Praxair’s CryoBlend continuous cryogen injection system provides precise temperature cooling while keeping your process continuously moving along. The CryoBlend continuous system is suitable for many continuous mixes that require cooling including mechanically deboned meat, pet food proteins, plant or botanical materials, or difficult to process masses like granola. The CryoBlend continuous system precisely injects either liquid carbon dioxide or liquid nitrogen to quickly cool your food product for maintaining quality, reducing bottlenecks, and increasing throughput.

If transitioning from a batch operation to a continuous operation, CryoBlend continuous can save labor as well as provide consistent and precise chilled temperatures. A continuous operation eliminates batch to batch temperature variations and frequently reduces labor in the loading and unloading of batch systems. Both precise temperature control and seamless operation make CryoBlend continuous an attractive alternative to batch processing.

With the versatility to process a variety of products including complex proteins and botanical and biomass materials, the CryoBlend continuous system provides a high level of heat removal per unit length compared to alternative chilling options. The combination of continuous, gentle movement of the product material with the injection of a cryogen allows for a relatively small footprint machine to achieve large degrees of temperature reduction. Rapid temperature reduction is important for reducing moisture loss, bacterial growth, cleaning time, or all three.

**Established Savings and Efficiency**

Initial data from several protein products across several producers provides evidence for throughput increases of up to 40%. Texture analysis during the testing also confirms minimal product degradation within the CryoBlend continuous system, reaffirming the system’s capability for maintaining product quality.

Compared to mechanical chilling methods, the CryoBlend continuous system can increase efficiency by lowering labor requirements and by eliminating the time required for batch to batch transitions associated with manual loading. Continuous cryogen injection can also decrease losses from product that may be overworked in batch mixing. In addition, the CryoBlend continuous system yields space savings through both its small footprint and the reduction of Work In Progress (WIP) carts, bins, or totes.

**Temperature Control is Praxair’s Expertise**

Praxair’s CryoBlend continuous injection system consistently applies only the necessary amount of cryogen, ensuring an evenly and consistently chilled product. Either liquid nitrogen or liquid carbon dioxide can be used in the CryoBlend system, offering precise temperature control from either cryogen. The team of experts at Praxair can work to identify and provide the exact temperature control system that works best for your processing operation.

**Features**

- Precise temperature control or reduction
- Continuous process
- High heat removal; small footprint
- Sized for your operation
- Easy to integrate
- Efficient cryogen use

**Benefits**

- Small footprint
- Reduced product degradation
- Improved throughput
- Labor and space savings over batch process
- High reproducibility and product uniformity

**Contact Praxair Today**

For more information about cryogenic, process, analytical, and industrial gases used throughout your operation, call Praxair at 1-800-PRAXAIR or visit our website at [www.praxairfood.com](http://www.praxairfood.com).