

SAFETY ALERT (07/06/05)

USE OF CONCRETE PUMPS/RISK FROM BLOCKAGES



BACKGROUND:

The Injured Person fell off the above shuttering, **height of shutter only 800mm**, after the concrete pump delivery hose he was holding kicked due to an 'undetected' blockage, causing him to lose his balance and fall.

The I.P fell back onto the Multiform Tie-rod (the angled t-shaped bar with a yellow mushroom cap on it) and then scraped his head on a locking pin at the base of one of the push-pull props.

INJURIES:

The Injured Person received **26no. stitches** to the right side of his head and ear & severe bruising to his mid lower back. **Please Note: the round shaped bruise in the centre of the back was caused when the I.P fell onto the Multiform Tie-rod. This mushroom cap probably prevented him being impaled on the tie-rod!**

RECOMMENDATIONS:

The following 'basic' recommendations are advised when using concrete pumps:-

1. Can another, perhaps less hazardous, method of transferring concrete to the place of work be utilised? If Not,
2. Ensure the concrete mix design is suitable for pumping through the pipeline. Stiffer concrete needs more pressure to pump through the system, for example.
3. Many of the Pumps are now operated remotely therefore it is important that the concrete mixer truck driver is aware of the need to maintain a steady flow of concrete into the pump hopper & avoid the hopper becoming too low thus allowing potential air locks, debris etc entering the system and increasing the likelihood of a blockage.
4. Monitor closely the timings between loads. Pump Supplier's Procedures specify precautions to avoid the concrete becoming too stiff in the hopper and pipeline, i.e. this particular supplier specifies that if there is a delay of 30 minutes between loads the concrete MUST be re-circulated.
5. Ensure Operatives at the concrete delivery end stand clear of the delivery hose at the start of each pour until the concrete is flowing freely. This period is when most blockages occur.
6. Ensure a safe working platform is available for ALL operatives to work from, including the operative holding the delivery hose. Additional edge protection may be necessary dependant on the particular circumstances.
7. Ensure ALL those involved in the use of concrete pumps are aware of the additional risks imposed by the use of a concrete pump, in particular the risk of blockages and the need for a safe working platform to work from. The relevant risk assessment/method statement must be clear and concise in this respect.
8. Ensure Mushroom Caps ARE fitted to any tie-rods, re-bar etc where there is a potential for someone to fall onto them.

This accident highlights why the New Work at Height Regulations 2005 have revoked the '2m Rule' as it highlights the severity of a fall of substantially less than 2m and the potential for a far worse outcome.