Figure 9 is a diagram for explaining an effect of a housing according to the present embodiment.

Figure 10 is a diagram for explaining an effect of the housing according to the present embodiment.

Figure 11 is a diagram (side view) showing a modification example of the housing according to the present embodiment.

DESCRIPTION OF THE EMBODIMENTS

[0024] Hereinafter, a preferred embodiment of the present invention will be described with reference to the accompanying drawings. Firstly, a prober 100 according to the present embodiment will be described, then a housing 1 to be applied to the prober 100 will be described.

[0025] [Prober]

First, a configuration of the prober 100 will be described with reference to Figures 1 and 2. Figure 1 is an external view showing an overall configuration of the prober 100. Figure 2 is a plan view of the prober 100 shown in Figure 1.

[0026] As shown in Figures 1 and 2, the prober 100 according to the present embodiment includes a loader unit 114 which supplies and collects a wafer W (refer to Figure 5) to be inspected, and a measurement unit 112 which is arranged adjacent to the loader unit 114. The measurement unit 112 includes measuring parts 30 and when the wafer W (inspection object) is supplied to each measuring part 30 from the loader unit 114, an inspection (wafer-level inspection) of electrical characteristics is respectively performed for each chip of the wafer W in each measuring part 30. Then, the wafer W inspected in each measuring part 30 is collected by the loader unit 114. Note that the prober 100 is also equipped with an operating panel 121, a control device (not illustrated) for controlling the respective units, and the like.

[0027] The loader unit 114 has a load port 118 on which a wafer cassette 120 is placed and a conveyance unit 122 which conveys the wafer W between each measuring part 30 of the measurement unit 112 and the wafer cassette 120. The conveyance unit 122 is equipped with a conveyance unit drive mechanism (not illustrated) and is configured to be movable in X and Z directions and rotatable in a θ direction (around the Z direction). In addition, the conveyance unit 122 is equipped with a conveyance arm 124 and is capable of stretching and contracting the conveyance arm 124 in the Y direction with the conveyance unit drive mechanism. A suction pad (not illustrated) is provided in an upper surface part of the conveyance arm 124, and the conveyance arm 124 holds the wafer W by subjecting a rear surface of the wafer W to vacuum suction with the suction pad. Accordingly, the wafer W

CLAIMS

1. A housing for a prober having a multi-layer structure in which a plurality of measuring parts are stacked in multiple stages and a moving stage is configured to be movable among two or more measuring parts arranged on a same layer, the housing for a prober comprising:

floor bases configured to constitute floor surfaces of respective layers of the multi-layer structure; and

a side frame body which is arranged between a floor base of one layer and a floor base of another layer positioned above the one layer among the plurality of layers, and positioned in both side parts of the measuring parts, wherein

the side frame body includes:

a first side frame which is erected on the floor base of the one layer and supports a lower surface side of the floor base of the another layer; and

a second side frame which is erected on the floor base of the one layer at a position different from that of the first side frame, and supports a measuring part constituent member arranged in each measuring part, and

the second side frame has a gate form comprising two column parts and a beam part which spans between the two column parts, in such a manner that the moving stage is movable among two or more measuring parts on the one layer.

2. The housing for a prober according to claim 1, wherein

the side frame body is arranged on a layer other than an uppermost layer among the plurality of layers.

3. The housing for a prober according to claim 2, further comprising

a head plate having a holding unit configured to hold the measuring part constituent member, wherein

a lower surface side of the head plate is supported by the second side frame.

4. The housing for a prober according to any one of claims 1 to 3, wherein

the second side frame is juxtaposed to the first side frame at a position adjacent to the first side frame.

5. The housing for a prober according to any one of claims 1 to 4, wherein

the measuring part constituent member is one of a pogo frame, a probe card and a test head.

6. The housing for a prober according to any one of claims 1 to 5, wherein

the floor base of the one layer has a flat plate shape which is elongated in a first direction and parallel to a horizontal plane,

the moving stage is movable in the first direction on the one layer, and

in the second side frame, the beam extends in a second direction different from the first direction on the horizontal plane.

7. A prober comprising

the housing for a prober according to any one of claims 1 to 6, wherein

two or more measuring parts are provided on the one layer, and

the prober comprises a moving stage capable of moving a wafer to be inspected to each of the two or more measuring parts arranged on the one layer.

Draft amendment to claims (clean)

1. A housing for a prober having a multi-layer structure in which a plurality of measuring parts are stacked in multiple stages and a moving stage is configured to be movable among two or more measuring parts arranged on a same layer, the housing for a prober comprising:

floor bases configured to constitute floor surfaces of respective layers of the multi-layer structure; and

a side frame body which is arranged between a floor base of one layer and a floor base of another layer positioned above the one layer among the plurality of layers, and positioned in both side parts of the measuring parts, wherein

the side frame body includes:

a first side frame which is erected on the floor base of the one layer and supports a lower surface side of the floor base of the another layer; and

a second side frame which is erected on the floor base of the one layer at a position different from that of the first side frame, and supports a measuring part constituent member arranged in each measuring part, and

the second side frame has a gate form comprising two column parts and a beam part which spans between the two column parts, in such a manner that the moving stage is movable among two or more measuring parts on the one layer.

2. The housing for a prober according to claim 1, wherein

the side frame body is arranged on a layer other than an uppermost layer among the plurality of layers.

3. The housing for a prober according to claim 2, further comprising

a head plate having a holding unit configured to hold the measuring part constituent member, wherein

a lower surface side of the head plate is supported by the second side frame.

4. The housing for a prober according to any one of claims 1 to 3, wherein

the second side frame is juxtaposed to the first side frame at a position adjacent to the first side frame.

5. The housing for a prober according to any one of claims 1 to 4, wherein

the measuring part constituent member is one of a pogo frame, a probe card and a test head.

6. The housing for a prober according to any one of claims 1 to 5, wherein

the floor base of the one layer has a flat plate shape which is elongated in a first direction and parallel to a horizontal plane,

the moving stage is movable in the first direction on the one layer, and

in the second side frame, the beam extends in a second direction different from the first direction on the horizontal plane.

7. A prober comprising

the housing for a prober according to any one of claims 1 to 6, wherein

two or more measuring parts are provided on the one layer, and

the prober comprises a moving stage capable of moving a wafer to be inspected to each of the two or more measuring parts arranged on the one layer.