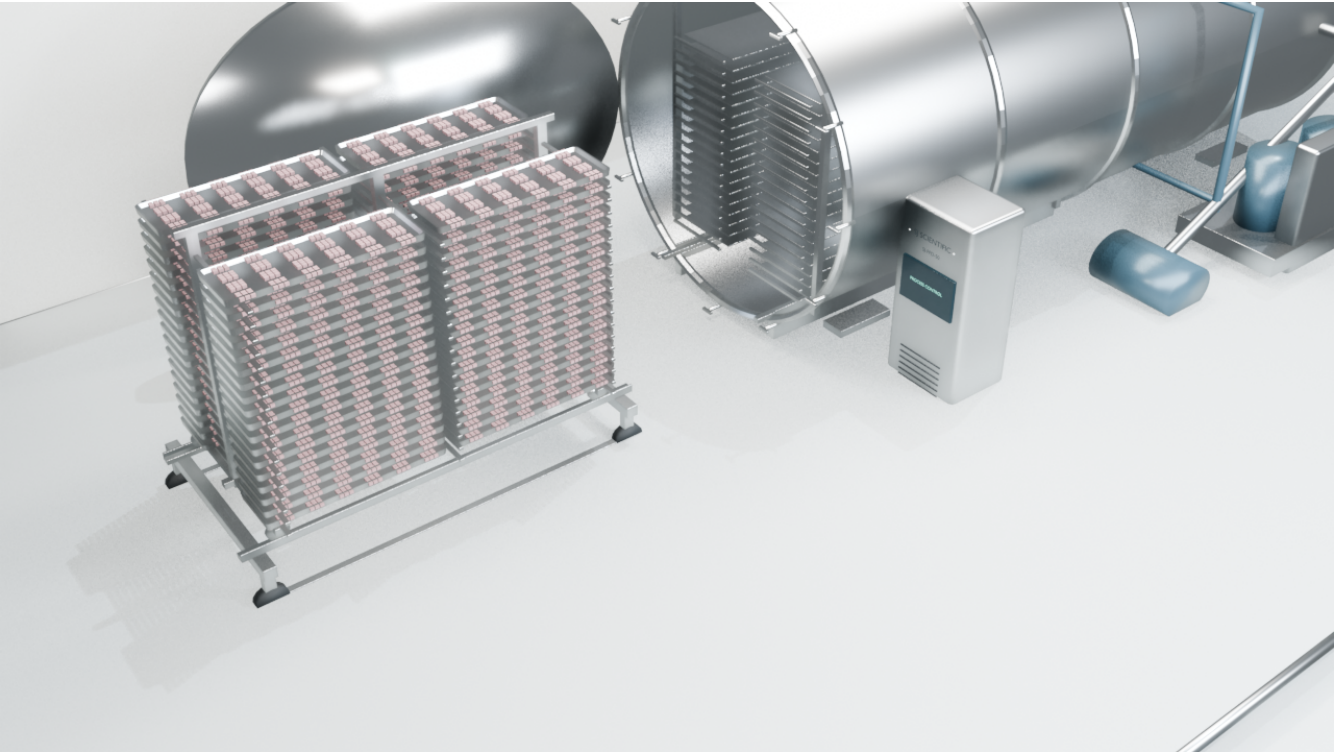


Pet-food freeze-drying line

Compact meat preparation, frozen storage and 500 kg batch freeze drying.



500 kg / batch

SJ-FFD-50 reference fresh-product load

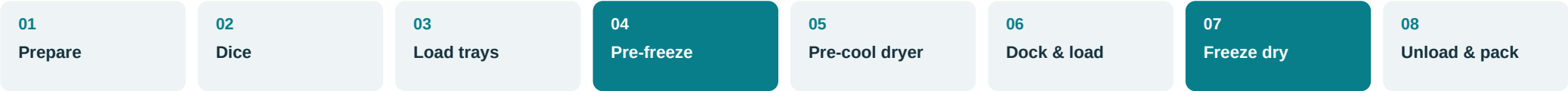
5,000 kg

Freezer frozen-product storage target

Approx. 10 batches of inventory

5,000 / 500 on the same material-mass basis. Storage capacity does not specify the freezer's freezing throughput.

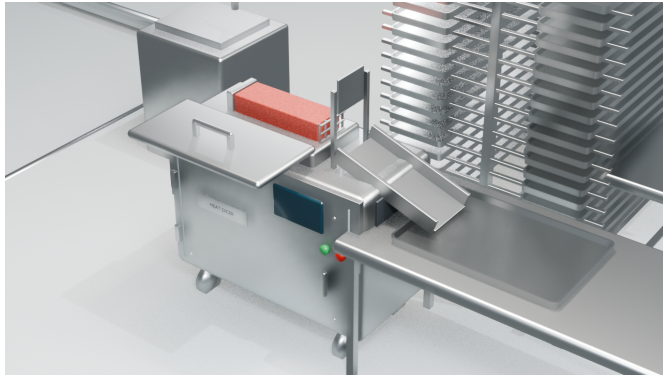
A compact line, built around separate preparation and batch handling.



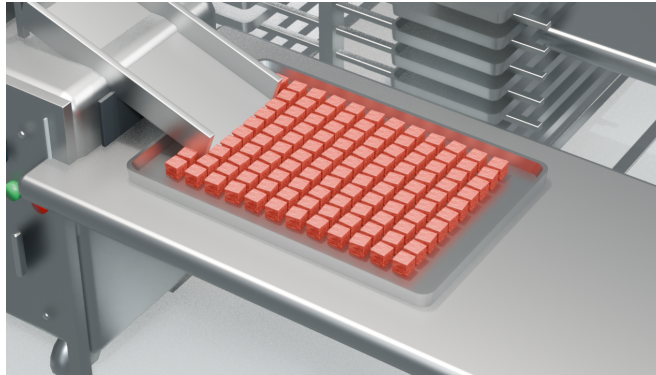
Site basis The freezer is inside the upper-left corner of the customer area. Meat preparation uses the lower projecting room; the dryer is in the upper-right area, with its loading end facing the internal aisle.

From whole meat to frozen trays

Small, separate meat cubes are visible after cutting and remain visible during tray loading.



COMPACT DICER



DICED MEAT IN SHALLOW TRAYS



INSULATED FREEZER

1 Prepare and dice

Inspect and trim the meat according to the product procedure. A feed ram, cutting grid and cross-cut action create small cubical pieces. The mechanism is exposed only for the animation explanation.

2 Fill trays and rack

Inspect cube consistency and spread the pieces evenly in shallow trays. Place the trays on the upper rack supports. Tray loading is a separate operation from dicing.

3 Pre-freeze and store

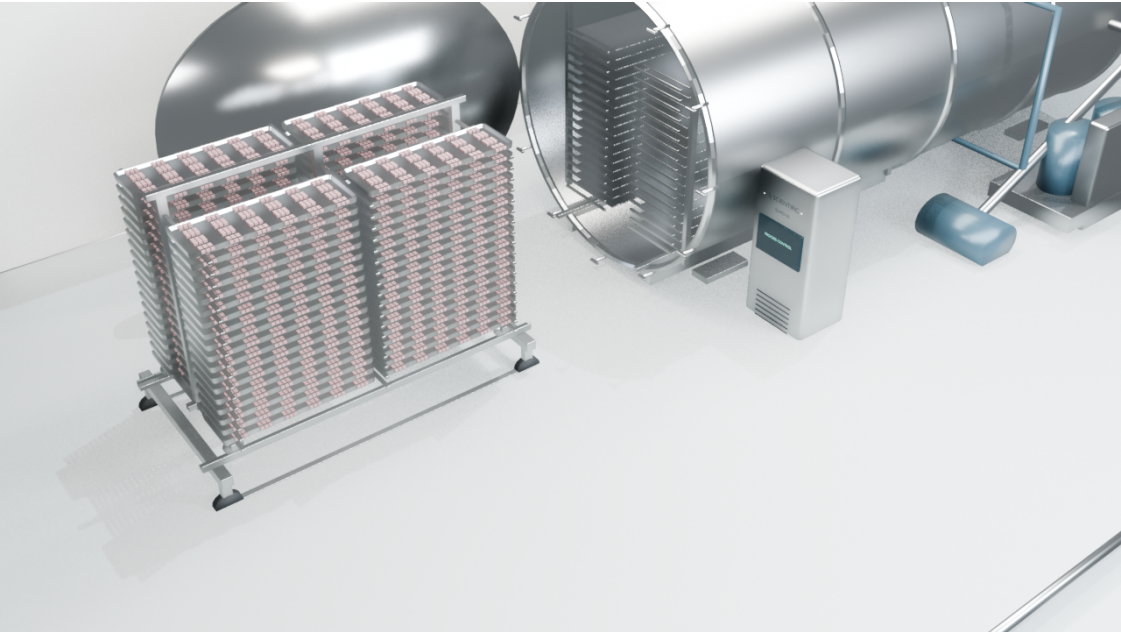
The lower transfer trolley carries the loaded upper rack into the freezer. Confirm the product is fully frozen using the required core-temperature and holding-time criteria; retain it in frozen storage until scheduled.

Equipment appearance

The rendering uses stainless-steel cabinet construction, rounded pressed trays, cold-room panel joints, door hardware and evaporator housings. The dicer is a compact-class concept; cube size, tray count and freezer dimensions remain illustrative.

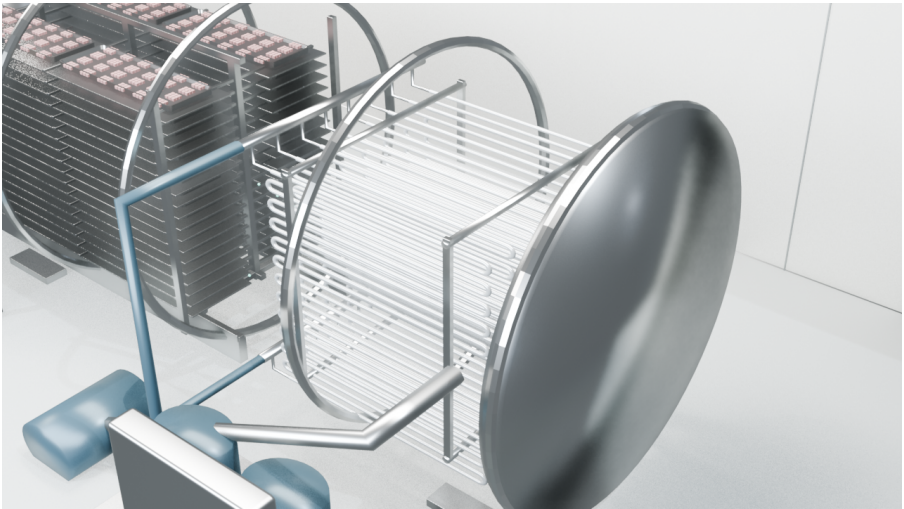
Dock, transfer and freeze dry

The upper rack enters on the chamber rails. The separate lower trolley stays outside.



TWO SHELF BANKS + TWO BOTTOM RAILS

Align the trolley with the chamber rails. Roll the upper rack and trays into the chamber, then withdraw the empty lower trolley. After drying and controlled repressurization, reverse the transfer to unload.



INTERNAL REAR COLD-TRAP COILS

Water vapor from the frozen product reaches the refrigerated serpentine coil bank inside the rear chamber and deposits as ice. The front product zone remains separate from the rear coil zone.

Before removing the batch from frozen storage

Suggested loading preparation supplied for this project.
The full drying recipe and final moisture endpoint are set separately.

Shelves

-15 to -25°C

Internal cold trap

-45°C

Model basis: customer rack/chamber photos and CAD; compact dicer form reference: holac Cubixx 100. Geometry and pipe circuits are schematic.