



Construction Bulletin



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Concrete Cutting Safety

- How well are you managing health and safety in this industry?
- How well are you training your concrete saw operators?
- Why do accidents occur in this industry?

OSH is concerned that this is a high risk activity, which has had some horrendous accidents in the past.

Without paying particular attention to the training of operators and identifying all the hazards of the job and implementing systems to manage those hazards, these accidents will continue, *at your peril*.

Health and safety is a matter of life and death.

Training may well be necessary for the employer as well as the staff.

There was an horrific accident where the employer was cutting a panel out of a concrete wall. This wall was solid fill, 200 mm concrete block. The panel to be removed was about 800 x 800 mm. He cut from the inside, leaving a small portion uncut towards the bottom on both sides. He then went to the outside of the wall to complete the task. He was down on one knee as he cut, but he had not installed wedges or used any other method of holding the panel secure. One side of the panel dropped, the saw kicked back and the revolving blade struck the operator across the throat and upper chest.

He did not go home to his family that night.

If that panel had been secured with wooden wedges at the sides, top and bottom, a task that

would have taken about 60 seconds, this very sad accident, which left a wife without a husband and children without a father, would not have occurred.

No job is worth dying for.

The victim was the employer, but was he properly trained in the safe use of these potentially dangerous machines, or was he well trained but in too much of a hurry to take the necessary steps to ensure his own safety?

The employer has a duty to ensure his/her own safety and to ensure that employees are trained and competent in the safe use of all equipment and safety gear and processes that are necessary to complete the job safely.

Training should include the precautions necessary to ensure safety in confined spaces. The appropriate machine to use, and the correct respiratory protection to use. Training in the correct use and maintenance of respirators is also important. Working in confined space situations can be extremely hazardous and must be properly planned and all hazards guarded against.

The following story relates what can happen when using petrol-driven saws in unventilated confined spaces:

An employee was required to cut a concrete floor inside a building. He identified that there could be a problem from the dust and carbon monoxide fumes so he bought a respirator to protect himself from the "dust and stuff".

The respirator he purchased was suitable for asbestos but not for fumes.

Two other workers walked passed and saw him lying unconscious on the floor. He was fortunate to only end up in hospital with carbon monoxide poisoning. He could so easily have died.

Fire should not be overlooked as a hazard as there is no doubt the consequences of this are very real.

Take the case of the poor workman who was cutting concrete above his head. Petrol dripped down onto him saturating his overalls and clothes.

The operator apparently chose not to turn on the water supply as he would get wet from the water dripping down.

The task proceeded uneventfully until the blade struck some steel in the concrete.

The resultant sparks ignited the fumes which created an explosion and the clothing of the operator caught fire.

He became a ball of fire and he sustained serious burns to a large percentage of his body.

- Was he using the correct type of saw for this operation? If he had used a hydraulic saw, this accident would not have happened.
- Was he using the saw correctly?
- Was the saw properly maintained?
- We know that the operator had filled the petrol tank but was the filler cap securely tightened?
- Why was the water not running on the blade? If he had used water and tightened the petrol cap this accident should not have happened.

This horrific accident was preventable and this man did not have to get seriously burnt.

Training of staff is of the utmost importance as good comprehensive training will reduce the number and severity of accidents.

There was an horrific accident which occurred on a commercial site when a company was involved in the removal of a section of a concrete wall. The wall had been cut up both sides and across the top. The bottom had been broken out so that the alternative reinforcing rods could be cut with a disk grinder. This was to allow the wall section to be dropped and broken up on the floor.

During the cutting of the rods, the 4 tonne wall began to fall striking the worker who was unable to run to safety in time. The wall crushed his lower body.

He did not go home to his family that night.

- Why was this section of wall not secured with wedges or braces, to safely hold it in place during the cutting?
- Why was he cutting from the felling side of the wall?
- Why was he in a situation where the path to safety was compromised?
- Why was proper planning of the job not carried out?

No job is worth dying for.

Train to think “safety”.