



CRYOTECH
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SPECIALISTS IN CRYOGENIC EQUIPMENT



CryoDoserTM S7200

Medium to high speed LN₂ dosing system for pressurization and inerting. Advanced capabilities optimize line performance. Features Siemens based controls.

All products come with Cryotech's renowned customer service from conceptual design to implementation and are backed by a one year warranty.

The CryoDoser S7200 is the premier, high-speed liquid nitrogen (LN₂) dosing system. Using advanced cryogenic technology, Cryotech engineers designed an ultra-efficient, double walled, sealed vacuum unit likened to a "high-tech thermos." Typically installed after the filler and before the capper/sealer, the CryoDoser S7200 dispenses a measured dose of LN₂. Once the LN₂ (-320F/-195C) is introduced into the container, it immediately picks up heat and turns into gaseous nitrogen, expanding 700 times in the process. When trapped inside the container, the gaseous nitrogen creates pressure and adds rigidity to the container. For headspace inerting applications, the rapidly expanding gas is allowed to escape before the product is sealed, flushing oxygen out of the container.

The CryoDoser S7200 has the following features:

- Sealed, vacuum insulation for frost-free operation
- Consistent, accurate dosing over all line speeds
- Flexible arm accommodates multiple stand locations
- Flexible arm allows head to be tilted as necessary
- Pulse/discrete and steady stream modes
- User defined changeover point between discrete and continuous modes
- Speed compensation
- Pulse mode up to 1800 cpm during routine operations
- Siemens PLC
- Recipe storage
- Multiple language capabilities
- Arm support allows support cables to be passed through for cleaner, neater installation
- Encoder compatible
- Self monitoring system
- Quick Service automatic defrost system
- Remote container sensor location
- Electronic dose targeting
- 100% compatibility with Cryotech's SoftDose technology for hot-fill applications

CryoDoser S7200 System Specifications

Materials

Stainless Steel Series 300

CryoDoser S7200 Weight

38 lbs (17 kg)

Body Dimensions

28.5" (724 mm) H x 6" (152 mm) W

Arm Length

29" (740 mm)

Dosing Head Dimensions

9.8" (249 mm) H x 2.0" (51 mm) W

CryoDoser S7200 Controller

Weight: 22.5 lbs (10.3 kg)

Controller Dimensions

8.5" (216mm) x 12" (305mm) x 19.5" (495mm)

Dosing Range

Min. 0.1 – Max 20 g/sec

Accuracy

+/- 5% of dose volume

Timing range

Up to 500 ms in 1 ms intervals

Nozzles

0.040" installed

0.050" and 0.060" shipped with unit

Max nozzle size: 0.120"

Head Pressure

0.9 psig.

CL of stand to CL of dosing head

33" (838 mm)

System Utilities

Liquid Nitrogen:

3 - 22 psi (0.2 - 1.5 BAR)

(10 micron filter provided)

Gaseous Nitrogen:

60-100 psig (4.2 - 6.8 BAR)

Electricity:

100 - 240 VAC, 50/60 HZ, 110 W

Internal Control: 24 VDC

Steady State Consumption

4 cubic feet per hour of N₂ plus dewar connection

loss (0 - 300 cfh)

Certifications

NEMA 4X IP 65 Controls/CE



Advantages

- The CryoDoser S7200 ensures accurate, precise dosing by delivering pure LN₂ at a constant pressure for an exact dose duration.
- Durable electrical components including a dosing head heater, vent heater, container sensor, pocket sensor, solenoid valve, and valve confirmation sensor are modular in design for easy maintenance.
- Quick Service automatic defrost, eliminates most freeze ups in less than 10 minutes.
- Flexible dosing arm allows the dosing head to be installed at an angle.
- Easy to use PLC based controller facilitates set-up procedures.
- Vacuum jacket technology prevents premature boil-off and eliminates the need for "blow-down" valves.
- Discrete dosing at line speeds up to 1800 containers per minute minimizes LN₂ waste and associated downtime.
- Exact dose control ensures safe line operation and avoids costly line jam-ups.

Cost-Savings

One customer reported a 56% reduction in LN₂ costs with a Cryotech LN₂ injection unit. Contact Cryotech for a customized cost-savings assessment of your production line.



Visit our website at: www.cryotechinternational.com

CRYOTECH INTERNATIONAL, INC.

745-B Camden Ave., Campbell, CA 95008

Phone: (408) 371-3303, Fax: (408) 371-3320, Service: (408) 371-4932

ASIA. Cryotech VBS Philippines Office. Phone: +(63) 2 951 4623

MEXICO/CENTRAL AMERICA. Cryotech-VTI Office, Phone: +(52) 555 370 8726

EUROPE. Peco Controls Office, Phone: +(44) 1386 556622

Brazil: McPack, Phone: +(55) 11 5044 4535

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