



## Shotcrete Repair to Headstock Beams - Siam Seaport, Au Udom, Thailand.

Hammersmith were involved in the development of a concrete repair solution for the Approach Bridge Headstocks at Siam Seaport's Au Udom facility for almost two years prior to the award of this project, working closely with the clients Engineer, Messrs. Sindu Maunsell Consulting and specialist material supplier Sika (Thailand) Ltd.

The primary mode of deterioration was considered to be "*crack propagation due to torsion fatigue of the cover concrete*" requiring that the headstock repair material incorporate 1% by volume High Performance Polypropylene Fibers of a length not less than 50 mm.

Hammersmith sourced and imported the required fiber and, based on the small volume of material to be "shot" at each repair location, proposed the use of a small volume wet shotcrete process machine.

An Allentown POWERCRETER Magnum was subsequently imported specifically for this repair project allowing on site batching of the HPP fibers and pre-bagged repair mortar.



**"SPECIALIST SOLUTIONS  
FOR THE  
CONSTRUCTION INDUSTRY"**

HAMMERSMITH LIMITED

38/1 Soi Naphasap Yak 1 Sukhumvit Soi 36,  
Klongtoey, Bangkok 10110 THAILAND

Phone: (662) 661 5962/3

Fax: (662) 661 5986

Email: email@hammersmithgroup.com

Web: www.hammersmithgroup.com

### PROJECT DETAILS

Project Title

Shotcrete Repairs to Headstock Beams

Client

Siam Seaport Co., Ltd.

Details

Phase one of a four year project to carry out concrete repairs to 96 No headstock beams, including the fabrication of two 94m long, 160 ton, mobile headstock isolation truss bridges, and the placement of 1500 tons of HPP fiber reinforced shotcrete

# PROJECT REFERENCE



# HAMMERSMITH

## Shotcrete Repair to Headstock Beams - Siam Seaport, Au Udom, Thailand.



### HAMMERSMITH LIMITED

38/1 Soi Naphasap Yak 1 Sukhumvit Soi 36,  
Klongtoey, Bangkok 10110 THAILAND

Phone: (662) 661 5962/3

Fax: (662) 661 5986

Email: [email@hammersmithgroup.com](mailto:email@hammersmithgroup.com)

Web: [www.hammersmithgroup.com](http://www.hammersmithgroup.com)