CLAIMS

1. A conveyance system comprising:

a first track provided such that a device port is positioned below and on one side of the first track;

a second track provided along the first track and arranged below and parallel with the first track in a vertical direction such that the device port is positioned below and on the one side of the second track;

a plurality of overhead conveyance vehicles configured to travel along each of the first track and the second track, and each of the plurality of overhead conveyance vehicles configured to convey a conveyed object;

a storage section provided below and on the other side of the first track and the second track, the other side opposed to the one side of the first track and the second track, and configured to have the conveyed object placed thereon; and

a controller configured to control operations of the overhead conveyance vehicles, wherein

the storage section is provided so as to be positioned below each of the first track and the second track,

each overhead conveyance vehicle comprises:

a gripping unit capable of gripping the conveyed object;

a movement mechanism capable of moving the gripping unit to a position above the device port or above the storage section; and

a hoisting mechanism capable of raising and lowering, with respect to the device port or the storage section, the gripping unit, which has been moved to the position above the device port or above the

storage section by the movement mechanism,

one of the overhead conveyance vehicles on the first track and one of the overhead conveyance vehicles on the second track are capable of transferring the conveyed objects to or from the same storage section,

wherein the controller,

with respect to the same device port, in a situation in which one overhead conveyance vehicle of one of the overhead conveyance vehicles on the first track and one of the overhead conveyance vehicles on the second track needs to receive from the device port the conveyed object to be collected from the device port, and the other overhead conveyance vehicle of one of the overhead conveyance vehicles on the first track and one of the overhead conveyance vehicles on the second track needs to place onto the device port the conveyed object to be delivered to the device port, the other overhead conveyance vehicle has reached a transfer region corresponding to the device port before the one overhead conveyance vehicle reached the transfer region,

for a predetermined time after the other conveyance vehicle having reached the transfer region, controls operations of the overhead conveyance vehicles such that the other overhead conveyance vehicle waits in the transfer region,

in a situation in which the one overhead conveyance vehicles reaches the transfer region while the other conveyance vehicle is waiting in the transfer region, controls operations of the overhead conveyance vehicles such that the one overhead conveyance vehicle having reached the transfer region receives the conveyed object to be

collected from the device port, and controls operations of the overhead conveyance vehicles such that the other overhead conveyance vehicle places the conveyed object to be delivered onto the device port after the one overhead conveyance vehicle receives the conveyed object to be collected from the device port, and

in a situation in which the one overhead conveyance vehicle does not reach the transfer region while the other conveyance vehicle is waiting in the transfer region, controls operations of the overhead conveyance vehicles such that the other overhead conveyance vehicle places the conveyed object to be delivered onto the storage section and receives the conveyed object to be collected from the device port, and controls operations of the overhead conveyance vehicles such that the one overhead conveyance vehicle having reached the transfer region receives the conveyed object to be delivered from the storage section and places the conveyed object to be delivered onto the device port.

2. The conveyance system according to claim 1, wherein

in a situation in which one of the overhead conveyance vehicles on the first track and one of the overhead conveyance vehicles on the second track need to perform device port-side transfer operations of transferring the conveyed objects to or from the same device port, during the device port-side transfer operation performed by one of the overhead conveyance vehicles on the first track and on the second track, the controller prohibits the other one of the overhead conveyance vehicles from performing the device port-side transfer operation, and

in a situation in which one of the overhead conveyance vehicles

on the first track and one of the overhead conveyance vehicles on the second track need to perform storage section-side transfer operations of transferring the conveyed objects to or from the same storage section, during the storage section-side transfer operation performed by one of the overhead conveyance vehicles on the first track and on the second track, the controller prohibits the other one of the overhead conveyance vehicles from performing the storage section-side transfer operation.