

March 7, 2008

NERCON ANNOUNCES NEW LIVE-DRUM “LOW TENSION” SPIRAL CONVEYOR



OSHKOSH — March 7, 2008 — Nercon Engineering and Manufacturing has developed a new spiral conveyor system that utilizes a cylindrical drum that assists in driving the modular plastic belt. The benefits of the Live-Drum Spiral Conveyor include low belt tension, increased elevation changes and capacity, design and product range versatility and low maintenance.

Regardless of the conveyor length, the rotating stainless steel drum imparts the driving force to the inside edge of the belt creating very low tension on the belt. The benefit of low belt tension allows for exceptionally long runs translating into significantly increased number of tiers. The substantial quantity of conveying belt in this relatively small footprint offers manufacturers increased production and profitability.

This low tension Live-Drum Spiral having longer runs and multiple tiers in its design can attain greater elevation changes compared to shaft and sprocket driven high tension spirals. While the number of tiers is limited by the complex drive system and chain pull limitations in high tension spirals, the Live-Drum Spiral's effective edge wrap driving force maintains low tension throughout multiple tiers resulting in higher elevation designs.

From a design standpoint, the Drum Spiral Conveyor can be configured with various infeed and discharge locations, and it can be engineered to lower or elevate products. It can also be designed to carry products between floors and machines, or over aisles. The Live-Drum Spiral takes advantage of vertical space that is normally not used on the production floor. When compared to a tabletop spiral conveyor with the same footprint, the capacity of the Spiral Drum conveyor is appreciably greater.

Most products that can be transported on a conveyor can also travel on a Live-Drum Spiral system. The gentle, uniform slope of the Drum Spiral Conveyor assures no disturbance of product flow. This equipment can transport packages such as jars, tubs, cups, bundles, cans, bottles, bags, pouches, cartons, totes and cases. Further, the Live-Drum Spiral can be designed to accommodate several sizes of products on one production line with no changeover.

Another advantage of the low tension Live-Drum Spiral Conveyor is minimal maintenance. Competing high tension spirals have multiple drives, motors, bearings, rollers and hundreds of moving parts to maintain. The continual low tension operation of the Drum Spiral results in longer life of the two drives, belt and other components in the system. The unit link belting utilized in the Live-Drum Spiral allows for quick repairs.

How does the Low Tension Drum Spiral Work?

One motor powers the cylindrical drum which drives the belt in a helix path around the drum. Another low horse power motor powers the belt. The counter weight in the take up system is utilized to remove slack in the belt to allow for normal mechanical elongation and thermal expansion of the belt.

A 36" diameter drum can accommodate a variety of belt widths from 4 ½" wide to 16" wide. Maximum incline is only limited by product stability and slippage. A variety of different drum diameters and spiral cages are available that utilize wider modular plastic belts.

The range of industries that can utilize the Drum Spiral include Meat, Dairy, Bakery, Beverage, Packaging, Tissue, Personal Care, Industrial and Consumer Goods. It can be designed as a stand alone lowerator, elevator, twin system accumulator, ambient cooler and proofer to name a few applications.

Depending on the application, the Drum Spiral Conveyor's support frame can be manufactured using painted mild steel or polished stainless steel tubular construction. The cylindrical drum is made from stainless steel. Guide rails can also be used when necessary for product stability. Nercon has operated the Drum Spiral conveyor at speeds of 10 - 150 feet per minute. Faster speeds are attainable but are determined by production requirements and product parameters. The modular plastic belting is specifically designed for tight turning radii. The lighter weight of the modular plastic belt also allows for increased carrying capacity.

The safety and control features include an upper and lower primary drive torque limit switch device that automatically shuts the system off if there is too much tension detected. There are also edge sensors on every tier. If excessive belt tension causes any lifting, the machine will also stop. The drum's speed is determined by the speed of the belt and the belt drive will never

operate unless the drum's drive is operating. This guarantees that the belt tension is always minimal.

Nercon is well known as a designer, integrator and manufacturer of packaging and process conveyors and materials handling equipment. The company has over 30 years of experience in engineering conveyors, equipment and customized conveyor lines. Nercon's spiral engineering specialists will recommend the most efficient and effective system based on throughput requirements, speeds, belt widths, drum diameter and product specifications.

For more information on Nercon's Live-Drum Spiral Conveyor, visit www.nercon.com/SpiralConveyor or call 920-233-3268. The web page offers a movie, article and brochure downloads. The Spiral Drum will also be featured in Nercon's booth (#N4136) at Pack Expo – Chicago, November 9 – 13, 2008. A unit is also available for demonstration by customer appointment in Nercon's test center.

#####

For more information, press only:

Jessica Jacobson, jjacobson@nercon.com, 920-233-3268

For more information about Nercon:

<http://www.nercon.com>
3972 S. Hwy. 45, Oshkosh, WI 54902 USA