CLAIMS

1. Portal gantry crane (10) for loading / unloading containers (C) from a container vessel comprising:

- Two parallel main girders (11) running side by side on respective sides of a midplane (M),
- two legs (20, 21) each positioned in said midplane (M),
- two couples of trolleys (40), each couple of trolleys operating on a corresponding girder (11), each trolley carrying a hoist, the ropes (58) of which carrying a spreader (60) configured for attachment to a container (C).

2. Portal gantry crane according to claim 1, the legs (20, 21) being of box-section.

3. Portal gantry crane according to claim 1 or 2, the girders (11) being rigidly connected to one leg (20) and being pinned to the other leg (21).

4. Portal gantry crane according to any one of claims 1 to 3, comprising cantilevers (22, 23) extending beyond a main span, the girders (11) being suspended in a way to allow the trolleys (40) to pass on to cantilevers.

5. Portal gantry crane according to any one of claims 1 to 4, the girders (11) being interconnected by horizontal bracing (12).

6. Portal gantry crane according to any one of claims 1 to 5, each hoist being laterally movable both ways relative to centreline of the corresponding girder.

7. Portal gantry crane according to any one of preceding claims, the girders (11) being of variable depth (k), the trolleys traveling on tracks (30) situated below the top edge (11a) of the girders.

8. Portal gantry crane according to any one of preceding claims, comprising suspension cross beams (17, 18) connected to respective legs (20, 21) and carrying the girders (11).

9. Portal gantry crane according to claim 8, wherein the suspension cross beams (17, 18) are prestressed.

10. Portal gantry crane according to any one of the preceding claims, the girders (11) comprising lateral extensions (32) or brackets (75) carrying tracks (30) on which the trolleys travel.

11. Portal gantry crane according to any one of claims 1 to 10, the trolleys being self-propelled.

12. Portal gantry crane according to any one of claims 1 to 11, wherein the main girders (11) are prestressed.

13. Container terminal (1) comprising:

- A double-sided berth (2), preferably an indented berth,
- At least one portal gantry crane (10) according to any one of the preceding claims, spanning in a transverse direction across the berth.

14. The terminal of claim 13, the gantry crane traveling on tracks (5) extending along each side of the berth.

15. The terminal of claim 14, comprising a plurality of portal gantry cranes traveling along said tracks, preferably three to four cranes (10).

16. A method for loading/unloading a container vessel received in the double-sided berth of the container terminal of any one of claims 13 to 15, comprising:

- Moving the trolleys (40) along the girders (11) so that each trolley moves between a first position substantially median to the vessel and a second position on a corresponding side of the vessel.

17. The method of claim 16, two portal gantry cranes (10) being positioned adjacent to each other, four adjacent trolleys (40) of said cranes (10) being operated simultaneously as a unit in heavy lift operations.