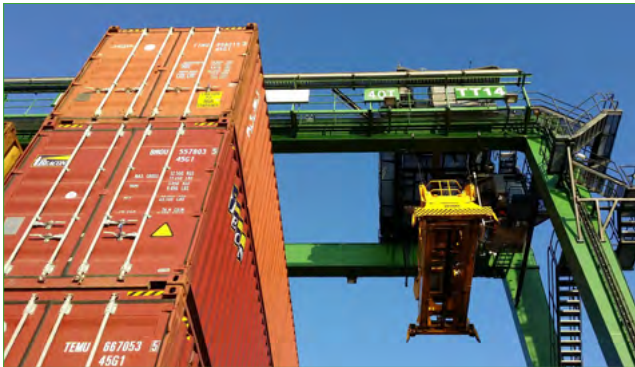




LaseLCPS-3D-2D - Load Collision Prevention System-3D-2D

Product module *CEWS* Container Logistics



This specific version of the application LaseLCPS-3D-2D - Load Collision Prevention is a combined 3D/2D measurement system consisting of each one 2D and one 3D laser scanner mounted under the trolley.

The LaseLCPS application software collects the scan data, does all needed calculations and sends the results to the machine PLC. In order to measure all relevant stacks a 2D profile scan in gantry as well as trolley direction will be processed before the first move. Two different scan planes are projected orthogonally to each other.

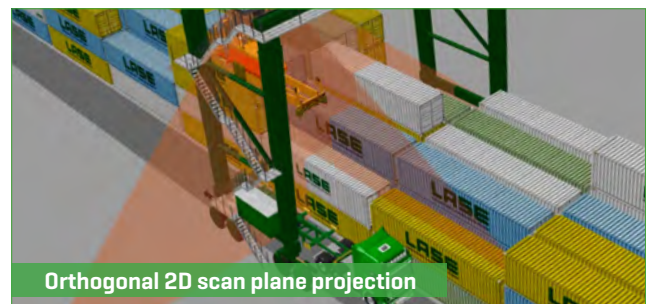
An additional 3D scan will be done after the trolley has passed the highest point of the stack in order to detect shadow areas. A further collision prevention check by the dynamic surveillance cube has the function to avoid collisions between the empty spreader or container on the spreader and containers in the stacking area.

The position [cube center] is located in the middle of the spreader's lower edge. The expansion of the cube is depending on the adjusted length of the spreader [20', 40', 45'], height of container on the spreader, moving direction and the velocity of trolley and hoist.

This intelligent and innovative solution is built to diminish the risk of collisions and accidents in container stacking areas. The measurement system by LASE is applicable for topography detection and collision prevention at RTGs and RMGs cranes.

Customer benefits & features:

- Stack height information for path optimisation
- Avoids collisions between load and stack
- Applicable for RMGs and RTGs
- Avoids collisions with adjacent stacks in gantry direction
- Gentle container handling through soft landings & less spreader wear
- Driver assistance
- Both 2D and 3D profile scan in gantry/trolley drive direction
- Reduction of container damage claims

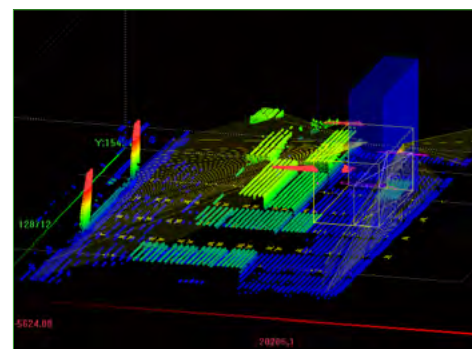
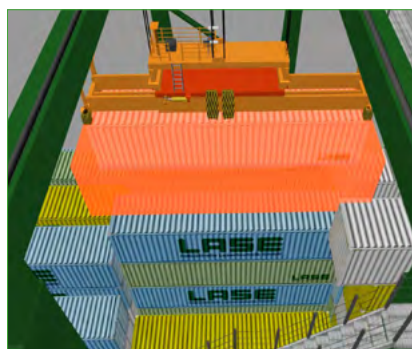


Orthogonal 2D scan plane projection



Dynamic 3D surveillance cube

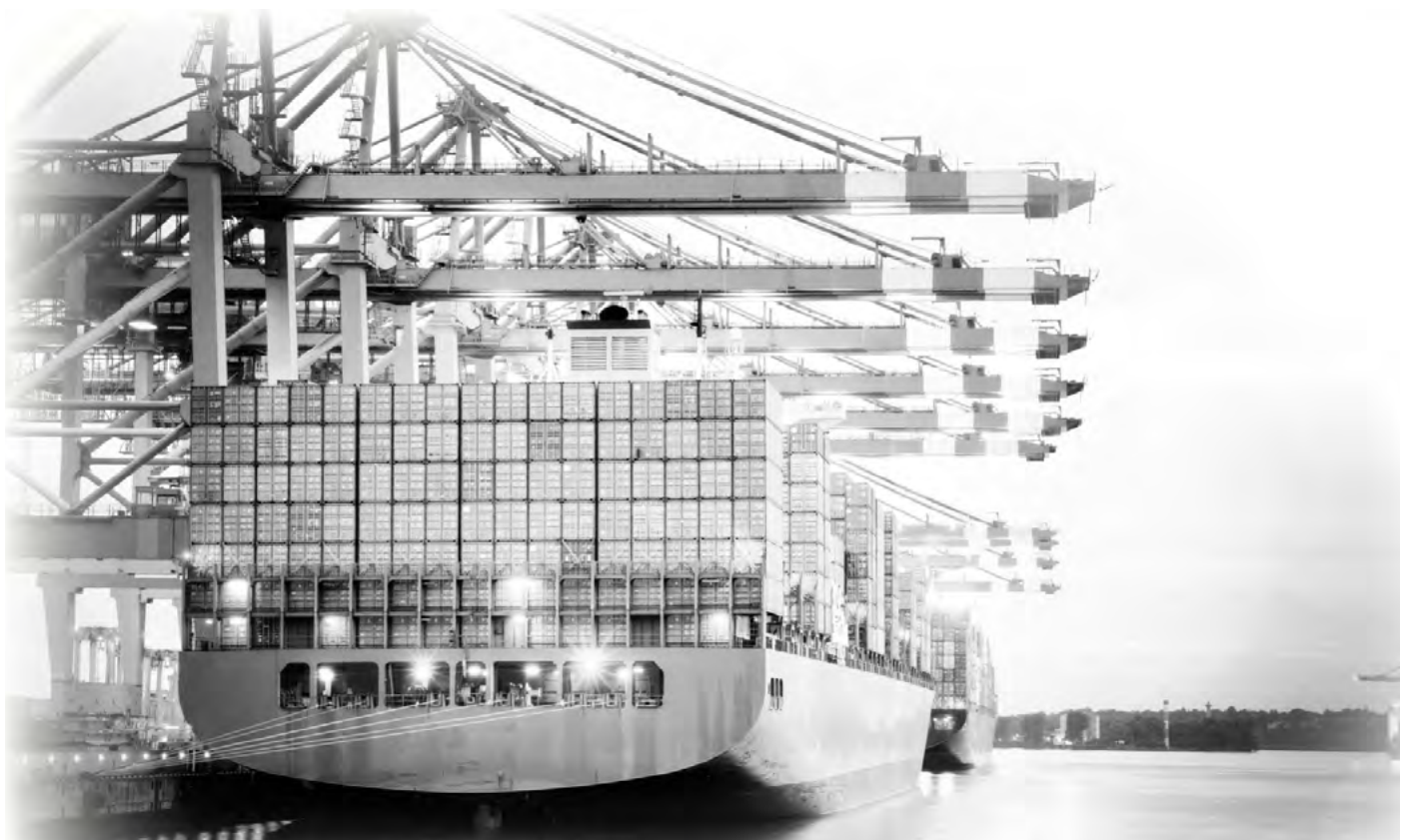
Function principle



LASE offers innovative and productive solutions by combining state-of-the-art laser hardware technology and sophisticated software applications. We deliver a broad range of precise and reliable 1D, 2D and 3D laser systems, which can be used for several measurement tasks.

We look to develop long-term relationships with our customers to drive projects forward and help improve safety and efficiency at a huge diversity of applications worldwide through working closely with them.

COMPETENCE, CREATIVITY AND PASSION lead us to be the ideal partner for your requirements. Convince yourselves of our broad portfolio of innovative products and solutions on our corporate website.



Product module **CEWS** Container Logistics

Note:

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