

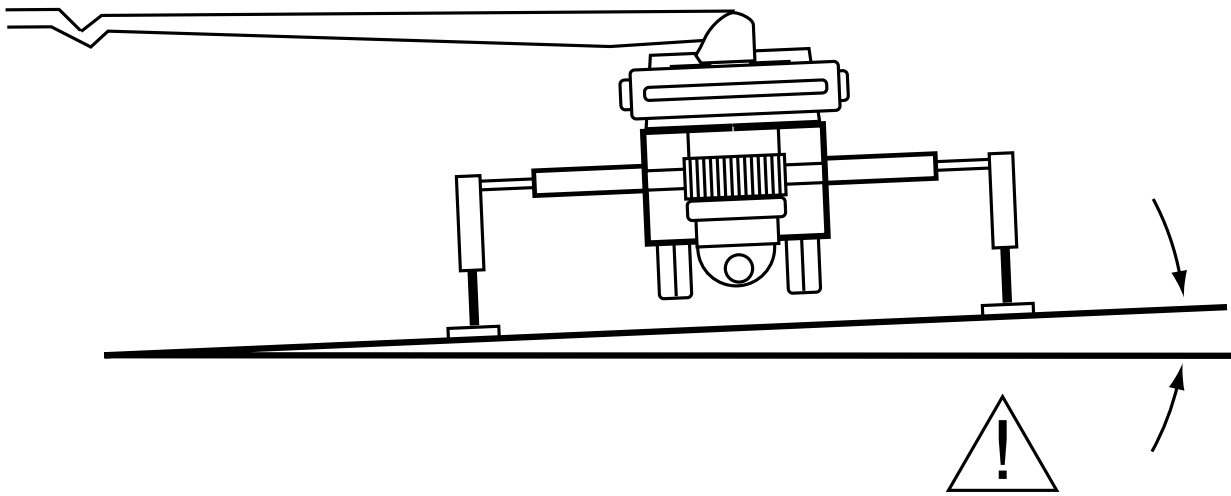
No job is more important.



Safety Alert

Nº.7 1999

Concrete Pump Overturns - Worker Breaks Ankle



A truck-mounted concrete pump was set up on a sloping (approximately 15o) work site. Timber packing was placed under the outriggers to level the unit. The timber packing under one of the outriggers moved after a short period of pumping and this, coupled with the fact that the pump boom was fully extended, caused the unit to overturn. A worker was hit by the pump boom and his ankle was broken.

Contributing Factors

An investigation into this accident revealed:

- The gradient of the work site was too great for the truck-mounted concrete pump.
- The vibration of the unit caused the timber packing to move from underneath an outrigger.

Recommendations

When setting-up a concrete pump, the ground should be level, well compacted and free of obstructions.

- Ensure the pump is not positioned over or adjacent to:
 - (i) previously disturbed ground that has been back-filled,
 - (ii) excavations, trenches or holes in the ground,
 - (iii) cellars, basements or pits, or
 - (iv) inadequately compacted or soft ground.

- Make sure the pump unit is set up level but if this cannot be achieved ensure:
 - (i) the incline or angle of the machine does not exceed the manufacturer's recommendations (refer to operating instruction manual),
 - (ii) adequate timber is supplied for the purpose of packing the outriggers' base plates. The timber should be pigstayed and capable of supporting the machine, and
 - (iii) the outrigger pads are clear of excavations, soft or filled ground, or other obstacles that could interfere with the safe operation of the machine. If the ground is not firm, the operator should make sure that the bearing pressure of the ground is not exceeded by the bearing pressure exerted by any outrigger.
- Particular care should be taken when a concrete pump is used in the vicinity of an excavation. The weight of the concrete pump and the load can impact on the stability of the excavation wall and cause a slip which could lead to the concrete pump overturning.

If you would like further information contact Workplace Standards Tasmania on:
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