

Fatal 5 - Failure of wire rope on rising skip

WHAT HAPPENED

During the normal operation of the casting skip, the skip had begun its ascent. During its climb, the slack wire rope switch triggered and sounded. At this point the rope snapped on both sides and the skip fell to the bottom of the pit. It is not known whether the skip had reached its full height, however the skip was still full of aggregate so had not got to the stage of emptying.

This caused considerable damage and downtime. Other similar incidents have occurred with processing equipment on different sites over the last 12 months.

Following an investigation, the following points were revealed

- The wire rope had been rubbing on the side of the plates housing the rope and the skip wheels.
- Over a period of time, this could have caused the rope to become damaged, hence both ropes snapping at the same time.
- Ordinarily, the design is such that should one rope fail the other will hold the skip and prevent it falling.



Broken wire



Where the wire rope was rubbing

LEARNING POINTS / ACTIONS TAKEN

- Ensure a robust PPM in place for inspection and replacement of ropes within all types of manufacturing equipment, both for safety of people and production equipment.
- Ensure a Statutory Inspection undertaken for safety critical ropes
- On inspection of the ropes, check for wear due to rubbing and engineer out any problems if identified.
- Ensure a robust lubrication process is in place for ropes and wires



LOCATION:
ACTIVITY:
SUB ACTIVITY:

CONCRETE PRODUCTS PLANT
LIFTING
NO SUB ACTIVITY AVAILABLE

ALERT STATUS: Normal
DATE ISSUED: 01/02/2022 18:46:36
INCIDENT No: 03605