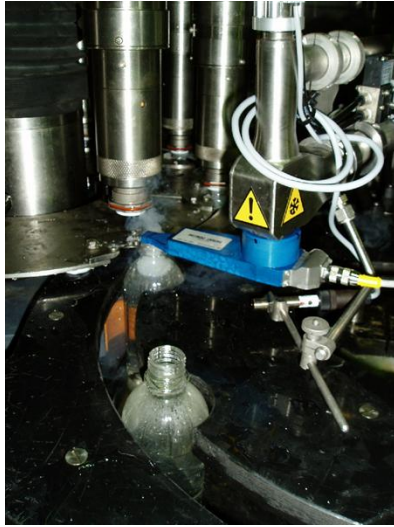


Hot Chute™

Precise, Accurate, LN₂ Dosing



With the Hot Chute, liquid nitrogen (LN₂) is dispensed into a container just milliseconds prior to sealing.

Typical Applications Include:

- Pressurization of non-carbonated beverages in ultra-light weight PET containers
Gentle LN₂ dose delivered immediately before capping results in consistent pressures critical for successful ultra-light weight bottle applications.
- Pressurization of hot filled products
Gentle nitrogen spray settles on top of product without excessive splashing.
- Inerting of sensitive food products
An atomized dose of LN₂ quickly vaporizes into gaseous nitrogen, eliminating the potential of product freezing.

LN₂ Dosing Technology

The unique properties of liquid nitrogen allow for effective container pressurization and headspace flushing. One part of liquid nitrogen will expand into 700 parts of gaseous nitrogen. If the container is capped, the expanding nitrogen gas will pressurize a container. If the nitrogen is allowed to escape, the expansion process effectively displaces O₂ from a container's headspace.

Hot Chute Features:

- The Hot Chute™ extension effectively atomizes liquid nitrogen for gentle, controlled dosing at line speeds up to 400 cpm.
- The Hot Chute can be fitted onto all VBS injection units including the LCI, UltraDoser and Inerter.
- The slim horizontal profile allows the LN₂ dose to be delivered directly upstream of the capper.
- For some specialized installations using an **Alcoa capper**, the Hot Chute can be completely integrated into the capper.
- Complete with VBS' renowned customer care from conceptual system design to implementation.

VBS International has been the leader of cryogenic systems for the food and beverage industry for over 25 years. Our practical experience is revealed in our cutting edge, specialty products and continued performance.

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