

ABSTRACT

The invention installed a set of automatic lifting system and automatic tilt adjuster besides the parking lane outside the automated terminal, and a laser scanner on the device. The laser scanner has lifting and tilting detections on the lock holes above the no-load container chassis that enters into the lane, measures position of the nearest one or several lock holes, figure out the general locations of all the lock holes in the container chassis, and then has accurate detection, finds out the accurate locations of all lock holes and realizes the precise positioning of the container chassis. For heavy-load container truck which enters into the lane, the laser scanner would have horizontal sweep on the container truck, adjust corresponding height according to container landing signals and height signals of the hoist, and measure the interval between the container and the chassis to prevent that the container truck is unlocked and hangs the container truck. The above method can realize accurate positioning and lift prevention detection of external container trucks outside the automatic field.

(Fig.5)