CLAIMS

1. A conveyor configured to convey a granular material to a downstream device, the conveyor comprising:

a casing having a conveying path therein and having a supply port for introducing the granular material into the conveying path and a discharge port for discharging the granular material to the downstream device;

a plurality of conveying units accommodated in the casing and configured to convey the granular material to the discharge port by circulating along the conveying path;

an opening/closing mechanism configured to open and close the discharge port; and

a control unit configured to control operation of the plurality of conveying units and the opening/closing mechanism,

wherein the conveying path includes a forward path from the supply port to the discharge port and a return path from the discharge port to the supply port,

wherein when restricting supply of the granular material to the downstream device, the control unit is configured to control the opening/closing mechanism to close the discharge port, and continue to circulate the plurality of conveying units so that the granular material is returned to the return path, thereby continuing to move the granular material along the conveying path.

2. The conveyor according to claim 1,

wherein when restricting supply of the granular material to the downstream device, the control unit is configured to control the opening/closing mechanism to completely close the discharge port.

3. The conveyor according to claim 1 or 2,

wherein the plurality of conveying units are configured to move in a vertical direction in at least part of the conveying path.

4. The conveyor according to any of claims 1 to 3,

wherein each of the plurality of conveying units is a flight.

5. A conveyance method of conveying a granular material to a downstream device with a conveyor having a supply port and a discharge port, the conveyance method comprising:

a step of supplying the granular material to the conveyor through the supply port;

a step of conveying the granular material to the discharge port by causing a plurality of conveying units included in the conveyor to circulate along a conveying path;

a step of discharging the granular material from the conveyor to the downstream device through the discharge port; and

a step of, when restricting supply of the granular material to the downstream device, closing the discharge port, and continuing to circulate the plurality of conveying units, thereby continuing to move the granular material along the conveying path,

wherein the conveying path includes a forward path from the supply port to the discharge port and a return path from the discharge port to the supply port,

wherein a step of closing the discharge port and continuing to circulate the plurality of conveying units includes a step of continuing to circulate the plurality of conveying units so that the granular material is returned to the return path.