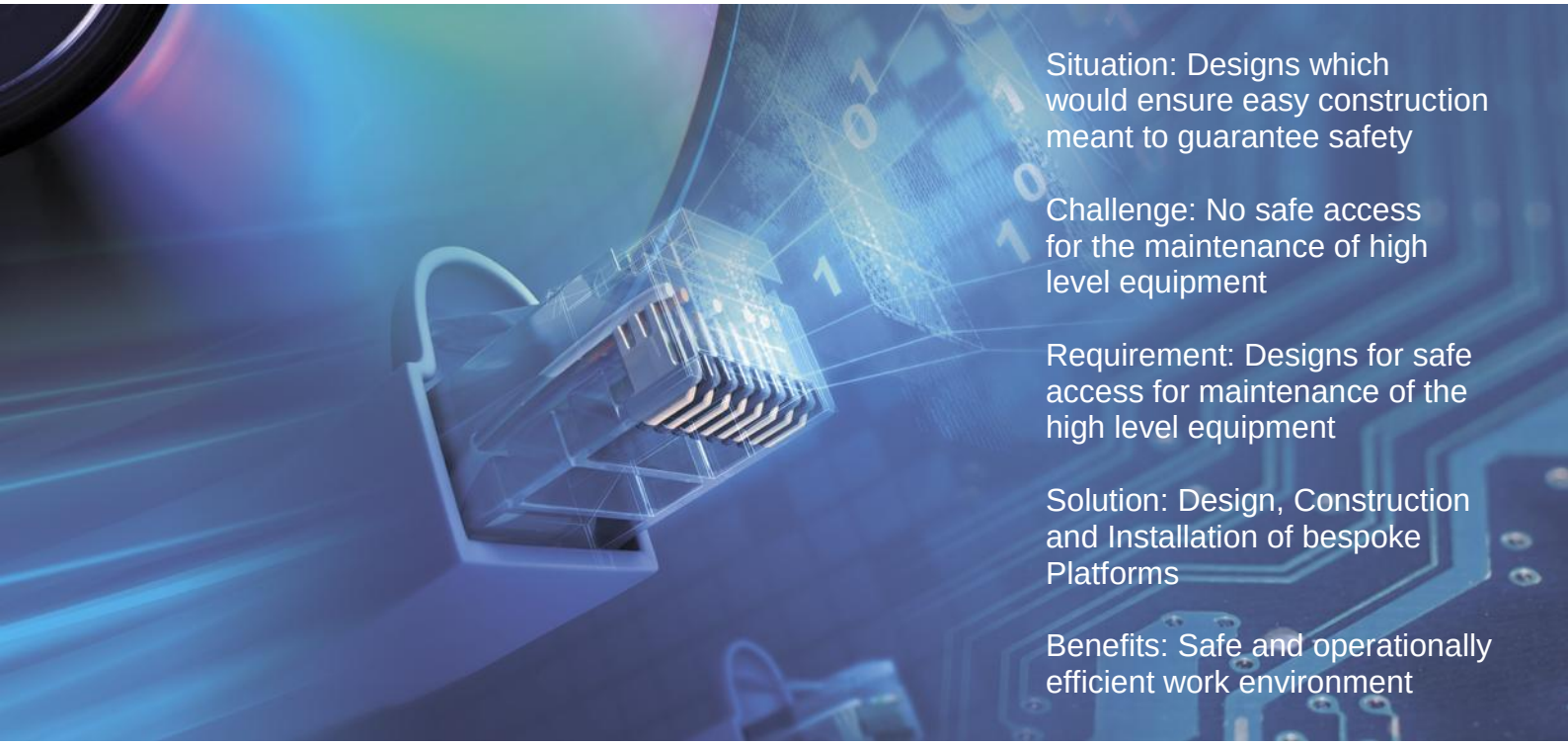
Case Study

Design for “Installation of Platforms Around Machines to Ensure Safety of Employees”

Hanson Building Products provide a safe environment for Engineers to maintain difficult access machinery without disruption to operations



Situation: Designs which would ensure easy construction meant to guarantee safety

Challenge: No safe access for the maintenance of high level equipment

Requirement: Designs for safe access for maintenance of the high level equipment

Solution: Design, Construction and Installation of bespoke Platforms

Benefits: Safe and operationally efficient work environment

Hanson Building Products, which is part of Heidelberg Cement Group, are one of the world’s largest manufacturers of building materials. They are a global market leader in aggregates and a prominent player in the fields of cement, concrete and other downstream activities.

Hanson Building Products uses machine situated many meters off the ground, which automatically packs bricks for dispatch. The machines needed to be maintained, however accessing the high level machine posed a health and safety risk for the maintenance engineers. Hanson needed a solution that would not compromise the everyday working of the machines but still allowed maximum room for maintenance. Bennett Engineering was appointed, in consultation with the maintenance and production teams, to design an outline plan from which the final design emerged for the maintenance of the said machines.

Challenge: High Level machinery needs regular maintenance

Hanson had to carry out periodic maintenance on their high level equipment. They needed a safe means of accessing this high level equipment for maintenance, which would allow minimum disruptions to the everyday working of the machines while allowing maximum room for maintenance.

They therefore needed a design which would allow safe access for maintenance of the machines, without disruptions or slowing down the operations of the machines.

"The Plans and Designs from Bennett have enabled us to construct platforms used in maintenance of high level equipment."

Steven Godfrey - Factory Manager, Hanson Building Products, Desford

"Good Experience, because Project was delivered on time and on Budget"

Steven Godfrey - Factory Manager, Hanson Building Products, Desford

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Requirement: Safe access to machinery

Hanson Building Products therefore needed a detailed design which would reduce risks and provide safe access to the machines. The solution needed to ensure minimum disruption to the everyday working of the machine and Hanson's operations, while allowing sufficient room for maintenance.

Hanson Building Products required detailed designs and drawings to ensure the platforms would allow maintenance of machines without the risk of injury and would conform to the company's safety standards.

Hanson Building Products: *"Restricted access meant that we needed the platforms components to be small enough to be handled safely by two men."*

"We needed them to provide us with detailed drawings and designs to allow installation of platforms on one of our machines."

Steven Godfrey - Factory Manager, Hanson Building Products, Desford

Solution: Bespoke maintenance Platforms

Bennett Engineering provided detailed engineering drawings and designs for Hanson to review. The platforms would be located in close proximity to the packing machinery, providing easy access to the machine and allowing sufficient room for maintenance activities, without affecting machine operations.

A manufacturer was then selected to construct the platforms ensuring that the right material was used. Bennett Engineering managed the process, including designs, drawings, material selection and manufacturing, and supervised the installation.

Hanson: *"We needed designs that would ensure installation of platforms and bring the Project on time and on Budget."*

"The main benefit is improved productivity by ensuring repairs are completed faster and safer."

Steven Godfrey - Factory Manager, Hanson Building Products, Desford

Benefits: A safer, operationally-efficient work environment

The new platforms provide considerable benefit for Hanson Brick. First of all, it provides safe access to the machinery-providing a safer working environment for employees. Furthermore, the company is able to maintain their brick packing machinery without disrupting operations. It allows maintenance operations to be carried out far quicker, reducing downtime, and delivering operational cost and time savings.

- **Safe and easy access to machinery for maintenance**
- **Less operational disruptions**
- **Easier and quicker maintenance activities**
- **Reduced brick packing machine downtime**
- **Operational time and cost savings.**

Outcome: Faster and more efficient machinery maintenance

Based on a three dimension model discussed with the manufacturer, a complete set of platforms have now been installed, which can be operated on safely in a cost effective manner. This has provided a safe and friendly working environment for all employees. Since output depends on reliability of machines, the designs allowed maintenance and use of machine more reliably.

About Bennett Engineering:

Bennett Engineering Design Solutions specialise in providing a comprehensive package from research through to design, development and delivery of unique products.

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