ABSTRACT

FLEXIBLE ROLLING BELT-BASED CONVEYING APPARATUS

A flexible rolling belt-based conveying apparatus is provided, which belongs to the technical field of conveying apparatuses. The flexible rolling belt-based conveying apparatus includes a plurality of rolling body units. Each rolling body unit includes a support. A power roller is arranged above the support. Locomotion wheels are arranged on two sides of the support. A chain link unit is arranged in the middle of the support. A guide wheel is mounted below the chain link unit. The chain link unit includes a main chain link and an auxiliary chain link. The main chain link and the auxiliary chain link are hinged respectively through a longitudinal hinge shaft and a transverse hinge shaft. The longitudinal and transverse hinge shafts form a crisscross structure, and are in no contact at a center of the crisscross structure. The plurality of rolling body units are sequentially connected front and back through the chain link units. The rolling body units can rotate in a horizontal direction and a vertical direction to form a continuous flexible conveying rolling belt. The conveying apparatus can simultaneously rotate in two directions, and the chain link units are short and have small turning radiuses, so that the conveying apparatus can adapt to complex warehousing and transportation working conditions such as small-scale warehousing and a narrow transfer space; malfunctions such as items being stuck do not easily occur; and transportation is more stable and reliable.

FIG. 2