

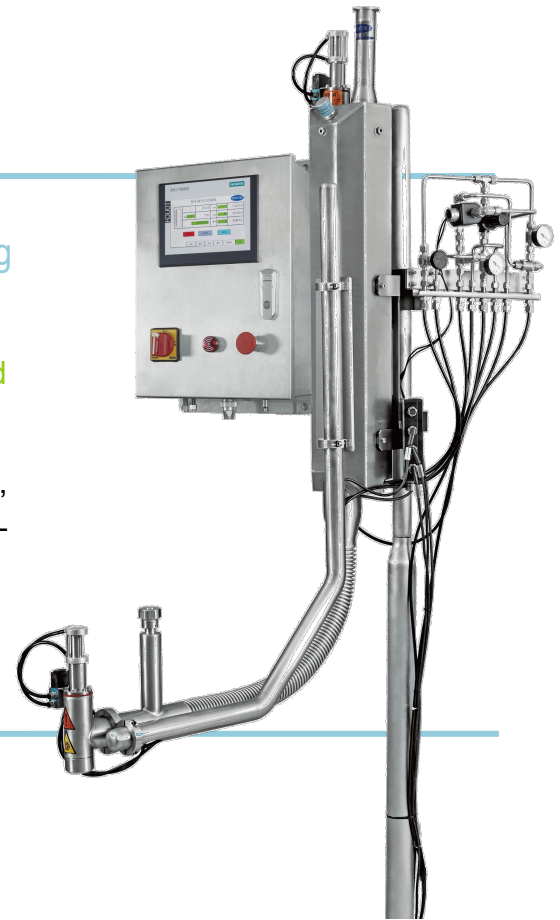


SVBS-300

Liquid Nitrogen Dosing

Svbs - 300 is the most advanced liquid nitrogen (LN2) dosing system utilizing advanced cryogenic technology and PLC programming.

SVBS-300 utilizes three sensors to detect conveyor speed, timing, and bottle presence, making it suitable for both low-speed and high-speed production lines. It enhances the synchronization accuracy between the system and the conveyor, enabling precise dosing of liquid nitrogen (LN2) into each container.



Features

- **Flexiable Arm** - enables flexiable head position and dosing angle.
- **Precise Dosing** - delivers consistent, accurate dosing for any speed.
- **Fast Service** - auto de-frost in 3 minutes.
- **Discrete Dosing** - up to 800 containers per minute (controller dependant).
- **Discreteor Continuous Dosing** - change over defined by user.
- **Vacuum Insulated Technology** - the most efficient use of LN2.
- **SoftDose Compatible** - Scala's proven technology for hot fill, powder, and granular applications.

How it Works

Liquid nitrogen is supplied to the Svbs-300 by a standard 10ft (3mt) vacuum insulated hose (various lengths available) and flows into the dosing head. A 24vdc PNP sensor detects the speed of the line (encoder compatible for higher speeds); a second 24vdc PNP sensor detects the presence of a container. When a container is detected, the dosing head opens and dispenses an exact amount of pure LN2.

Key Benefits

- **Lightweight PET** - reduce the weight of PET for cost and environmental savings
- **Glass to PET Transition** - eliminate glass safety hazards and weight of containers
- **Bottle Rigidity** - maintain bottle shape even with lighter weight containers
- **Eliminate Paneling** - increase the internal pressure to offset paneling issues
- **Oxygen Reduction** - create an inert environment to preserve product freshness
- **Extend Shelf Life** - minimize oxygen levels
- **Ease of Labeling** - consistent bottle rigidity creates an efficient labeling process
- **Reduce Nitrogen Consumption** - measurable and repeatable liquid doses
- **Maximize Warehouse Storage Space** - increasing product stackability utilizes less square footage
- **Stabilize Organic Products** - extend shelf life without preservatives

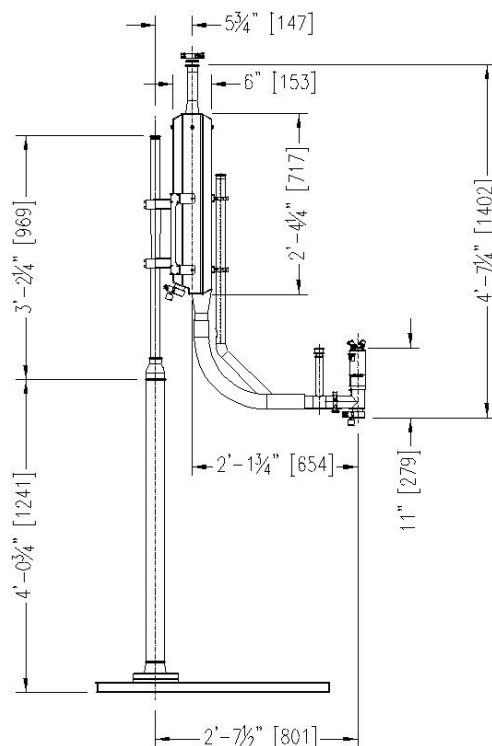
SBS-300

Technical Specifications



Weight	17kg
Body Dimensions	724x 152mm
Dosing Head Dimensions	241x 50.8mm
Arm Reach	609.6–863.6mm
Head Pressure	0.9psi (0.06bar)
Nozzles	Min. 0.020"– Max. 0.120" available Ships with 0.040", 0.050", 0.060"
System Utilities	Liquid Nitrogen: 3 – 22 psi Gaseous Nitrogen: 60 – 100 psi Electricity: 110–240VAC; 50/60Hz, 110W
Steady State Consumption	0.04 gal (0.2 liter) / hour
Quick Service Feature	✓
Vacuum Insulated	✓
Flexible Arm	✓
SoftDose Compatible	✓

Svbs-300 Dimensions



Controller Technical Specifications

Dimensions	19.8"H x 7.8"D x 12.3"W (503 x 198 x 312 mm)
Weight	22.5 lbs (10.2 kg)
PLC Platform	Siemens
Dosing Range	0.5 – 12g/sec.
Timing Range	7 to 1000 ms (in 1ms intervals)
Encoder Compatible	✓
Discrete Dosing	Up to 800 cpm
Line Speed Auto Detect	✓
Speed Compensated Mode	✓
Electronic Dose Targeting	✓
Fixed Delay Mode	✓
Accuracy	± 2% of dose value
Multiple Languages	✓
Recipe Storage	✓
Certification	CE Compliance, NEMA 4X, IP65