CLAIMS

[Claim 1]

A probe storage jig that stores a probe including an arm having a cantilever structure and a support section connected to a fixed end of the arm, wherein

the probe storage jig has a structure in which a first guide plate and a second guide plate are stacked, and both surfaces of the first guide plate and the second guide plate are defined by an upper surface and a lower surface facing each other, and in which a through-hole penetrating from the upper surface to the lower surface is formed in each of the first guide plate and the second guide plate,

the probe storage jig holds the probe penetrating through the through-hole formed in each of the first guide plate and the second guide plate, in a state in which an upper part of the support section is exposed when viewed from above the probe storage jig and a tip end of a free end of the arm is exposed when viewed from below the probe storage jig, and

the probe storage jig is configured in such a way that the first guide plate and the second guide plate are relatively movable in a direction intersecting a penetration direction of the through-hole so as to sandwich the probe between the first guide plate and the second guide plate,

two adjacent sides of the probe abut on an inner wall surface of the through-hole of the first guide plate,

two other adjacent sides of the probe abut on an inner wall surface of the through-hole of the second guide plate, and

all four sides of the probe having a rectangular cross-section perpendicular to the penetration direction abut on either the inner wall surface of the through-hole of the first guide plate or the inner wall surface of the through-hole of the second guide plate.

[Claim 2]

The probe storage jig according to claim 1, wherein

a projection projecting from the support section abuts on the upper surface of the first guide plate.

[Claim 3]

The probe storage jig according to claim 1 or 2, further comprising:

a third guide plate that is stacked on a stacked body of the first guide plate and the second guide plate and in which the through-hole through which the probe penetrates is formed,

wherein the third guide plate is relatively movable with respect to the first guide plate and the second guide plate in a direction intersecting the penetration direction.

[Claim 4]

A probe storage system including a probe that is used for inspecting an inspection object and a probe storage jig that stores the probe, the system comprising:

the probe that includes an arm having a cantilever structure and a support section connected to a fixed end of the arm, and is provided with a projection projecting from the support section; and

the probe storage jig having a structure in which a first guide plate and a second guide plate are stacked, and both surfaces of the first guide plate and the second guide plate are defined by an upper surface and a lower surface facing each other, and in which a through-hole penetrating from the upper surface to the lower surface is formed in each of the first guide plate and the second guide plate, wherein

the probe storage jig holds the probe penetrating through the through-hole formed in each of the first guide plate and the second guide plate,

the projection of the probe abuts on the upper surface of the first guide plate,

an upper part of the support section is exposed when viewed from above the probe storage jig,

a tip end of a free end of the arm is exposed when viewed from below the probe storage jig, and

the probe storage jig is configured in such a way that the first guide plate and the second guide plate are relatively movable in a direction intersecting a penetration direction of the through-hole, and the probe is sandwiched between the first guide plate

and the second guide plate,

two adjacent sides of the probe abut on an inner wall surface of the through-hole of the first guide plate,

two other adjacent sides of the probe abut on an inner wall surface of the through-hole of the second guide plate, and

all four sides of the probe having a rectangular cross-section perpendicular to the penetration direction abut on either the inner wall surface of the through-hole of the first guide plate or the inner wall surface of the through-hole of the second guide plate.

[Claim 5]

The probe storage system according to claim 4, wherein

the projection is disposed, in the probe, in a direction from the tip end of the free end of the arm toward the upper part of the support section, on the support section side of a center of gravity of the probe.

[Claim 6]

The probe storage system according to claim 4, wherein

the probe storage jig further includes a third guide plate that is stacked on a stacked body of the first guide plate and the second guide plate and in which the through-hole through which the probe penetrates is formed,

the third guide plate is relatively movable with respect to the first guide plate and the second guide plate in a direction intersecting the penetration direction.

[Claim 7]

A probe storage method for storing a probe that is used for inspecting an inspection object in a probe storage jig, the method comprising:

preparing the probe including an arm having a cantilever structure and a support section connected to a fixed end of the arm;

preparing the probe storage jig having a structure in which a first guide plate and

a second guide plate are stacked, and both surfaces of the first guide plate and the second guide plate are defined by an upper surface and a lower surface facing each other, and in which a through-hole penetrating from the upper surface to the lower surface is formed in each of the first guide plate and the second guide plate;

inserting the probe into the through-hole formed in each of the first guide plate and the second guide plate such that an upper part of the support section is exposed when viewed from above the probe storage jig and a tip end of a free end of the arm is exposed when viewed from below the probe storage jig; and

moving the first guide plate and the second guide plate relatively in a direction intersecting a penetration direction of the through-hole, and holding the probe by means of the probe storage jig in a state in which the probe is sandwiched between the first guide plate and the second guide plate,

causing two adjacent sides of the probe to abut on an inner wall surface of the through-hole of the first guide plate,

causing two other adjacent sides of the probe to abut on an inner wall surface of the through-hole of the second guide plate, and

causing all four sides of the probe having a rectangular cross-section perpendicular to the penetration direction to abut on either the inner wall surface of the through-hole of the first guide plate or the inner wall surface of the through-hole of the second guide plate.

[Claim 8]

The probe storage method according to claim 7, further comprising:

causing a projection projecting from the support section to abut on the upper surface of the first guide plate.

[Claim 9]

The probe storage method according to claim 7 or 8, further comprising:

preparing the probe storage jig further including a third guide plate that is stacked on a stacked body of the first guide plate and the second guide plate and in which

the through-hole through which the probe penetrates is formed; and

moving the third guide plate relatively with respect to the first guide plate and the second guide plate in a direction intersecting the penetration direction, and adjusting a posture of the probe in a state that is sandwiched between the first guide plate and the second guide plate.