



# SIKA AT WORK

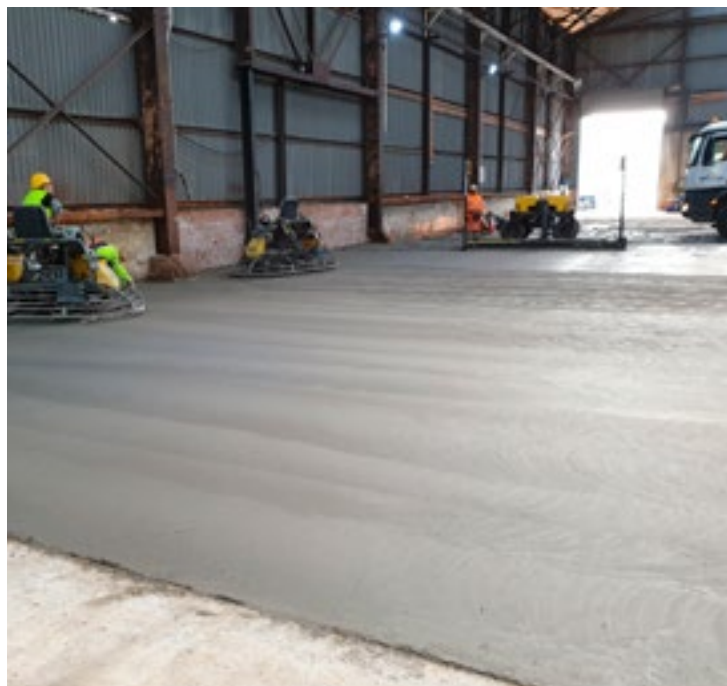
## IMMINGHAM DOCK, NEAR GRIMSBY

CONCRETE: SikaFume®-50 S

BUILDING TRUST



# IMMINGHAM DOCK NEAR GRIMSBY



## NEW GRAIN STORAGE BARN FOR FAMILY OWNED FARM

### The Project

After the existing concrete slab failed in the shed bagging area, a fertiliser storage facility at Immingham Dock needed a new solid floorplate ...and quick!

Located at a major east coast port, the facility has been used for bulk storage for the last 50 years, handling thousands of bags of fertiliser each year.

With nine different ranges, the storerooms house a large amount of liquid nitrogen and sulphur fertilisers available to purchase by customers across the globe.

### Project Requirements

Following the failure of the existing floorplate, around 900m<sup>2</sup> needed covering with a new chemically-resistant internal slab. With a requirement to support the large quantity of fertiliser passing through, the slab needed to be solid, reliable and durable.

As the facility is in operation for more than ten hours a day the solution needed to provide minimal disruption. In order to mitigate the impact, specialists BCJ Construction were appointed.

### The Solution

The concrete needed to withstand the weight and strength of the fertiliser, which can include nitrogen and sulphur. Thanks to its highly reactive pozzolanic materials and stabilisers, SikaFume<sup>®</sup>-50 S was specified for the project.

SikaFume<sup>®</sup>-50 S is a concrete additive in liquid form, based on silica fume technology. When added to concrete it changes the rheology and reacts with the cement hydration products to dramatically improve concrete strength and durability.

Microsilica concrete has a much higher chemical resistance when compared to Portland Cement, which helps slow down the corrosion rate too.

Sika delivered 10,000 litres of SikaFume<sup>®</sup>-50 S directly to Breedon's concrete plant in Grimsby, minimising any disturbance to the client's site.

The ultra high-performance concrete is perfect for chemical resistance as the low penetrability provides protection against sulphates. The material, totalling 170m<sup>3</sup>, was delivered in a single pour meaning the project could be completed in record time.

Ian Oliver, director at BCJ Construction, said: "We were delighted with the results. With Sika, you know that you are getting a high-quality product which does what it says on the label. Sika are our go-to suppliers for this kind of project as they offer the specialised solutions required and the technical support to go with that."

For further information call 0800 292 2572.



### SIKA LIMITED

Head Office  
Watchmead  
Welwyn Garden City  
Hertfordshire, AL7 1BQ  
United Kingdom

### Contact

Phone +44 1 707 394444  
Fax +44 1 707 329129  
Email enquiries@uk.sika.com  
www.sika.co.uk  
@SikaLimited

**BUILDING TRUST**

