

From vial filling to lyophilization

Command Flexible for peptide and pharmaceutical vial projects



Illustrative 3D workflow in a cleanroom setting. Equipment layout and interfaces are project-specific.

A configuration built around your batch

SJ Scientific supplies Command freeze-drying platforms for development, pilot and production projects. The Flexible Type can be configured around the vial format, batch count, fill volume, ice load and available facility space.

01 / Prepare

Vial filling and half-stopper placement

02 / Load

Tray handling and chamber loading

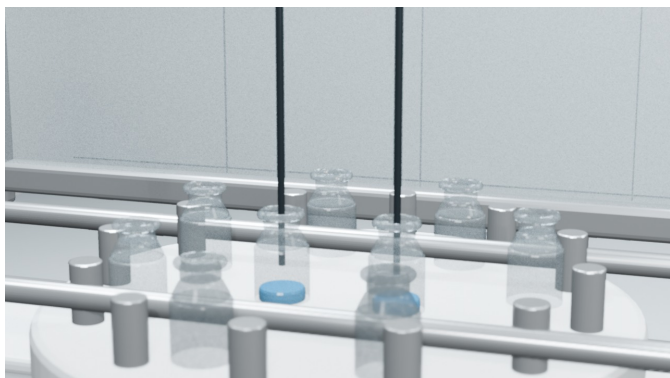
03 / Process

Drying cycle and configured stoppering

For a useful first discussion: tell us whether filling and freeze-drying are handled in-house, and share one representative vial and batch.

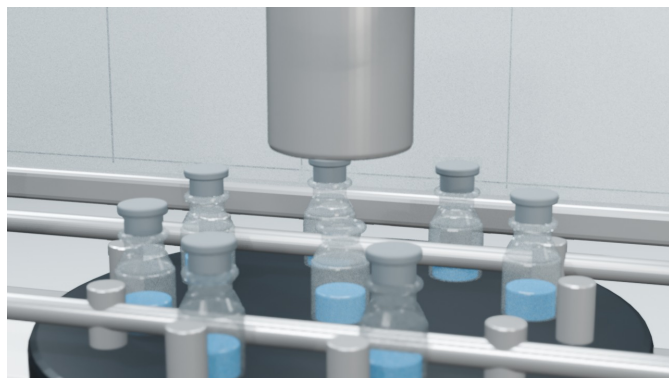
The vial workflow

Container handling, loading and the freeze-dryer interface



01 / Vial filling

Filling needles align with the vial mouth and enter for dosing. The animation uses 10R-proportioned vials; actual needle travel and fill settings follow the application.



02 / Half-stopper placement

Stoppers are partially seated for the drying stage. Vial and stopper drawings define fit, insertion depth and the required vapor path.



03 / Tray loading

Half-stoppered vials are arranged on a tray and moved into the chamber. Shelf clearance, tray dimensions and loading access are reviewed together.



04 / Close and run the cycle

Once loading is complete, the door closes. The approved process defines freezing, primary and secondary drying, followed by configured backfill and stoppering.

Process visualization

The images illustrate handling only. They do not depict cycle duration or establish an aseptic classification. Final equipment and operating procedures follow the agreed project requirements.

Start with your vial and batch

Command F Flexible reference configuration



1.08-3.51 m²

Listed product shelf area

4-13 shelves

450 x 600 mm reference shelf size
Condenser matched to ice load and cycle
Vial clearance reviewed by project

What can be configured

- Product handling:** shelf arrangement, vial clearance, loading interface and optional stoppering.
- Process and controls:** shelf and vacuum control; PLC, SCADA and data functions as specified.
- Facility:** utilities, installation route, service access and cleanroom interface.

Send these details for a preliminary review

Product & container	Application, vial/stopper drawings and fill volume
Batch & cycle	Vials per batch, total water/ice load and cycle target
Site & quality	Destination, utilities, loading, data and validation needs

Project support

Agree FAT/SAT, commissioning, training, documentation, remote support and spare-parts scope in the technical agreement. CIP/SIP, automatic loading and electronic records require an explicitly defined configuration.

Source: SJ Command GMP Freeze Dryer Catalogue 2026, pp. 4-5. Values are selection references; the approved quotation and user requirements specification (URS) define the supplied scope. Images: SJ workflow animation V4.