CLAIMS

[Claim 1] An overhead transport vehicle capable of traveling along a rail arranged at least partially in a grid pattern, the overhead transport vehicle comprising:

an article holding unit configured to hold an article;

a linear drive unit configured to drive the article holding unit to move linearly;

a pivoting drive unit configured to drive the article holding unit to pivot horizontally;

a control unit configured to control the pivoting drive unit in accordance with orientation of the article held by the article holding unit and orientation of a load port on which the article is placed;

a traveling wheel configured to roll on the rail; and

a body section disposed below the rail and including the article holding unit, the linear drive unit, and the pivoting drive unit, wherein

the linear drive unit includes a lifting drive unit configured to raise and lower the article holding unit and a slide drive unit configured to slide and move the lifting drive unit,

the pivoting drive unit includes a first pivoting drive unit configured to horizontally pivot the slide drive unit and a second pivoting drive unit configured to horizontally pivot the article holding unit or the lifting drive unit, and

when the slide drive unit is horizontally pivoted by the first pivoting drive unit, the second pivoting drive unit, the lifting drive unit, and the article holding unit that are attached to a lower side of the slide drive unit are horizontally pivoted together.

[Claim 2] The overhead transport vehicle according to claim 1, wherein

the control unit performs:

a first control of horizontally pivoting the article holding unit by a first angle such that the orientation of the article and the orientation of the load port are in a certain relation; and

a second control of horizontally pivoting the article holding unit by a second angle smaller than the first angle such that the orientation of the article is fine-tuned.

[Claim 3] An overhead transport system comprising:

a plurality of processing devices disposed so as to be aligned along a passage on each of one side and the other side of the passage; and

the overhead transport vehicle according to claim 1 or 4, wherein

each of the processing devices includes the load port disposed on a side of the processing device closer to the passage, and

the overhead transport system includes a traveling path, serving as a path along which the overhead transport vehicle travels, extending across the passage and allowing the overhead transport vehicle to pass through above a pair of the load ports.

[Claim 4] The overhead transport vehicle according to claim 1, wherein

the first pivoting drive unit rotates the slide drive unit at intervals of 90 degrees, and

the second pivoting drive unit rotates the lifting drive unit within a

range of 180 degrees.

[Claim 5] The overhead transport vehicle according to claim 2, wherein the control unit performs the first control during conveyance of the article to the load port, and performs the second control during unloading of the article onto the load port.