



# Inerting with the LCI LN<sub>2</sub> Dosing System



- The LCI dispenses a dose of liquid nitrogen into the container.
- In the container, the cold liquid immediately turns into a gas.
- One part of liquid nitrogen will turn into 700 parts of gaseous nitrogen.
- The expanding gas will flush O<sub>2</sub> out of the container.

## Inerting Benefits:

### Removing oxygen from product headspace

*A dose of liquid nitrogen reduces the oxygen content of product headspace. Typical results are less than 4% O<sub>2</sub>. Product shelf life is substantially improved.*

- Typical Applications Include: Packaging of mayonnaise, salad dressing, and edible oils

### Removing oxygen from food container

*Customers are replacing their inefficient, expensive nitrogen tunnels with LN<sub>2</sub> injection. Typical O<sub>2</sub> levels inside a container are less than 4% O<sub>2</sub>. Product shelf life is substantially improved.*

- Typical Applications Include: Peanuts, dry pet kibble, coffee beans

### Removing oxygen from wine/beer bottle

- Typical Applications Include: beer and wine

## Application Considerations:

- Ideally, dose 10-15 seconds before the capper.
- If using an inductive seal, the sealer should be relatively close to the capper.
- Install a metal or plastic plate about 1/8" above the dosed containers. This will allow nitrogen to escape from the container while limiting the amount of oxygen that can re-enter the container.
- Round bottles can hold more pressure than square shaped bottles.
- A bottle with an indented base can hold more pressure than a bottle with a flat base.