

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

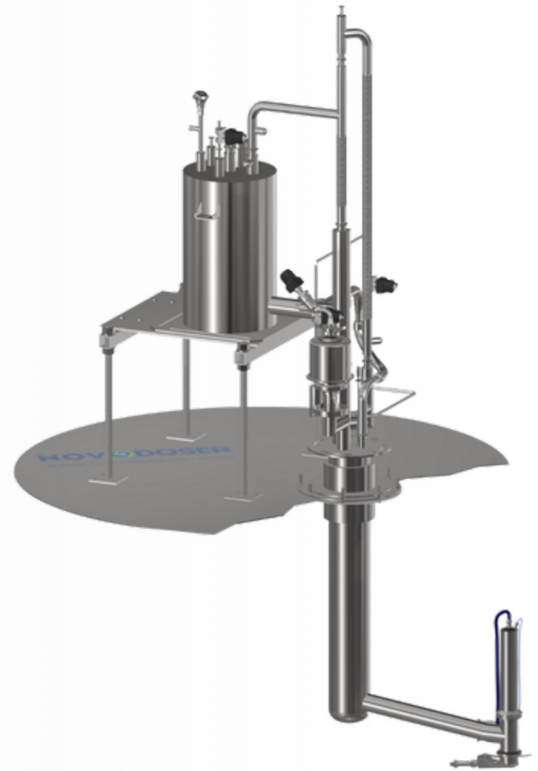
- **Container Rigidity** – enhance bottle strength and eliminate paneling especially in light weight PET bottle filling process
- **Container Light-weighting** – reduce packaging cost and environmental carbon footprint
- **Oxygen Exclusion** – Reduce residual oxygen in product headspace to minimize product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

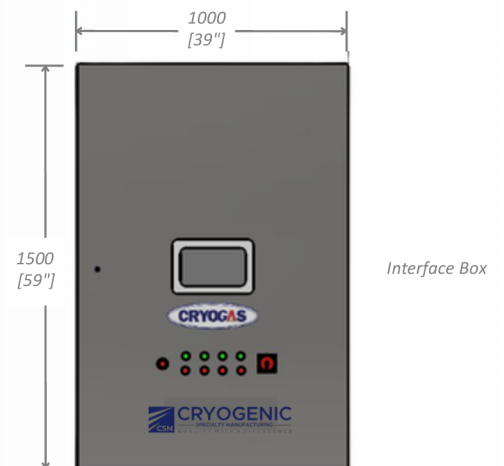
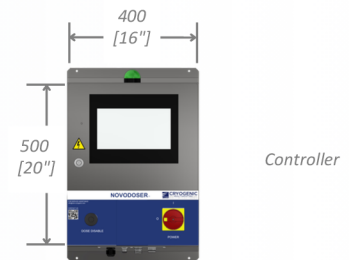
NovoDoser® Aseptic Dimensions

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



Controller Specifications

Model	8000DSC-X
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



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.