

Bill Boley Project Profile: Hope Cement Plant

Total Solutions in Controlled Hydraulic Movement and Jacking

Project Designation/ Location

Construction/dismantling of a temporary bypass chimney stack for the **Hope cement plant**, Peak District, Derbyshire. This was to ensure there was no disruption to production, whilst an internal overhaul was carried out on the 132 metre high main chimney stack.

Client

Zenith Structural Access Ltd



Background

With a history going back more than 80 years, Hope cement plant in Derbyshire is the UK's largest cement plant. It has a capacity of almost 1.5 million tonnes per year, supplying around 15% of the UK's cement. It is now part of the Breedon Group.

Project Challenge

The temporary chimney stack had to be constructed and dismantled in a very confined space, adjacent to the existing main stack. Because of environmental planning constraints, the stack then had to be dismantled within a short time frame after the work on the main chimney had been completed. The temporary stack was constructed in sections by lifting the part finished structure and placing the next section underneath from the bottom.

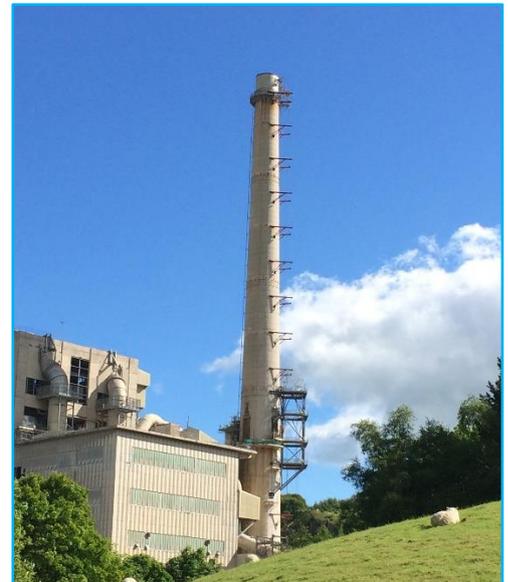
Given the nature of the working environment, health and safety procedures were of paramount importance throughout this complex project.

Bill Boley Solution

**JACK TYPE: 3-Strand CAPACITY: 45 tonnes LIFT: 500 mm
QUANTITY: 2 lifting, 4 lowering**

Bill Boley Ltd has extensive experience in the computer-controlled hydraulic movement of chimney sections and flare-stacks. Working closely with Zenith structural engineers, Bill Boley used specialist triple-strand jacks to lift the new chimney sections. The 45 tonne jacks were mounted at opposite corners of a steel frame structure secured to the main chimney.

In such projects it is essential that the jacks are accurately controlled to ensure perfectly balanced vertical lift and lowering procedures. This is achieved using proprietary computer control techniques. For optimum safety, Bill Boley devised a different lowering/dismantling procedure for the temporary stack, using pairs of strand jacks at the two lifting/lowering points.



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