

ABSTRACT

A travelling wire rope winding system and travelling mechanism for an external lower trolley of a conventional quay crane, comprising a lower-trolley travelling mechanism (5) and a lower-trolley travelling winding system (6). The lower-trolley travelling mechanism (5) drives a lower trolley (3) to move along a double-trapezoidal four-track girder (1) by means of the lower-trolley travelling winding system (6). The lower-trolley travelling mechanism (5) is provided in a machine room (4). The lower-trolley travelling mechanism (5) comprises a lower-trolley travelling mechanism A (8) and a lower-trolley travelling mechanism B (9). The lower-trolley travelling mechanism A (8) and the lower-trolley travelling mechanism B (9) are provided at the left side and the right side of an upper trolley travelling mechanism (7), respectively. According to the travelling wire rope winding system and travelling mechanism for an external lower trolley of a conventional quay crane, by means of smart structure design, the problem of disposing the travelling mechanism and the like can be solved without reconstructing the machine room; in addition, a travelling steel wire rope winding system for adding a lower trolley is designed, thereby ensuring that the lower trolley moves along the outer side of the girder.

FIG. 2