CLAIMS

1. A conveyance apparatus that conveys an object to be molded to a molding die in which a recess is formed on a side of a mold surface on which the object to be molded is placed, the conveyance apparatus comprising:

a holding unit that holds the object to be molded;

a position reference mechanism having a reference surface serving as a positioning reference of the object to be molded placed on the molding die; and

an object-to-be-molded moving mechanism that moves the object to be molded placed on the molding die toward the reference surface,

wherein the position reference mechanism includes

a reference surface member having the reference surface and provided so as to be contactable with a side surface of the recess,

a lift mechanism that comes into contact with a bottom surface of the recess to separate the reference surface member from the bottom surface of the recess, and

a reference surface moving mechanism that moves the reference surface member toward a side surface of the recess while the reference surface member is separated from the bottom surface of the recess by the lift mechanism, wherein

the lift mechanism includes a lift member provided so as to be contactable with the bottom surface of the recess, and an up-down moving slide portion that slides the lift member so as to be moved up and down with respect to the holding unit,

the reference surface member is configured to be movable up and down with respect to the molding die together with the lift member, and

a distance along a vertical direction between a lower end of the reference surface member and a lower end of the lift member is smaller than a depth dimension of the recess.

2. The conveyance apparatus according to claim 1, wherein

the molding die includes a pot block formed with a pot in which a resin material is accommodated, and the recess is formed by positioning the pot block below the mold surface, and

the lift mechanism comes into contact with an upper surface of the pot block to separate the reference surface member from the upper surface of the pot block.

3. The conveyance apparatus according to claim 1 or 2, wherein the reference surface member is configured to be horizontally movable with respect to the lift member.

4. The conveyance apparatus according to claim 3, wherein

the up-down moving slide portion includes an up-down moving rail member and an up-down moving slide member that slides the up-down moving rail member, and

the reference surface member is configured to be horizontally movable with respect to the lift member by a horizontal slide portion provided on the up-down moving slide member.

5. The conveyance apparatus according to any one of claims 1 to 4, wherein

the reference surface moving mechanism uses a cam mechanism, and includes

a cam driver that moves up and down by an actuator, and

a cam slider that is provided on the reference surface member and horizontally moves in contact with the cam driver.

6. The conveyance apparatus according to any one of claims 1 to 5, further comprising a pressing member that presses the object to be molded placed on the molding die toward the molding die,

wherein the reference surface member and the lift mechanism are provided on the pressing member.

7. A resin molding apparatus comprising the conveyance apparatus according to any one of claims 1 to 6.

8. A method of manufacturing a resin molded product using the conveyance apparatus according to any one of claims 1 to 6, the method for manufacturing a resin molded product comprising:

bringing the reference surface member into contact with the molding die;

moving and positioning the object to be molded placed on the molding die toward the reference surface; and

molding the positioned object to be molded with a resin.