

BEST PRACTICE

LOCATION:
ACTIVITY:
SUB ACTIVITY:
BEST PRACTICE No:
COUNTRY OF ORIGIN:

Concrete products plant
Production and Processing
Concrete products
BP2132

ARTICLE YEAR
COMPANY:
COMPANY LOCATION:
COMPANY TEL:

2022
Forterra
Hoveringham
0000

TITLE

Remote stressing via automated pin locator

ARTICLE

At Forterra's Hoveringham precast site, pre-stressed reinforced concrete beams are produced in cells in a wet cast environment on 70 metre beds. The high tensile 5mm wires are stressed to 23.10KN and then concrete is poured over them to produce the beams.

The wires are stressed using two hydraulic rams controlled by 24V solenoids and valve blocks, at a working pressure of 350 Bar. The hydraulic rams stretch the wires into a tensioned state prior to casting, the stressing head travels out of the frame and the head is retained with steel blocks once the process is complete.

In March 2018, an operative was walking into the north end of the building when a 5mm wire snapped, with sufficient force and energy that the wire struck the operative entering the building.

Following the incident improvements were made in the following: -

- Exclusion Zones
- Audible sounders
- Signage
- Stressing booths

However, Forterra was keen to find a solution that would allow all the operatives to be removed from the shop floor when the bed is being stressed.

Please view the video to see how this was achieved.

ARTICLE IMAGES