

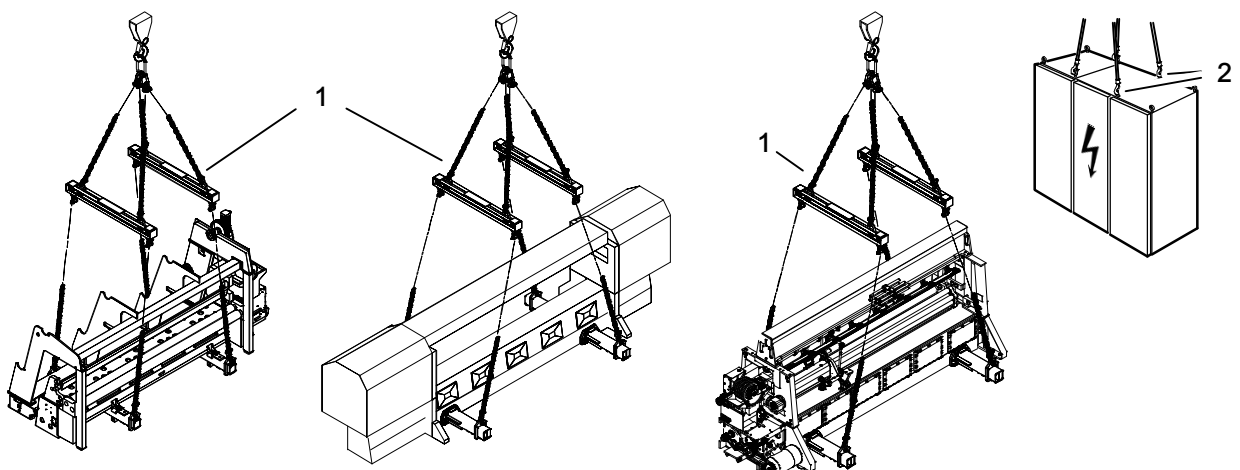
1.1 Suitable place of installation for the machine

- Choose the installation site of the machine in such a way that there is sufficient space for a safe operation, supervision and maintenance of the machine.
- Draft and direct sun radiation should be avoided because temperature variations in the proximity of the machine might interfere with the correct running of the machine.
Recommended ambient temperature: 25 +/- 3 degrees C
- The floor of the installation site should be even (flat).
- The bearing capacity of the floor and/or of the understructure (ceiling) should be in accordance with the static and dynamic load of the machine (vibration diagrams can be supplied by us - upon request).
- The local building regulations should be observed.
- If necessary, observe special machine-specific operating conditions.
See chapter 1 "Safety regulations and operating conditions".

1.2 Safe machine transport

Detailed instructions to be observed during the machine transport and the relevant safety instructions can be found on the next pages.

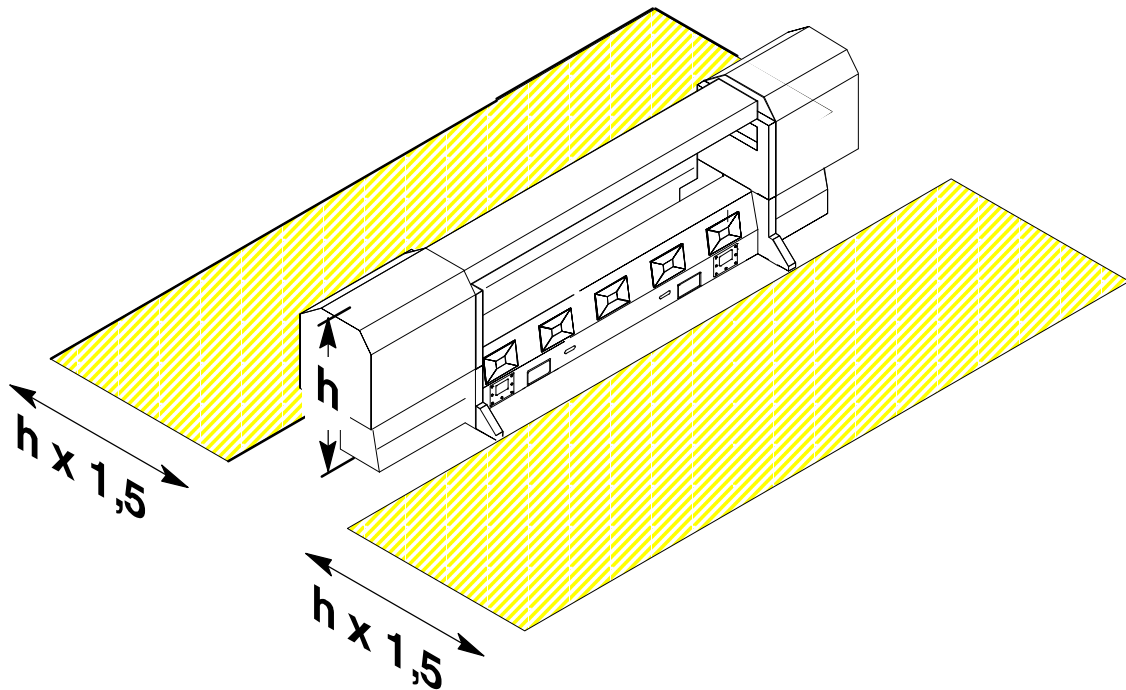
- For the machine transport use a crane and a lifting device suitable for the respective machine type.
- If the machine cannot be transported by crane, it is imperative to use a transport carriage or a fork lift truck.
It is recommendable to unpack the machine only after having arrived at its location.
- Make sure that the lifting device (1) is firmly screwed down with the machine.
(The lifting device can be made available, upon request)
- To avoid damage on the switch cabinet when lifting, the crane hooks should be fixed onto the eyelets (2).



1.1 Definition of danger zone during machine transport

The danger zone during the transportation of the machine results from:


the height (h) x 1,5.



Important:

The height (h) is measured from the highest point of the machine up to the floor!

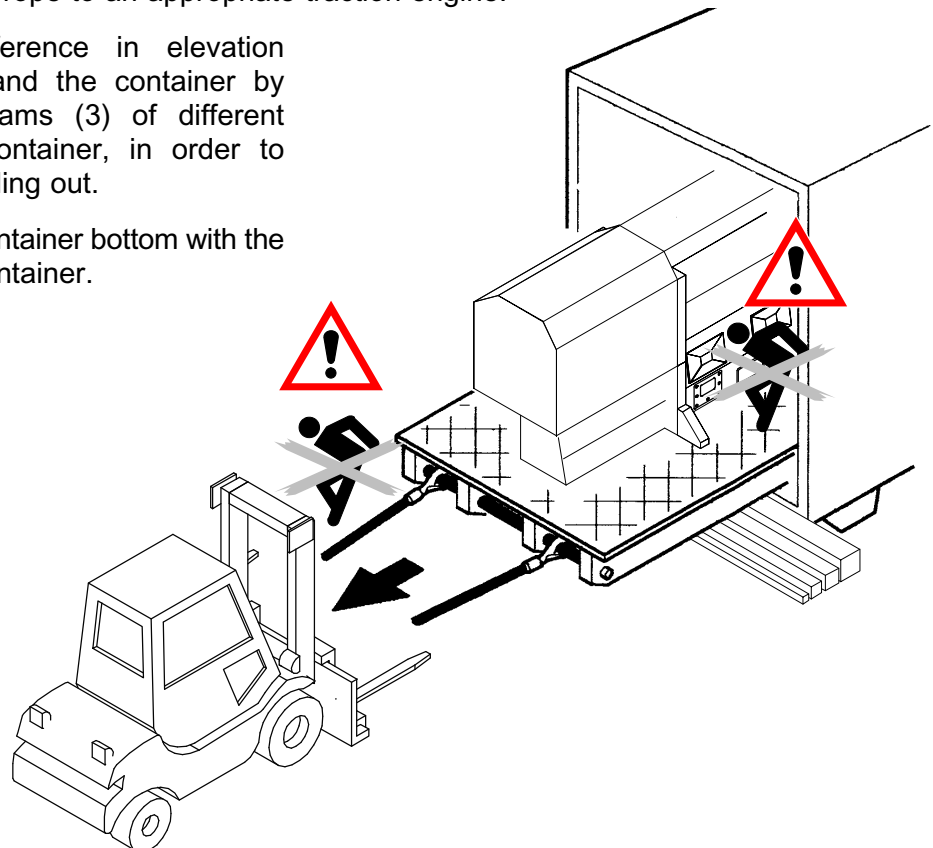
1.1 Unloading of the machine from container with the fork lift truck

DANGER!	
	Lifted or suspended loads may tilt or fall down!
	This may cause serious injuries to persons, even their death or damages to property.
	<ul style="list-style-type: none"> - Don't step under suspended loads! - Keep out of the danger zone! <ul style="list-style-type: none"> - Don't stay: in front of the container, - in the container - and/or between the machine and the fork lift truck! - Always pull out the machine from the container at ground level! - The fork lift truck has to be suitable for the relevant machine weight! - The staff in charge of the machine transport has to be specially trained for the handling of heavy loads. - Observe the local safety regulations!



- Choose the unloading place in such a way that there is sufficient space available for a safe moving of the machine.
- Before unloading the machine from the container, remove all the hindering (restricting) parts (bypacked machine components, etc.).

Sequence of operations

1. Fix the suitable traction rope (1) to the shafts (2) of the container bottom.
2. Hang up the traction rope to an appropriate traction engine.
3. Level out the difference in elevation between the floor and the container by placing wooden beams (3) of different height under the container, in order to ensure a smooth pulling out.
4. Slowly pull out the container bottom with the machine from the container.



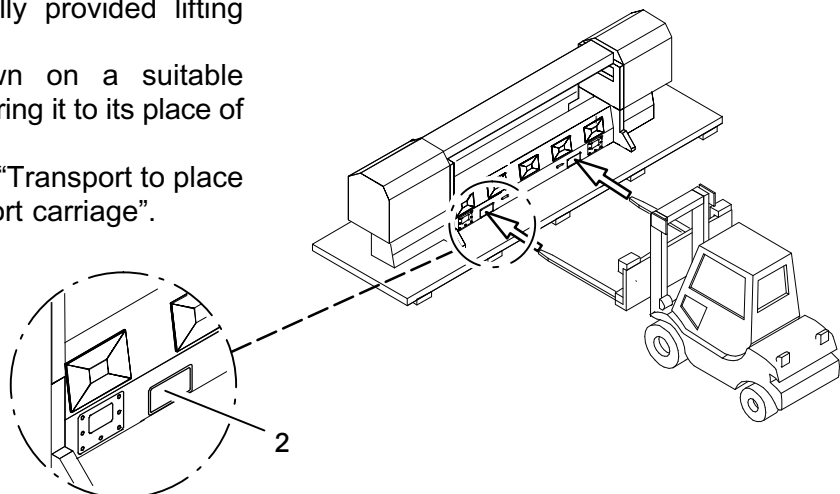
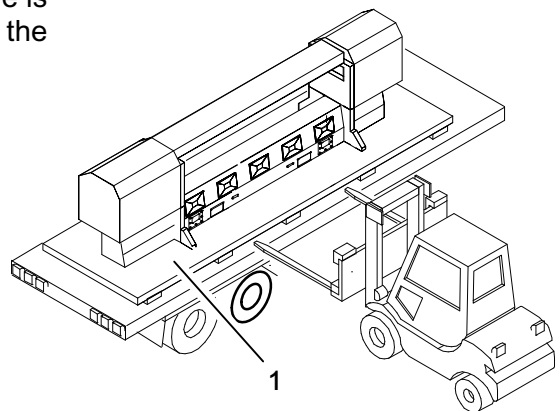
1.2 Unloading of the machine from truck with a fork lift truck

DANGER!	
	Lifted or suspended loads may tilt or fall down! This may cause serious injuries to persons, even their death or damages to property.
	<ul style="list-style-type: none"> - Don't step under suspended loads! - Keep out of the danger zone! <ul style="list-style-type: none"> - Don't stay: under the suspended machine - and/or between the machine and the fork lift truck! - The fork lift truck has to be suitable for the relevant machine weight! - Lift the machine only at the specially provided lifting (holding) places! - Observe the local safety regulations! - The staff in charge of the machine transport has to be specially trained for the handling of heavy loads.
CAUTION!	
	Hazard of cutting or piercing when cutting open the packaging film! Injury of hands possible.
	<ul style="list-style-type: none"> - Wear appropriate personal protection outfit (safety gloves)!



- Choose the unloading place in such a way that there is sufficient space available for a safe moving of the machine.
- Before lifting the machine, remove all the hindering (restricting) parts (bypacked machine components, truck superstructures, etc.).

Operating sequence during unloading

1. Unload the truck bottom (1) with the machine and put it down onto a level surface.
2. Remove the packaging film.
3. Lift the machine from the LKW bottom.
ATTENTION: It is only allowed to lift the machine at the specially provided lifting (holding) places (2).
4. Put the machine down on a suitable transport carriage and bring it to its place of installation.
See: Table of contents: "Transport to place of installation by transport carriage".

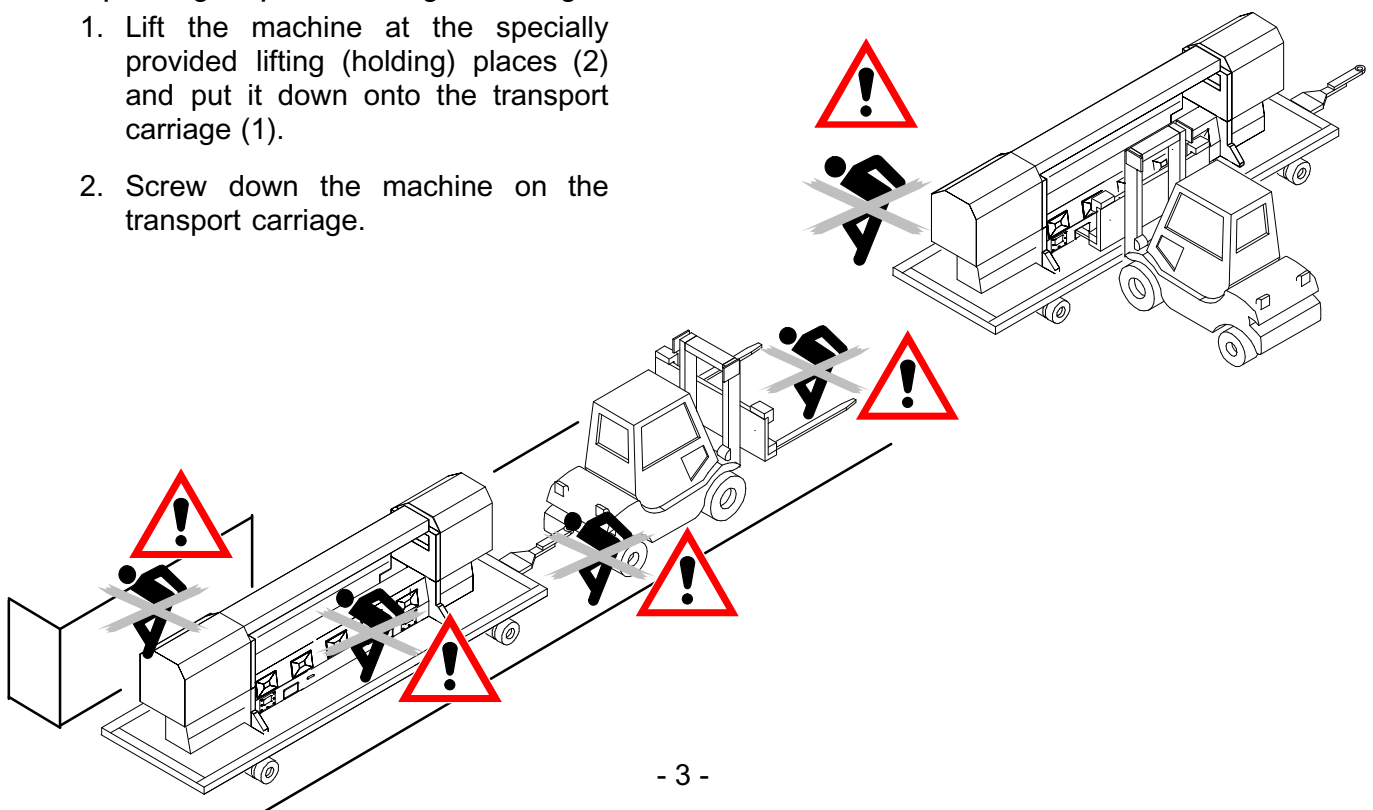


1.3 Transport of the machine to its place of installation by means of a transport carriage

DANGER!	
	<p>Danger due to overturning of the machine (load)! This may cause serious injuries to persons, even their death or damages to property.</p> <ul style="list-style-type: none"> - Lift the machine only at the specially provided lifting (holding) places! - Secure (fix) the machine on the transport carriage in order to avoid its slippage and tilting! - The manual pushing of the machine on the transport carriage is prohibited! - Use suitable traction engine and transport carriage! - Keep out of the danger zone! <ul style="list-style-type: none"> - Don't stay: in front of the traction engine - and/or between the traction engine and the transport carriage! - The staff in charge of the machine transport has to be specially trained for the handling of heavy loads. - Observe the local safety regulations!
	<p>Crushing hazard! This may cause serious injuries to persons, even their death or damages to property.</p> <ul style="list-style-type: none"> - The manual pushing of the machine on the transport carriage is prohibited! - Keep out of the danger zone! <ul style="list-style-type: none"> - Don't stay: in front of the traction engine - and/or between the traction engine and the transport carriage - as well as between the traction engine/transport carriage and walls of factory halls or narrow places! - Observe the local safety regulations!


Operating sequence during unloading

1. Lift the machine at the specially provided lifting (holding) places (2) and put it down onto the transport carriage (1).
2. Screw down the machine on the transport carriage.



1.1 Use of the lifting device

(Brackets (3) are laterally screwed down on the machine frame)

DANGER!	
	Lifted or suspended loads may tilt or fall down!
	This may cause serious injuries to persons, even their death or damages to property.
	<ul style="list-style-type: none"> - Don't step under suspended loads! - Keep out of the danger zone! - The used transportation means and lifting tools have to be suitable for the relevant machine weight! - Don't lift or put down the machine by jerks and jolts! - Attach the lifting devices in such a way as to ensure a horizontal suspension! - Don't guide the pull chains over sharp edges and don't kink them! - The staff in charge of the machine transport has to be specially trained for the handling of heavy loads. - Observe the local safety regulations!

Before unloading

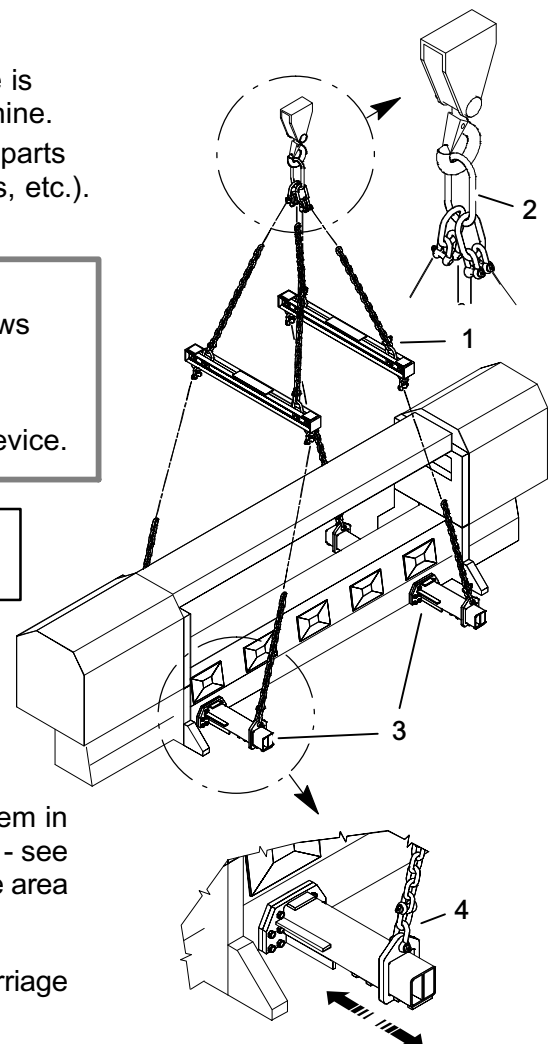
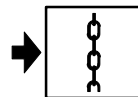
- Choose the unloading place in such a way that there is sufficient space available for safely moving the machine.
- Before fixing the lifting device (1), remove restricting parts (machine parts sent as bypack, truck superstructures, etc.).

Important:

- Only use the fastening elements and screws delivered with the machine.
- Use the screws M 20 only once!
- Do not detach any individual parts of the lifting device.


Sequence of operations

1. Fix the brackets (3) with screws M 20 to the marked positions of the machine frame.
Tighten the screws with a pre-tension of 185 Nm.
2. Fasten the lifting device to the crane hook (2) (as shown in the figure) and lift it over the machine.
3. Attach the chains to the carrier tubes and position them in such a way that the machine can be lifted horizontally - see fig. (4). Make sure that no machine parts are within the area of the pull chains.
4. Lift the machine and place it on a suitable transport carriage or directly at the place of installation.



1.1 Use of the lifting device

(Carrier tubes (6) are screwed down under the machine)

DANGER!	
	Lifted or suspended loads may tilt or fall down!
	This may cause serious injuries to persons, even their death or damages to property.
	<ul style="list-style-type: none"> - Don't step under suspended loads! - Keep out of the danger zone! - The used transportation means and lifting tools have to be suitable for the relevant machine weight! - Don't lift or put down the machine by jerks and jolts! - Attach the lifting devices in such a way as to ensure a horizontal suspension! - Don't guide the pull chains over sharp edges and don't kink them! - The staff in charge of the machine transport has to be specially trained for the handling of heavy loads. - Observe the local safety regulations!

Before unloading

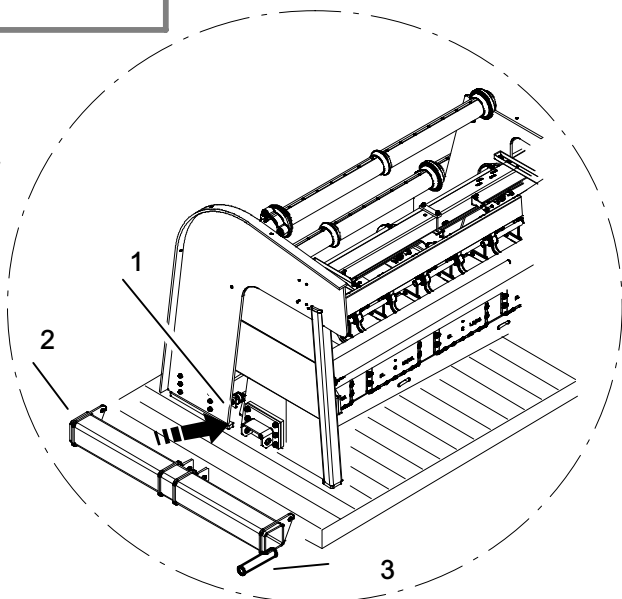
- Choose the unloading place in such a way that there is sufficient space available for safely moving the machine.
- Before fixing the lifting device (1), remove restricting parts (machine parts sent as bypack, truck superstructures, etc.).

Important:

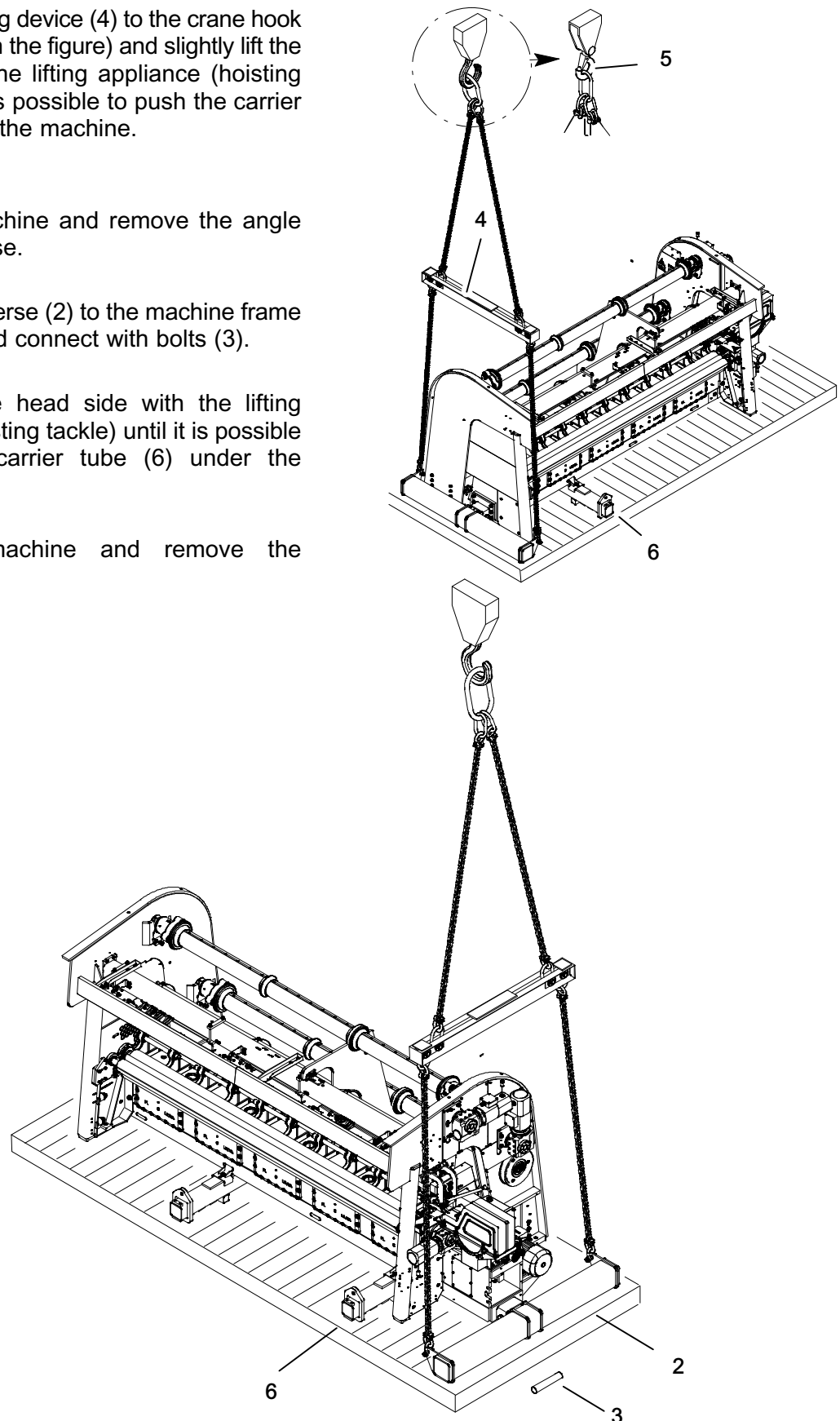
- Only use the fastening elements and screws delivered with the machine.
- Do not detach any individual parts of the lifting device.

Sequence of operations:

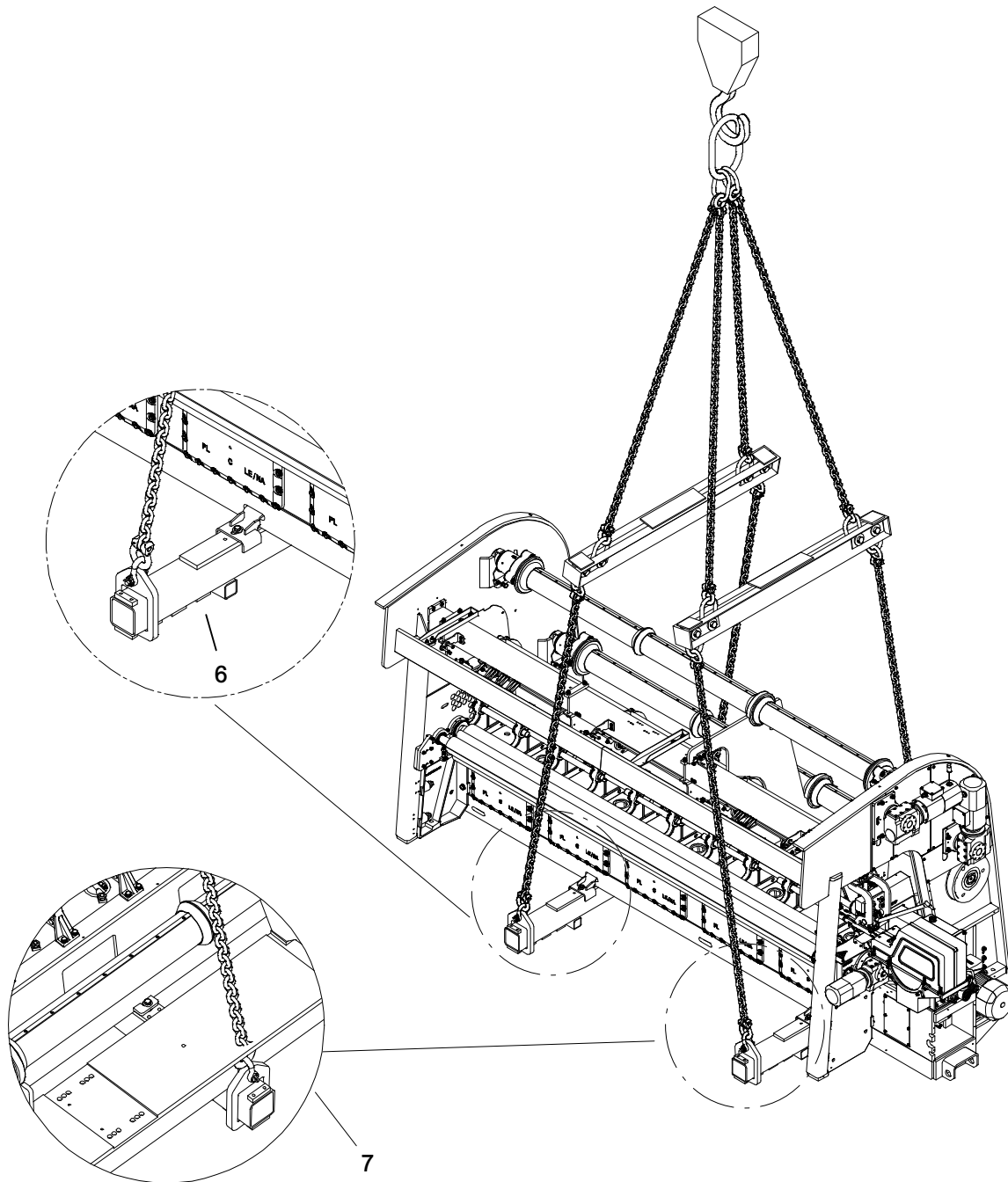
1. Screw down the angle (1) to the left part of the machine frame by using seven hexagon head screws.
2. Attach the traverse (2) to the angle and connect it by bolts (3).



3. Fasten the lifting device (4) to the crane hook (5) (as shown in the figure) and slightly lift the left side with the lifting appliance (hoisting tackle) until it is possible to push the carrier tube (6) under the machine.
4. Lower the machine and remove the angle with the traverse.
5. Attach the traverse (2) to the machine frame (head side) and connect with bolts (3).
6. Slightly lift the head side with the lifting appliance (hoisting tackle) until it is possible to push the carrier tube (6) under the machine.
7. Lower the machine and remove the traverse.



8. Screw down the carrier tubes (6) with the machine frame.
9. Attach the chains to the carrier tubes and position them in such a way that the machine can be lifted horizontally - see fig. (7). Make sure that no machine parts are within the area of the pull chains.



10. Lift the machine and place it onto a suitable transport carriage or directly at the place of installation. Attention - danger due to suspended load!