

HANDLING

- The plates for culverts, flat or curved, must be moved using forklifts of suitable capacity; handling must be carried out by adjusting the width of the forks to at least 3/4 of the width of the plates themselves.
- Packs of plates must be handled individually, never two or more at a time.
- When handling the plates, you must pay close attention to the fact that they are loose inside the package; no worker must ever be near a pack of sheet metal when it is lifted from the ground or from the floor of the means of transport and set in motion.
- When loading on the forks, the plates must be positioned centrally to obtain a good balance and avoid swaying or overturning of the package itself.
- Unloading on the construction site can take place either by forklift (see above) or by crane; in this case the packs of plates 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 plates 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.

STORAGE

- Always check that the storage area is flat and sufficiently solid to support the packs of plates to be stored.
- The plates for culverts must always be positioned with the convexity upwards, to avoid swinging and the possibility of hitting the upper edges.
- The packs of plates 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 plates can be stacked either one on top of the other or in a pyramid; the number of stackable packages depends on the curvature radius: the wider it is, the greater the number of stackable packages (see example photos).
- When stacking multiple packages, the total height must be limited to a maximum of m. 1.50.
- The packs of plates must always be positioned with the curved side perpendicular to the direction of installation/removal. A pedestrian access space can be provided between the rows of parcels along their straight side (approximately 60 cm). It is not permitted to leave access space between packages along the curved side of the plates.






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, 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.