

CLAIMS

1. A transport vehicle system equipped with an overhead transport vehicle in which a lifting part having a gripping part for gripping an article is lifted and lowered by a plurality of suspending members, the transport vehicle system comprising:

a measuring part configured to measure a measurement target portion;

a measured part on which the measurement target portion is formed;

a control part configured to cause the lifting part to be lifted and lowered according to a predetermined set value;

a maintenance trestle provided in a traveling area of the overhead transport vehicle and on which a placement table of the measuring part is formed; and

a communication unit configured to transmit a result of measurement of the measured part made by the measuring part to the control part provided in the overhead transport vehicle in a wireless manner, wherein

the measured part is formed as a first unit member grippable by the gripping part,

the measuring part is formed as a second unit member placeable on the placement table,

the first unit member is placed on the maintenance trestle in a state of being supported by the second unit member placed on the placement table, and

the control part is configured to cause the gripping part to grip the first unit member in a state of being supported by the second unit member at the placement table of the maintenance trestle and causes the lifting part to lift so that the second unit member in a state of being placed on the placement table is able to measure the first unit member gripped by the gripping part, and corrects the set value based on a measurement result of the first unit member transmitted via the communication unit from the second unit member in a state of being placed on the placement table.

52. The transport vehicle system according to claim 1, wherein the overhead transport vehicle has a body part, the lifting part provided in a manner of being able to be lifted and lowered with respect to the body part by the suspending members being wound and unwound, and a sliding part configured to move the lifting part in a direction orthogonal to both a transport direction of the overhead transport vehicle and a vertical direction, and

the maintenance trestle includes a first placement table provided at a position where the article is placeable by lowering the lifting part without the overhead transport vehicle activating the sliding part, a second placement table provided above the first placement table in the vertical direction and provided to be retractable in a horizontal direction from an area above the first placement table in the vertical direction, and a third placement table provided at a position where the article is placeable by at least the overhead transport vehicle activating the sliding part.

63. The transport vehicle system according to claim 1, further comprising an area controller configured to cause the overhead transport vehicle to periodically move to the maintenance trestle.

84. A transport vehicle system equipped with an overhead transport vehicle in which a lifting part having a gripping part for gripping an article is lifted and lowered by a plurality of suspending members, the transport vehicle system comprising:

a measuring part configured to measure a measurement target portion;

a measured part on which the measurement target portion is formed; and

a control part configured to cause the lifting part to be lifted and lowered according to a predetermined set value, wherein

the overhead transport vehicle includes

a winding drum configured to lift and lower the lifting part by winding and unwinding the suspending members,

at least one guide roller around which the suspending members unwound from the winding drum are wound,

a body part supporting the winding drum and the guide roller,

at least one position adjustment part configured to move a connection portion of the suspending members with the lifting part in a lifting-and-lowering direction by moving a relative position of the guide roller with respect to the body part, and

the control part configured to control a movement of the guide roller by the position adjustment part based on information about inclination of the lifting part, wherein

the control part ~~controls~~ is configured to control lifting and lowering of the lifting part so that the measuring part is able to measure the measured part by one of the measuring part and the measured part gripped by the gripping part and by the other of the measuring part formed or placed at a predetermined position and the measured part formed or placed at a predetermined position, and corrects the set value based on a result of measurement of the measured part made by the measuring part, and

the set value includes the information about inclination.

95. The transport vehicle system according to claim 84, wherein

one of the measuring part and the measured part is formed as a first unit member grippable by the gripping part,

the other of the measuring part and the measured part is formed as a second unit member placeable at the predetermined position, and

one of the first unit member and the second unit member is placed at the predetermined position in a state of being supported by the other of the first unit member and the second unit member.

106. The transport vehicle system according to claim 84 or 95, further comprising:

a communication unit configured to transmit the result of measurement of the measured part made by the measuring part to the control part provided in the overhead transport vehicle, wherein

the measured part is used in a state of being gripped by the gripping part and the measuring part is used in a state of being placed at the predetermined position.

117. The transport vehicle system according to any one of claims 84 to 106, further comprising a maintenance trestle that is provided in a traveling area of the overhead transport vehicle and on which a placement table to be the predetermined position is formed.

128. The transport vehicle system according to claim 117, wherein

the overhead transport vehicle has a body part, the lifting part provided in a manner of being able to be lifted and lowered with respect to the body part by the suspending members being wound and unwound, and a ~~slide portions~~sliding part configured to move the lifting part in a direction orthogonal to both a transport direction of the overhead transport vehicle and a vertical direction, and

the maintenance trestle includes a first placement table provided at a position where the article is placeable by lowering the lifting part without the overhead transport vehicle activating the sliding part, a second placement table provided above the first placement table in the vertical direction and provided to be retractable in a horizontal direction from an area above the first placement table in the vertical direction, and a third placement table provided at a position where the article is placeable by the overhead transport vehicle activating at least the sliding part.

~~139~~. The transport vehicle system according to claim ~~117~~ or ~~128~~, further comprising an area controller configured to cause the overhead transport vehicle to periodically move to the maintenance trestle.

~~1410~~. The transport vehicle system according to any one of claims ~~84~~ to ~~139~~, wherein

the set value is set for each placement part for the article,

one of the measuring part and the measured part is used in a state of being gripped by the gripping part, and

the other of the measuring part and the measured part is used in a state of being formed or placed on the placement portion to be a measurement target.