

Food & Beverage Industry Product Round-Up

The following contains additional products recently released for food and beverage applications including drives, chains and fittings.

lwis

OFFERS PIN OVEN CHAINS FOR THE BEVERAGE CAN **INDUSTRY**

Cans are still the classic packaging choice for drinks in the food and beverage industry. After forming, one of the next high-speed production processes the cans undergo is painting. Specially-developed roller chains have become the preferred conveying technology for this rapid transfer, during which the cans are held in place by protective heads connected to the chain by special transport pins.



The pin oven chains (POC) developed by iwis offer a number of unique advantages. The precision roller chains themselves are particularly wear-resistant and they are treated with the Iwis special lubricant IPP before they leave the factory. IPP is PWIS-free, non-drip, suitable for high temperatures and approved for use in the food industry.

Transport pins can be replaced easily without breaking the chain or removing it from the machine. Three different fixture possibilities are available - pins are integrated in the outer chain plates, secured with special nuts or fixed with split-pins. Users can also choose between two pin versions: flexible or snap-off. The flexible pin - for example after an accidental impact caused by a conveyor jam - can be quickly and easily bent back to its originally position by hand.

The advantage of the snap-off pin is that it will break off in the event of a shock or accidental contact with an obstacle during operation. The snap-of solution is possible because both transport pins and chain pins have the hardness and thus the same wear resistance. This can be of importance when producing steel cans with a risk of jamming the production machines, when the pins do not break. The length of the transport pins can also be adapted to the requirements of individual specifications.

Finally, the standard protective head is made from highquality PEEK which is heatproof up to at least 260 °C and is resistant to a variety of chemicals. A high-temperature elastomer head (ECT) developed and pa-tented by iwis is also available as an alternative. With its design, it can be replaced easily without the need for complex tools and it is robust in

everyday operation because its damping properties are similar to those of a spring. It is made from PWIS-free material that is approved for use in contact with food.

Well-equipped in every respect: a comprehensive range of spare parts and user-friendly tools for assembling and dismantling chains round off the Iwis pin oven chain program.

Iwis is always able to offer can manufacturers a highquality conveyor chain solution that is tailor-made for their individual application requirements. The hallmark of quality: all production series use JWIS brand precision roller chains, so long service life and reliable aftersales service are guaranteed.

In addition to pin oven chains, Munich-based chain specialist Iwis provides a full product range for all drive and conveying applications. This also includes precision and high-performance roller chains, conveyor chains, maintenance-free and corrosion-resistant chains, power and free conveyor chains, special-purpose conveyor chains, flyer chains, flat-top chains, modular belts, chains and accessories for agricultural machinery, and timing drives for the automotive industry.

For more information:

Iwis Drive Systems, LLC Phone: (317) 821-3539 www.iwisusa.com

Emerson

EXPANDS LINE OF LIQUIDTIGHT CONDUIT FITTINGS

Emerson is targeting the food, beverage and pharmaceutical industries with its 4QSS liquidtight fittings featuring 316 stainless steel for dependable performance that will last decades in wet, corrosive locations.



Engineered for applications where sanitation is a critical concern and washdowns are frequent, the UL Listed fittings securely connect flexible metallic electrical conduit while completely sealing off liquids, vapors and solids. A nickel-plated ferrule provides maximum surface contact with longer, more pronounced threads; this ensures pull-out

FEATURE

protection and the prevention of tight bend conduit "popout" to help minimize costly replacements and service calls.

As a result of high demand by users in a variety of industries, 4QSS fittings are available in a broad range of trade sizes of 3/8-inch to 2-inches, with body designs of straight, 45° and 90°.

Thanks to their compact, slim profile the fittings allow for a tighter turning radius for installation in standard knock-out spacing, a common user frustration with standard fittings.

In addition to sanitary environments 4QSS fittings are well suited for machine tool building, HVAC, robotics assembly and areas rated hazardous by the NEC such as petrochemical processing.

For more information:

Emerson Industrial Automation Phone: (314) 553-2000 www.emerson.com

Nord Drivesystems OFFERS ALUMINUM DRIVE UNITS FOR FOOD & BEVERAGE

APPLICATIONS

Earlier this year, Nord Drivesystems released aluminum drive units for the food and beverage industry. The lightweight, corrosion-resistant gear units, smooth surface motors, frequency inverters and motor starters in washdown optimized die cast aluminum housings are extremely robust and durable thanks to a special surface treatment: Nord nsd tupH surface protection.



With this process, the material is hardened below the surface. The surface treatment creates a protective layer which is permanently bonded to the substrate material. It is based on an electrolytic process and gives aluminum corrosion resistance properties which are similar to those of stainless steel. The scratch-resistant surface is more than seven times harder than untreated aluminum alloy. The drives can easily withstand high pressure steam washing or contact with aggressive media.

Among other applications, Nord nsd tupH modules are used in the many conveyor systems which are used in oyster farming. While cast iron geared motors only remain operational for one or two years due to corrosion by the salty environment, the aluminum drive units from Northern Germany offer a durable and economical solution, which usually completely outlives the 10 year life cycle of the conveyor belts which they drive. Therefore, users save time and expense for the maintenance and repair of their systems.

These drive units are a robust, durable and economical alternative to painted cast iron geared motors or stainless steel versions. The nsd tupH treatment is available for all Nord aluminum products, unlike stainless steel drives, which are only offered in a small number of versions by other manufacturers.

For nsd tupH aluminium drive units, all DIN and standard components, including drive shafts, are made from stainless steel. The fan-less smooth motors do not spread germs and also run very quietly. They are available as synchronous and asynchronous motors and fulfil efficiency classes IE2 and IE3 (asynchronous motors) and IE4 (synchronous motors).

For more information:

Nord Drivesystems Phone: (608) 849-7300 www.nord.com

Tsubaki

OFFERS CHAIN PRODUCTS FOR GLOBAL FOOD INDUSTRY

Tsubaki has developed a number of engineered chain solutions which provide for the precise hygiene requirements of both food processing and packaging; while also offering minimal wear, reduced maintenance and increased productivity.

The latest generation of Tsubaki's lube-free RS Lambda chain is particularly suited for conveyor applications where the product may be at risk of contamination from contact with the chain. The design incorporates internally lubricated sintered bushes, the pores of which are vacuum filled with NSF-H1 food grade lubricant. The chain runs 'dry to the touch' and requires no additional lubrication throughout its life, yet provides a significant increase in wear-life performance.

Tsubaki has developed the Lambda concept a stage further to specialize it for retrofitting to tray packaging machinery widely used in the food and beverage industry. On such





machines, where cleanliness and hygiene are paramount, standard lubricated chain can cause contamination and may become chocked with dust and other particles, rendering the lubrication ineffective.

The Lambda chain has a consistent internal lubrication, it therefore combats the risks of uneven wear and elongation amongst the partner chains. Combined with Tsubaki's unique Match and Tag service, this delivers an unparalleled operating life for the application. Depending on the needs of the application the chain can be fitted with pushers or other attachments via an extended pin.

For washdown environments and other applications with harsh environments, the Neptune chain features high tensile strength and corrosion resistance. The chain benefits from a ground breaking, two-layer surface treatment that combines protection against corrosive environments with maximized chain strength. A top coat of resin protects against physical impact and corrosive agents, while a base coating prevents oxidization from reaching the chain. The coatings are applied prior to chain assembly to ensure that each component is completely coated, so that Neptune can be used in wet environments or even underwater.

Tsubaki prides itself on its ability to apply its engineering expertise to its customers' needs. Tsubaki can combine many of its technologies and design bespoke solutions that exceed the expectations of manufacturers within the food industry.

For more information:

Tsubaki

Phone: (800) 323-7790 www.ustsubaki.com

Winsmith

LAUNCHES RD SPEED REDUCER

The patent pending Winsmith RD is uniquely engineered to provide performance in applications involving general industrial processing and material handling equipment such as: food processing, bottling, and packaging. The RD offers offer a fret-free motor connection that guarantees quick motor removal and replacement.

The innovative single lubricant level design delivers offthe-shelf universal mounting capabilities. The RD is dimensionally interchangeable with many competitors' quill input right angle speed reducers, and its modular product assembly method ensures that most configurations can ship within 24 hours of order placement.



The RD provides superior operating performance by incorporating Winsmith's premium efficient gearing, a two-bearing worm support, and the WinGuard 316 stainless epoxy coating system; as well as standard product features.

In addition to the standard offering, Winsmith offers the RD Max, which features the addition of a stainless-steel nameplate and output shaft, IP66 certification, and x-ray and magnetically detectable food safety blue plugs.

For more information:

Winsmith Phone: (716) 592-9310 www.winsmith.com

Brother

IPMAX GEARMOTORS OFFER COMPACT, LIGHTWEIGHT **OPTION**

Brother Gearmotors, a division of Brother International Corporation that offers a wide range of ultra-reliable, sub-fractional AC gearmotors and reducers for the food & beverage, packaging and material handling industries, has introduced IPMax, a line of lightweight, compact interior permanent magnet (IPM) gearmotors that are highly efficient with a wide synchronous speed range.

The series of IPMax maximum performance gearmotors incorporate magnets embedded within the rotor, as opposed to on the surface. No copper losses are experienced in the rotor, and considerably less copper losses occur in stator winding. The gearmotors can operate fanless up to 1hp, and do not require encoders for sensor control. When stopped, a servo lock feature holds the motor in position.



Brother's IPMax gearmotors are 23% smaller than comparable ie3 motors, and run 24% cooler for longer lifespan. They employ brake sequential - which sets motor operations when the mechanical brake is turned on or off - as well as a torque limit solution that protects the mechanical system. Various functions of their programmable I/O terminals may be changed according to external circuits or applications. RS485 is included as standard.PTE

For more information:

Brother Gearmotors Phone: (866) 523-6283 BrotherGearmotors.com