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## REFERENZ HARBOUR CONSTRUCTION AND MARINE ENGINEERING

### Expansion CT Burchard quay – Berth 3 + 4



The 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 back-anchored 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 quay 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	852 St
Reinforced concrete	ca. 19.000 m <sup>3</sup>
Reinforced steel	ca. 2.500 t
Hydraulic sand filling	ca. 260.000 m <sup>3</sup>

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