

ABSTRACT

The present disclosure provides a four-way shuttle and a warehouse storage system. The four-way shuttle includes a first bracket, a first roller group, a second bracket, a second roller group and a jacking mechanism. The first roller group includes multiple first rollers whose axial directions are parallel in a horizontal plane and are arranged on the first bracket, and at least part of the first rollers are each provided with a first hub motor. The second roller group includes multiple second rollers whose axial directions are parallel in the horizontal plane, the axial directions of the second rollers are perpendicular to the axial directions of the first rollers, the second rollers are arranged on the second bracket, and at least part of the second rollers are each provided with a second hub motor. The jacking mechanism is arranged between the first bracket and the second bracket and can drive the second bracket to move in a vertical direction relative to the first bracket. The embodiments of the present disclosure simplify the power system, facilitate the lightweight and compact design of the four-way shuttle, improve transmission efficiency, enable a more flexible internal structural arrangement of the four-way shuttle, and further contribute to the modularization of the components of the four-way shuttle.

Fig.1