

HANDLING

- Road barrier upper beams must be moved using forklifts of suitable capacity; handling must be carried out by adjusting the width of the forks to the maximum allowed.
- Before handling the bundles of upper beams, it is necessary to check the integrity of the packaging; if you find one or more straps failing, restore the packaging before lifting the package.
- Packs of upper beams must be handled individually, never two or more at a time; no worker must ever be near a package of upper beams when it is lifted from the ground or from the floor of the means of transport and set in motion.
- When loading the package of upper beams onto the forks, it must be positioned centrally to obtain a good balance and avoid the package itself swaying or overturning.
- When transporting the bundles of upper beams along the transit routes of the yard, 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 site can take place either by forklift (see above) or by crane; in this case the packs of upper 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 an already open pack of upper beams to collect one or more products, you must restore the binding of the pack before lifting 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.
- Pay attention when removing straps/packaging (possible falling material, projection of materials) and the possible presence of nails or sharp parts (e.g. splinters of wood).

STORAGE

- Always check that the storage area is flat and sufficiently solid to support the packs of upper beams to be stored.
- The packs of upper beams must be positioned by interposing a wooden spacer in order to avoid damage to the galvanizing at the contact points and to facilitate gripping.
- The bundles of upper beams can be stacked one on top of the other in a maximum number of 3; in any case, when stacking packages, the total height must be limited to a maximum of m. 1.80.
- When positioning a pack of upper 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 bundles of upper beams must always be positioned with the longer side perpendicular to the installation/removal direction. 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 upper beams package.








RISK ASSESSMENT AND CLASSIFICATION

DESCRIPTION	LEVEL OF PROBABILITY	AMOUNT OF DAMAGE	CLASS
○ 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
○ 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

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, upper 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 upper upper beams, there are packages of 20 to 28 pieces for a maximum total of 2 tons. For further information, also refer to the transport documents, Installation Manual and commercial communications.