

UltraClean Doser[®] 2000DSC



A new generation ultra-clean liquid nitrogen doser with frost-free nozzle, corrosion resistant 316L material grade construction, hygienic wash-down design in compliance to stringent ultra clean bottling line requirement

Specifications

- Discrete dosing up to 2000 CPM
- Controller with Siemen S7-1200 PLC platform
- NEMA 4X IP65 stainless steel enclosure
- HMI comes with TFT color touch screen
- Minimum dose duration 5mS
- Accurate dose weight +/-1%
- No container No dose function
- Smart-maintenance to allow user plan the maintenance schedule
- Direct LN2 feed pressure up to 30psi (2.0 Bar)
- ModBus user interface
- Alarm log to assist system trouble shooting and performance monitoring
- Recipe storage 10 recipes or more
- 316L material construction higher corrosion resistance
- HS Hygienic Dosing Head wash-down design, IP65 rated
- Multi-lingual HMI : English, Spanish, Chinese, etc

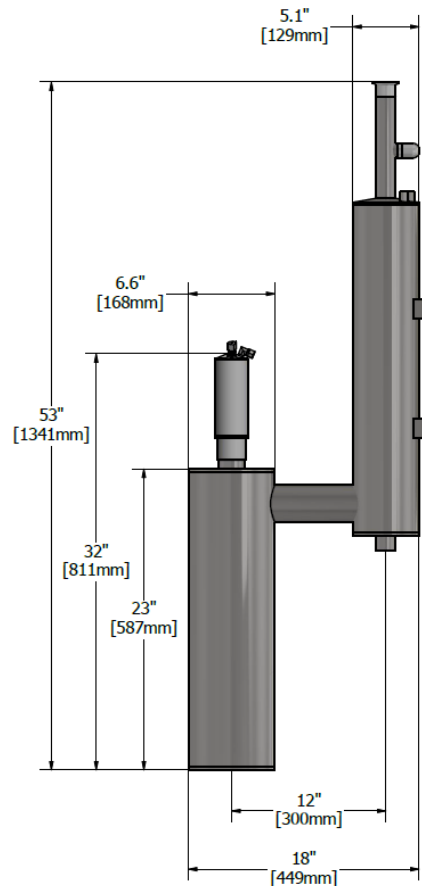
Ergonomic Features and Benefits

- **Frost-free Nozzle** – Self-generating GN2 for dosing head blanketing
- **Lowest LN2 Consumption** – Discrete dosing, for speed up to 2000* containers per minute
- **Lowest LN2 Losses** – Proprietary vacuum insulation with lowest heat leak
- **Minimized Product Splash** – Lowest dose pressure in its class, 0.3 psi
- **Sub-cooled LN2** – Ensuring constant LN2 density for accurate dosing
- **Lowest System Downtime** – Sensors & Electrical cables are IP 65 rated and 316L material grade of construction for main system
- **Ease of Maintenance** – Achievable by system smart maintenance and remote monitoring
- **Highest Hygiene Wash Down Design** – All external surface construction is in round shape, surface are sloped for self-drainability and easy wash-down
- **Lowest Maintenance** – Ultra long life cycle HS dosing valve > 60 million
- **Ease of Installation** – Compact size enables ease of installation in limited space
- **Applications Flexibility** – Compatible with soft-dose and micro-dose technology for hot fill, powder, and granular applications
- **5 Years Vacuum Warranty** – Lowest cost of ownership

UltraClean Doser® 2000DSC

Dimensions

Material	Stainless Steel Series 316L
Head Pressure	0.3psi
LN2 Supply Pressure	22 psi (1.5 bar)
Steady State Consumption	< 0.03 gal (0.1 liter) / hour
Body Dimension	37"H x 5"W (930 x 129mm)
Dosing Head Dimension	Standard 9.5"H x 2"W (241x50mm)
Dosing Head Arm Reach	18" (457mm)
Weight	30lbs (14kg)
Utilities	GN2 60 psi ; Electric 110-220VAC



2000DSC Controller Specifications

PLC Platform	Siemens S7-1200
HMI (LCD touch screen)	7.0" Color
Dose Duration, 1ms int.	5 to 1000 ms
Dose Volume, mg/dose	5 to 1400
Dose Accuracy	± 1%
Max. Discrete Dosing	2000 CPM
Fixed Delay	✓
Speed Compensation	✓
Dose Compensation	✓
Encoder Compatible	✓
Nozzle Pre-Cooling	✓
Thermomatic Sanitization	✓
Nozzle Auto Defrost	✓
User Signal Interface	✓
Modbus User Interface	✓
Ethernet User Interface	✓
Smart Maintenance	✓
Recipe Storage	unlimited
HS Hygienic Dosing Head	✓
Certifications	CE, NEMA 4X

