

NovoDoser®

Aseptic



A **sterile, low-pressure** liquid nitrogen dosing system equipped with log 9 nitrogen gas purifying unit, steam-in-place sterilization and chemical-in-place sanitization. Constructed from **high purity pharmaceutical grade** stainless steel 316L / 1.4404 material, it ensures peace of mind in your aseptic production processes. Packed with advanced control and communication technology, it provides precision and frost-free dosing operation.

Applications

- **Container Rigidity** – enhance bottle strength and eliminate paneling especially in light weight PET bottle filling process
- **Container Light-weighting** – reduce packaging cost and environmental carbon footprint
- **Oxygen Exclusion** – Reduce residual oxygen in product headspace to minimize product oxidation for longer shelf life

Ergonomic Features and Benefits

- **LN₂ Sterility:** Log 9 microbial free liquid nitrogen
- **Line Speed:** 2000 CPM
- **Dose Accuracy:** +/- 2 % dose weight
- **Dosing Pressure:** 0.4 psi, low pressure splash-free dosing to minimize container and production line contamination
- **Sub-cool Liquid Nitrogen:** Ensures constant liquid nitrogen density for precise and repeatable dosing
- **Dose Volume Synchronization:** Ensures that each container receives the correct amount of LN₂ regardless of variations in production speed
- **Servo-operated Actuator:** Fast response and precise valve opening control for high-speed dosing operation with life-cycle exceeding 1 billion bottles production
- **Chemo Sanitization:** The nozzle is sanitize-able during filler CIP (clean-in-place) interval using customizable recipes and duration settings, helping maintain ultra-high hygienic performance
- **Quick Nozzle Defrost:** Ultra-fast nozzle defrost and dry-down, maximizing system uptime and efficiency
- **Automatic CIP Protection:** Prevents nozzle freeze up during or after filler CIP or wash down, by keeping moisture out of the dosing head. Built to handle high-pressure washdowns and harsh chemicals for longer service life and less downtime
- **Nozzle Blanketing:** Prevents frosting during both standby and active production with sterile nitrogen gas for effective nozzle protection from microbial contamination
- **Process Monitoring with Data Logging, History Records and Alarms:** Advanced process monitoring with data logging system ensure compliance to GAMP 5 requirements. The real time monitoring alerts operators for system faults via on-screen text messages, buzzer and light beacon alarms
- **Operating Language:** English, German, Spanish, Portugese, Chinese, Russian etc.
- **Vacuum Warranty:** 5 years international warranty

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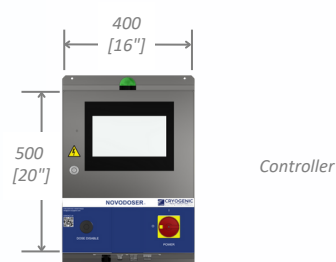
Dimensions

Material	Stainless Steel Series 316L
Head Pressure	0.4 psi
Nozzle Sterilization / Sanitization	Steam / Chemical
Steady State Consumption	< 0.12 gal (0.4 L) / hr
Body Dimension	Customize to filler
Dosing Head Dimension	Customize to filler
Dosing Head Arm Reach	Customize to filler
Weight	Customize to filler
Utilities	Liquid Nitrogen LN ₂ : ≤ 100 psi Gaseous Nitrogen GN ₂ : 100 psi Electrical: 110-220 VAC

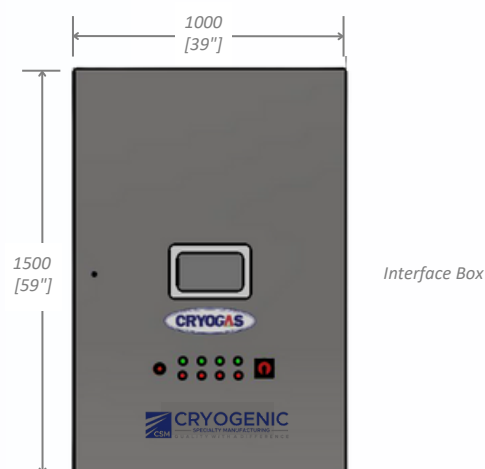


8000DSC-X Controller Specifications

PLC Platform	Siemens S7-1200
HMI (LCD touchscreen)	10.0" Color
Dose Volume Control	Variable, speed synchronized
Dose Volume, mg/dose	5 to 1400
Dose Accuracy	± 2%
Max. Line Speed	2000 CPM
Dosing Head Actuator	IP67 Aseptic
Thermo-Purging - Quick System Purging - Rapid Nozzle Defrosting - CIP Protection	✓
Chemomatic Nozzle Sanitization	✓
Steam Sterilization SIP	✓
Filler Command Signal	✓
Filler Signal Exchange	✓
Modbus RTU User Interface	✓
Ethernet User Interface	✓
Smart Maintenance	✓
Recipe Storage	10
Certifications	CE



Controller



Interface Box

All dimensions provided are for indication purposes only and may not accurately represent the actual product dimensions. Please contact us for updated and actual measurements.