

The Northfield SuperTRAK spiral delivers proven performance and high-volume processing in the freezing, chilling, cooling, or proofing of a wide range of food products. The Northfield SuperTRAK offers flexible configurations, choices of airflow and a variety of belt types to optimize food handling and hygiene. Innovative engineering improves safety and ensures reliable, trouble-free operation. Whether freezing, chilling, cooling, or proofing, the Northfield SuperTRAK spiral delivers the necessary temperature and environmental control to help you rapidly achieve superior finished product quality at the lowest total cost.



SuperTRAK®
Solutions



SuperTRAK®

Proven performance and high volume freezing, cooling, or proofing

We are your single source for profitable processing solutions

JBT FoodTech can provide you with portioners, freezers, and everything in between – including process control, food product development assistance, operator training and a full range of customer support alternatives.

Our Food Technology Centers have served leading processors in the development of many of the world's most popular food brands. Learn how to increase your processing potential by contacting your JBT FoodTech representative or by visiting our website.

We're with you right down the line.™

www.jbtfoodtech.com



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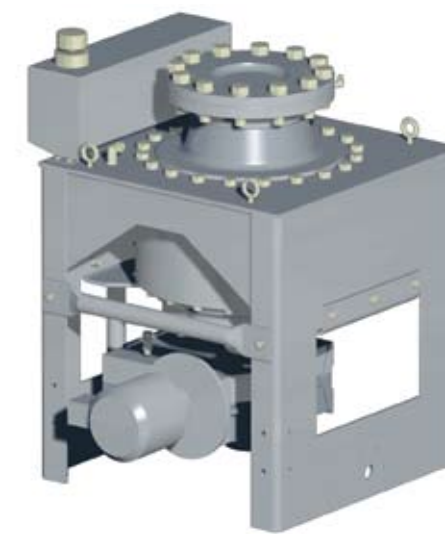
SuperTRAK® Strength & Flexibility

Over forty years of development, engineering and field proven expertise have led to today's SuperTRAK systems. The Northfield SuperTRAK's design, material selection and rugged construction all focus on simple, yet comprehensive goals—lower maintenance requirements, longer component life and reduced downtime.

The robust strength of the Northfield SuperTRAK's center drum drive and rigid tier supports easily accommodate some of the widest belt widths and heaviest loads without compromising flexibility in layout, application or capacity.

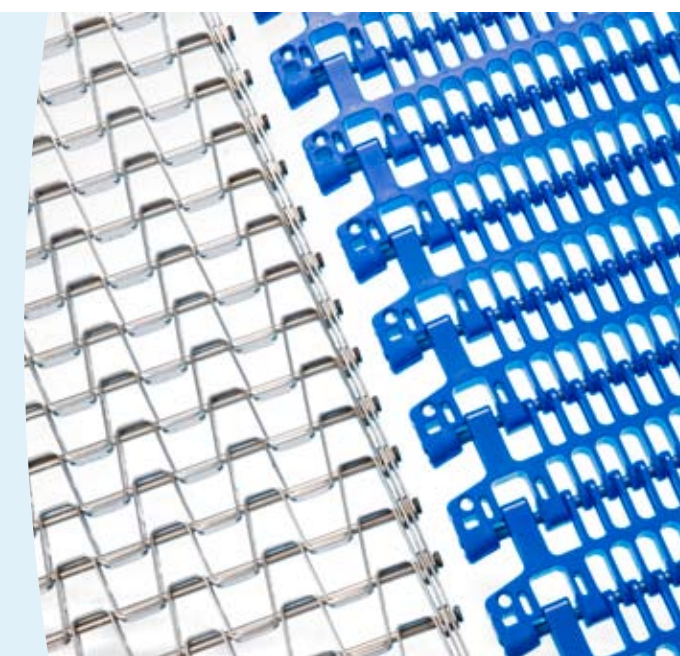
Center Drum Drive System

- Eliminates conventional chain drives
- Completely sealed against the freezer's harsh environment for better hygiene and ease of maintenance
- Trouble-free operation, simple maintenance and cleaning, with floor level access to all components
- Rigid drive cage with strong internal support rings are built around a robust center drive shaft



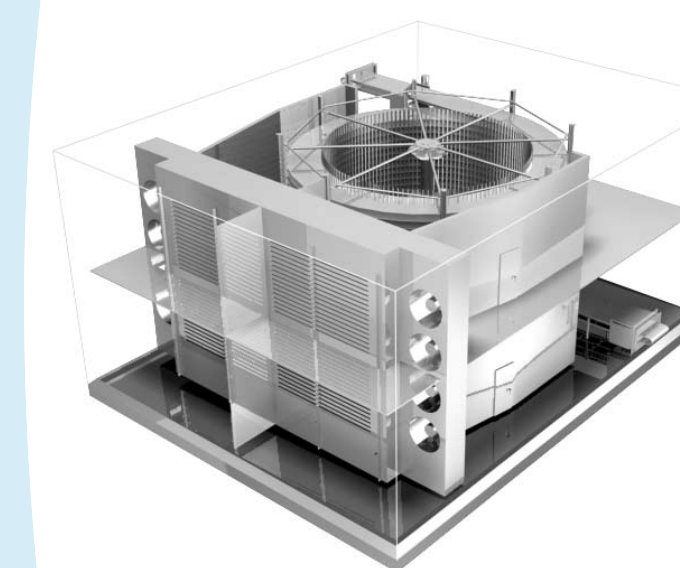
A Wide Choice of Belt Types and Construction Materials

- Belts: Stainless steel or plastic designed to match your specific product and production requirements
- Evaporator: Stainless steel tubes and aluminum fins, aluminum tubes and fins or all galvanized steel. Designed with visual inspection, access and high heat transfer efficiency in mind.
- Spiral construction: All stainless steel, stainless steel product zone or galvanized construction depending on your hygiene requirements



F.A.S.T.™ Defrost (Fixed Assembly Sequentially Timed)

- Patented system provides thorough defrosting of the freezer evaporator coils without interrupting production for up to 21 days depending on the application
- Evaporators are designed with surplus capacity to account for one section in defrost without affecting freezer performance. Fixed air baffle walls isolate each coil to prevent air and moisture migration
- Each coil is individually defrosted in a pre-programmed PLC sequence controlling hot gas and water flush
- The F.A.S.T.™ sequential defrost system has no moving parts, no flaps or louvers, no electric or hydraulic motors allowing for simple and effective operation



Cleaning Systems of Varying Levels

- Recirculating, multi-zone cleaning system (RCS) to defrost, wash, rinse and sanitize the freezer interior. Once the system is loaded, the powerful pump and steam injection system keeps the water temperature to the desired level and recirculates both water and cleaning chemicals, making it economical and efficient.
- by a powerful pump to clean the belt as it passes. After post rinse, the belt is dried under a powerful, double-pass air blast supplied from a centrifugal fan.
- Run-cold recirculating, belt washer includes three distinct zones: detergent wash, post rinse and forced air dryer. Twin spray headers, situated above and below the belt, are supplied
- Simplified rail and cage cleaner for cost effective and focused cleaning to keep the belt support rail and drive cage surfaces free from contamination, reducing critical belt tension, increasing belt life and extending trouble free operation.



Applications

With a global installed base of 7,000 freezers including 1,200 Northfield freezers, JBT FoodTech provides food-focused applications expertise with every system sold. Each Northfield SuperTRAK is customized with attention to airflow, temperature, holding time, production schedule and capacity. The Northfield SuperTRAK has gained a "best-in-class" reputation for treating the following products:



Pizza

- Crusts alone and topped pizzas

Since the introduction of frozen pizza, over 100 Northfield SuperTRAKs and LSTs have been installed for crusts and topped pizzas.



Bakery

- Breads, cakes, pies, donuts, bagels

Rugged construction and long runtimes using F.A.S.T.™ Sequential Defrost have made the Northfield SuperTRAK and LST market leaders with over 350 bakery installations.



Ice Cream Hardening

- Novelties, pints, sqrounds, bundles

The world's largest ice cream producers simply call their hardeners "Northfields." Sturdy LST's harden containers up to 5 gallons / 19 liters in volume.



Ready Meals in trays

- Single serve to family size entrées

Northfield LSTs freeze packaged entrées with holding times up to 2 hours in spirals with belt lengths over 1 mile / 1.6km.



Handheld snacks

- Meat, cheese or fruit-filled

All stainless steel spiral construction along with plastic or stainless steel belt choices make the Northfield SuperTRAK an ideal choice for high-volume frozen snack production.

A Center Drum Drive

- Fully sealed, central drive system to replace conventional chain drive

B F.A.S.T.™ Defrost

- Sequential defrost system has no moving parts, no flaps or louvers, no electric or hydraulic motors allowing for simple and effective operation

C Spiral Conveyor Belt

- Stainless steel or plastic designed to match your specific product and production requirements

D Evaporator Coil

- Stainless steel tubes/aluminum fins, aluminum tubes and fins or all galvanized steel designed with high heat transfer efficiency in mind

E Construction materials

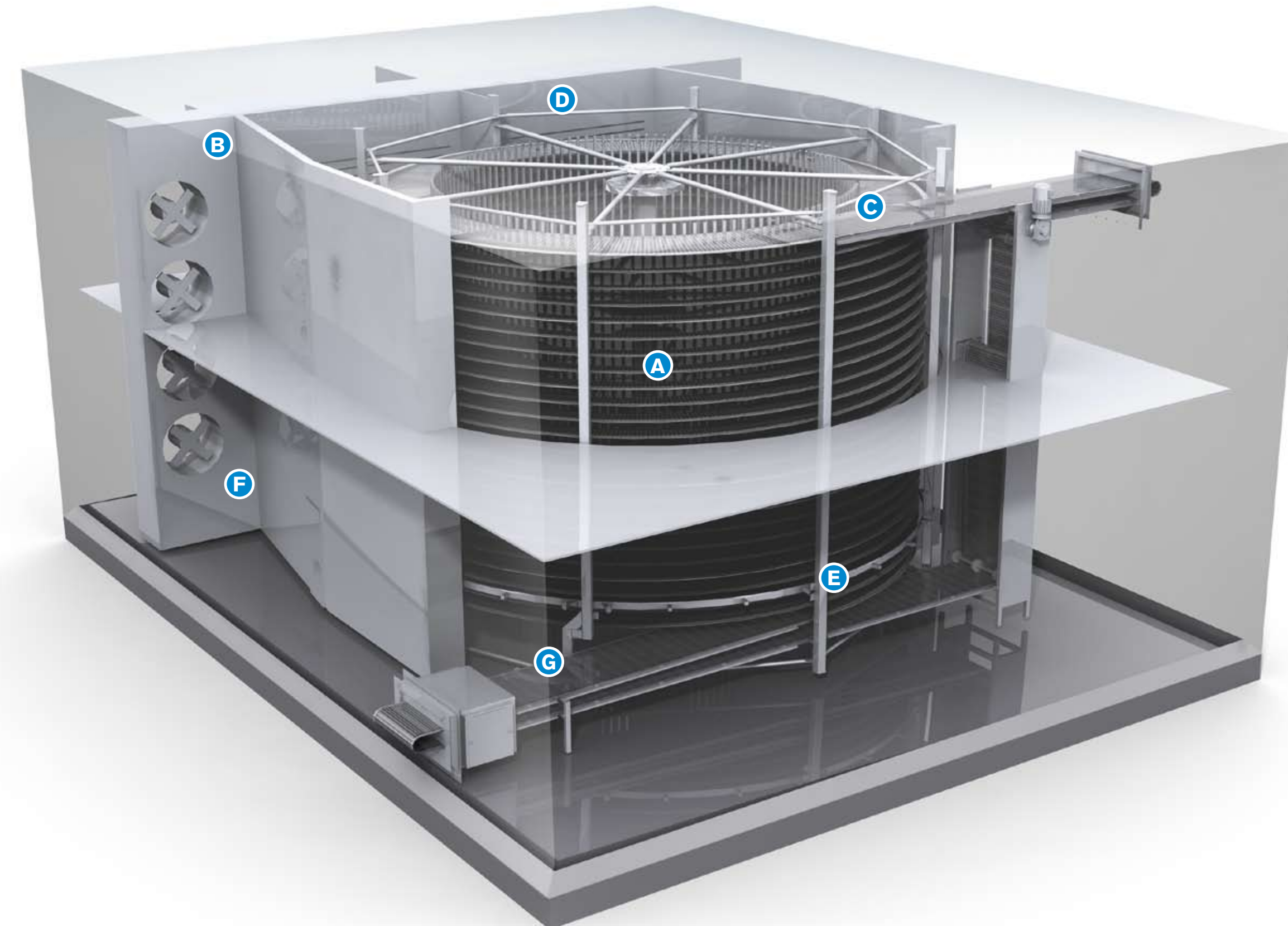
- All stainless steel, stainless steel product zone or galvanized construction depending on your hygiene requirements

F Airflow

- Airflow carefully chosen to match the physical and thermal properties of your product, to provide fast, uniform freezing combined with economical operation

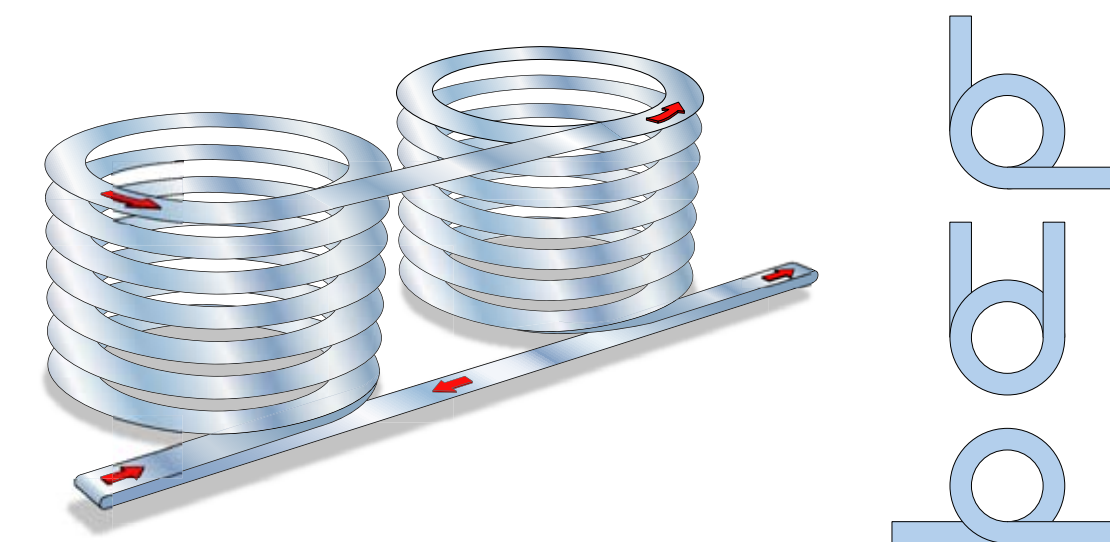
G Optional Cleaning Systems

- Cleaning systems of varying levels from belt washer to recirculating, multi-zone cleaning system (RCS)



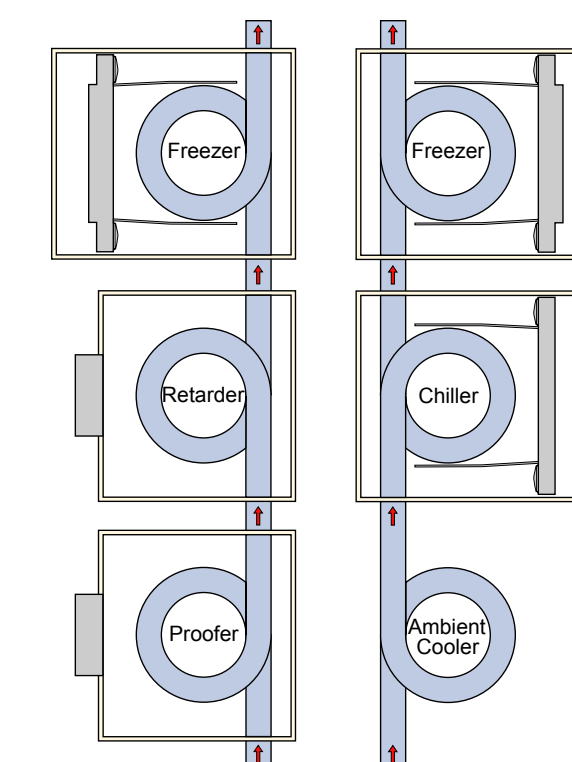
Flexible Layouts

- Twin drums
- Ascending & descending
- Twin belts
- Multi-spiral combinations



Full Line Capability

- Ambient coolers
- Proofers
- Retarders
- Refrigerated coolers
- Freezers



Other Products

Northfield LST® (Large Spiral Technology)

The LST® is the largest industrial spiral freezer on the market today, offering reliability and economy for large volume processors. Incorporating many of the unique engineered features of the SuperTRAK® freezer, the rugged LST® design picks up where others leave off, allowing spirals to be built wider and taller with greater capacities and longer operating times.

Each LST® freezer is custom engineered to accept very heavy belt loads. The structure design and material selection result in lower maintenance requirements, longer component life and reduced downtime. Heavy duty roller chain and economical gearbox selection powers the drive cage. Large section top beams, base beams, uprights and heavy-duty tier supports provide the necessary strength for large-scale freezing.

Field studies comparing Northfield LST® spiral systems to conventional spiral designs invariably show the LST® spiral construction to be dramatically stronger in high-stress areas. The largest spiral freezers in the world today are Northfield LST® freezers.

- Production lines carrying over 36,000 lbs./ 16,300 kg per hour
- Weights up to 40 lbs. per foot / 60 kg per linear meter of belt
- Belt speeds in excess of 150 ft. / 46 meters per minute
- Belt widths up to 60 inches / 1524 mm
- Belt lengths up 6,000 ft. / 1,800 meters in a single spiral
- Temperatures down to -60 °F / -50 °C
- Multiple cages, multiple belts

AquaTRAK™ Spiral Chiller

Built on the firm foundation of the proven SuperTRAK® conveyor system, the AquaTRAK™ Spiral Chiller evenly distributes chilled water throughout the spiral, sprayed directly onto the product surface, to chill any item sealed in plastic bags, pouches, tubs or cups. Water sprays uniformly from each tier support onto the sealed product surface and then cascades over the product on the tiers below.

The nozzles are arranged in a pattern that ensures complete coverage over the belt surface and minimizes over-spray. The water is collected and recycled, filtered and chilled before being fed back to the upright columns and tier supports in which the spray nozzles are located.

Suitable for chilling products to no lower than 40 °F / 5 °C, the gentle AquaTRAK™ spiral conveyor eliminates damage to pouches that may occur in tumbler chillers and can achieve faster chill times than air chillers. The stainless steel construction, removable plastic spray nozzles and sealed center drum drive ensures easy maintenance and operation.

- Gentle handling of product compared to tumble chillers
- Product maintains regimentation and orientation on the belt
- Even chilling over entire product surface
- Eliminates freeze damage to corners of pouches
- Fast chill times compared to air chillers
- Lower cost of refrigeration compared to air chillers
- Removes fans from refrigerated space
- Sealed center drum drive eliminates concerns about contamination from chain lubricants

