

**TITLE OF INVENTION: OBSTACLE AVOIDANCE AND DETECTION DEVICE
FOR VEHICLE BODY OF FOUR-WAY SHUTTLE AND PALLET, AND WORKING
METHOD THEREOF**

ABSTRACT

An obstacle avoidance and detection device for a vehicle body of a four-way shuttle and a pallet, and a working method thereof are provided. The device includes a four-way shuttle, pallets with goods, and Y direction tracks and an X direction track that are interlaced horizontally and longitudinally. The four-way shuttle can operate in track directions of the Y direction tracks and the X direction track. Shelf supports are arranged on two sides of the Y direction tracks. A vehicle body of the four-way shuttle is provided with distance sensors on front and rear sides in both an X direction and a Y direction. A jacking structure of the four-way shuttle is provided with distance detection sensors on front and rear sides in the Y direction. Collisions between the four-way shuttle and an obstacle or the pallets are avoided.

FIG. 1