Claims

1. A fast discharging device, adapted for connecting to a discharge opening of a container, comprising:

a valve body (11) having a cylindrical cavity with an opening at one end, and formed with a discharge outlet on a lateral wall thereof;

a valve spool (12) for sealing the opening;

a valve rod (13) with one end fixed to the valve spool (12) and the other end extending through a holder inside the valve body (11) and fixed to a handle (15) outside the valve body (11), the handle (15) being able to be rotated to drive the valve rod (13) to move axially; and

a switch unit (16) with a communicating tube (17) connected between the discharge outlet and the switch unit (16).

~~1~~2. A container with a direct-fired heating pipe, comprising a container body provided with a discharge opening and a spare discharge opening arranged on its lateral wall and close to its bottom, wherein, said container does not include vehicles or conventional packaging, the container has a fast discharging device adapted for connecting to the discharge opening or the spare discharge opening, the container body is provided with a heating port (2), the heating port (2) has a structure suitable for direct injection heating, a heating pipe is arranged at the heating port (2) and inside the container body, which comprises a heating portion (31) in the form of a coiled pipe and a fume exhaust pipe (32)~~; the container body comprises an rectangular-shaped outer housing body, an rectangular-shaped inner housing body and a thermal insulation layer between the outer housing body and the inner housing body, with an arc chamfering at each of the eight corners of the inner housing body,~~ and the fast discharging device comprises:

a valve body (11) having a cylindrical cavity with an opening at one end, and formed with a discharge outlet on a lateral wall thereof;

a valve spool (12) for sealing the opening;

a valve rod (13) with one end fixed to the valve spool (12) and the other end extending through a holder inside the valve body (11) and fixed to a handle (15) outside the valve body (11), the handle (15) being able to be rotated to drive the valve rod (13) to move axially; and

a switch unit (16) with a communicating tube (17) connected between the discharge outlet and the switch unit (16).

~~2~~3. The container of claim ~~1~~2, wherein, the coiled pipe extends within a plane.

~~3~~4. The container of claim ~~2~~3, wherein, the heating portion (31) is arranged in the form of a rectangular coiled pipe.

4~~5~~. The container of claim ~~3~~4, wherein, the heating portion (31) is positioned near a bottom board of the container without contacting the bottom board.

~~5~~6. The container of claim 4~~5~~, wherein, the heating portion (31) is positioned parallel to the bottom board.

~~6~~7. The container of any one of claims ~~1~~2-~~5~~6, wherein, the heating port (2) is positioned at a lower-left corner or a lower-right corner of an end plate of the container body.

8. The container of any one of claims 2-7, wherein, the container body comprises a rectangular-shaped outer housing body, a rectangular-shaped inner housing body and a thermal insulation layer between the outer housing body and the inner housing body, with an arc chamfering at each of the eight corners of the inner housing body.

~~7~~9. The container of any one of claims ~~1~~2-~~6~~8, wherein, the container further comprises a burner installation assembly arranged on the exterior of the heating port (2).

~~8~~10. The container of ~~any one of~~ claim~~s~~ ~~7~~9, wherein, the burner installation assembly comprises:

a burner, comprising an incendiary cylinder which is connected to the rest of the burner by a first bolt; and

a connection fastening device, comprising:

a hanging component, comprising:

a first loading board (21) and a second loading board (22) that are perpendicular to each other and integrally formed into one piece, the first loading board (21) being formed with a second threaded hole, the burner being hung onto the hanging component by the first bolt inserted into the second threaded hole;

a first flat board (27) and a second flat board (28) that are perpendicular to each other, with the first flat board (27) welded to the first loading board (21) and arranged perpendicular thereto, and with the second flat board (28) welded to the second loading board (22) and arranged perpendicular thereto;

a clamping mechanism, comprising a dynamic clamping unit and a

stationary clamping unit to clamp the flange of the heating port between them, as well as a telescopic unit to drive the dynamic clamping unit to move towards the stationary clamping unit.

~~9~~11. The container of any one of claims ~~1~~2-~~8~~10, wherein, a chimney opening is provided on a roof board of the container, and the fume exhaust pipe (32) extends in a direction away from a bottom board of the container to the chimney opening.

~~10~~12. The container of any one of claims ~~1~~2-~~9~~11, wherein, an exterior wall of the heating portion (31) of the heating pipe is provided with fins extending outwards to the inner space of the container body.

~~11~~13. The container of any one of claims ~~1~~2-~~10~~12, wherein, the container further comprises an observation hole on a surface of the container body.

~~12. The container of any one of claims 1-11, wherein, the container further comprises a discharge opening and a spare discharge opening arranged on a lateral wall of the container body and close to a bottom of the container body.~~

~~13. The container of claim 12, wherein, the container further comprises a fast discharging device for connecting to the discharge opening or the spare discharge opening, the fast discharging device comprises:~~

~~a valve body (11) having a cylindrical cavity with an opening at one end, and formed with a discharge outlet on a lateral wall thereof;~~

~~a valve spool (12) for sealing the opening;~~

~~a valve rod (13) with one end fixed to the valve spool (12) and the other end extending through a holder inside the valve body (11) and fixed to a handle (15) outside the valve body (11), the handle (15) being able to be rotated to drive the valve rod (13) to move axially; and~~

~~a switch unit (16) with a communicating tube (17) connected between the discharge outlet and the switch unit (16).~~

14. The container of any one of claims ~~1~~2-13, wherein, the exterior surface of the sealing element for openings on the container body is provided with a thermal insulation coating.

Claims

1. A fast discharging device, adapted for connecting to a discharge opening of a container, comprising:

   a valve body (11) having a cylindrical cavity with an opening at one end, and formed with a discharge outlet on a lateral wall thereof;

   a valve spool (12) for sealing the opening;

   a valve rod (13) with one end fixed to the valve spool (12) and the other end extending through a holder inside the valve body (11) and fixed to a handle (15) outside the valve body (11), the handle (15) being able to be rotated to drive the valve rod (13) to move axially; and

   a switch unit (16) with a communicating tube (17) connected between the discharge outlet and the switch unit (16).

2. A container with a direct-fired heating pipe, comprising a container body provided with a discharge opening and a spare discharge opening arranged on its lateral wall and close to its bottom, wherein, said container does not include vehicles or conventional packaging, the container has a fast discharging device adapted for connecting to the discharge opening or the spare discharge opening, the container body is provided with a heating port (2), the heating port (2) has a structure suitable for direct injection heating, a heating pipe is arranged at the heating port (2) and inside the container body, which comprises a heating portion (31) in the form of a coiled pipe and a fume exhaust pipe (32), and the fast discharging device comprises:

   a valve body (11) having a cylindrical cavity with an opening at one end, and formed with a discharge outlet on a lateral wall thereof;

   a valve spool (12) for sealing the opening;

   a valve rod (13) with one end fixed to the valve spool (12) and the other end extending through a holder inside the valve body (11) and fixed to a handle (15) outside the valve body (11), the handle (15) being able to be rotated to drive the valve rod (13) to move axially; and

   a switch unit (16) with a communicating tube (17) connected between the discharge outlet and the switch unit (16).

3. The container of claim 2, wherein, the coiled pipe extends within a plane.

4. The container of claim 3, wherein, the heating portion (31) is arranged in the form of a rectangular coiled pipe.

5. The container of claim 4, wherein, the heating portion (31) is positioned near a bottom board of the container without contacting the bottom board.
6. The container of claim 5, wherein, the heating portion (31) is positioned parallel to the bottom board.
7. The container of any one of claims 2-6, wherein, the heating port (2) is positioned at a lower-left corner or a lower-right corner of an end plate of the container body.
8. The container of any one of claims 2-7, wherein, the container body comprises a rectangular-shaped outer housing body, a rectangular-shaped inner housing body and a thermal insulation layer between the outer housing body and the inner housing body, with an arc chamfering at each of the eight corners of the inner housing body.
9. The container of any one of claims 2-8, wherein, the container further comprises a burner installation assembly arranged on the exterior of the heating port (2).
10. The container of claim 9, wherein, the burner installation assembly comprises:

a burner, comprising an incendiary cylinder which is connected to the rest of the burner by a first bolt; and

a connection fastening device, comprising:

a hanging component, comprising:

a first loading board (21) and a second loading board (22) that are perpendicular to each other and integrally formed into one piece, the first loading board (21) being formed with a second threaded hole, the burner being hung onto the hanging component by the first bolt inserted into the second threaded hole;

a first flat board (27) and a second flat board (28) that are perpendicular to each other, with the first flat board (27) welded to the first loading board (21) and arranged perpendicular thereto, and with the second flat board (28) welded to the second loading board (22) and arranged perpendicular thereto;

a clamping mechanism, comprising a dynamic clamping unit and a stationary clamping unit to clamp the flange of the heating port between them, as well as a telescopic unit to drive the dynamic clamping unit to move towards the stationary clamping unit.

11. The container of any one of claims 2-10, wherein, a chimney opening is provided on a roof board of the container, and the fume exhaust pipe (32) extends in a direction away from a bottom board of the container to the chimney opening.
12. The container of any one of claims 2-11, wherein, an exterior wall of the heating portion (31) of the heating pipe is provided with fins extending outwards to the inner space of the container body.
13. The container of any one of claims 2-12, wherein, the container further comprises an observation hole on a surface of the container body.
14. The container of any one of claims 2-13, wherein, the exterior surface of the sealing element for openings on the container body is provided with a thermal insulation coating.