GⅡ型
DRY CAPSULE
for Plastic Container
High speed rotation generates centrifugal force; atomized water is flled off and removed.

The History of Dry Capsule

1976 June  Granted bounty by MITI Nagoya Bureau for the technological improvement to contribute the energy saving

1980 February  A prototype is completed, testing is started.
1980 March    The first utility model of the "container cleaning and centrifugal drying machine" is applied.
1981 May      Upgraded the model with a new mechanical structure
1983 June     Patent announcement of the upgraded "container cleaning and centrifugal drying machine"
1983 October  Utility model announcement of the "container cleaning and centrifugal drying machine"
1996 February Received the JSAI invention award
2001 March    GII type prototype is completed, the performance and endurance test runs is started. *Improvements: further cut down on power use, enhancement of the processing capability, and downsizing. The corrosion resistance is improved by using FRP/SUS 304.
2002 February Granted US patent
2006 March    Granted patents of 5 European countries (UK, France, Germany, Italy and Belgium)
New Centrifugal Drying Machine
Ecology & Economy

The world's first original mechanism innovated by Misuzu Koki using centrifugal force to fly off and spin dry the atmized water on stacked plastic containers.

Features

1. Drying cost decrease significantly.
   Boiler and heat energy can be totally eliminated when running costs are compared to ordinary tunnel type dryer. Electricity consumption is also cut down drastically.

2. Earth-friendly mechanism with centrifugal force
   GII is a clean energy operated without boiler vapor or electric heater. Consequently, harmful gases such as CO, CO2 or NOx are not released into the air. Working conditions are largely improved from the aspect of noise, temperature and humidity.

3. Betterment of the drying quality
   Stacked plastic containers (max. 1850m/m h) are treated with centrifugal force collectively in about 50 seconds. No stains are left on the surface of the containers.

4. Functional upgrading with a new mechanism
   A new mechanism is integrated into the rotation unit. By adopting the xcarbon composite material which is a light and high-strength advanced composite and also excellent in corrosion resistance, the G II provides much better performance than other existing type of dryers.
Energy saving
Great effect of running cost reduction

Space saving
Installation space is smaller than the tunnel type dryer.

Reduced noise
Blow noise has been eliminated.

Operation
Operations are carried out automatically, which is cycled as follows:

1. Stacked and washed plastic containers are fed into the aligner through the feed conveyor to align correctly.

2. They are transferred into the center located turntable by the pusher. The corners of the stacked containers are clamped, the pusher returns to the original position and the entrance door closes.

3. The turntable is rotated at high-speed by the spindle motor, the containers are dried quickly.

4. The containers stop revolving and unclamped. The exit door is opened.

5. The dried plastic containers are discharged and the new ones not yet dried are fed by the pusher at the same time.

The cycle operation is repeated in every 50 seconds. A regenerative braking system is working during deceleration to recover the electricity.

Note: A real machine is delivered without an access window.
Example of Dry Capsule Layout

Compact line 60stacks/h (75mm high 1600pcs/h 150mm high 800pcs/h)

![Diagram of compact line]

Large line 180stacks/h (75mm high 4800pcs/h 150mm high 2400pcs/h)

![Diagram of large line]

Specifications

- Plastic container dimensions: Max. 550W×650L×H (your containers)
- Max. stack height: Max. 1850H
- Max. processing capacity: 1600pcs/H (75H)
- Main spindle speed: 400rpm
- Spindle drive motor: AC 1.1kW (regenerative inverter control system)
- Loader motor: AC 0.75kW
- Feed conveyor motor: AC 0.4kW
- Air consumption: 30L/min
- Power consumption: 0.7kW/h
- Power requirement: 200V 3phase 17kW
- Main unit dimensions: See the drawing (A)
- Gross weight (incl. loader): 2600kg

*Please contact us about the other specifications than those shown above.

* The specifications in this catalog are subject to change without notice. 20160501BD1,000