

THE HISTORY OF SS GREAT BRITAIN AND ITS RECENT REFURBISHMENT

David Beattie, Director, Arup (Bristol)

Dave Beattie of Arup, Bristol talked to the society about Isambard Kingdom Brunel and the restoration of his second ship, the S. S. Great Britain. He drew parallels between Brunel and Ove Arup, founder of his company; both the product of a classical education, both educated abroad, both the children of foreign parents but more significantly both designing beyond established codes of practice. Brunel with the world's largest ships of their type and Arup with buildings like the Sydney Opera House.

The Great Britain, launched in Bristol in 1843 initially started on the trans Atlantic route including its grounding in Dundrum Bay prior to being saved from loss by Brunel himself, then many years on emigration trips to Australia before becoming a storage hulk in the Falklands in the late 1880s, from where she was famously recovered in 1970 for restoration.

The constant exposure to salt during 150 years, has caused major corrosion below the water line and it has been decided the only solution to save the ship is to reduce the humidity around the hull. It was decided to construct a seal, in the form of a laminated glass platform, with glass supporting beams, between the listed monument dock and the frail hull to allow this to happen. To improve the visual effect this platform supports 50 mm of water, weighing of over 50 tonnes, to create the effect of the ship floating. The ship grows and shrinks with temperature so the final seal is made by sticking a hypalon membrane to the iron hull.

The expectation is that this will preserve the hull for a further 50 years.

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