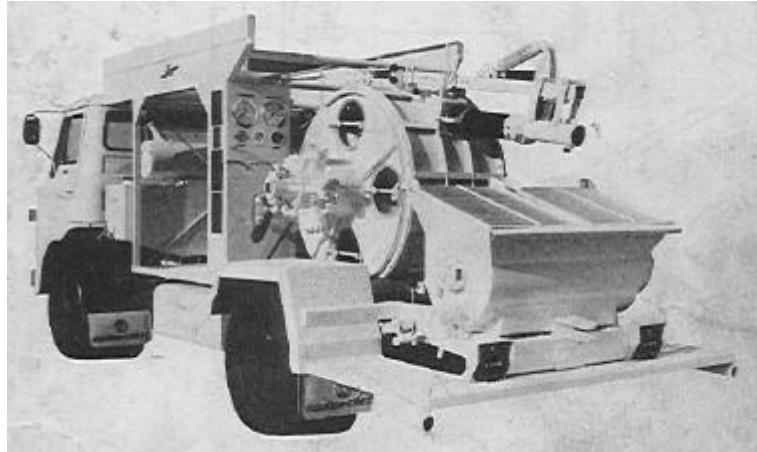


No. 15, July 2000

Concrete Pumping Accident

A worker suffered horrific injuries when his left hand was caught in the internal mechanism of a “Squeeze-Crete” type concrete pump. He was applying dry cement to the pumping tube so that it would provide better grip for the rollers when he accidentally bumped the pump control lever. This set the pump rotating and his arm was caught. He suffered a degloving injury where the skin from his elbow to his fingers was peeled back. His thumb and two fingers were also amputated.



“A Squeeze-Crete -type concrete pump similar to that involved in this particular accident.”

The manufacturer of “Squeeze-Crete” pumps recommends the application of dry cement on the pumping tube in its workshop manual. While it may be an acceptable maintenance task, the power controls to the pump must be isolated to ensure the operator is safe while he carries this out. One method of doing this is to have the access covers on the pump interlocked with the power supply. This means that once the covers are removed to gain access, the power supply is interrupted. If it were not practicable to fit an interlocking system, then a manual isolation procedure would need to be introduced. The requirements for a manual isolation procedure are set out in Regulation 17 of the Health and Safety in Employment Regulations 1995.

Another issue identified with concrete pumps is the size of the grating on the top of the concrete hopper. OSH recognises the minimum standard as set out in the Australian Standard AS 1418 – 1994 *Cranes (including hoists and winches)* –

concrete placing equipment. This allows for the grating bars to be no further apart than 75 mm and the distance from the top surface of the grating to any moving part shall be at least 100 mm. This Standard also requires the grating to be fully interlocked so the agitator can not be put in motion unless the grating is in the fully closed position.

AS 2550.15-1994 *Cranes – safe use of – concrete placing equipment*, details how the employers of concrete pump operators can set up a scheme to train operators to use, maintain, and clean concrete pumps safely. Applying AS 2550.15-1994 would be one way that an employer could meet his or her obligations under the Health and Safety in Employment Act 1992 and the Health and Safety in Employment Regulations 1995.

For further information, contact your local OSH branch or Christchurch North Branch.

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