3 with the adapter for double slide rails.



5.11 Summary of how to work correctly (for briefing)

- Application case **must correspond with case of operation 1 - 4** (incl. excavator position)
- Place attachment on the wide-flanged beam (HEB 600 or bigger) as described in Chapter 5.6 "Positioning Hydralifter T100-Type3 correctly for use". Which HEB beam size is the right one for your application case depends on the max. force and the free beam length (ask SBH application consultant)
- Fasten **attachment point for lifting rings** to the inside panel (helper is required)
- Tauten round slings (helper keeps at least 2 m away)
- Helper and all other persons move min. 10 m away from the danger zone
- During the pulling process, there must be nobody in the trench
- Undo / pull panels
- Lower Hydralifter until the round slings slacken off
- Undo **attachment point for lifting rings** (helper is required)
- Set Hydralifter down
- Check **attachment point for lifting rings** and round slings every day for damage. Damaged lifting tackle must not be used - **risk of fatality!**

Not complying with all these points puts persons at risk or may damage the appliance.



6 Problems and troubleshooting

- In the event of problems or accidents, **immediately take the Hydralifter T100-Type3** out of operation. It must be ensured at all times that the appliance operates soundly and properly.
- Putting the **the Hydralifter T100-Type3** back into operation is to be prevented, e.g. by marking it in a way that is understandable and visible to everyone, e.g. by attaching a "Warning, fault" or "quarantined" sign on the Hydralifter where it can be seen.
- If hydraulic oil, lubricant, grease or the like leaks, the **the Hydralifter T100-Type3 is to be taken out of operation** immediately; contamination of the environment is to be removed in an environmentally-friendly manner. After rectifying the causes of the leaks, the attachment must be inspected by a qualified person. Only once the **the Hydralifter T100-Type3** has been inspected may it be put back into operation.

7 Maintenance and repair

7.1 Cleaning

Clean the attachment every day before and after each operation,
Cover grease nipples when using a steam jet!

7.2 Checking welding seams

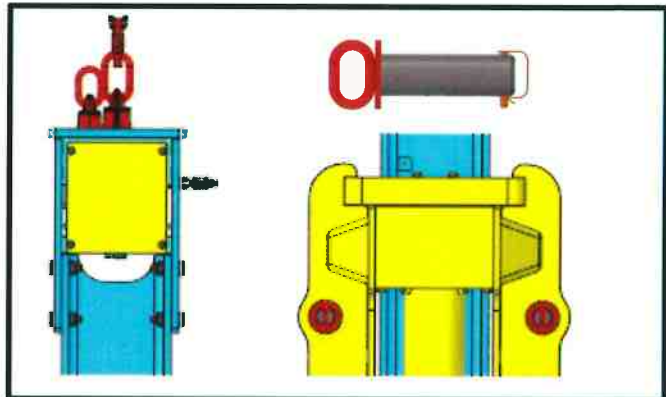
All welding seams must undergo a visual inspection every day, as well as after overload situations, impact etc., to check for crack formation. Checking for cracks saves larger repairs and prevents accidents.

7.3 Checking suspension + bolts

Daily visual inspection:
In case of damage the attachment must be shut down immediately.

7.3.1 U-bolt for carrier chain

The U-bolt for attaching the carrier chain is to be checked for damage every day by means of a visual inspection.



7.4 Hydraulic system

The entire hydraulic system must undergo a visual inspection every day. Damaged, abraded or leaky hydraulic lines, couplings and seals must be replaced professionally straight away. Hydraulic hoses must be replaced according to the applicable, valid legislation and rules of technology.

7.5 Requirement regarding lubricant, grease etc.

The oil level in the hydraulic unit is to be checked and topped up if necessary at least every day acc. to the manufacturer's operating instructions.
Lubricant, grease etc. is to be checked every day. If required, the corresponding areas must be lubricated or greased.

7.6 Regular checks

Attention!

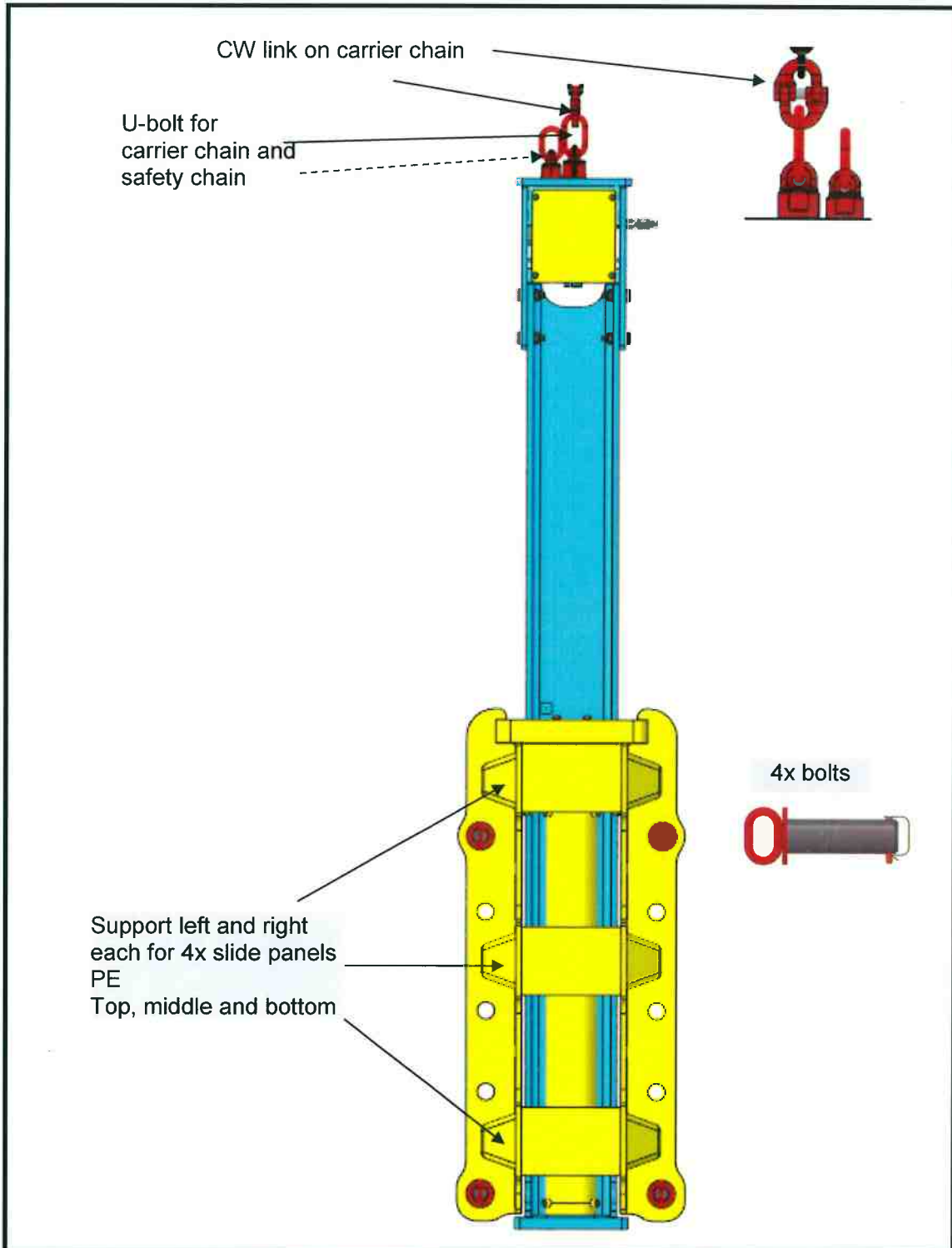
The appliance must undergo an annual safety inspection by the manufacturer or expert according to Chapter 8.



7.7 Lubricating schedule

The following parts and areas must be lubricated with grease every week.
(apply using a paint brush, better with spray)

Grease with the following specification is to be used: RENOLIT FEP2, supplied by Fuchs.



7.8 Any damage

If cracks, damage, leaks etc. are discovered, the **Hydralifter T100** must be taken out of operation immediately. After rectifying the discovered defects, a comprehensive check must be carried out again. After that the **Hydralifter T100** may be put back into operation.

7.9 Putting out of operation for an extended period

- Clean attachment thoroughly and lubricate it according to lubricating schedule
- Storage only permitted in suitable, dry environment.
- If shutting down the attachment for more than ½ a year, residual amounts of hydraulic oil must be drained and disposed of in an environmentally-friendly manner
- Before being put back into operation, the machine must be inspected by a qualified person according to the checklist in Chapter 8 **!Unerwartetes Ende des Ausdrucks.**

8 Repeat inspection according to BetrSichV [Occupational Safety Directive]

The attachment is to be inspected regularly, **at least once a year**, by the manufacturer or by a **qualified person trained by the manufacturer**.

The inspection must be documented accordingly.

To document the inspection regularly carried out according to BetrSichV , the checklist must be completely filled out!	Date: Name:	Date: Name:	Date: Name:	Date: Name:	Date: Name:
Serial number:					
1. General					
• Cleaning performed					
• Screws and nuts checked					
• Cylinder fastener on floor checked					
2. Lubrication according to lubricating schedule					
• Lubrication performed					
3. Connecting flange HL head					
• Visual inspection: Not deformed or damaged					
• Visual inspection: Welding seams free of cracks					
• tightly screwed (250 Nm)					
4. Attachment at top (U-bolt with carrier chain)					
• Visual inspection: Not deformed or damaged					
• Visual inspection: Welding seams free of cracks					
5. Hydraulics					
• no damage					
• no loss of hydraulic oil					
• Hydraulics safety marking present					
6. Supports					
• Visual inspection: undamaged					
• Visual inspection: not deformed					
• Visual inspection: Welding seams free of cracks					

To document the inspection regularly carried out according to BetrSichV , the checklist must be completely filled out!	Date: Name:	Date: Name:	Date: Name:	Date: Name:	Date: Name:
Serial number:					
7. Slide rails					
• Visual inspection: undamaged					
• Visual inspection: not deformed					
• Visual inspection: Welding seams free of cracks					
8. Belt adapter					
• Visual inspection: undamaged					
• Visual inspection: not deformed					
• Visual inspection: Welding seams free of cracks					
• M42 washer present					
• M42/3 nut present					
• Spring locking pin present					
• Bush bolt present					
9. Nameplate, safety and test markings					
• present					
• easily legible					
10. Lifting tackle, shackles, round slings					
• Inspection by expert for lifting equipment					
12 Adapter for double slide rail					
• Visual inspection: Welding seams free of cracks					
• Visual inspection: Not deformed					
13 Adapter for double corner slide rail					
• Visual inspection: Welding seams free of cracks					
• Visual inspection: Not deformed					
14 Attachment point for lifting ring					
• Visual inspection: Not deformed					
• Bolt inspection - not grinded					

9 Spare parts

Spare parts lists and drawings are still in progress.

Please request an up-to-date list by email specifying its appliance no. (photo of nameplate)

Also photos of accessories (if this applies to the spare parts order)

10 Waste disposal

- Drain oil and dispose of in an environmentally-friendly manner (according to legal provisions)
- Preliminary cleaning with a high pressure cleaner (cover grease nipples)
- All metals can be disposed of as scrap metal

11 Technical details

11.1 Weight, lifting loads, dimensions

These load specifications must correspond with the nameplate:

Feature	Value	Comment:
Tare weight	1500 kg	without chains on top
Lifting load	100,000 kg	(at 280bar, on two sides)
Hoist height	max. 1300 mm	(Plan reserve)
Total height	3300 mm	plus chain
Operating range	-10°C to +40°C	

12 Einbauerklärung / declaration of EG-conformity

Hiermit erklärt der Hersteller

we declare as the manufacturer

Schmölz SchachtFIX und Baugeräte GmbH
Osterried 2
D-87616 Marktoberdorf

in alleiniger Verantwortung die Konformität
der folgenden Produkte

*the responsibility for the conformity
of the following products*

Hydralifter T100

Typ / Type :

Hydralifter T100 Typ 3

Unvollständige Maschine

Inbetriebnahme wird solange untersagt,
bis sie in eine Maschine eingebaut wurde
und die gesamte Maschine den u.a.
Richtlinien entspricht.

incomplete machine

*starting-up is not allowed until the
incomplete machine is installed into a
machine and the complete machine fits
the codes described on this page*

Entspricht den grundlegenden Sicherheits-
und Gesundheits-Anforderungen nach:

*the product suits the basic principles
of safety and health as described in :*

EG-Maschinenrichtlinie 2006/42/EG

Heinsberg, 01.03.2017

Florian Schmölz

(Inhaber / owner)

13 Übergabe-Erklärung / commissioning checklist

Jegliche Gewährleistung/Garantie des Herstellers ist nur möglich nach Zusendung der komplett (und lesbar) ausgefüllten Checkliste	Warranty is only possible at the base of this form ! This form must be completed and returned (see address at side 1)
Maschinen-Typ + Serien-Nr.	Machine-type + ser-number:
Besitzer (Adresse inkl. E-Mail)	owner's adress (incl. E-mail):
Datum:	date:
Eingewiesene Person(en):	instructed person(s):
Einweiser:	instructor / trainer:
Checkliste	commissioning checklist
<input type="checkbox"/> Übergabe Betriebsanleitung	<input type="checkbox"/> delivery of user's manual
<input type="checkbox"/> Überprüfung Serien-Nr.	<input type="checkbox"/> check of machine-nr.
<input type="checkbox"/> Einweisung anhand der Betriebsanleitung	<input type="checkbox"/> instruction of user's manual
<input type="checkbox"/> Funktionsprüfung durchgeführt	<input type="checkbox"/> final assembly
<input type="checkbox"/> Gefahrenbelehrung erfolgt	<input type="checkbox"/> safety instructions
<input type="checkbox"/> Unfallvorbeugungs-Maßnahmen	<input type="checkbox"/> prevention of accidents
<input type="checkbox"/> Pflicht zur Übergabe alle Unterlagen (auch an Wiederverkäufer)	<input type="checkbox"/> obligation to give all instructions to next user
<input type="checkbox"/> Einweisung erfolgt	<input type="checkbox"/> instruction finished
_____	_____
(Unterschriften der eingewiesenen Personen)	(signature of trained persons)

14 Appendices

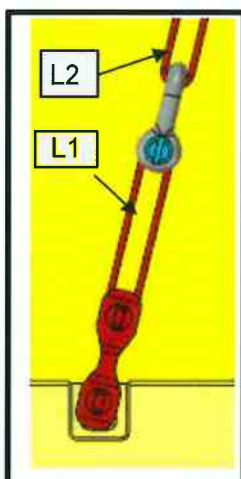
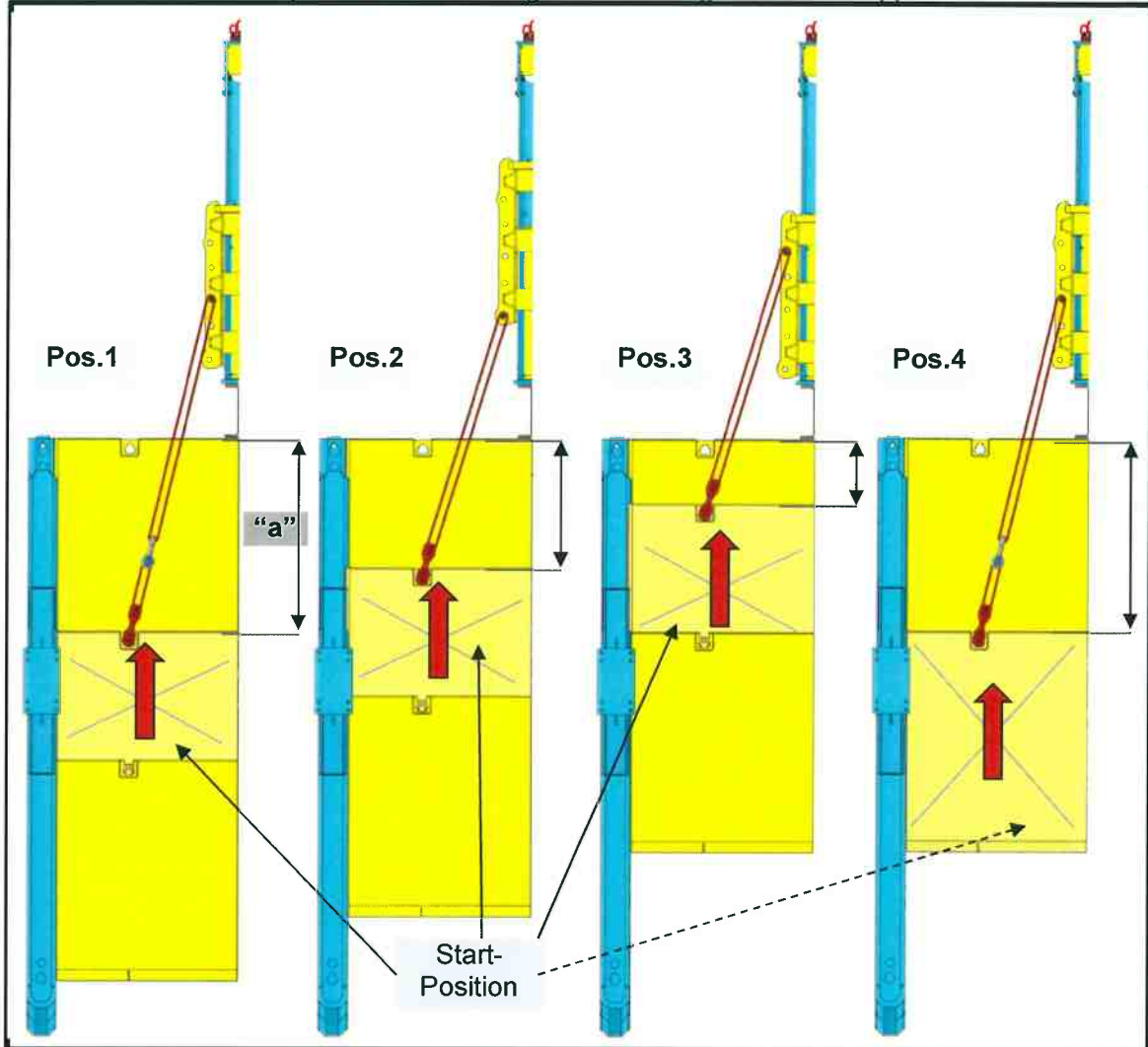
14.1 Warnings



14.2 Combinations of round slings

14.2.1 Base & extension panels inside, base panels outside – with support

In the inside and base panels in the outer guide - with e.g. HEB 500 support



	"a" (ca.)	Length L1	Length L2	Note
Pos.1	2100mm	700	2900	Corresponding technical regulations for the removal have to be followed.
Pos.2	1400mm	-,-	2900	
Pos.3	700mm	-,-	2900	
Pos.4	2100mm	700	2900	



14.3 Information about available accessories/SBH kit

We (i.e. SBH) make sure that the accessories for the **Hydralifter T100-Type3**:

- Are thoroughly tested and documented
- Cover clear, necessary application cases and are easy to use.
- For this reason we also reserve the right to **discontinue groups of accessories**.
(Exception: spare parts)

We expressly recommend using original SBH accessories!
Our Website contains up-to-date information about this:



<https://www.sbh-shoring.com/trench-shoring/hydralifter-hydraulic-lifting-for-slide-rail-shoring.html>

Simply ask your SBH application consultant.

#In Arbeit bei CB mit SBH-GL: Hier fehlt eine klare Aussage zu Rotationsmotoren , SWA und Fremdanhängungen !

The **validity of the key safety information** from these operating instructions also applies to all accessories:



If an accessory requires special signs/maintenance, a read instructions sticker and a nameplate will be found :



We recommend sticking in the accessories instructions afterwards. If these get dirty or are lost, you can request a current set of instructions at any time using the nameplate number.

14.3.1 Available SBH accessories for HL (as at 10/2017) :

	Short identifier	Details
<input type="checkbox"/>	Connection panel	
<input type="checkbox"/>	Hydralifter attachment point for panels	
<input type="checkbox"/>	Adapter for double slide rail	
<input type="checkbox"/>	Adapter for double corner slide rail	
<input type="checkbox"/>	Round slings with var. lengths	
<input type="checkbox"/>	Protective sleeves for round slings	
<input type="checkbox"/>	Shackles	
<input type="checkbox"/>	Hydralifter transport frame	
<input type="checkbox"/>	Hydraulic hoses	