

CONCRETE AUXILIARY POURING DEVICE

TECHNICAL FIELD

[0001] The present application relates to a technical field of building pouring, in particular to a concrete auxiliary pouring device.

BACKGROUND ART

[0002] In a pouring of buildings mainly adopting reinforced concrete structure, concrete needs to be transported to a steel framework and poured into a formwork through a concrete-distributing machine to form a floor building structure.

[0003] When pouring the concrete, there are certain fast rules for a height of a discharging pipe, when the discharging pipe is too high, it is easy to produce a segregation layer during pouring, which affects a pouring effect, when the discharging pipe is too low, it will make the concrete pouring unable to open, and the concrete used during pouring needs to be continuously mixed.

SUMMARY

[0004] In order to better mix concrete and control a height of a discharging port, the present application provides a concrete auxiliary pouring device.

[0005] The concrete auxiliary pouring device provided in the present application adopts the following technical solution.

[0006] The concrete auxiliary pouring device comprises a bottom plate; a mixing bucket; the mixing bucket is provided on the bottom plate, a discharging pipe is provided on a side of the mixing bucket, wherein the discharging pipe is connected with a discharging pump; a lifting mechanism, the mixing bucket is connected to the bottom plate with the lifting mechanism, the lifting mechanism is configured to drive the mixing bucket to move back and forth in a vertical

direction; and a feeding mixing mechanism, the feeding mixing mechanism is provided at a top of the mixing bucket, and the feeding mixing mechanism is configured to receive concrete and mix the concrete inside the mixing bucket.

[0007] By adopting the above technical solution, the feeding mixing mechanism can receive concrete and feed it into the mixing bucket, continuously mix the concrete in the mixing bucket at the same time, prevent the concrete from solidifying in the mixing bucket, while the feeding mixing mechanism mixes the concrete in the mixing bucket, the discharging pipe on the side of the mixing bucket can be connected to the discharging pump to discharge the concrete from the mixing bucket for pouring, the lifting mechanism can adjust a vertical position of the discharging port on a side of the mixing bucket, making it convenient for a staff to pour.

[0008] Optionally, the feeding mixing mechanism comprises a cover plate and a mixing rod, wherein the cover plate is provided at a bucket opening of the mixing bucket, the cover plate is configured to rotate around an axis of the cover plate and is rotatably connected to the mixing bucket, the mixing rod is located on a central axis of the cover plate and the mixing rod penetrates through the cover plate, the mixing rod is provided with a feeding channel, a feeding port of the feeding channel is provided at a top of the mixing rod, the feeding port is provided with a connecting part, the connecting part is capable of rotating around its own axis and being connected to the feeding port, a discharging port of the feeding channel is provided on a side of the mixing rod inside the mixing bucket, a first mixing blade is provided on the mixing rod, the first mixing blade is located below the discharging port in the vertical direction.

[0009] By adopting the above technical solution, the feeding port of the mixing rod can be connected to the discharging port of the feeding mixing mechanism with the conveying pipe, achieving a transportation of the concrete into the mixing bucket, as the cover plate can rotate around its own axis, so the cover plate can drive the mixing rod to rotate together, allowing the first mixing blade of the mixing rod to mix the concrete in the mixing bucket.

[0010] Optionally, the feeding mixing mechanism further comprises an electric motor, a main

body of the electric motor is fixedly connected to the bottom plate, a first gear is provided at an output end of the electric motor, a second gear is coaxially and fixedly connected outside the cover plate, and the first gear is engaged with the second gear.

[0011] By adopting the above technical solution, utilizing the electric motor to provide power for a rotation of the cover plate.

[0012] Optionally, the concrete auxiliary pouring device further comprises a supporting frame, a main body of the electric motor is fixedly connected to the bottom plate with the supporting frame, and the supporting frame is provided with a supporting groove for arranging the mixing bucket.

[0013] By adopting the above technical solution, the supporting frame can lift the electric motor to a position that can fit with the cover plate, while further providing protection for the mixing bucket, avoiding tipping accidents during a vertical reciprocating movement of the mixing bucket driven by the lifting mechanism or a movement of the concrete auxiliary pouring device.

[0014] Optionally, the feeding mixing mechanism further comprises a planetary gear train, wherein the planetary gear train comprises a planet carrier, a sun gear, a planet gear, and an outer gear ring, the planet carrier has a planetary disk and a planetary gear shaft, a through hole is provided on a central axis of the planetary disk for the mixing rod to pass through, the planetary disk is capable of rotating around its own axis and being rotatably connected to the mixing bucket, the planetary gear is capable of rotating around its own axis and being rotatably connected to the planetary gear shaft, the sun gear is fixedly connected to the mixing rod and the sun gear is located above the discharging port in the vertical direction, the outer gear ring is fixedly connected to the mixing bucket, the planet gear is simultaneously engaged with the outer gear ring and the sun gear, a second mixing blade is provided on a side of the planetary gear shaft departing from the planetary disk.

[0015] By adopting the above technical solution, the mixing rod which is fixedly connected to the sun gear rotates, and the power is input from the sun gear, the outer gear ring is locked, and

the planet gear transmits the power, as an output end of the power, the planet carrier rotates, thereby causing the planetary gear shaft of the planet carrier to rotate around a central axis of the sun gear, so that the second mixing blade on the planetary gear shaft plays a role in a concrete mixing.

[0016] Optionally, the feeding mixing mechanism further comprises an inner wall scraper, wherein the inner wall scraper comprises a bucket wall scraper and a bucket bottom scraper, a first end of the bucket bottom scraper is connected to the bucket wall scraper, and a second end of the bucket bottom scraper is fixedly connected to a bottom end of the mixing rod.

[0017] By adopting the above technical solution, the bucket wall scraper and bucket bottom scraper can scrape a bucket wall and bucket bottom of the mixing bucket with a rotation of the mixing rod, thereby avoiding the concrete adhering to the bucket wall and bucket bottom.

[0018] Optionally, the lifting mechanism comprises a pushing component, wherein a main body of the pushing component is fixedly connected to the bottom plate, and an output end of the pushing component is vertically provided and the pushing component is in a driving connection with the mixing bucket for driving the mixing bucket to move back and forth in the vertical direction.

[0019] By adopting the above technical solution, due to a vertical setting of the output end of the pushing component, as the pushing component works, the pushing component can drive the mixing bucket to move back and forth in the vertical direction.

[0020] Optionally, the lifting mechanism further comprises a plurality of elastic elements, wherein the elastic elements are arranged in a circumferential direction around the pushing component at equal intervals, a first end of the elastic element is fixedly connected to the bottom plate, and a second end of the elastic element is fixedly connected to an outer bottom wall of the mixing bucket.

[0021] By adopting the above technical solution, utilizing the elastic elements can share a force from the mixing bucket on the pushing component.

[0022] Optionally, a plurality of universal wheels are provided on a bottom of the bottom plate, and a push handle is provided on a side of the bottom plate.

[0023] By adopting the above technical solution, utilizing the push handle and the universal wheels can help the staff control the concrete auxiliary pouring device.

[0024] In summary, the present application includes at least one of the following beneficial technical effects:

[0025] 1. enabling a lime and a stone to mix better;

[0026] 2. enabling the height of the discharging port to be controlled;

[0027] 3. avoiding the concrete adhering to an inner wall and a bottom wall of the mixing bucket.

BRIEF DESCRIPTION OF THE DRAWINGS

[0028] FIG. 1 is a structural schematic view of a concrete auxiliary pouring device according to the embodiment of the present application;

[0029] FIG. 2 is an internal structural schematic view of the concrete auxiliary pouring device according to the embodiment of the present application;

[0030] FIG. 3 is a structural schematic view of a planet carrier in planetary gear train according to the embodiment of the present application;

[0031] FIG. 4 is a structural schematic view of a cover plate and a mixing rod according to the embodiment of the present application;

[0032] List of references signs: 1. bottom plate; 101. universal wheel; 102. push handle; 2. mixing bucket; 201. discharging pipe; 3. lifting mechanism; 301. pushing component; 302. elastic element; 4. supporting frame; 5. feeding mixing mechanism; 501. cover plate; 502. mixing rod; 503. feeding port; 5031. connecting part; 504. discharging port; 505. sun gear; 506. planet gear; 507. outer gear ring; 508. planet carrier; 5081. planetary disk; 5082. planetary gear shaft; 5083. through hole; 509. inner wall scraper; 5091. bucket wall scraper; 5092. bucket bottom scraper; 510. electric motor; 511. first gear; 512. second gear; 513. first mixing blade; 514. second mixing

blade.

DETAILED DESCRIPTION

[0033] The present application will be further described in detail below in combination with the FIGs. 1-4.

[0034] The present application discloses a concrete auxiliary pouring device.

[0035] Referring to FIG. 1, the concrete auxiliary pouring device includes a bottom plate 1, a mixing bucket 2, a lifting mechanism 3, a supporting frame 4, and a feeding mixing mechanism 5, the mixing bucket 2 is connected to the bottom plate 1 with the lifting mechanism 3, and the feeding mixing mechanism 5 is provided at a top of the mixing bucket 2, the supporting frame 4 is provided on the bottom plate 1, the supporting frame 4 is provided with a supporting groove for arranging the mixing bucket 2, the supporting groove can provide protection for the mixing bucket 2 and prevent the mixing bucket 2 from tipping over.

[0036] Referring to FIG. 1, a side of the mixing bucket 2 is provided with a discharging pipe 201, which is configured to connect with a discharging pump, the discharging pump can pump out concrete inside the mixing bucket 2 for pouring.

[0037] During pouring, the bottom plate 1 can be located at a moving end of a concrete-distributing machine, and the concrete-distributing machine can pull the auxiliary pouring device to change a position of the discharging pipe 201. When pouring in areas where the concrete-distributing machine cannot reach, a plurality of universal wheels 101 can be provided at a bottom of the bottom plate 1 as an option, and a push handle 102 is provided on a side of the bottom plate 1, in the embodiment, a number of the universal wheels 101 is four, and an user can pull an auxiliary pouring device to change the position of the discharging pipe 201 with a push handle 102.

[0038] During pouring, a height of the discharging pipe 201 can be changed by the lifting mechanism 3.

[0039] Referring to FIGs. 1 and 2, the lifting mechanism 3 includes a pushing component 301 and an elastic element 302, a body of the pushing component 301 is fixedly connected to the bottom plate 1, the pushing component 301 is vertically provided and an output end of the pushing component 301 is in a driving connection with the mixing bucket 2, an end of the elastic element 302 is fixedly connected to the bottom plate 1, and another end of the elastic element 302 is fixedly connected to an outer bottom wall of the mixing bucket 2, a number of the elastic element 302 is multiple, and a plurality of elastic elements 302 are arranged in a circumferential direction around the pushing component 301 at equal intervals. Wherein the pushing component 301 can be an electric pushing rod or cylinder, and the elastic element 302 can be a spring or a spring plate. In the embodiment, the electric pushing rod is adopted as the pushing component 301, a spring is adopted as the elastic element 302, and the number of the elastic element 302 is four.

[0040] During a pouring process, by controlling the pushing component 301 to work, with the output end of the pushing component 301 moving back and forth, which can drive the mixing bucket 2 to move back and forth together. When the output end of the pushing component 301 extends to a maximum length, the elastic element 302 is in a compressed state, at this time, the elastic element 302 can apply an upward force to the mixing bucket 2, sharing a portion of a force applied by the mixing bucket 2 to the pushing component 301. When the output end of the pushing component 301 retracts, the elastic element 302 is further compressed to overcome a force of contraction of the elastic element 302, which is less than a gravity of the mixing bucket 2 when the mixing bucket 2 is fully loaded, therefore, during this process, the elastic element 302 can still share the portion of the force applied by the mixing bucket 2 to the pushing component 301, avoiding the pushing component 301 from bearing excessive force for a long time to reduce its service life. When the output end of the pushing component 301 extends out, the elastic element 302 is released, and the pushing component 301 is aided in pushing the mixing bucket 2 in a direction departing from a main body of the pushing component 301, reducing the force that the pushing component 301 needs to apply to the mixing bucket 2 and avoiding a need for excessive

force from the pushing component 301 to reduce its service life.

[0041] During pouring, the concrete can be injected into the mixing bucket 2 by the feeding mixing mechanism 5, while mixing the concrete in the mixing bucket 2 to avoid plasticization and solidification of the concrete in the mixing bucket 2.

[0042] Referring to FIGs. 2 and 3, the feeding mixing mechanism 5 includes a cover plate 501 and a mixing rod 502, the cover plate 501 is provided at a bucket opening of the mixing bucket 2, which can rotate around its own axis, and the cover plate 501 is rotatably connected to the mixing bucket 2, the mixing rod 502 is located on a central axis of the cover plate 501 and the mixing rod 502 penetrates through the cover plate 501, when the cover plate 501 rotates, the mixing rod 502 can rotate together with the cover plate 501.

[0043] In order to feed the concrete into the mixing bucket 2, the mixing rod 502 is provided with a feeding channel, a feeding port 503 of the feeding channel is provided at a top of the mixing rod 502, and a discharging port 504 of the feeding channel is provided on a side of the mixing rod 502 inside the mixing bucket 2. The concrete can enter the feeding channel from the feeding port 503 and leave the feed channel from the discharging port 504 to enter the mixing bucket 2. Due to a fact that during actual use, the mixing rod 502 will remain in a rotating state under a drive of the cover plate 501, a connecting part 5031 can further be provided on the mixing rod 502, the connecting part 5031 can rotate around its own axis, and the connecting part 5031 is rotatably connected to the feeding port 503. In the embodiment, the connecting part 5031 is a tubular structure, and the connecting part 5031 passes through the feeding port 503, and a bearing is provided between the connecting part 5031 and the feeding port 503, and there are a plurality of other connection methods between the connecting part 5031 and the feeding port 503, the present application does not limit to this. The mixing rod 502 is connected to a conveying pipe with the connecting part 5031, which ensures that when the mixing rod 502 rotates, the conveying pipe is relatively fixed with the connecting part 5031, stabilizing a transmission process of concrete.

[0044] In order to feed the concrete into the mixing bucket 2 and mix the concrete inside the

mixing bucket 2, a first mixing blade 513 is further provided on the mixing rod 502, and the first mixing blade 513 is located below the discharging port 504 in a vertical direction. In actual use, the cover plate 501 can drive the mixing rod 502 to rotate together, so that the first mixing blade 513, which is fixedly connected to the mixing rod 502, mixes the concrete inside the mixing bucket 2.

[0045] Referring to FIGs. 2 and 4, in order to expand a mixing range of the feeding mixing mechanism 5, and avoid an insufficient mixing of the concrete departing from the first mixing blade 513 due to a small mixing range, resulting in a decrease in a hardness of poured concrete, the feeding mixing mechanism 5 can further include a planetary gear train.

[0046] The planetary gear train includes a planet carrier 508, a sun gear 505, a planet gear 506, and an outer gear ring 507, the planet carrier 508 has a planetary disk 5081 and a planetary gear shaft 5082, a central axis of the planetary disk 5081 is provided with an through hole 5083 for the mixing rod 502 to pass through, an inner wall of the mixing bucket 2 is provided with a planetary groove that matches the planetary disk 5081, so that the planetary disk 5081 can rotate around its own axis and the planetary disk 5081 is rotatably connected to the mixing bucket 2, the planetary gear 506 can rotate around its own axis and the planetary gear 506 is rotatably connected to the planetary gear shaft 5082, the sun gear 505 is fixedly connected to the mixing rod 502 and is located above the discharging port 504 in the vertical direction, in the embodiment, the sun gear 505 is integrally formed with the mixing rod 502, and the outer gear ring 507 can be fixedly connected to the mixing bucket 2 or, as in the embodiment, the outer gear ring 507 is integrally formed with the mixing bucket 2, the planet gear 506 is simultaneously engaged with the outer gear ring 507 and the sun gear 505. There are a plurality of combination methods for the planetary gear train according to a different input end, output end, and locking end, in the embodiment, due to an inability of the mixing bucket 2 to rotate, so in the planetary gear train, the outer gear ring 507 integrated with the mixing bucket 2 is the locking end, since the cover plate 501 can rotate around its own axis and simultaneously drive the mixing rod 502 to rotate, so in the planetary gear

train, the outer gear ring 507 integrated with the mixing rod 502 is the input end, since the input end and the locking end are determined, so in the planetary gear train, the planet carrier 508 is the output end. In order to enable the output end of the planetary gear train to play a mixing role in concrete, a second mixing blade 514 is provided on a side of the planetary gear shaft 5082 departing from the planetary disk 5081.

[0047] In actual use, the cover plate 501 can drive the mixing rod 502 to rotate together, thereby driving the planet carrier 508 of the planetary gear train to rotate around its own axis, causing the planetary gear shaft 5082 of the planet carrier 508 to rotate around a central axis of the sun gear 505, and allowing the second mixing blade 514 fixedly connected to the planetary gear shaft 5082 to mix the concrete in the mixing bucket 2. A number of the planet gear 506 in the planetary gear train can be multiple, and a number of the planetary gear shaft 5082 is a same as the number of the planet gear 506, in order to fully mix the concrete in the mixing bucket 2 without excessively occupying a space in the mixing bucket 2 at the same time, in the embodiment, a number of the planet gear 506 is three.

[0048] Referring to FIG. 2, in order to avoid the concrete adhering to a wall and bottom of the mixing bucket 2 during a mixing process, the feeding mixing mechanism 5 further includes an inner wall scraper 509, which includes a bucket wall scraper 5091 and a bucket bottom scraper 5092, the bucket bottom scraper 5092 is provided tightly against the bottom of the mixing bucket 2, and an end of the bucket bottom scraper 5092 is fixedly connected to a bottom end of the mixing rod 502, another end of the bucket bottom scraper 5092 is connected to the bucket wall scraper 5091, so that the bucket wall scraper 5091 can tightly adhere to a bucket wall of the mixing bucket 2.

[0049] In actual use, the cover plate 501 can drive the mixing rod 502 to rotate together, thereby driving the inner wall scraper 509 to rotate around the central axis of the cover plate 501, when rotating, the bucket wall scraper 5091 can scrape the bucket wall of the mixing bucket 2, and the bucket bottom scraper 5092 can scrape a bucket bottom of the mixing bucket 2, achieving cleaning

of the bucket wall and bucket bottom of the mixing bucket 2.

[0050] Referring to FIG. 1, In order to provide power to the feeding mixing mechanism 5, the feeding mixing mechanism 5 further includes an electric motor 510, a main body of the electric motor 510 is fixedly connected to the bottom plate 1, an output end of the electric motor 510 is provided with a first gear 511, a second gear is coaxially and fixedly connected outside the cover plate 501, in the embodiment, the second gear 512 is integrally formed with the cover plate 501, and the first gear 511 is engaged with the second gear 512.

[0051] In actual use, when the electric motor 510 starts working, it drives the first gear 511 to rotate, under an effect that the first gear 511 is engaged with the second gear 512, the second gear 512 and the cover plate 501 start to rotate simultaneously. During a rotation of the first gear 511 driven by the electric motor 510, the mixing bucket 2 will change its position in the vertical direction due to an influence of the pushing component 301, thereby causing the second gear 512 to change its position in the vertical direction, so a thickness of the first gear 511 should be greater than the thickness of the second gear 512, so that the second gear 512 can always engage with the first gear 511 during a vertical movement.

[0052] An implementation principle of the concrete auxiliary pouring device in the present application embodiment is: before pouring, the conveying pipe is connected to the connecting part 5031 of the mixing rod 502, after the conveying pipe starts to transport concrete into the mixing bucket 2, the electric motor 510 is started, due to a drive of the electric motor 510, the mixing rod 502 starts to rotate, and the discharging port 504 on the mixing rod 502 further rotates around an axis direction of the mixing rod 502, so that the concrete can enter the mixing bucket 2 evenly, avoiding situations where there is too much concrete on a side and too little concrete on an other side of the mixing bucket 2.

[0053] Due to the drive of the electric motor 510, the mixing rod 502 starts to rotate, the sun gear 505 which is integrally formed with the mixing rod 502 further rotates together, therefore, the planet carrier 508 in a same planetary gear train further starts to rotate, at this time, the first

mixing blade 513 and the second mixing blade 514 start to mix the concrete in the mixing bucket 2.

[0054] At this time, a staff can pump the concrete out for pouring by opening the discharging pump which is connected to the discharging pipe 201. During the pouring process, the staff can pull the concrete auxiliary pouring device with the concrete-distributing machine to change the position of the discharging pipe 201 in a horizontal direction, or push the auxiliary pouring device with the push handle 102 to change the position of the discharging pipe 201 in the horizontal direction; at the same time, the electric pushing rod can further be controlled to drive the mixing bucket 2 to move vertically to change the position of the discharging pipe 201 in the vertical direction.

[0055] The above are the preferred embodiments of the present application, which are not intended to limit the protection scope of the present application. Therefore, all equivalent changes made according to the structure, shape and principle of the present application should be covered within the protection scope of the present application.

WHAT IS CLAIMED IS:

1. A concrete auxiliary pouring device, characterized by comprising:

a bottom plate (1);

a mixing bucket (2) provided on the bottom plate (1), wherein a discharging pipe (201) is provided on a side of the mixing bucket (2) , and the discharging pipe (201) is connected with a discharging pump;

a lifting mechanism (3), wherein the mixing bucket (2) is connected to the bottom plate (1) with the lifting mechanism (3), and the lifting mechanism (3) is configured to drive the mixing bucket (2) to move back and forth in a vertical direction; and

a feeding mixing mechanism (5) provided at a top of the mixing bucket (2), wherein the feeding mixing mechanism (5) is configured to receive concrete and mix the concrete inside the mixing bucket (2).

2. The concrete auxiliary pouring device according to claim 1, characterized in that, the feeding mixing mechanism (5) comprises a cover plate (501) and a mixing rod (502), wherein the cover plate (501) is provided at a bucket opening of the mixing bucket (2), the cover plate (501) is configured to rotate around an axis of the cover plate (501) and is rotatably connected to the mixing bucket (2), the mixing rod (502) is located on a central axis of the cover plate (501) and the mixing rod (502) penetrates through the cover plate (501), the mixing rod (502) is provided with a feeding channel, a feeding port (503) of the feeding channel is provided at the top of the mixing rod (502), the feeding port (503) is provided with a connecting part (5031), the connecting part (5031) is configured to rotate around an axis of the connecting part (5031) and is connected to the feeding port (503), a discharging port (504) of the feeding channel is provided on a side of the mixing rod (502) inside the mixing bucket (2), a first mixing blade (513) is provided on the mixing rod (502), and the first mixing blade (513) is located below the discharging port (504) in a vertical direction.

3. The concrete auxiliary pouring device according to claim 2, characterized in that, the

feeding mixing mechanism (5) further comprises an electric motor (510), wherein a main body of the electric motor (510) is fixedly connected to the bottom plate (1), a first gear (511) is provided at an output end of the electric motor (510), a second gear (512) is coaxially and fixedly connected outside the cover plate (501), and the first gear (511) is engaged with the second gear (512).

4. The concrete auxiliary pouring device according to claim 3, characterized in that, the concrete auxiliary pouring device further comprises a supporting frame (4), wherein the main body of the electric motor (510) is fixedly connected to the bottom plate (1) with the supporting frame (4), the supporting frame (4) is provided with a supporting groove for arranging the mixing bucket (2).

5. The concrete auxiliary pouring device according to claim 2, characterized in that, the feeding mixing mechanism (5) further comprises a planetary gear train, wherein the planetary gear train comprises a planet carrier (508), a sun gear (505), a planet gear (506), and an outer gear ring (507), the planet carrier (508) has a planetary disk (5081) and a planetary gear shaft (5082), a through hole (5083) is provided on a central axis of the planetary disk (5081) through hole for the mixing rod (502) to pass through, the planetary disk (5081) is configured to rotate around the central axis of the planetary disk (5081) and is rotatably connected to the mixing bucket (2), the planetary gear (506) is configured to rotate around an axis of the planetary gear (506) and is rotatably connected to the planetary gear shaft (5082), the sun gear (505) is fixedly connected to the mixing rod (502) and is located above the discharging port (504) in a vertical direction, the outer gear ring (507) is fixedly connected to the mixing bucket (2), the planet gear (506) is simultaneously engaged with the outer gear ring (507) and the sun gear (505), and a second mixing blade (514) is provided on a side of the planetary gear shaft (5082) departing from the planetary disk (5081).

6. The concrete auxiliary pouring device according to claim 2, characterized in that, the feeding mixing mechanism (5) further comprises an inner wall scraper (509), wherein the inner wall scraper (509) comprises a bucket wall scraper (5091) and a bucket bottom scraper (5092), a

first end of the bucket bottom scraper (5092) is connected to the bucket wall scraper (5091), and a second end of the bucket bottom scraper (5092) is fixedly connected to a bottom end of the mixing rod (502).

7. The concrete auxiliary pouring device according to claim 1, characterized in that, the lifting mechanism (3) comprises a pushing component (301), wherein a main body of the pushing component (301) is fixedly connected to the bottom plate (1), and an output end of the pushing component (301) is arranged vertically and the pushing component (301) is in a driving connection with the mixing bucket (2) for driving the mixing bucket (2) to move back and forth in a vertical direction.

8. The concrete auxiliary pouring device according to claim 7, characterized in that, the lifting mechanism (3) further comprises a plurality of elastic elements (302), wherein the plurality of elastic elements (302) are arranged in a circumferential direction around the pushing component (301) at equal intervals, a first end of each of the plurality of elastic elements (302) is fixedly connected to the bottom plate (1), and a second end of each of the plurality of elastic elements (302) is fixedly connected to an outer bottom wall of the mixing bucket (2).

9. The concrete auxiliary pouring device according to claim 1, characterized in that, a plurality of universal wheels (101) are provided on a bottom of the bottom plate (1), and a push handle (102) is provided on a side of the bottom plate (1).