

## Safety Alert 12: Moulds falling over in a stacking rack

## **Accident sequence (occurred abroad)**

Wall panel moulds (2 m x 6 m x 0.20 m, weight ca. 600 kg) were stored in vertical position between metal bars. There were two support bars on both sides of the mould. The support bar is shown in the photo.

The employee operated the crane with a remote control to transfer a scoop filled with concrete (bottom photo). As he moved the scoop over the panel moulds, the scoop hit the top of the support bars causing the moulds to fall over, crushing the employee between the falling moulds and a smaller, but heavier mould indicated with a circle.

Two employees working nearby managed to release the employee trapped under the moulds in about 5 minutes. He was taken to hospital, but died there a little later.





## **Corrective actions**

- The suitability of the support system used to secure panels of this size shall be assessed.
- Although this storage method is not used in Finland, a similar incident could occur if wall panels stored in a stacking rack are hit with a crane.
- In the stacking rack storage method used in Finland, it could be justifiable to use sturdier, fixed pins at suitable distances, for example welded U profiles as shown in the photo, which are capable of stopping the panels from falling against each other.
- Crane operators using remote control should stay at an adequate distance from the route of the crane and the loading/unloading area.
- The work area should be arranged so that the load can be transferred along a route free from obstacles.

