CLAIMS

1. A container crane comprising:

a spreader configured to controllably attach to a container;

a container trolley to which the spreader is attached via cables, the container trolley being provided on an upper part of the container crane and being horizontally movable along a first direction (x);

a first sensor arrangement mounted on the container trolley, the first sensor arrangement being usable to determine a position of the container;

a second sensor arrangement being usable to determine a position of a target; and

at least one reference marker provided fixed, in at least two dimensions, to a horizontal support provided along the first direction (x) between vertical structures of the container crane, the at least one reference marker being provided vertically lower than and detectable by the first sensor arrangement and having a determinable position relative to the second sensor arrangement, such that a relative position between the first sensor arrangement and the second sensor arrangement is determinable.

2. The container crane according to claim 1, wherein the second sensor arrangement is attached to the upper part of the container crane and wherein the at least one reference marker is detectable by the second sensor arrangement.

3. The container crane according to claim 1, wherein the second sensor arrangement is provided fixed, in at least two dimensions, to the horizontal support.

4. The container crane according to claim 3, wherein the second sensor arrangement is provided on a sensor trolley, being movable along the horizontal support, and wherein the at least one reference marker is provided on the sensor trolley.

5. The container crane according to claim 3, wherein the second sensor arrangement comprises a plurality of sensors fixed to the horizontal support and wherein the at least one reference marker is provided fixed to the horizontal support.

6. The container crane according to any one of the preceding claims, comprising two reference markers respectively provided fixed, in at least two dimensions, to two horizontal supports, each of which are provided along the first direction (x) between vertical structures of the container crane.

7. The container crane according to any one of the preceding claims, wherein the container crane is a ship-to-shore crane.

8. The container crane according to any one of the preceding claims, wherein the target is a vehicle.

9. The container crane according to any one of the preceding claims, wherein the distance from ground to a boom of the container crane is greater than 50 metres.

10. The container crane according to any one of the preceding claims, wherein the at least one reference marker are both optically distinguishable and structurally distinguishable.

11. The container crane according to any one of the preceding claims, wherein the horizontal support is a crossbeam.

12. The container crane according to any one of claims 1-9, wherein the at least one reference marker is provided at a vertical height of 20-30 % of the vertical height of the first sensor arrangement.

13. A method performed in a coordinator device, the method comprising the steps of:

detecting a reference marker using a first sensor arrangement to determine a position of the first sensor arrangement relative to the reference marker, the first sensor arrangement forming part of a container crane further comprising: a spreader configured to controllably attach to a container, a container trolley to which the spreader is attached via cables, the container trolley being provided on an upper part of the container crane and being horizontally movable along a first direction (x), wherein the first sensor arrangement is mounted on the container trolley and wherein the at least one reference marker is provided vertically lower than the first sensor arrangement;

determining the position of a second sensor arrangement, being usable to determine a position of a target, in relation to the reference marker; and

determining a relative position between the first sensor arrangement and the second sensor arrangement based on the relative position between the first sensor arrangement and the reference marker, and the relative position between the second sensor arrangement and the reference marker, wherein the reference marker is provided fixed, in at least two dimensions, to a horizontal support provided along the first direction (x) between vertical structures of the container crane.

14. A computer program comprising computer program code which, when run on a coordinator device causes the coordinator device to:

detect a reference marker using a first sensor arrangement to determine a position of the first sensor arrangement relative to the reference marker, the first sensor arrangement forming part of a container crane further comprising: a spreader configured to controllably attach to a container, a container trolley to which the spreader is attached via cables, the container trolley being provided on an upper part of the container crane and being horizontally movable along a first direction (x), wherein the first sensor arrangement is mounted on the container trolley and wherein the at least one reference marker is provided vertically lower than the first sensor arrangement;

determine the position of a second sensor arrangement, being usable to determine a position of a target, in relation to the reference marker; and

determine relative position between the first sensor arrangement and the second sensor arrangement based on the relative position between the first sensor arrangement and the reference marker, and the relative position between the second sensor arrangement and the reference marker, wherein the reference marker is provided fixed, in at least two dimensions, to a horizontal support provided along the first direction (x) between vertical structures of the container crane.

15. A computer program product comprising a computer program according to claim 14 and a computer readable means on which the computer program is stored.