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NEWS STORY

TENSION SYSTEM COMPONENTS FOR TYNE SOUTH PIER LIGHTHOUSE

Brooks Forgings was approached to manufacture and supply a new roof tensioning system for the iconic lighthouse at the end of the River Tyne South Pier in South Shields.

In October 2023, following Storm Babet, the lighthouse and the surrounding pier suffered severe damage. The combination of strong winds and high waves resulted in the lighthouse's iconic white and red roof/dome being torn off and lost at sea.

As the pier and lighthouse are Grade II listed, repairs must adhere closely to the original design and construction. However, the use of modern materials was permitted to minimise future storm damage.

Six sets were supplied, each including two clevis ends with lock nuts, clevis pins, and tie bar.

The tension systems were supplied with six fabricated brackets in stainless steel.

The roof/dome of the lighthouse was originally secured with six sets of tensioning bars made of mild steel. The project engineers determined that switching to stainless steel components would provide greater corrosion resistance and offer a safer, long-term solution.

The machined clevis ends in stainless steel.

The tension system secures the lighthouse roof in position.

Digital illustration of the iconic lighthouse at River Tyne South Pier.

Brooks Forgings manufactured the tension system components and supporting bracketry using 316 (A4) stainless steel. Each set is M20 in size, spanning 2644mm, consisting of two clevis ends with lock nuts, clevis pins, and a tie bar measuring 2500mm in length.

If you are working on a pier or lighthouse project that requires new components, please reach out to our team. We will be glad to assist you further.

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