

Production Scale Freeze Dryers for Food

PFQ 8100 Series



#### Production Scale Freeze Dryers for Food PFQ 8100 Series

Production Scale Freeze Dryers for Food PFQ 8100 series is designed for drying food. It has two chambers: pre-freezing chamber and drying chamber which are separated. These chambers can work simultaneously which improves the freeze-drying efficiency and shortens the freeze-drying time.

#### **Features**

- Equipped with Industrial embedded touch screen, Special modular controller, stable and reliable system, high control accuracy
- Provided with alloy shelf, good temperature uniformity, radiation rate more than 90% and double-sided radiation heating
- Equipped with drying curve optimization control which can control heating rate and vacuum degree in drying stage
- lt has high efficient refrigerant medium, high heat exchange efficiency and long service life
- The system can be set-up with user level and password for preventing any unauthorized activities
- To ensure the accuracy of long-term use, device is installed with precise sensor calibration
- For strong water pumping ability and high drying efficiency, it is designed with good gas diversion and control technology
- This system can save many groups of recipe and can adjust the process in real time for drying process which improves the process optimization rate
- lt has flexible control mode (Manual + Automatic). Manual mode is for groping process while Automatic mode is for batch production

# Specifications

| Model No.                         | PFQ 8100                     | PFQ 8101                     | PFQ 8102                     |
|-----------------------------------|------------------------------|------------------------------|------------------------------|
| Shelf Area                        | 1m2                          | 5m2                          | 10m2                         |
| Loading Capacity                  | 10kg                         | 50kg                         | 100kg                        |
| Shelf Number                      | 4+1 Layer                    | 7+1 Layer                    | 9+1 Layer                    |
| Shelf Size                        | 400*625 mm                   | 600*1200mm                   | 1000*1120 mm                 |
| Shelf Spacing                     | 60 mm                        | 80 mm                        | 80 mm                        |
| Trolley Number                    | -                            | -                            | -                            |
| Shelf-Temperature Control Range   | Ambient Temperature ~ +100°C | Ambient Temperature ~ +100°C | Ambient Temperature ~ +100°C |
| Max. Ice Capacity                 | ≥15kg/batch                  | ≥75kg/batch                  | ≥150kg/batch                 |
| Condenser Temperatur<br>(No-Load) | ≤-60°C                       | ≤-50°C                       | ≤-60°C                       |
| Cooling Method                    | Air Cooling                  | Water Cooling                | Water Cooling                |
| Defrosting Type                   | Water                        | Soak                         | Soak                         |
| Final Vacuum                      | ≤5Pa (no-load)               | ≤5Pa (no-load)               | ≤5Pa (no-load)               |
| Installed Power                   | 9kw                          | 20kw                         | 45kw                         |
| Cooling Water                     | -                            | 10m3/hr.                     | 20m3/hr.                     |
| Compressed Air<br>(P=0.5~0.8Mpa)  | -                            | -                            | -                            |
| Overall Dimensions<br>(L*W*H)     | 1.9*1.2*1.7 m                | 2*3.5*2.1 m                  | 5*2*2.5 m                    |
| Total Weight                      | 0.9Ton                       | 2.5Ton                       | 6Ton                         |

# Specifications

| Model No.                          | PFQ 8103                           | PFQ 8104                           |
|------------------------------------|------------------------------------|------------------------------------|
| Shelf Area                         | 20.6m2                             | 31.68m2                            |
| Loading Capacity                   | 200kg                              | 300kg                              |
| Shelf Number                       | 8+1 Layer                          | 8+1 Layer                          |
| Shelf Size                         | 1200*2150*15 mm                    | 1200*3300*15 mm                    |
| Shelf Spacing                      | 80 mm                              | 80 mm                              |
| Trolley Number                     | 2 unit                             | 2 unit                             |
| Shelf-Temperature Control<br>Range | Ambient Temperature<br>~ +120°C    | Ambient Temperature<br>~ +120°C    |
| Max. Ice Capacity                  | ≥300kg/batch                       | ≥450kg/batch                       |
| Condenser Temperatur<br>(No-Load)  | ≤-60°C                             | ≤-60°C                             |
| Cooling Method                     | Water Cooling,<br>Water temp.<30°C | Water Cooling,<br>Water temp.<30°C |
| Defrosting Type                    | Spray + Soak                       | Spray + Soak                       |
| Final Vacuum                       | <5Pa (no-load)                     | <5Pa (no-load)                     |
| Installed Power                    | 96kw                               | 120kw                              |
| Cooling Water                      | 40m3/hr.                           | 60m3/hr.                           |
| Compressed Air<br>(P=0.5~0.8Mpa)   | 30L/min                            | 30L/min                            |
| Overall Dimensions<br>(L*W*H)      | 6.2*2.3*3.2 m                      | 7.5*2.3*3.2 m                      |
| Total Weight                       | 10Ton                              | 16Ton                              |

## **Specifications**

| Model No.                          | PFQ 8105                           | PFQ 8106                           |
|------------------------------------|------------------------------------|------------------------------------|
| Shelf Area                         | 52.92m2                            | 105.84m2                           |
| Loading Capacity                   | 500kg                              | 1000kg                             |
| Shelf Number                       | 9+1 Layer                          | 18+1 Layer                         |
| Shelf Size                         | 4900*1200*15 mm                    | 4900*1200*15 mm                    |
| Shelf Spacing                      | 80 mm                              | 80 mm                              |
| Trolley Number                     | 3 unit                             | 3 unit                             |
| Shelf-Temperature Control<br>Range | Ambient Temperature<br>~ +120°C    | Ambient Temperature<br>~ +120°C    |
| Max. Ice Capacity                  | ≥750kg/batch                       | ≥1500kg/batch                      |
| Condenser Temperatur<br>(No-Load)  | ≤-50°C                             | ≤-50°C                             |
| Cooling Method                     | Water Cooling,<br>Water temp.<30°C | Water Cooling,<br>Water temp.<30°C |
| Defrosting Type                    | Spray + Soak                       | Spray + Soak                       |
| Final Vacuum                       | <10Pa (no-load)                    | <10Pa (no-load)                    |
| Installed Power                    | 150kw                              | 230kw                              |
| Cooling Water                      | 80m3/hr.                           | 160m3/hr.                          |
| Compressed Air<br>(P=0.5~0.8Mpa)   | 30L/min                            | 30L/min                            |
| Overall Dimensions<br>(L*W*H)      | 7*8.5*3.2 m                        | 7*11*3.5 m                         |
| Total Weight                       | 29Ton                              | 46Ton                              |

### **Applications**

Used widely for drying food such as Coffee, Fruit and juice, Vegetables, Meat, Fish  $\up326$  Seafood and many more.