## CLAIMS

1. A robotic container handling system comprising:

a container load handling device and a storage and sortation structure, the structure including two substantially perpendicular sets of rails forming a grid above a workspace, the workspace including a plurality of stacked containers;

a plurality of robotic load handling devices operative on and above the rails, the robotic load handling devices each comprises a body mounted on wheels, a first set of wheels being arranged to engage with at least two rails of a first set of rails, a second set of wheels being arranged to engage with at least two rails of a second set of rails, the first set of wheels being independently moveable and driveable with respect to the second set of wheels such that when in motion only one set of wheels is engaged with the grid at any one time thereby enabling movement of the load handling device along the rails to any point on the grid by driving only the set of wheels engaged with the rails; and,

transfer means for transferring the containers in to and out of the storage and sortation structure, the transfer means comprising conveyance means operable between the container load handling device and a transfer point, the conveyance means comprising a number of transversal load handling devices adapted so as to receive containers delivered by the container load handling device, the transversal load handling devices being adapted to transport containers to and or from the transfer point on the conveyance means at which point the containers are collected or delivered by the robotic load handling devices, the transversal load handling devices acting to align each container with a respective robotic load handling device of the plurality of robotic load handling devices.

2. A container handling system according to claim 1, in which the system further comprises a plurality of transfer means for a given storage and sortation structure thereby enabling the robotic load handling devices to move multiple containers to and from a plurality of transfer points at the same time.

3. A container handling system according to any preceding claim in which the system further comprises control means, the control means comprising a utility for

monitoring and tracking the location of the or each container in the system.

4. A container handling system according to any preceding claim in which the or each containers comprises identity means, the identity means enabling location of the or each container in the system.

5. A container handling system according to any preceding claim in which the container comprises service means for controlling and/or monitoring the physical properties of the or each container.

6. A container handling system according to any preceding claim in which the workspace comprises a framework supporting the grid above the stacks of containers.

7. A container handling system according to any preceding claim in which the framework and grid are provided with service means for controlling and/or monitoring the physical properties of the grid, framework or containers.

8. A container handling system according to any preceding claim in which container load handling device comprises a crane carrying crane load handling devices thereon, the crane load handling devices adapted to connect with a container and transport said container to a crane transfer point and transfer the container to a transversal load handling device.

9. A container handling system according to any preceding claim in which the conveyance means comprises a conveyor system adapted to transfer containers thereon.

10. A container handling system according to any preceding claim in which the conveyance means comprises alignment means, said alignment means enabling the or each container to be moved in to position for collection by a robotic load handling device.

11. A container handling system according to any preceding claim in which the conveyance means comprises container accumulation means thereby enabling

accumulation of containers on the conveyance means.

12. A container handling system according to claim 11, in which the container accumulation means comprises interface plates and or interface blocks mounted on the conveyance means.

13. A container handling system according to any preceding claim in which the or each containers comprise shipping containers.

14. A container handling system according to any preceding claim in which the workspace comprises a storage and sortation area for a shipping container port.

15. A container handling system according to claim 14 in which a portion of the grid extends above a vehicle transfer area, the robotic load handling devices being adapted so as to move containers from the workspace to vehicles located in the vehicle transfer area.

16. A container handling system according to any preceding claim in which the containers are being transferred to or from vessels such as container ships.

17. A method of transferring containers utilising the container handling system according to any preceding claim.