

Hänel

Memorandum for Technical Field Service



Safety Regulations & Specifications for Assembly and Service

The specifications in the respective country, e.g. for Europe, the (current) Machinery Directive, as well as the operating, monitoring, control and safety specifications of the operator, must be observed.

Inform the customer of his obligation to ensure that the lift system always complies with state-of-the-art technology and that operating and maintenance personnel receive instruction (must be documented).

Issues requiring clarification must be taken up with the customer's contact person and the on-site supervisor.

Please report damage caused to the customer's property, or malfunctions during assembly/service work, directly to the customer's contact person and your responsible on-site supervisor.



The appropriate use of your »personal protective equipment« is mandatory (high visibility vests, working shoes, gloves, safety helmet, safety belts etc.).

»Protective devices« must not be rendered ineffective.

Before and during work hours: »Alcohol is prohibited«.

»Staff under the influence of alcohol« must not be allowed to start work.

Machines & tools must only be used for their »intended purpose«.



1. Prior to starting assembly or service work

Hänel installers or service technicians must clarify the following special conditions at the place of installation with the customer's contact person:



1.1 Safety instructions

Instruction in customer-specific requirements, including but not limited to escape & rescue routes, first aid facilities, life saving appliances (fire extinguishers — hydrants etc.).



1.2 Guidelines

What are the special stipulations affecting operation?

For example, no naked flames and restrictions such as smoking prohibition, etc..



1.3 Storage location assignment

for assembly material, machine parts, tools etc.

Co-ordination of customer's transportation routes.

Important: Emergency escape & rescue routes must be kept free, signs must always be clearly visible.

1.4 Provision of staff

must be organised by the customer.

Sequence and time schedule of tasks must be co-ordinated.

Working auxiliary personnel must be sufficiently proficient in the German language.

Quantity see document »Installation Requirements for the Owner/Operator«.

Qualifications of additional/temporary staff must be checked on site.



2. Provision of equipment/tools

Must be guaranteed by the customer or arranged through the Hänel Sales Department.

2.1 Assessment of the equipment provided

- a) Proper condition (→ visual check).
- b) Existence of valid test verification tags.



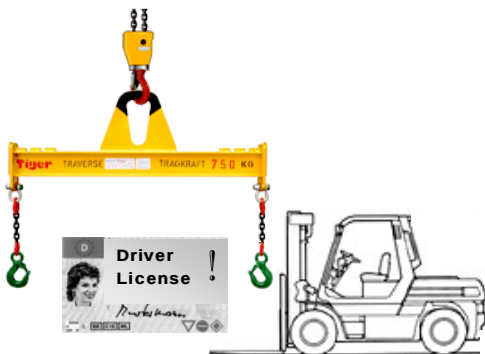
2.2 Lifting gear

Must be available for heavy loads:

Cranes, fork lift trucks, block and tackle etc. Refer also to the document »Installation Requirements for the Owner/Operator«.

Machines requiring a driving licence must be operated by authorised personnel only.

If the necessary hoisting gear is not available, assembly/service work must be discontinued.



2.3 Tools and equipment

Necessary for job implementation must be provided (→ ladders, working platforms, scaffolding etc.).

Refer also to the document »Installation Requirements for the Owner/Operator«.

If the necessary lifting gear is not available, assembly/service work must be discontinued.





2.4 Blocking-off equipment

For safeguarding the assembly site, as well as any necessary access openings, must be provided (e.g. railings and fixed covers).



2.5 Personal protective equipment

Must be available for auxiliary personnel assigned by the customer. Assembly and service staff from Hänel have their own protective equipment (→ safety belts, shoes, helmets, etc.).

The on-site supervisor must check and guarantee that all personnel use the equipment!



3. Customer's work

Must always be performed by the customer's staff.



3.1 Work on the customer's electrical systems

Is prohibited.

Note: Work on Hänel lift/carousel systems is an exception to this rule (see Section 4.4).



3.2 Work on the customer's installations,

Such as drilling, welding, sanding etc. is prohibited.

This also includes anchoring for the lift/carousel, which is carried out by the customer, refer also to the document »Installation Requirements for the Owner/Operator«.

Note: Drilling on the Hänel lift/carousel systems is permitted. Welding & sanding is prohibited.

Caution: Avoid damaging cables or other important components when drilling. Inspect the location carefully beforehand!



4. Work on Hänel lift/carousel systems

Safety equipment must not be altered or removed. Please observe the Work Instructions!

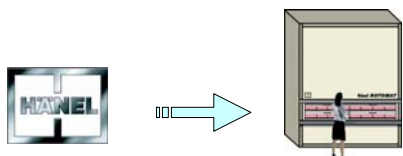
Electrical work must only be carried out by qualified electricians. The basic electrical engineering safety rules, such as "ensuring a de-energised state" etc., must be observed. Beware of the external voltage partly applied to electrical components!

Work on the mechanical lift system must only be carried out by personnel qualified and instructed in this type of work.

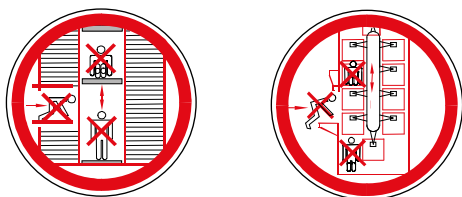


4.1 Prior to starting work

The on-site supervisor must instruct all the staff, especially the auxiliary personnel assigned by the customer, and familiarise them with the most important rules of action. For this purpose, each member of staff is given an instruction sheet. The relevant Hänel Assembly and Operating Instructions must be observed in each case.

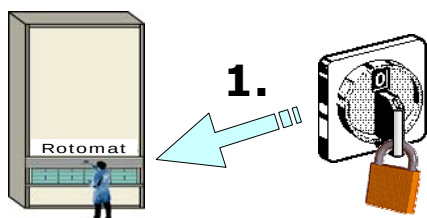


4.2 Only original spare parts must be used.



4.3 Climbing in through the access opening and travelling on the lift is prohibited.

Observe Sections 4.4 & 4.5 prior to starting work.



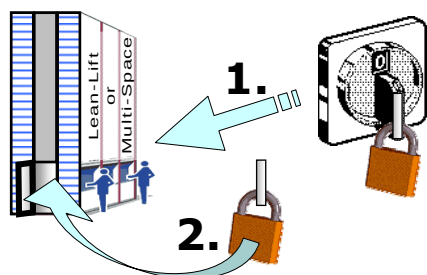
4.4 Access to the lift/carousel – Maintenance opening/doors

Before anyone enters, reaches into or leans into the lift/carousel, the Hänel fitter or service technician must do the following using his or her own padlocks:

- a) turn the **main switch** to the »OFF« position and lock it with the 1st padlock.
Work carried out where the voltage is not "dead" can lead to severe injuries causing death! e.g. on the LEAN-LIFT should the extractor fall.
- b) Secure the **actuator latch** of each open maintenance opening or door (LEAN-LIFT and MULTI-SPACE) with one additional padlock each.
- c) **First of all check**
 - when setting up the multi-unit network (only for LEAN-LIFT), that all the main switches have switched off automatically and that they cannot be switched on again.



All lifts/carousels that will be entered or in which work is carried out



must be secured from being switched on again at the corresponding main switches with a padlock.

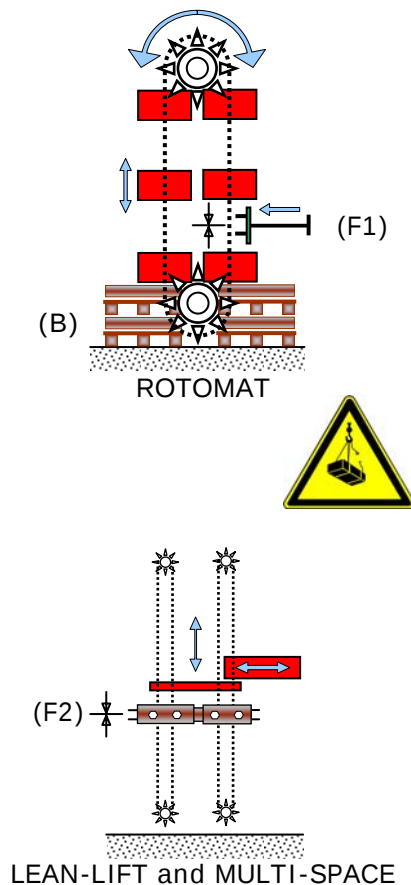
Other lifts/carousels in the multi-unit network are to be likewise secured, at the very least, by disconnecting all the individual main switches of the devices from the mains supply.

d) **Then check**

- from outside through the opening to ensure that no parts can fall down from above into the working area. It may be necessary to access the lift/carousel from the side / from above in accordance with the applicable operating manual.

e) **Access from the side / from above**

Likewise only permitted in observance of safety measures according to a), b) & c) in accordance with the applicable operating manual.



4.5 Prior to work on the

ROTOMAT

... parts of the drive assembly

such as motors, gear units or drive pinions/chains or drive shafts, the electrical system and the carriers must be reliably secured as described in Section 4.4.

This is achieved by means of the locking device with a sufficiently dimensioned layer of pallets* and squared timber* (B).

... parts of the carrying chains,

carrier chain wheels, bearings or guides, the carousel must be emptied of articles and the interior fittings removed.

* Hard wood

LEAN-LIFT and MULTI-SPACE

... parts of the drive assembly

such as motors, gear units, bearings, chains, chain wheels or drive shafts, the electrical system and the extractor must be reliably secured as described in Section 4.4.

This takes place by moving the extractor to ground level.

As an alternative, secure it using the locking device (F2). Please follow the instructions described in detail in the respectively valid Operating Instructions!

4.6 Working at heights $\geq 2m$

Above the access level is permitted only with the use of suitable protective equipment or approved working materials (belt systems, work platforms with railings etc.)



5. At end of work

All hazardous areas must be reliably safeguarded. In particular the blocking-off devices in front of holes and floor/ceiling penetrations must be set up carefully. Heated objects or smouldering embers must not be left in the work area (→ Risk of fire).

I, the fitter/service technician, hereby confirm with my signature that I have adhered to the above listed information.

Name

Date

Signature

You can obtain further information on specifications in your own country from your national advisory organisation for product and work safety.

★ Distributor: To all members of staff in the assembly and service departments ★