



## FOOD & BEVERAGE

Onsite Nitrogen Generation is widely used in the preparation, production and packaging of foods. Oxygen if present can cause spoilage, the growth of moulds, yeast and aerobic bacteria and cause impairment of taste.

Food goes bad, it goes sour, becomes mouldy and smells - it's a fact we all know. Without the use of preservatives it is a challenge for food manufacturers to prepare, store and transport their produce to the consumer in the very best condition. This is where Modified Air (MA) and Modified Atmosphere Packaging (MAP) comes into it's own.

Using Nitrogen to modify or substitute the atmospheric air inside of a package as a protective gas mix, it helps the product to stay fresh as long as possible - it maintains freshness, quality and extends shelf-life.



### Snack Food Packaging

Various of snack foods such as potato crisps, peanuts, biscuits, dry fruit and other perishable products can benefit from being packaged in a nitrogen modified atmosphere.

Nitrogen helps maintain product freshness, quality and extends shelf-life. The nitrogen reduces the oxygen content within food packaging to prevent product deterioration which may occur due to oxidative rancidity, moisture loss or gain, bacterial. In addition, mould induced spoilage.

Nitrogen can also be used as a filler gas to create a pressurised atmosphere that prevents package collapse therefore helping to protect the product and ensuring that it is in good condition for the customer.



### Coffee Packaging

After roasting, oxygen begins degrading coffee causing it to lose its flavour. Displacing oxygen with nitrogen during packaging process preserves the flavour and shelf life of coffee.



### Beverage

In the beverages industry, nitrogen is used in packaging of carbonated or still beverages, beer, wine, juice drinks, tea, bottled water etc.

Nitrogen is injected precisely into each container at a predetermined rate which pressurizes the container adding to its rigidity. In carbonated drinks Nitrogen pressure helps to keep the carbon dioxide in solution by occupying the container headspace which adds value to the product. Nitrogen is an inert gas that is safe, clean and dry. It is ideally suited for use in purging and pressure transfer but can also be used for preservation or can be blended with carbon dioxide for the optimal level of carbonation. Purging tanks and vessels with nitrogen also improves durability and shelf life.

