Air Liquide creative oxygen | nexelia

Temperature Control

We deliver:

- A competitive chilling cost
- Process optimization
- A customized monitoring program

Your Market

With globalization and changing consumer habits, many food processors continue to be focused on innovation and on keeping their costs under tight control in order to minimize the impact of higher prices, for raw materials, fuel and consumables, on their profit margins. Processes involving cryogenic refrigeration continue to play a vital role in food manufacturing since cryogenics can deliver outstanding results for addressing many food safety and spoilage concerns for various types of food products. Cryogenics is also well-known for improving product quality, productivity throughputs and process flexibility while delivering a competitive freezing or chilling cost.

Properly managing and optimizing your cryogenic process can be a challenging task, however the Nexelia for Temperature Control offer can provide you with a simple solution for cost control and a new level of operational performance.

Your Solution

Nexelia for Temperature Control is an all-in-one gas solution that combines the best of Air Liquide's ALIGAL gases, application equipment and technical support service along with a customized Performance Monitoring Service program for the optimization of your cryogenic process. This offer has been designed for those processors that need to achieve a competitive chilling cost for their food products. With Nexelia, we define the results together and then commit to delivering on our performance.

Our Commitment

• Improved management of your chilling costs

Air Liquide will ensure the regular management of your chilling costs through the new Performance Monitoring Service program. We will provide you with a benchmark gas consumption value and then assist you with the on-going monitoring and optimization of your gas consumption.

• Regular feedback & support service

Start-up assistance and customized operational training with productivity, process improvement, safety and cleaning guidelines will be provided by our technical experts. Regular feedback will be provided to your plant operators and maintenance personnel based on the results of our Process and Gas Installation & Application auditing programs. Furthermore, Air Liquide will also commit to a yearly review in order to discuss your progress in the Performance Monitoring Service program and to ensure that your cryogen consumption goals are being met.

• Continuous improvement initiatives

Our enhanced auditing programs will provide real-time feedback to your plant operators and maintenance personnel in order to recommend opportunities for process optimization, cost reduction, and continuous improvement specifically with your cryogenic system in mind.

Our Offer

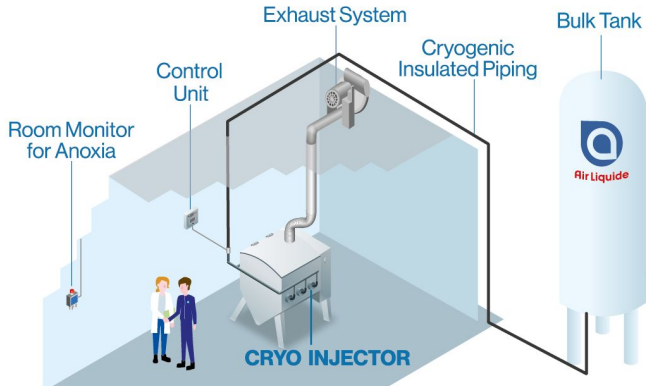
Nexelia for Temperature Control consists of:

•ALIGAL™ 1 (Liquid Nitrogen) or ALIGAL™ 2 (Liquid Carbon Dioxide) supply:
ALIGAL is an Air Liquide brand name for those gases that are compliant with local food grade specifications, regulations, and industry standards, including HACCP certification for production, storage and distribution.

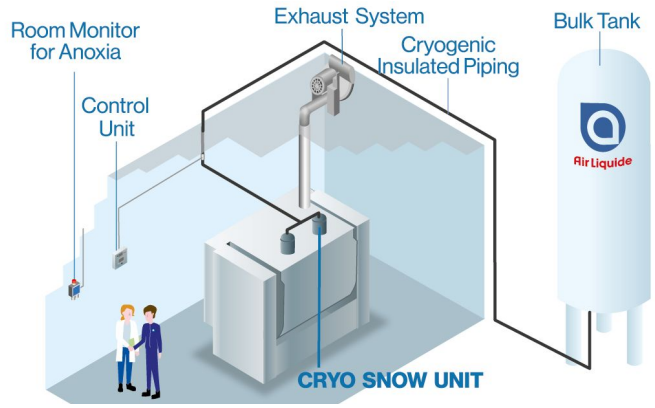
•Process Expertise & Service:
As part of the Performance Monitoring Service program, Air Liquide will provide you with the full support of our food application and technical experts for the design of the solution, its installation, start-up and the on-going optimization of your process with the Performance Monitoring Service program.

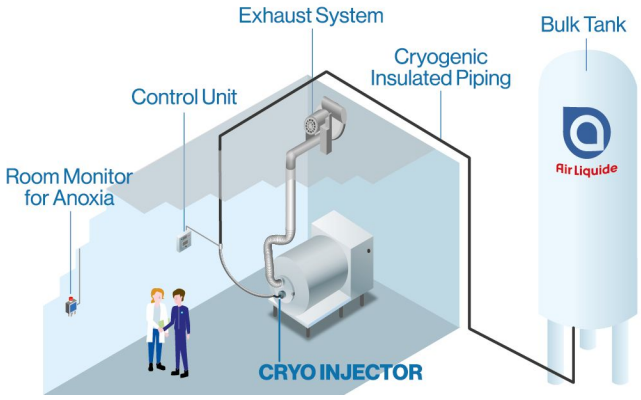
•State-of-the-Art Application Equipment:
Air Liquide offers a variety of cryogenic application equipment to meet your chilling and temperature control needs:

- The CRYO INJECTOR range for those batch processes that need the versatility to efficiently chill and control the temperature with bottom injection while ensuring exceptional quality for any type of food product.



- The CRYO SNOW UNIT range for those batch processes and food products that are better suited to chilling and temperature control using the top injection of CO_2.





Our range of application equipment is ideal for those processors that need increased productivity, excellent cryogen efficiency, improved sanitary design, ease of operation & maintenance with a minimal capital investment and installation cost.

Case Study

IQF Cooked, Sliced Poultry Products

Optimize the temperature control process to achieve a LIN consumption objective of 0.5 kg/kg in a new mixer for blending poultry meat for forming chicken nugget

Performance Monitoring service	Issues	Optimization
Recipe Set-up	Operators were manually changing the chilling parameters- no records	Set up chilling recipes for each product for operational consistency. Provided documentation.
Training	Minimal Safety & Operator Training without any documentation	Customized Safety & Operational Training of operators on the cryogenic injection system. Provided documentation.
Process Audit	Changes made to original operating parameters without documentation	Reviewed process and made recommendations to improve chilling time. Provided documentation.
Gas Installation & Application Audit	Issues with performance of exhaust system design and reliability of cryogenic valve	Recommendations provided for an improved exhaust system set-up and a more reliable cryogenic proportional valve- documented
Gas Consumption Optimization	Gas consumption higher than original objective	Cryogen injection sequence optimized to reduce gas consumption
Follow-up Review	No regular reviews	Review of consumption objective planned annually

Contact us

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