

Safety Alert 017 Excavator Crush



Groundworker trapped by excavator.

An incident occurred recently within one of our group companies where a groundworker was trapped between the bucket and the track of a 35 tonne excavator. The operative was trapped just below the left knee, and tragically after multiple operations had to have his lower left leg amputated.



The ensuing investigation highlighted a number of factors which came together to cause this tragic incident.

The principal causal factor was when the plant driver was climbing back into his cab following a conversation with the injured person, his coat snagged the slew/dipper arm control, and without realising that his coat was caught, he activated the “dead mans handle”. The excavator was ‘ticking over’ in idle mode, as he climbed in but the machine was set in ‘high revs’. This deactivation of the safety device caused the machine bucket to travel at high speed in the direction dictated by the snagged control lever.

At that very moment the IP was walking between the bucket and track of the machine. This was so he could continue a conversation with a third party who had arrived at the scene just before the incident, he became trapped between the bucket and the track.

The investigation following the accident has discovered that this incident is not a “one off” event, as it was discovered that a least 5 other events of this

nature have occurred in the last year in the wider construction industry. In the previous incidents, no injuries had been reported.

Learning Points

- Plant must be turned off when the operator exits the cab.
- Managers of plant operations should review the start up procedures of plant items, in particular, thought should be given to a methodical approach to the start up of plant, this will allow the operator time to ensure the hazard area of the plant is clear of persons on the ground. Engaging 'low revs' would be part of this process.
- Segregation of all pedestrians and plant must be reviewed.
- Projects should review the type of PPE issued to plant operators.
- Tool Box Talks, task briefings, STARRT talks or any work related conversations should be undertaken away from plant items in a safe place.
- An incident briefing about this accident should be delivered to all operatives on VINCI projects, particular notice should be given to the obvious hazards when working in the slew area of any plant item. Further direction should be given as to the method of approaching working plant items, this should focus on getting the attention of the operator and only approaching when the operator indicates it is safe to do so.
- The need to report near misses should be reinforced, unfortunately until the investigation started to look at the wider industry, the previous incidents were not common knowledge. Had a robust, industry wide, near miss reporting procedure been in place this incident may have been avoided.