

Safety and health alert

01/01 Concrete cutting saw causes death

Incident

In September 2000 a 39-year-old stonemason died from injuries received while operating a concrete cutting saw.

The stonemason was cutting a concrete pipe which was on the ground and as the saw cut through the pipe a flange at one end of the pipe caused the cut to pinch on the rotating blade. Reactive forces (usually known as kickback) immediately pushed the saw up and back towards the operator with great force in a rotational motion striking him.

Factors

- The concrete pipe was on the ground necessitating the operator to bend or squat down towards the pipe.
- The surface of the ground consisted of loose gravel and was on a slight slope and the pipe was chocked with an orange cone or witches hat to prevent it rolling.
- The flange caused the pipe to be raised at one end, as the cutting proceeded a pinching effect was created on the saw blade.
- Reactive forces are exerted in a direction opposite to the direction in which the cutting blade is moving; in this case the saw blade came back towards a bending or squatting operator with force giving him little chance of controlling the saw.

Recommendations

1. Where practicable eliminate the risk, that is replace the system of work with something safer, using a frame or track to hold the saw, order pipes to size required, use an alternate power source eg hydraulics.
2. If the risk cannot be eliminated, use personal protective equipment and adopt a safe system of work where the task is constantly re-evaluated.
3. Never use a saw on an unstable or loose surface.
4. Operators need to be aware of reactive forces that may occur instantly and with great force resulting in operators losing control of the machine.
5. Operators hands should be at waist height when cutting horizontally; and between shoulder and knee height when cutting vertically, operating outside these limits will create a danger of injury to the operator.
6. Guarding should not be removed.
7. Operators should not work alone.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

