WHAT IS CLAIMED IS:

1. A storage unit comprising:

a carousel including a plurality of levels and including a plurality of container storage spaces on each level, the carousel rotating around a vertical axis;

a loading port for loading and unloading the container;

a transport unit for transporting the container between the loading port and the container storage spaces; and

a pipe configured to be connected to an intake port provided in the container for feeding clean gas such that feeding is turned on and off for each container storage space.

2. The storage unit according to claim 1,

wherein said carousel is a first carousel, said storage unit further comprising:

a second carousel disposed above the first carousel so as to be superposed over the first carousel in a plan view, the second carousel rotating around a vertical axis independently of the first carousel, the second carousel including a plurality of levels and including a plurality of article storage spaces on each level, and the article storage spaces being able to be opened and closed;

a filter fan unit for feeding clean air in a down-flow manner from above the second carousel;

an opening and closing unit for bringing the article into and out of the container;

a second transport unit for transporting the article between the opening and closing unit and the second carousel;

a second pipe for feeding clean gas such that feeding is turned on and off for each article storage space; and

a storage unit housing.

3. The storage unit according to claim 2,

wherein the container storage space includes a door configured to be opened and closed by a hand of the transport unit for transporting the container,

wherein the article storage space includes a door configured to be opened and closed by a hand of the second transport unit for transporting the article,

wherein the pipe is configured to be connected to the intake port provided in the container including a valve for opening a flow channel when coming into contact with the container, and

wherein the second pipe includes a valve for opening a flow channel as result of coming into contact with the article.

4. The storage unit according to claim 2 or 3,

wherein both the second pipe and the first pipe are configured to be connected to the intake port provided in the container each include a rotary joints connected to a clean gas feeding source and downstream pipes branching from the rotary joints and supplying clean gas to the container storage spaces and the article storage spaces.

5. The storage unit according to claim 4,

wherein the first carousel and the second carousel include vertical shafts, and wherein the downstream pipes extend upward from below along the shafts.

6. A storage method of executing the following steps using a storage unit comprising: a carousel including a plurality of levels and including a plurality of container storage spaces on each level, the carousel rotating around a vertical axis; a loading port for loading and unloading the container; a transport unit for transporting

the container between the loading port and the container storage spaces; and a pipe for feeding clean gas to each container storage space,

the method comprising:

a step for transporting a container accommodating a reticle or a semiconductor wafer and including the intake port, between the loading port and the container storage spaces by the transport unit; and

a step for connecting the pipe to the intake port of the container stored in the container storage space and feeding clean gas.

WHAT IS CLAIMED IS:

1. A storage unit comprising:

a carousel including a plurality of levels and including a plurality of spaces for storing a container on each level, the carousel rotating around a vertical axis;

a loading port for loading and unloading the container;

a transport unit for transporting the container between the loading port and the container storage spaces; and

a pipe configured to be connected to a first valve provided at a bottom of the container for feeding clean gas such that feeding is turned on and off for each container storage space,

the first valve being configured to open a flow channel for clean gas when pressure outside the container is higher than internal pressure of the container, and

the pipe including, at its end, a second valve configured to open a flow channel for clean gas as a result of coming into contact with the first valve.

2. The storage unit according to claim 1,

wherein said carousel is a first carousel, said storage unit further comprising:

a second carousel disposed above the first carousel so as to be superposed over the first carousel in a plan view, the second carousel rotating around a vertical axis independently of the first carousel, the second carousel including a plurality of levels and including a plurality of article storage spaces on each level, and the article storage spaces being able to be opened and closed;

a filter fan unit for feeding clean air in a down-flow manner from above the second carousel;

an opening and closing unit for bringing the article into and out of the container;

a second transport unit for transporting the article between the opening and closing unit and the second carousel;

a second pipe for feeding clean gas such that feeding is turned on and off for each article storage space; and

a storage unit housing.

3. The storage unit according to claim 2,

wherein the container storage space includes a door configured to be opened and closed by a hand of the transport unit for transporting the container,

wherein the article storage space includes a door configured to be opened and closed by a hand of the second transport unit for transporting the article, and

wherein the second pipe includes a third valve for opening a flow channel for clean gas as result of coming into contact with the article.

4. The storage unit according to claim 2 or 3,

wherein both the second pipe and said pipe configured to be connected to the first valve provided in the container include rotary joints connected to a clean gas feeding source and downstream pipes branching from the rotary joints and supplying clean gas to the container storage spaces and the article storage spaces.

5. The storage unit according to claim 4,

wherein both the first carousel and the second carousel include vertical shafts, and wherein the downstream pipes extend upward from below along the shafts.

6. A storage method of executing the following steps using a storage unit comprising: a carousel including a plurality of levels and including a plurality of spaces for storing a container on each level, the carousel rotating around a vertical axis; a

loading port for loading and unloading the container; a transport unit for transporting the container between the loading port and the container storage spaces; and a pipe for feeding clean gas to each container storage space,

the pipe including, at its end, a second valve configured to open a flow channel for clean gas when coming into contact with a first valve provided at a bottom of the container,

the first valve being configured to open a flow channel for clean gas when pressure outside a container is higher than internal pressure of the container,

the method comprising:

a step for transporting a container accommodating a reticle or a semiconductor wafer and including the first valve at the bottom, between the loading port and the container storage spaces by the transport unit; and

a step for connecting the second valve at the end of the pipe to the first valve of the container stored in the container storage space, and feeding clean gas into the container by opening both the second valve and the first valve.

WHAT IS CLAIMED IS:

1. A storage unit comprising:

a carousel including a plurality of levels and including a plurality of spaces for storing a container on each level, the carousel rotating around a vertical axis;

a loading port for loading and unloading the container;

a transport unit for transporting the container between the loading port and the container storage spaces; and

a pipe configured to be connected to a first valve provided at a bottom of the container for feeding clean gas such that feeding is turned on and off for each container storage space,

the first valve being configured to open a flow channel for clean gas when pressure outside the container is higher than internal pressure of the container, and

the pipe including, at its end, a second valve configured to open a flow channel for clean gas as a result of coming into contact with the first valve.

2. The storage unit according to claim 1,

wherein said carousel is a first carousel, said storage unit further comprising:

a second carousel disposed above the first carousel so as to be superposed over the first carousel in a plan view, the second carousel rotating around a vertical axis independently of the first carousel, the second carousel including a plurality of levels and including a plurality of article storage spaces on each level, and the article storage spaces being able to be opened and closed;

a filter fan unit for feeding clean air in a down-flow manner from above the second carousel;

an opening and closing unit for bringing the article into and out of the container;

a second transport unit for transporting the article between the opening and closing unit and the second carousel;

a second pipe for feeding clean gas such that feeding is turned on and off for each article storage space; and

a storage unit housing.

3. The storage unit according to claim 2,

wherein the container storage space includes a door configured to be opened and closed by a hand of the transport unit for transporting the container,

wherein the article storage space includes a door configured to be opened and closed by a hand of the second transport unit for transporting the article, and

wherein the second pipe includes a third valve for opening a flow channel for clean gas as result of coming into contact with the article.

4. The storage unit according to claim 2 or 3,

wherein both the second pipe and said pipe configured to be connected to the first valve provided in the container include rotary joints connected to a clean gas feeding source and downstream pipes branching from the rotary joints and supplying clean gas to the container storage spaces and the article storage spaces.

5. The storage unit according to claim 4,

wherein both the first carousel and the second carousel include vertical shafts, and wherein the downstream pipes extend upward from below along the shafts.

6. A storage method of executing the following steps using a storage unit comprising: a carousel including a plurality of levels and including a plurality of spaces for storing a container on each level, the carousel rotating around a vertical axis; a

loading port for loading and unloading the container; a transport unit for transporting the container between the loading port and the container storage spaces; and a pipe for feeding clean gas to each container storage space,

the pipe including, at its end, a second valve configured to open a flow channel for clean gas when coming into contact with a first valve provided at a bottom of the container,

the first valve being configured to open a flow channel for clean gas when pressure outside a container is higher than internal pressure of the container,

the method comprising:

a step for transporting a container accommodating a reticle or a semiconductor wafer and including the first valve at the bottom, between the loading port and the container storage spaces by the transport unit; and

a step for connecting the second valve at the end of the pipe to the first valve of the container stored in the container storage space, and feeding clean gas into the container by opening both the second valve and the first valve.