HANDLING AND STORAGE OF ROAD BARRIER BEAMS 26/03/2024

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HANDLING

- The road barrier beams must be handled using forklifts of suitable capacity; handling must be carried out by adjusting the width of the forks to the maximum allowed.
- Packs of beams must be handled individually, never two or more at a time.
- When handling packs of beams, it is necessary to pay close attention to the fact that the sheets are loose inside
 the pack; no worker must ever be near a pack of beams when it is lifted from the ground or from the floor of
 the means of transport and set in motion.
- When loading the pack of beams onto the forks, it must be positioned centrally to obtain a good balance and avoid the pack itself swaying or overturning.
- When transporting the packs of beams along the transit routes of the yard/construction site, particular attention
 must be paid to the fact that the products are of considerable length and therefore the extreme points of the
 same must always be kept under control to avoid accidental contact with any obstacles.
- Unloading on the construction site can take place either by forklift (see above) or by crane; in this case the packs of beams must be lifted individually using flat belts of identical length to be used in pairs, taking care to position them near the ends of the packaging and checking that the pack is well balanced before lifting it from the box. The straps must be protected at the point of contact with metal or equipped with anti-cut protection.
- If you need to move a pack of beams to collect one or more products, the stability of the pack must be restored before moving it.
- When using a forklift (crane/truck crane on construction site), always check that there are no third parties within the operating range of the vehicle and the maneuvering areas.
- For any ascent/descent from means of transport, use suitable access points or dedicated ladders. It is forbidden to climb on the load positioned on the ground or on the floor of the vehicle.
- Always check the good condition of the vehicles, any accessories used (e.g. lifting accessories), materials (pallets, wooden beams) and support surfaces (particularly on construction sites).
- Pay attention to the possible presence of electricity lines/other services (construction site, use of cranes/truck cranes).
- Pay attention when removing straps/packaging where present (possible projection of materials) and the possible presence of nails or sharp parts (e.g. splinters of wood).
- During transport by vehicle/road, the transporter must check the load before departure to ensure that the
 material is stable and there is no risk of loss of parts of the load/objects during transport.



STORAGE

- Always check that the storage area is flat and sufficiently solid to support the packs of beams to be stored.
- The packs of beams must be positioned by interposing a wooden spacer in order to avoid damage to the galvanization at the contact points and to facilitate gripping.
- The packs of beams can be stacked on top of each other in a maximum number of 2 (40 pieces) or 4 (20 pieces); in any case, when stacking packages, the total height must be limited to a maximum of m. 1.80.
- When positioning a pack of beams on top of the previous one, particular attention must be paid to the stability
 of the positioning, making sure that the upper pack cannot swing or move once placed.
- The packs of beams must always be positioned with the longer side perpendicular to the direction of
 installation/removal. A pedestrian access space can be provided between the rows of packages along their
 shortest side (approximately 60 cm). It is not permitted to leave access space between packages along the
 longest side of the beams package.









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RISK ASSESSMENT AND CLASSIFICATION

DESCRIPTION	LEVEL OF PROBABILITY	AMOUNT OF DAMAGE	CLASS
o Crushing due to falling load	Possible	Serious	Remarkable
Overturning/overturning of the mobile crane	Possible	Serious	Remarkable
 Load falling due to breakage of the crane rope 	Possible	Serious	Remarkable
 Electrocution (work near power lines) 	Possible	Serious	Remarkable
o Collision of things or people	Probable	Significant	Remarkable
Accidents with other vehicles	Probable	Significant	Remarkable

PPE

Depending on the risks highlighted, the following PPE are required (non-exhaustive list, see also specific training/instructions of the Employer, the description and regulatory references of which are given:

HIGHLIGHTED RISKS	PPE	DESCRIPTION
Falling materials	Protective Helmet (crane/truck crane use)	Device useful for protecting the worker from the risk of injury to the head due to falling material from above or in any case due to contact with dangerous elements
Dust and debris during processing	Protective suit	To be used in workplaces characterized by the presence of materials and/or tools that can cause abrasion/cutting/drilling
Shocks, blows, impacts and compressions	Safety shoes	Reinforced steel toe cap against crushing/abrasions/punctures/injuries of the lower limbs and non-slip sole to protect the ankle from sprains
Injuries due to contact with moving parts during work	Split leather gloves	To be used in workplaces characterized by the presence of materials and/or tools that can cause abrasion/cutting/hand drilling
Collision	Vest HV	Wear the HV vest (or clothing) during loading/unloading and handling activities on the yard or on construction sites

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TRAINING

For loading/unloading and handling activities, operators must be adequately trained.

The minimum training includes:

- basic/specific worker training
- forklift use training
- crane operator training (where applicable construction site)
- training in slinging/lifting and load handling

The operator need fit for duty according to specific task.

Further training may be necessary depending on the activities and working conditions (example: construction site) and must be provided by the employer/company (example: subcontractors, transporters).

* For "PPE" and "TRAINING", check further requirements need according to local regulations.

STANDARD PACKAGING REQUIREMENTS

(NOTE FOR SUPPLIER)

- Where applicable, use europallet type pallets.
- Where applicable, use plastic straps (no metal).
- Where applicable (e.g. for small components) use of extensible straps, apply the straps first and then the extensible strap.
- All the material (pallets, beams, straps...) must be suitable and in good condition.
- If material is received for subsequent processing (e.g. galvanizing), the material must be returned with the same packaging.
- If the material received is expected to be shipped to the construction site (in quantities different from what was received), keep the packaging type/materials as described.

For the handling and storage of road barrier beams, there are packages of 18 to 20 pieces for a total maximum of 2 tons. For further information, also refer to the transport documents, Installation Manual and commercial communications.