

## Limited Mounting Space

Berth 1, Port of Sheerness, United Kingdom



**Application**  
General Cargo Terminals

**Type**  
Pile Fenders

**Date** 2024

**Reference** 0260

## A CLOSER LOOK AT THE CASE

Steeped in history, the Port of Sheerness is part of the London Medway cluster operated by Peel Ports. Located at the mouth of the Thames Estuary, it offers seamless access to London and Northern Europe and handle a variety of cargo, including automotive, steel, timber, and RoRo. The port, constructed in the early 19th century, **continued evolving and unlocked opportunities to accommodate larger vessels and strengthen its role** as a leading logistics hub.

As part of the ongoing improvements, GPS Mac undertook the refurbishment of Berth No. 1, where the **existing fender systems had become inadequate** for the larger RoRo vessels docking at the berth. Selected for this upgrading project, ShibataFenderTeam designed and delivered a custom solution consisting of 9 sets of Pile Fenders, each featuring an Element Fender (FE 1600x1500 G2.8) and a closed-box steel panel measuring 2200x7650 mm.

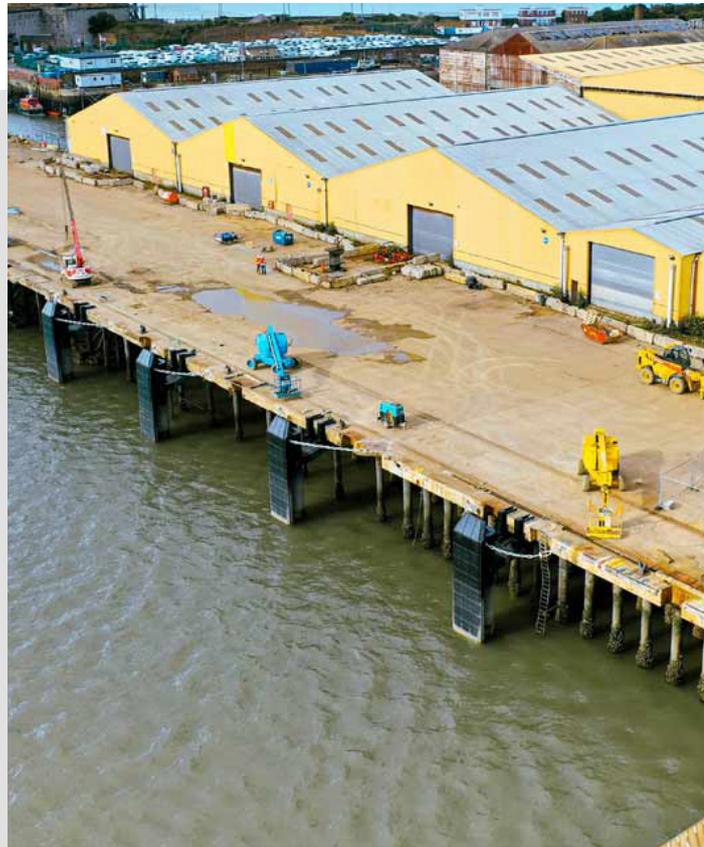
### Project Scope

9 Pile Fender Systems consisting of 1 Element Fender (FE 1600x1500 G2.8) and 1 closed-box steel panel (2200x7650 mm)

## CHALLENGE AND SOLUTION

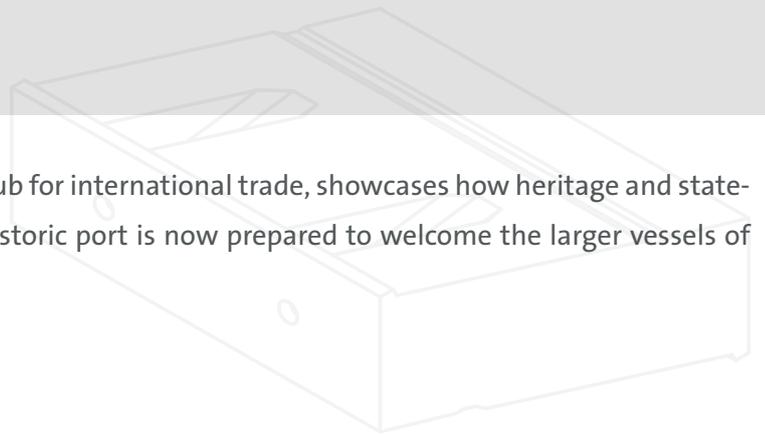
Due to the **limited mounting space on the jetty**, SFT in-house engineering team selected Element Fenders for their compact, modular design—perfectly suited to the project’s constraints. However, the rubber fender alone do not define the system. For this installation, an exceptionally large steel panel was clamped over the pile, using a specially engineered construction driven deep into the seabed for lasting stability.

Other **operational requirements, including the types of vessels berthing at the port, also influenced the solution design.** Shear chains were incorporated to resist horizontal forces generated by berthing maneuvers, as well as chamfers to ensure that the hull beltings present on numerous RoRo vessels do not get stuck on or below the panel and cause severe fender damage.



Berth 1 Peel Ports | Sheerness | United Kingdom

The Port of Sheerness built on its **proud legacy** as a hub for international trade, showcases how heritage and state-of-the-art fender systems coexist seamlessly. This historic port is now prepared to welcome the larger vessels of the future.



9 custom-built Pile Fenders now provide safe berthing at this historic port, which blends heritage with innovation, preparing it for the next generation of vessels. Explore more SFT Case Studies or Contact Your Nearest Office.

