CLAIMS

1. A processing facility comprising:

a container for holding an object to be held therein;

a container support for supporting the container from below with the container positioned in a set position;

a container side connecting portion which is provided in a bottom portion of the container and which has a communicating hole capable of allowing communication between interior space of the container and outside the container;

a support side connecting portion which is provided to the container support and which has a supply hole for supplying gas to the interior space of the container or a discharge hole for discharging gas from the interior space of the container;

wherein a container side contact surface which is an undersurface of the container side connecting portion and a support side contact surface which is a top surface of the support side connecting portion are configured to be in contact with each other and to allow communication between the supply hole or the discharge hole and the communicating hole, when the container is supported by the container support,

characterized in that

the container side contact portion projects downwardly relative to the undersurface of the container, and

the container side contact surface is formed to be a single flat surface located downwardly relative to the undersurface of the container,

wherein the support side contact surface is formed to have a shape that is gradually lower as a distance increases from the supply hole or the discharge hole.

2. The processing facility as defined in claim 1, characterized in that

the support side contact surface is formed to have a shape that conforms to a surface of a sphere.

3. The processing facility as defined in claim 1 or 2, characterized in that

an elastic member is held between the support side connecting portion and the container support,

wherein the support side connecting portion is made of material having an elastic modulus that is greater than an elastic modulus of the elastic member.

4. The processing facility as defined in one of claims 1 to 3, characterized in that

a restricting member is provided in a periphery of the support side connecting portion, for restricting movement of the support side connecting portion in a horizontal direction and in a vertical direction to within a range defined in advance.

5. The processing facility as defined in claim 4, characterized in that

the support side connecting portion includes a top portion which is circular in shape in plan view and which has the support side contact surface, a smaller diameter portion whose diameter is less than a diameter of the top portion and is greater than a diameter of the supply hole or the discharge hole, and which adjoins the top portion from below, and a leg portion whose diameter is greater than the diameter of the smaller diameter portion and which adjoins the smaller diameter portion from below,

wherein the restricting member has an insert portion which is thinner than a vertical dimension of the smaller diameter portion, and

wherein the insert portion is provided such that the insert portion is located at a height at which the insert portion overlaps with the smaller diameter portion in a side view, and such that the insert portion overlaps with both the top portion and the leg portion in plan view.

6. The processing facility as defined in one of claims 1 to 5, characterized in that

a surface roughness of the support side contact surface is such that an arithmetic mean roughness (Ra) is within a range of 3.2 micrometers to 6.3 micrometers.