Conveying Chain for a Panel Belt of a Moving Walkway of Small Overall Height

DESCRIPTION

The present invention pertains to a conveyor chain for a pallet belt of a moving walkway, as well as to a pallet belt and a moving walkway equipped with such a conveyor chain.

Moving walkways are used as passenger transport systems in order to transport passengers within a building along a typically horizontal or slightly inclined travel path. For this purpose, a moving walkway comprises a pallet belt, on which passengers can stand and which can be moved along the travel path in a revolving manner. A plurality of pallets are arranged behind one another in the pallet belt. Each of the pallets is typically accommodated between two conveyor chains that are arranged along opposite sides of the pallet belt. Each of the conveyor chains is in turn composed of a plurality of elongate chain links, which are arranged behind one another at a pitch and pivotably connected to one another by means of link pins such that the entire conveyor chain can be subjected to high tensile loads. In this case, the pitch essentially corresponds to the distance between the longitudinal center axes of the link pins.

The pallet belt is arranged in a revolving manner. This means that the pallets can be moved along the travel path in a forward direction with the aid of the conveyor chains. At the end of the travel path, the pallet belt is respectively deflected by means of deflection devices such that the pallets can be moved back to the beginning of the travel path in the opposite return direction in the annularly closed pallet belt. Corresponding deflection devices typically comprise deflection chain wheels, which respectively interact with one of the conveyor chains in order to generally deflect the respective conveyor chain from the forward direction into the return direction or vice versa by 180°.

If a moving walkway should be installed in a building to be newly constructed, it is possible to integrate at least parts of the moving walkway into a floor of the building such that a bearing surface formed by the pallets in the forward direction can end as flush as possible with a surface of the floor. For this purpose, it may be advantageous to use moving walkways with a low structural height such that no deep pits, in which the moving walkway can be accommodated, have to be provided in the floors of the building.

If an already existing building should be retrofitted with a moving walkway, it may in some instances be impossible or at least very difficult to at least partially sink this moving walkway into a floor of the building, e.g. for reasons of statics. The moving walkway has to be