

CTA and CTB Hamburg

Automated Stacking Cranes



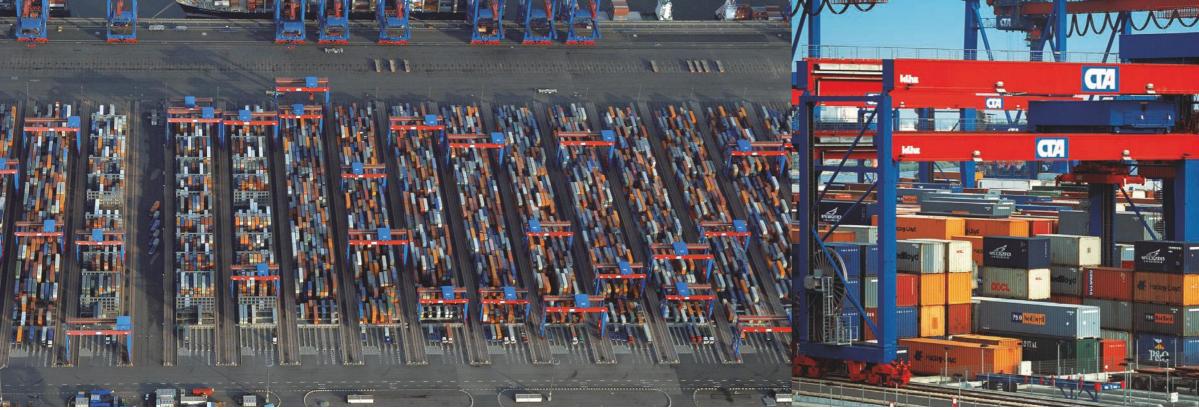
64 Kuenz Automated Stacking Cranes (ASC) ensure highest flexibility and productivity.

Fully automated technology for efficient container handling in Hamburg.

Jens Hansen,

Member of the Board, Hamburger Hafen und Logistik AG

"Kuenz has proven itself to be a reliable partner to us for many years. The existing automatic stacking cranes at the HHLA Container Terminal Altenwerder, and now the new crane installations at our Container Terminal Burchardkai, are evidence that our requirements towards availability and productivity are delivered by Kuenz in all aspects."



Container Terminal Altenwerder, Hamburg

Hamburger Hafen und Logistik AG (HHLA) is a leading European port and transport logistics company. With its container, intermodal and logistics segments, HHLA is positioned along the ideal transport chain between overseas ports and the European hinterland. HHLA's highly efficient container terminals in Altenwerder, Burchardkai and Tollerort ensure the Port of Hamburg's supreme importance as a global logistics hub. Kuenz is part of this high-performance concept with a total of 64 automated stacking cranes in the Container Terminals Altenwerder and Burchardkai.

HHLA Container Terminal Altenwerder

HHLA Container Terminal Altenwerder is the HHLA's newest terminal and with its high degree of automation and its compact layout it is leading the future of container handling. Since 2006, 52 Kuenz automated stacking cranes operate in the automatic yard.

HHLA Container Terminal Burchardkai

The Container Terminal Burchardkai is the largest facility for container handling in the Port of Hamburg. CTB handles almost one in three of all containers reaching the port of Hamburg. Since 2017, 12 enhanced automated stacking cranes support the efficient container handling.

Technical Highlights of the CTB crane systems

- Kuenz engineering is focused on a safe crane design for automated operation and maintenance.
- Gantry design ensures a stiff and rigid structure, minimizing deflections under gantry and trolley movement, while allowing for flexibility to compensate rail tolerances.
- This patented Kuenz solution enables the swingfree handling of containers due to patented 8x8fold hoist reeving without rope sheaves.

Passing Crane System (Picture: courtesy of HHLA

- Flexibility to compensate crane rail tolerances: The Kuenz directional travelling system lowers and equalizes the horizontal forces.
- Green Cooling Technology for the E-house.
- Easy access to all maintenance areas.

These features result in substantially lower maintenance costs and a high degree of system availability.

Passing Crane Systems

The Automated Stacking Cranes at CTA and CTB are designed as crane systems able to pass each other. The outer, larger crane and the internal smaller crane operate the same yard block, including the transfer zone. This ensures the highest degree of flexibility when setting priorities by picking and placing containers during peak times. The unique challenge of this system is the high stacking accuracy despite the varying crane rail gauge and rail tolerance.

Technical data: CT Altenwerder

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Quantity	52 (26 blocks)	
Year of installation	2001 - 2006	
Capacity large crane Capacity small crane	42 t 42 t	
Track width large crane Track width small crane	40.1 m 31.7 m	
Lifting height large crane Lifting height small crane	21.1 m 15.0 m	
Stacking capacity	10 wide, 1 over 4 / 1 over 5	
Length of crane way	305 m	
Working speeds:		
Hoist's rated load	0 - 52 m/min	
Hoist with partial load	0 – 90 m/min	
Gantry drive	0 – 180 m/min	
Trolley drive	0 - 60 m/min	
Power:		
Main hoist	400 kW / 40%ED	
Gantry drive	14 x 25 kW / 60%ED	
Trolley drive	4 x 10 kW / 60%ED	

Technical data: CT Burchardkai

Quantity	12 (6 blocks)	
Year of installation	2017	
Capacity large crane Capacity small crane	42 t 42 t	
Track width large crane Track width small crane	40.1 m 31.7 m	
Lifting height large crane Lifting height small crane	26.0 m 18.4 m	
Stacking capacity	10 wide, 1 over 5	
Length of crane way	385 m	
Working speeds:		
Hoist's rated load	0 - 52 m/min	
Hoist with partial load	0 – 90 m/min	
Gantry drive	0 – 180 m/min	
Trolley drive	0 – 60 m/min	
Power:		
Main hoist	2 x 260 kW / 100%ED	
Gantry drive	11 x 30 kW / 100%ED	
Trolley drive	4 x 11 kW / 100%ED	



The best references are our satisfied customers.



APM Terminal Maasvlakte II, Rotterdam, The Netherlands

54 Kuenz Automated Stacking Cranes for the handling of 20', 40', 45' containers

Year of installation: 2013 – 2017 Capacity: 41 t Track width: 27.8 m Lifting height: 18.1 m Stacking: 9 wide, 1 over 5

APM Terminals MedPort II, Tanger, Morocco

32 Kuenz Automated Stacking Cranes for the handling of 20', 40', 45' containers with Aerodynamic Single Girder

Year of installation: 2018 – 2019 Capacity: 41 t Track width: 33.7 m Lifting height: 18.1 m Stacking: 11 wide, 1 over 5





GCT Delta Port, Vancouver, Canada

8 Kuenz Intermodal Cranes for the automatic handling for the handling of 20', 40', 45' containers

Year of installation: 2017 Capacity: 41 t Track width: 54.7 m Lifting height: 11.5 m



Further information: www.kuenz.com

Künz GmbH 6971 Hard Österreich / Austria sales@kuenz.com www.kuenz.com