

## nitrogen generation for food & beverage processing



*“Our customer was so impressed with the efficiency & reliability of the nano GEN2 system, they are budgeting to buy a duplicate later this year.”*

*-nano distributor Compressed Air Systems, FL-*

Nitrogen is used in many commercial and industrial applications to improve the quality of a product or process or as a safety measure to prevent combustion. Liquid or bottled nitrogen delivery and storage can be expensive, unreliable and a safety concern. Nitrogen generators allow users to produce nitrogen in-house simply and inexpensively using an existing or new, dedicated compressed air system.

With traditional methods of gas supply such as liquid or bottled nitrogen, users are liable for hidden costs such as rental, refill and delivery charges, order processing charges and even environmental regulatory costs.

Nitrogen generators separate clean, dry compressed air by removing oxygen to deliver a continuous supply of high purity nitrogen and offering a cost-effective and reliable alternative to the use of cylinder or liquid nitrogen across a wide range of applications.

A Florida food packager of fresh salads, fruits and vegetables was in the process of expanding their packaging lines. They knew it was the perfect time to break the



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**products & processes include:**

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coffee

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fruits & vegetables

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cheese

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potato chips

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nuts

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chain from their current highly restrictive contract for delivered liquid nitrogen.

The manufacturer came to nano distributor Compressed Air Systems in Tampa, FL for a solution. They chose a nano GEN2-12130 nitrogen generator and NDL 2110 high-efficiency desiccant air dryer. The packager knew this was the best offering due to the modular pre-treatment dryer and modular nitrogen generator. As space constraints were an issue, the customer really liked the slim, modular design of the dryer and generator which gave them the small footprint they needed versus a much larger standard twin tower desiccant dryer and generator.

Once the system arrived at their facility, our nano technical support team commissioned the unit on-site.

### modified atmospheric packaging (MAP)



We've all left a bag of chips open or milk out of the refrigerator too long...the result is decay. The oxygen in ambient air (~21%) causes food decay called oxidation. The injection of nitrogen and removal of oxygen significantly slows down the process of decay by inhibiting processes of oxidation and the growth of microbes.

Modified Atmospheric Packaging (MAP) machines are equipped with injection nozzles which introduce nitrogen gas into each container or bag as it is filled with a food product. The benefits of packaging food with nitrogen gas include extended freshness, shelf life and shipping range.