USER MANUAL CREW BASKET



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Regulations with regard to the use of a crew basket hanging on a mobile crane

<u>User guide (should be present in crew basket):</u>

- There may only be used a crew basket which is meant to be used and which is specially arranged to transport people hanging in the crew basket in a safe way with a safe place to stand. Enter and exit at higher or lower places is **not** allowed. The crew basket should be in good condition and should be hanging in the mobile crane with the help of solid hoisting equipment. The crew basket should be protected for suddenly lift out from the mobile crane.
- Use is only allowed when it's technical or economical not realizable to use suitable resources for the proceedings, which is at assessment and under responsibility of the employer.
 - There must be done a risk stock taking and evaluation in advance for the use of a crew basket, hanging on a mobile crane as conveyance. Especially when persons have to be transported to a difficult achievable place to, after arriving, leave the crew basket again. Based on this RST the proceedings can be performed. A report of this RST should be known at work and should be present at work. Furthermore, a checklist matching the crew basket should be completed for every use.
 - There should be a set-up inspection of the holdercrane(s) and the crew basket every time before putting into use.
- It's not allowed for persons younger than 18 to be in a crew basket hanging on a mobile crane, the use is only reserved for authorized and informed persons. In the crew basket may not be more people then what is determined.
- A proof of inspection and testing by an expert for the first putting into use should always be present. The crew basket with fasteners should be inspected once a year by an expert and there should be taken care of a written administration.
- Persons in the crew basket should be wearing a safety belt with shock absorber which should be directly leashed on to a point strong enough to attach the crew basket (for example inside railing crew basket) Furthermore there should be weared a safety helmet.
- There should be direct visual contact possible constantly between crane driver and persons in the crew basket. If not, there should be taken provisions to accomplish the work safely. (for example the use of radiotelephone).
- There should be clear agreements between engineer and persons in the crew basket (for example unambiguous instructions with regard to hand/arm signs etc). Instructions to the crane driver can only be given by one and the same person in the crew basket.
- When there is a threat of communication disturbance or there is another possibility for danger for the persons in de crew basket, the proceedings should be a work stoppage.
- When there is not enough light for a good interaction in communication there should be organized more light, otherwise work should be forbidden until good interaction is possible again.
- The crew basket may not be used when there is a wind speed higher than 7.0 m/s(wind speed 25 km/hour) and at least not above the wind speed which is maximal acceptable for the crane.
- The crane driver and the persons in the crew basket must be clearly instructed about the dangers and the way of operating to prevent accidents. There for this regulation (or a similar instruction) should be directly available any time.
- The crane driver must always move the crew basket carefully and with little speed. Bumping or damaging the crew basket hereby must be prevented. The crew basket must hang loose from the jib of the crane under all work circumstances.
- Attaching and losing of the crew basket should be done in a safe way. Because of the minimal stability of the free-standing crew
 basket this cannot be done by climbing the crew basket. (They have to drop the eye of the fourleg beside the crew basket so onand unhook can happen safely.
- Before they get it or out the crew basket it is **necessary** the crew basket is attached to the crane. Therefore it is **not allowed** to enter or leave the crew basket without following the rule above.
- Enter or exit at a higher or a lower level than the level of beginning of the proceedings is not allowed (only with added risk analysis of the employer may be deviated from what is mentioned above).



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As long as there hangs a crew basket in the mobile crane the crane driver may not leave the control place of the crane. Simultaneously he may not accomplish other hoisting proceedings with the crane (like for example by a hoisting crane with a 'head- and second lifting device').

Note: By declutching the 'head holst' can be used a second winch with a crew basket. (For example over the auxiliary mast). The main winch should be completely defecated.

- There may not be driven with a mobile crane when there are persons in a crew basket hanging on this crane, unless it's a crane at rails, than only at the slowest speed possible with a max. of 2,5 km/hour.
- Unwanted move possibilities of the crew basket must be prevented. When there exist a connection between the at height hanging crew basket and the ground or another solid object (building, ship, crane etc.), for example by air-hose or an electricity wire, for in the crew basket used tools, must be taken care of the connection, it must be long enough and hanging loose, so the moving of the crew basket will not be impeded or causes dangerous situations for persons in the crew basket.
- During accomplishing proceedings from the crew basket, it must be, if needed- secured against turning away or dodging.
 Therefore should be certain stabilizing lines available in the crew basket. These lines should be stored after use in a special intended facility.

Note: Noted is at the danger of not unloading the stabilizing lines on time. Therefore it's important to fasten de lines in such a way the connection will be broken by sudden hoisting or slacking of the crew basket.

- When there will be accomplished proceedings with risk of fire (like welding), there must be an effective fire extinguisher available in the crew basket. It is recommended not to place gas- and oxygen bottles in the crew basket.
- The loading of the crew basket with persons, hand tools and/or material, the workload of the crew basket may not be exceeded for the
 proceedings which have to be done from the crew basket. The hand tools and/or materials to transfer may not stick out of the crew
 basket. There must be taken into account at least 100 kg per person including hand tools.
- The load of the crew basket, increased with the maximum workload may not amount more than:
 - 75% of the hoisting strain by a permanent placed or at a permanent crane beam raised hoisting crane
 - 25% of the hoisting strain by other cranes.

Electro technical indications:

Provisions must be made for proceedings nearby unprotected power lines under voltage so these proceedings can be performed safely. The manager and/or owner of these lines must give permission, as far as the proceedings will be performed within following zones:

- 50 meter, with high voltage lines and at masts of steel;
- 25 meter, with low voltage lines at masts of wood;
- 5 meter, with contact lines of rail- and tramways, as well as inter alia subway and hoisting

There must be complied to the prescribed in norm **NEN 3140** 'Low voltage installations-Provisions for safe proceedings, inspection and maintenance'.

The use of replaceable electronic material and replaceable ducts must be avoided as much as possible. If not possible, there should be made use of:

- electrical material with built-in power source;
- electrical material that's part of the VZ-keten, see 41 1.1 of **NEN 1010**, or
- electrical material of category 11 which is part of a S-keten (see **NEN 1010**). There may only be one machine connected to this S-keten.

Valid regulations

The valid regulations with regard to the use of a crew basket determined for the transport of persons, mentioned in the ""The Dutch Arbo"", article 7.23, second lid and the 7.23, appendix 1.

Valid regulations with regard to the use of the mobile crane

- Hanging and moving a crew basket with persons in it may only happen with a mobile crane, which complies with the in Holland valid legal provisions. For cranes in use after 1995, the crane must be provided with CE-marking with associated and matching declaration of agreement.
- The use of a holder (crane) with the possibility of a free fall (dropping at a friction brake) is forbidden.
- The hoisting work of a mobile crane used to transfer a crew basket, must have automatic brakes that cannot be turned out.
- The mobile crane must be controlled by a person who is known with the nature of the proceedings and must have a license to drive the mobile crane.
- Immediately prior to the use of a mobile crane for the goal the following must be checked:
 - The state of the hoisting cable, the hook and/or the block, chain work, and strops.



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- Fastening and securing of the hoisting cable to the cable gland/hoisting hook (should be controllable)
- The smooth running of the cable gland in the hoisting block,
- The mass of the crew basket plus the max. workload may not be more than:
 - 75% of the hoisting load by a permanent hoisting crane

OR

- 25% of the hoisting load in other cranes
- The lifting cable must be checked at least every three months or as often as reasonably necessary to ensure a safe use of the hoisting cable. The control of the hoisting cable should be reported in the crane book.
- The stamps must be placed horizontal and stable so the stability is guaranteed enough.
- Additional requirement of the machine guideline enclosure applicable by permanent use:
 - Loading limiter.
 - Steering gear in the crew basket (release button).
 - Design in a way the crew basket cannot fan or capsize.
 - Identifying mark on the crew basket.

Decay warranty

The due term of the warranty is 1 year.

<u>Installation</u>

Instructions and regulations for setting up, assembling and adjusting

Installing, assembling and adjusting should be done by an expert.

Use

Taking info use

There must be made agreements about the way of communication between the user and the crane driver for the taking into use of the crew basket. The way of communication must be effective and the users must be informed about the way of possible communication resources. Before starting the activities all securings and fastenings should be controlled at defects. The crew basket should be fastened at the crane with the enclosed fourleg or another certificated fourleg, with the same specifications.

Instructions for steering and personal protective equipment for the user

Fastening the crew basket to the crane should be done by an expert. Driving the crane should be done by an expert crane driver, who ownes a hoisting licence. Necessary documents should be available in the crane.

Personal protective equipment which should be used during work in the crew basket are: helmet and fall protection. The user should be competent in using this protective equipment.

Required knowledge and skills of the user

The user should be competent in using communication resources. The user should also be expert or be instructed in the use of the personal protective equipment.

Potential dangers for spectators during use

White using the crew basket people should take into account possible falling items and spectators should be informed about the dangers by warning signs at the ground under the crew basket.

Supplementary information

Enclosures to use, equipment

When using the crew basket the added certificated fourleg should be used, of high-quality iron chain. Also should be used verified personal protection equipment, like a helmet and a safetybel.