



# Safety Alert

## High Potential Near Miss - failure of a concrete floor saw

13 September 2019

The following pages of this safety alert were issued by  
Highways England's supply chain partner:

**Woodrow Vinci JV**  
**working on**  
**the M20 Junction 10A Major Project**

# HiPO involving concrete floor saw - Update

September 2019

A high potential incident occurred on one of our projects recently whereby a 1200mm diameter blade of a concrete floor saw became detached from the machine during use. Following on from the previous initial interim alert, the investigation has identified the following key factors that combined to cause the incident:

- **Habitual use of the emergency stop button.** This can cause additional stress on parts of the saw – in this instance a locating dowel pin on the flange plate. This meant that blade could rotate on the shaft during operation which potentially loosened the bolt.
- **The wrong length bolt and wrong washer.** The bolt was 13mm too long, and a standard flat washer was used (instead of a 5.5mm thicker version). This arrangement contributed to the bolt coming loose.
- **Missing latch plate.** This would have prevented the bolt from coming out of the shaft and hence would have held the blade within the machine guard when the bolt came loose.
- **Travelling with the saw in gear, and not in neutral.** This meant that once the bolt had come free from the shaft, the blade was rotating at significant speed when travelling out of the cut.



Bolt being used was 13mm too long and had a standard washer instead of a 5.5mm thick one



Saw in use with latch plate missing



Saw with latch plate correctly in position

## Immediate Actions

- Ensure that all operators are familiar with the exact type and model of equipment they are using - ask for evidence of familiarisation training, and ensure that they have a copy of the correct operators manual to hand from the manufacturer
- Ensure that RAMS include key safety features of the particular equipment, including the use of latch plates (as required for the particular model of saw)
- Ensure that daily checks are carried out against a checklist from the correct operators manual, and that these checks are recorded along with details of any faults or missing/wrong parts. Check that the correct bolts and washers are used to retain the blade.
- Ensure that the machine emergency stop is not used to stop the machine in normal conditions
- Ensure that these saws are placed in neutral and not in gear with the blade moving whenever travelling with them