### REFERENZ HARBOUR CONSTRUCTION AND MARINE ENGINEERING

# Expansion CT Burchard quay – Berth 3 + 4





container Terminal Burchardkai is Hamburg's largest container terminal, currently handling ~30% of the total freight throughput in the port of Hamburg.

In 2009, a joint venture comprising Bilfinger Berger was awarded the construction of Berth 3 and 4 with a total length of 662 m l. The quay wall of berth 3 and 4 is based on the established Hamburg Concept for optimized container quay walls. A 22,7 meter wide reinforced concrete deck structure with section lengths of 32 meters rests on a foundation of a row of freestanding friction piles on the water side, a backanchored combined sheet pile wall and three rows of in situ driven concrete piles.

A flood protection seepage apron strip secures the resulting hollow space on the land side. While the waterside crane track for the container gantry cranes is integrated in the guay wall beam, a separate crane track support beam will be constructed for the landside track of the 35 meters gauge whose alignment partly crosses the existing structure of the old quay wall.

Contract value: 45 € Mio

#### **Executed by:**

F+Z Baugesellschaft GmbH (KGF 50%)

#### Employer:

HPA Hamburg Port Authority AöR

#### Construction period:

2009 - 2012

# Location:

Hamburg

## Specifications / Main Quantities total:

Undulation 22,70 m Water depth NN -16.70 m Soil replacement 150 running metre

Friction piles 1.700 t Bearing tubes 5.300 t Infill sheets 1.200 t

In situ concrete piles

Reinforced concrete

ca. 19.000 m<sup>3</sup>

DEPENBROCK

Reinforced steel ca. 2.500 t Hydraulic sand filling

ca. 260.000 m<sup>3</sup>