Claims

WHAT IS CLAIMED IS:

1. An industrial robot for filling, comprising a fixed base (1), wherein a rotating base (10) is provided on the surface of the fixed base (1), a first joint (2) is provided on the surface of the rotating base (10), one end of the first joint (2) is provided with a main arm (3) and is rotatably connected to one end of the main arm (3), the other end of the main arm (3) is provided with a forearm (4) and is rotatably connected to the forearm (4), one end of the forearm (4) is provided with a connector (41), a second joint (5) is provided on both sides of the connector (41), the connector (41) is rotatably connected to the second joint (5), the bottom end of the second joint (5) is provided with a chassis (50), a filling mechanism (6) is provided under the chassis (50), the fixed base (1) is further provided with a liquid storage tank (8), one end of the fixed base (1) is provided with a disinfection mechanism (7), and one side of the liquid storage tank (8) is equipped with a swing mechanism (9);

wherein the disinfection mechanism (7) comprises a heating tank (71) fixed to the surface of the fixed base (1), a pressure release valve (72) at the bottom end of the heating tank (71) and an air outlet (70) at one end of the fixed base (1), the pressure release valve (72) communicates with the air outlet (70) through the air outlet hose (73), the top end at the inner side of the heating tank (71) is provided with a power socket (710), and the bottom end of the power socket (710) is provided with a quartz heating tube (711).

2. The industrial robot for filling according to claim 1, wherein a first servo motor (11) is provided on the surface of the rotating base (10), the output shaft of the first

servo motor (11) passes through a motor shaft hole (100) on the rotating base (10) and is coaxially provided with a pinion gear (12) between the rotating base (10) and the fixed base (1), a large gear (13) is provided on one side of the pinion gear (12), the pinion gear (12) meshes with the large gear (13), the top end of the large gear (13) is fixedly connected to the rotating base (10), and the bottom end of the large gear (13) is rotatably connected to the fixed base (1).

3. The industrial robot for filling according to claim 1, wherein a side of the first joint (2) is provided with a second servo motor (20) for driving the main arm (3) to rotate, the side wall at one end of the main arm (3) is provided with a third servo motor (30) for driving the forearm (4) to rotate, and the side wall at one end of the connector (41) is provided with a fourth servo motor (40) for driving the second joint (5) to rotate.

4. The industrial robot for filling according to claim 1, wherein the filling mechanism (6) comprises a filling tube (60) fixed to the side wall of the chassis (50) and a filling head (66) below the filling tube (60), the filling head (66) is coaxially and fixedly connected to the chassis (50), the top end of the filling head (66) is provided with a filling cylinder (65), a piston rod of the filling cylinder (65) passes through the top of the filling tube (60) and is slidingly connected to the inner wall of the filling tube (60) through a piston.

5. The industrial robot for filling according to claim 4, wherein the bottom end of the filling tube (60) is connected to a tee (61) through a pipe, the top end of the tee (61) is connected to a first one-way check valve (62), the bottom end of the tee (61) is

connected to a second one-way check valve (63), the top end of the first one-way check valve (62) communicates with the filling head (66) through a pipe, and the bottom end of the second one-way check valve (63) communicates with the liquid storage tank (8) through a hose (64).

6. The industrial robot for filling according to claim 1, wherein the pressure release valve (72) comprises a valve body (722) and a spring base (720), one end of the valve body (722) is provided with an air inlet (721), the side end of the valve body (722) is provided with an air outlet (727), a valve base (729) is provided inside the air inlet (721), the valve base (729) is sealed by a valve flap (723), a guide sleeve (725) is provided at one end of the valve base (729), a disc holder (724) is provided at the top end of the guide sleeve (725), and a valve stem (726) is provided at the top end of the disc holder (724).

7. The industrial robot for filling according to claim 6, wherein: a spring (728) is provided inside the spring base (720), a valve stem (726) is provided at the center of the spring (728), the valve stem (726) extends onto the disc holder (724) and is sleeved with the disc holder (724), and the valve flap (723) is slidingly connected to the guide sleeve (725).

8. The industrial robot for filling according to claim 1, wherein the swing mechanism (9) comprises a rocker (90) on the side wall of the air outlet (70), one end of the rocker (90) is fixed to the air outlet (70) and is provided with a connecting rod (91), one end of the rocker (90) is rotatably connected to one end of the connecting rod

(91) , one end of the connecting rod (91) is provided with a crank (92) and is rotatably connected to one end of the crank (92), one end of the crank (92) is provided with a driving motor (93) and is coaxially and fixedly connected to the output shaft of the driving motor (93), the driving motor (93) is fixed to the liquid storage tank (8) through a connecting base (94), and the other end of the rocker (90) is rotatably connected to the air outlet (70) through a rotating shaft (95).