Claims

WHAT IS CLAIMED IS:

1. A multi-angle installation-type industrial conveying robot, 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), one end of the main arm (3) is provided with a second joint (4) and is rotatably connected to the second joint (4), one end of the second joint (4) is provided with a first fixed block (40), a second fixed block (42) parallel to the first fixed block is provided on one side of the first fixed block (40), the four corners of the second fixed block (42) are all provided with fixed holes (43) which are fixedly connected by four connecting posts (41), one end of the second fixed block (42) is provided with a clamping jaw component (45), the four corners of the rotating base (10) are all provided with lifting mechanisms (7), the bottom end of the rotating base (10) is provided with a clamping installation mechanism (8), the surface of the rotating base (10) is provided with a supporting base (5), and a heat dissipation device (6) is provided above the supporting base (5); wherein a motor bracket (50) is provided on the supporting base (5), a rocker motor (53) is provided at the top of the motor bracket (50), the output shaft of the rocker motor (53) is provided with a second rocker (52) and is rotatably connected to one end of the second rocker (52), and one end of the second rocker (52) is provided with a first rocker (51) and is rotatably connected to one end of the first rocker (51).

2. The multi-angle installation-type industrial conveying robot 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), the first servo motor (11) 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 multi-angle installation-type industrial conveying robot 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 second joint (4) to rotate, and a fourth servo motor (44) is provided between the first fixed block (40) and the second fixed block (42).

4. The multi-angle installation-type industrial conveying robot according to claim 3, wherein the clamping jaw component (45) comprises a screw (451) fixedly connected to the output shaft of the fourth servo motor (44), a sleeve (450) is provided at one end of the screw (451) which is screwed with a screw hole (4500) in the sleeve (450), an outer wall section of the sleeve (450) is elliptical, one end of the sleeve (450) passes through the second fixed block (42) and is slidingly connected to the second fixed block, and a pull rod (452) is fixedly connected to the other end of the sleeve (450).

5. The multi-angle installation-type industrial conveying robot according to claim 4, wherein two clamps (453) are provided on both sides of the pull rod (452), one end of the two clamps (453) is rotatably connected to each other through a rotating shaft, an empty groove (4520) for sliding along the rotating shaft is provided in the center of the pull rod (452), one end of the pull rod (452) is rotatably connected to two struts (454), one end of the two struts (454) is rotatably connected to one end of the two clamps (453), respectively, and rubber anti-skid heads (455) are provided at the ends of the two clamps (453).

6. The multi-angle installation-type industrial conveying robot according to claim 1, wherein the heat dissipation device (6) comprises a protective shell (60), a rear cover (61) at one end of the protective shell (60) and an air outlet head (64) at the other end of the protective shell (60), a gear motor (62) is provided inside the protective shell (60), the output shaft of the gear motor (62) is coaxially and fixedly connected to the fan (63) at one end thereof, swing arms (65) are provided on both sides of the protective shell (60), one end of one swing arm (65) is rotatably connected to one end of the first rocker (51), the side of the other swing arm (65) is provided with a fixed rod (54) and is rotatably connected to one end of the fixed rod (54), and the other end of the fixed rod (54) is fixed to the supporting base (5).

7. The multi-angle installation-type industrial conveying robot according to claim 1, wherein the lifting mechanism (7) comprises four lifting rods (71), each of the lifting rods (71) is installed in the telescopic grooves (14) provided at the four

corners of the fixed base (1) respectively and is slidingly connected to the corresponding telescopic groove (14) respectively, each of the lifting rods (71) is provided with several limit holes (72) at equal intervals uniformly, a through hole (15) corresponding to the position of the lifting rod (71) is provided on the side wall of the fixed base (1), and the through hole (15) is provided with a limit pin (16) matched with the through hole (15) and the limit hole (72) in a plug-in manner.

8. The multi-angle installation-type industrial conveying robot according to claim 1, wherein the clamping installation mechanism (8) comprises guide rails (80) on both side walls of the bottom surface of the fixed base (1) and two clamping blocks (81) provided vertically between the guide rails (80), the opposite vertical surfaces of the two clamping blocks (81) are both provided with anti-skid grooves (810), chutes (800) are provided on the inner wall of the guide rails (80), and both ends of the clamping block (81) are provided with a sliding clamp (811) which is slidingly connected to the chute (800).

9. The multi-angle installation-type industrial conveying robot according to claim 8, wherein several locking mechanisms (801) are provided on the inner wall of the chute (800) at equal intervals uniformly, a pull rod (82) is provided directly above the guide rail (80), a round hole (820) corresponding to the position of the locking mechanism (801) is provided on the pull rod (82), the locking mechanism (801) comprises a connecting rod (8010) and a locking tongue (8011), a square hole (802) corresponding to the position of the locking tongue (8011) is provided on the inner wall of the chute (800), the locking tongue (8011) is slidingly

connected to the square hole (802) and is fixedly connected to the inner wall of the square hole (802) through a return spring (8012), the connecting rod (8010) passes through the guide rail (80) and is slidingly connected to the round hole (820), and one end of the connecting rod (8010) is further provided with an anti-dropping piece (8013) to prevent the drop out from the round hole (820).