



DEPENBROCK

## REFERENZ HARBOUR CONSTRUCTION AND MARINE ENGINEERING

# Bollard dolphin and fender refurbishment Seaport Brake



Rehabilitation of 14 bollard dolphins, the foundations of which have weakened cross-sections due to corrosion, particularly in the water change zone.

The following services will be carried out:

After an extensive survey of the existing structure by means of 3-D scans above and below water, the entire implementation planning will be prepared by the technical office of Depenbrock IWB.

In the area of lot 1, the existing bollard dolphins will be dismantled in order to be able to build a new bollard in the same place. The reinforced concrete bollard heads with up to 40 m<sup>3</sup>/bollard are to be demolished and existing foundation piles, fender and ladder piles as well as equipment are to be dismantled.

For the construction of the deep foundation, 51 steel piles will be installed as driven injection piles at different inclinations.

The bollard head will be constructed in reinforced concrete and provided with appropriate equipment such as edge protection and bollards. Finally, the bollard dolphins are to be equipped with ladder and fender planks.

In addition, part of the contract in Lot 2 is the rehabilitation of damage caused by an accident. The functionality of the transshipment facility is limited. Here too, after the necessary dismantling work, steel piles are driven in as foundation elements, a bollard head is constructed in reinforced concrete and a fender plank is installed. Behind the bollard heads, a steel line jetty is to be strengthened or newly constructed.

Most of the work will be carried out with floating equipment. The up to 36 m long inclined piles will be installed from the pile-driving pontoon Kurt with a cable dredger HS 895 and swing mast.

### Contract volume:

~ 6,7 € Mio Lot 1 and 2

### Contractor:

Hecker Bau GmbH & Co. KG  
Heute: Depenbrock Ingenieurwasserbau

### Client:

Niedersachsen Ports Brake

### Construction time:

10/2020 – vor. 02/2022

### Location:

Hafen Brake

### Technical data / main masses :

Foundation piles	650 t
Fender piles	175 t
Concrete	450 m <sup>3</sup>

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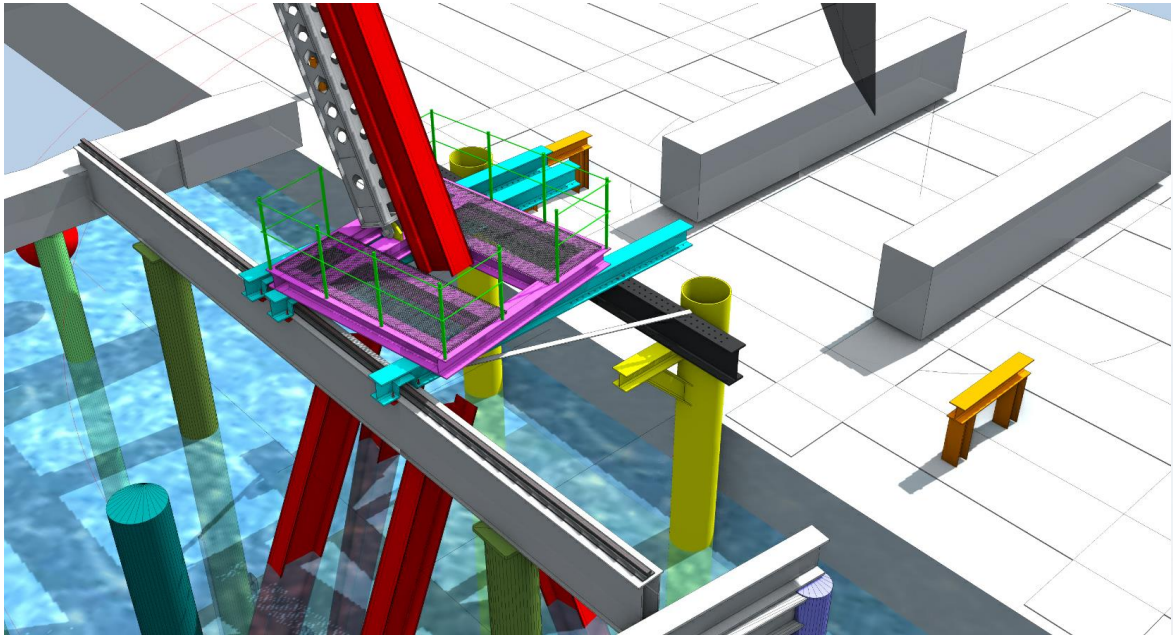
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Ram guidance

