



Bertschi AG

Intermodal Cranes



Smart crane technology for efficient handling in the combined transport sector.

Kuenz Intermodal for Chemicals Logistics.

Thomas Schnider, Project Manager, Bertschi AG:

"The selection of the Kuenz Company to deliver various Container Handling Cranes developed into a win-win situation. This was made possible due to the support and the high technical competence of the Kuenz staff, which allowed for finding and implementing optimum solutions for different crane installation sites. Flexibility and professionalism allowed for a flawless project execution, beginning with placing the order and continuing up to and including the installation and final commissioning of the cranes. We are very satisfied with our collaboration and can only recommend the Kuenz Company as a trusted partner. We look forward to future projects together."



Bertschi container terminal Schwarzheide, Germany



Monitor in the crane cabin



Piggy-back spreader camera

The family-owned company Bertschi AG, with head office in Dürrenäsch, Switzerland, has decades of experience in the combined rail-road transport sector and is a leader in chemicals logistics. Furthermore, the Bertschi Group owns 25 Container Terminals world-wide and created an outstanding Europe-wide network for combined transport. Kuenz is supporting this network with 5 modern container cranes at three sites.

The first Kuenz container crane for Bertschi was installed in 2006 at the inland terminal Rotterdam, the Netherlands. The Kuenz intermodal crane ensures the reliable handling of containers, interchangeable containers and trailers. Two Kuenz intermodal cranes are at the disposal of the Bertschi subsidiary, STR Tank-Container-Cleaning Ltd. at the rail terminal in Schwarzheide. In 2007, Kuenz installed a conventional double-girder

bridge. In 2014, the terminal was equipped with another larger Kuenz container crane in suspended design. For the Bertschi subsidiary company DKT Duisburg Kombiterminal in the port of Duisburg Rheinhausen, Germany, a Kuenz intermodal crane was ordered in 2009. Kuenz delivered the second crane in 2011 to increase the handling capacity.

Technical information for the Container Cranes.

All cranes are realized as double-girder bridges in suspended or conventional design. The supporting steel structure of the gantry bridge consists of the hinged post, the fixed post and the bridge girders. The hoist rope reeving of the container hoist is designed as a multi-directional rope shaft. This system enables a swing-free operation of the crane, when

crane traveling, trolley traveling or slewing, thus ensuring a highly efficient container handling.

Kuenz Technology - Piggy-back spreader camera

The handling of semi-trailers is often time-consuming and requires above all additional ground personnel. Kuenz has developed an innovative piggy-back camera system to minimize these difficulties and to make the handling of semi-trailers safer and easier. Four cameras are installed at the inner sides of the spreader legs taking images of the areas around the gripper edges. The image is displayed on a divided monitor in the crane cabin. The positions of all four piggy-backs can be easily recognized on the monitor screen and the semi-trailer can be securely gripped at the right place. This system makes it possible to substantially enhance

the safety and efficiency of the handling of semi-trailers. For night operation, the range of vision is illuminated with integrated LEDs.



Technical information on the cranes

Conventional two-girder bridges:

| Location Schwarzheide: Crane 1 | |
|-----------------------------------|--------------------|
| Year of installation: 2007 | |
| Capacity | 40 t |
| Track width | 44.4 m |
| Lifting height | 13.2 m |
| Working speeds: | |
| Hoist's rated load | 0 - 15 m/min |
| Hoist with partial load | 0 - 30 m/min |
| Gantry drive | 0 - 120 m/min |
| Trolley drive | 0 - 80 m/min |
| Slewing | 0 - 1.6 rpm |
| Power: | |
| Main hoist | 180 kW / 60%ED |
| Gantry drive | 10 x 26 kW / 60%ED |
| Trolley drive | 4 x 13 kW / 60%ED |
| Slewing mechanism | 7 kW / 60%ED |

| Location Rotterdam: | |
|-----------------------------------|--------------------|
| Year of installation: 2006 | |
| Capacity | 40 t |
| Track width | 42.5 m |
| Lifting height | 13.2 m |
| Working speeds: | |
| Hoist's rated load | 0 - 15 m/min |
| Hoist with partial load | 0 - 30 m/min |
| Gantry drive | 0 - 120 m/min |
| Trolley drive | 0 - 80 m/min |
| Slewing | 0 - 1.6 rpm |
| Power: | |
| Main hoist | 180 kW / 60%ED |
| Gantry drive | 10 x 26 kW / 60%ED |
| Trolley drive | 4 x 13 kW / 60%ED |
| Slewing mechanism | 7 kW / 40%ED |

Suspended two-girder bridges:

| Location Schwarzheide: Crane 2 | |
|-----------------------------------|---------------------|
| Year of installation: 2014 | |
| Capacity | 40 t |
| Track width | 8.7 m |
| Cantilever fixed column | 17.6 m |
| Cantilever hinged column | 17.6 m |
| Lifting height | 14.7 m |
| Working speeds: | |
| Hoist's rated load | 0 - 15 m/min |
| Hoist with partial load | 0 - 30 m/min |
| Gantry drive | 0 - 120 m/min |
| Trolley drive | 0 - 100 m/min |
| Slewing | 0 - 1.6 rpm |
| Power: | |
| Main hoist | 180 kW / 60%ED |
| Gantry drive | 18 x 26 kW / 100%ED |
| Trolley drive | 4 x 16 kW / 100%ED |
| Slewing mechanism | 2 x 7 kW / 100%ED |

| Location Duisburg: 2 Cranes | |
|--|--------------------|
| Year of installation: 2009 / 2011 | |
| Capacity | 40 t |
| Track width | 48.7 m |
| Cantilever hinged column | 17.6 m |
| Lifting height | 14.7 m |
| Working speeds: | |
| Hoist's rated load | 0 - 15 m/min |
| Hoist with partial load | 0 - 30 m/min |
| Gantry drive | 0 - 120 m/min |
| Trolley drive | 0 - 100 m/min |
| Slewing | 0 - 1.6 rpm |
| Power: | |
| Main hoist | 180 kW / 60%ED |
| Gantry drive | 18 x 26 kW / 60%ED |
| Trolley drive | 4 x 16 kW / 60%ED |
| Slewing mechanism | 7 kW / 60%ED |

Further Informationen: www.kuenz.com

