FOOD FREEZE DRYERS

QS-FD-20 Commercial Food Freeze Dryer

The QS-FD-20 is a square-chamber, track-type food freeze dryer that processes around 200 kg of wet material per batch on 20.16 m² of heated shelves. It pairs a –60 °C two-stage refrigeration unit with a pure-copper cold trap and four independent heating zones, so four different products can dry at once.

200 kg / batch	20.16 m²	1 unit
CAPACITY	DRYING AREA	MINIMUM ORDER







Key features

- **Four products, one cycle.** Four independently controlled shelf-heating channels with 0.1 °C accuracy let you run strawberries, yogurt melts and chicken cubes side by side.
- **Square, not cylindrical.** The rectangular SUS304 chamber uses floor space efficiently and loads with standard 400 × 600 mm trays on a front-opening door.
- **–60 °C on demand.** A single-unit two-stage compressor on R404A/R507 shuts itself down as product dryness rises — real-world draw is about 60% of rated power.
- **Food-safe by design.** Mirror-finish liner, food-grade silicone seals and a dry/wet separated layout meet food-safety hygiene requirements.

Technical specifications

Model	QS-FD-20
Drying area	20.16 m² (1 chamber)

Wet-material capacity	≈ 200 kg per batch
Overall dimensions	4500 × 1300 × 1400 mm
Inner chamber	3700 × 880 × 980 mm (L × W × H)
Total power	35 kW
Trays	84 pcs, 400 × 600 × 28 mm
Evaporative condenser	7.5 kW, 25 m²
Chamber material	SUS304 stainless steel, welded square-tube reinforcement; mirror-finish liner, brushed outer shell
Chamber shape	Square (replaces cylindrical design — saves floor space and energy)
Door	SUS304 front-opening door with acrylic sight glass; food-grade O-section silicone seal
Product temperature probe	Custom PT100, ±0.1 °C
Heating shelves	6063 aluminium alloy heated shelves + trays, electric heating
Tray size	400 × 600 × 28 mm
Shelf heating	Max. 80 °C, 0.1 °C control accuracy, 4 independent channels
Cold trap	Extra-large pure copper-tube coil, SUS304 shell
Defrost	Water bath or spray
Refrigeration	−60 °C ultra-low temperature single-unit two-stage compressor, R404A or R507
Expansion & solenoid valves	Danfoss TEX2-05 / Danfoss EVR
Energy saving	Compressor auto-stops by product dryness; actual consumption approx. 60% of rated

Standard configuration; final values are confirmed in the quotation. Voltage, heating source and layout can be customised.

Applications

Fruit & vegetables · Yogurt bites · Pet treats · Ready meals

Request a quotation — Email inquiry@foodfreezedryerfactory.com · WhatsApp / Tel +86 176 2154 1688 · www.foodfreezedryerfactory.com/products/qs-fd-20-commercial-food-freeze-dryer/