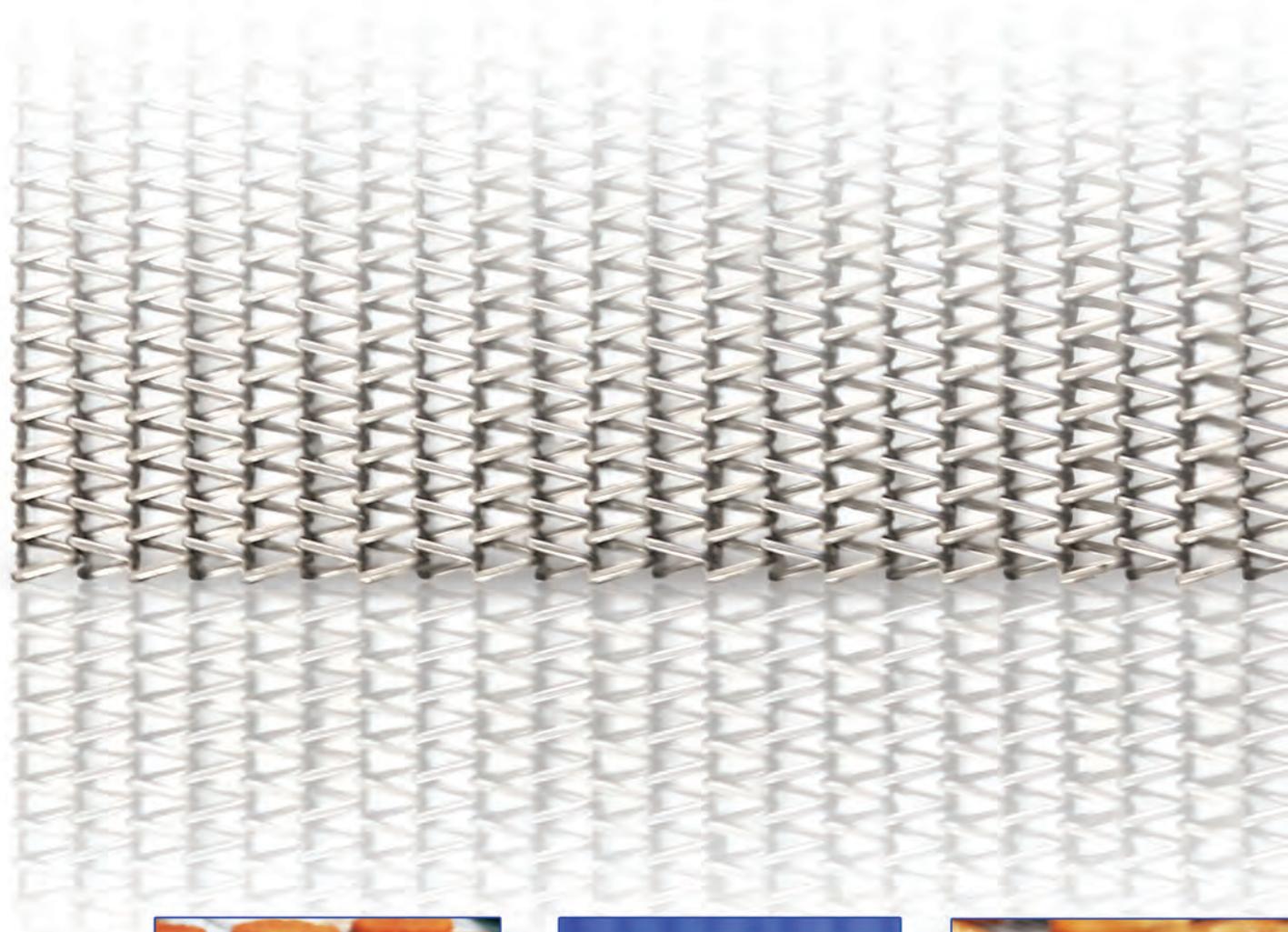


Metal Conveyor Belts for the
Food & Beverage Industries

CAMBRIDGE ENGINEERED SOLUTIONS



PEOPLE SOLUTIONS RESULTS

The Cambridge Advantage

Cambridge Engineered Solutions began weaving wire cloth in 1911. Today, we are the world's leading and largest manufacturer of metal conveyor belts and filtration for the food and beverage industries.

Customers choose Cambridge because we are a trusted solutions provider bringing innovation, market expertise and industry leadership to every transaction. We analyze, design, engineer, fabricate, install and service conveyor belt systems in dozens of applications in every market.

Cambridge belts are uniquely designed to provide the food processing industry with systems to clean, cook, filter and freeze your products. Our systems package and transport food and beverages safely and efficiently from plant to market.

Built on a reputation of outstanding service and customized solutions, our team has increased productivity and food safety for thousands of companies around the world.

“The Cambridge belt lasted **three times longer** than the one we were using and generated a **huge cost savings** for our customer, as well as **peace of mind**. The **service** we received from our local representative has been **stellar**.”

Manager, Poultry Manufacturing Distributor

SUPERIOR PRODUCTS

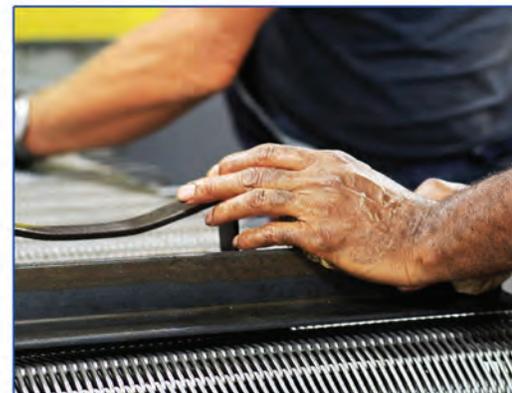
Cambridge offers the food and beverage industry:

- Straight Line Friction Drive Conveyor Belts
- Straight Line Positive Drive Conveyor Belts
- Spiral Cage & Turn Conveyor Belts
- Filtration & Wire Cloth
- Specialty Belts
- Custom Sprockets

METAL BELT ADVANTAGES

Metal belts eliminate fire risks associated with plastic and offer increased food safety:

- Longer-lasting and easy to repair
- Increased carrying capacity
- Customize to any opening
- Sanitary and easy to clean
- Superior tracking and performance



MarketExperts

Cambridge has the market experience to provide total solutions customized for every food and beverage company. Our specialty belts and industrial products are used by the most respected names in food processing worldwide. From sorting and washing to cooking, cooling and packaging, there are hundreds of custom solutions based on the market and application. World-class engineering and manufacturing methods ensure that our belts last longer and deliver optimal results.

CambridgeAdvantage



Innovation

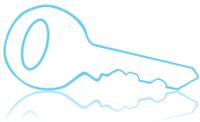
A pioneer in conveyor belt research and design, Cambridge holds more than three dozen international patents for engineering. We pioneered the manufacture of precision-engineered metal conveyor belts.

P= Cambridge Patented/Patent Pending Products



Global Leader

Cambridge has an international manufacturing and sales operation. With plants in the U.S., Mexico and Brazil, and agents in more than 30 countries, we are recognized around the world.



Solutions

Cambridge offers a total-systems, solutions-based approach. We work to evaluate, design and fabricate belting applications to maximize production, efficiency and food safety.



Market Expertise

Cambridge's success is built on a foundation of food industry markets, applications and trends. Industry, government and the media look to us for insight on forces shaping food processing and safety.



Customer Service 24/7/365

Our customers are in every time zone, with plants that run around the clock. We are available when you need us to discuss your question, schedule a consultation, recommend services or provide a quotation.



Excellence

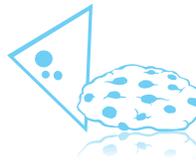
Cambridge is a proud member of the Conveyor Equipment Manufacturing Association. We are committed to upholding our reputation as a pioneer and practitioner of best practices in food safety and standards.

SpecialtyMarkets



Frozen & Prepared Specialties

From pizza to ice-cream and ready-to-eat meals, Cambridge belts are with you every step of the way. We cook, freeze and package thousands of well-known brands and products.



Bakery & Snack Foods

A leader in the baking equipment industry, Cambridge customers bake more bread, cookies, crackers and tortillas than anyone in the world. Our belts cook, decorate, bake and fry the tastiest treats around the world.



Meat, Poultry & Seafood

Working to improve food safety across the industry, Cambridge belts are the preferred choice for leading poultry, beef and seafood processors. Select applications include: Form, fry, bread, coat or grill.



Fruits & Vegetables

From field to factory, our belts harvest, sort, can and clean every size and type of fresh fruit or vegetable. Popular markets include peaches and strawberries.



Dairy Products

Cambridge belts are USDA certified because of our stringent adherence to dairy's unique sanitation challenges. Our belts are the best to pasteurize, prepare and package cheese, milk or yogurt.



Beverages

Cambridge has an extensive line of conveyor belts, wire cloth and filter leaves specially designed for the beverage industry. Our products pasteurize, filter and fill many beverages including fruit juice, beer, wine and soda.



Packaging

Cambridge has an extensive line of conveyor belts specially designed for packaging needs. Our products can be utilized for small to large packaging and processing.

“The Cambridge belt is superior to any wire belt I have used. The belt’s long life attests to that. Better design and reliability have meant big time savings for this plant.

- Plant Manager, Poultry Processor

The technical specifications noted for each belt are provided as general guidelines for capacity, width, length and speed. Cambridge is continuously expanding belt capabilities as requested by customers for different applications. All belts here can be customized to meet your unique needs.



5

Straight Line Friction Drive Conveyor Belts



6

Straight Line Positive Drive Conveyor Belts



9

Spiral & Turn Conveyor Belts



13

Filtration & Wire Cloth



14

Sprockets

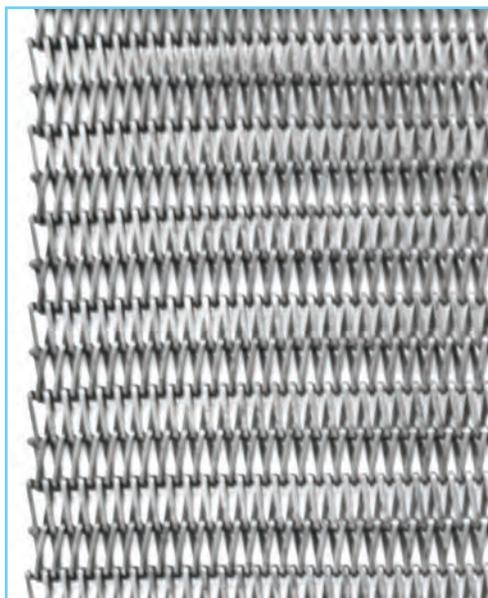
Straight Line Friction Drive Conveyor Belts

Balanced weave belts are the heart and soul of many bakeries and snack food operations. These straight-line belts are the optimal choice for friction driven conveyors. With their alternating right and left hand spiral construction and endless customization options, Cambridge's suite of Balance belts deliver better stability, heavier loads and increased surface area to the baking industry.



Working with Cambridge is one of the easiest things we do on a daily basis. They do whatever it takes to get you what you need when you need it.

- Engineer, Baking Equipment Manufacturer

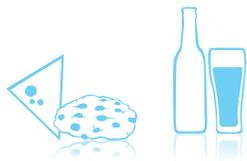


Oven Balanced Flat Seat®

Unique spiral shape and flat seat® rod design decrease belt stretch

Features

- Best tracking
- Greater product stability
- Less stretch and distortion
- Easily spliced



Technical Specs

- Widths up to 220" (559cm)
- Speeds to 1200fpm (366m)
- Temperatures up to 1000°F (538°C)
- T316LSS, T304SS, T430SS, HCS, Galv.



DiaCrimp®

Less vibration of any belt available in the marketplace

Features

- Increased carrying surface
- Best belt stability
- Better tracking
- Easily spliced



Technical Specs

- Widths up to 220" (559cm)
- Speeds to 1200fpm (366m)
- Temperatures up to 1,000°F (538°C)
- T316LSS, T304SS, T430SS, HCS, Galv.



Compound Balanced Weave

Our tighter mesh provides better tracking & baking than standard compound balance belts

Features

- Smooth, dense weave in dozens of sizes
- Excellent for baking any product
- Best surface area



Technical Specs

- Widths up to 160" (406cm)
- Speeds to 1,000fpm (304.80m)
- Temperatures up to 1000° (538°C)
- T316LSS, T304SS, T430SS, HCS, Galv.

REAL PEOPLE REAL RESULTS

Iced Cookies Stay Sweeter with DuraFlex® EDGE

A large cookie manufacturer found that frequent maintenance on their icing line was taking a bite out of production. Removed weekly to clean out sugar build-up knocked the belts out of shape and led to costly, time-consuming replacements. Cambridge installed **DURAFLEX® EDGE** and gave the plant back their dough.

Cambridge's positive drive belts have customized sprockets to assure the absolute best tracking, smoother operations and less product loss. These low tension, self-tracking belts are perfectly aligned with each application. Available in the widest variety of sizes, pitches and materials, many utilize patented technologies and are certified by the **USDA** as the gold standard in metal processing belts for food safety.



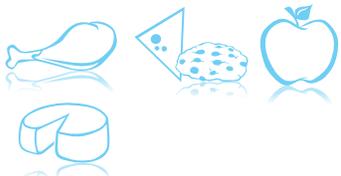
Duraflex® EDGE



Lasts 5x longer than any flex style belt on the market

Features

- NokLok™ pickets for optimal strength
- Easy 30-second splicing
- USDA-Certified for dairy market
- Eliminates snagging on adjacent belts
- Clear opening, lightweight design
- Patented edge technology



Technical Specs

- Widths up to 156" (396cm)
- Speeds to 200fpm (61m)
- Temperatures up to 1000° (538°C)
- T316LSS, T304SS
- See page 14 for sprockets

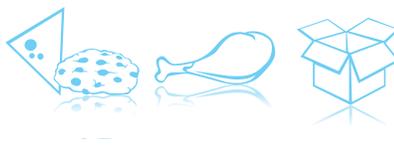


SaniGrid®

Simple open design provides efficient operation with minimum maintenance

Features

- Sanitary and easy to clean
- Flat uniform surface for gentle product handling
- Also available in turn belt design
- Available with UBar Fillers
- Resists stretching, reduces downtime



Technical Specs

- Widths up to 48" (122cm)
- Speeds to 50fpm (15m)
- Temperatures up to 1000° (538°C)
- Choice of 5, 7 or 9 gauge rods
- T304SS, HCS, Galv.
- See page 14 for sprockets



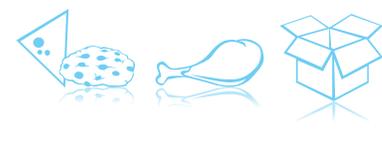
DuraHinge®



Lasts twice as long as other flex style belts

Features

- Patented compound Z bend hinges vs. flexes
- Spring tempered wire, strongest material available
- Reduces curling and snagging
- Light-weight and easy to clean
- Most specs are in stock



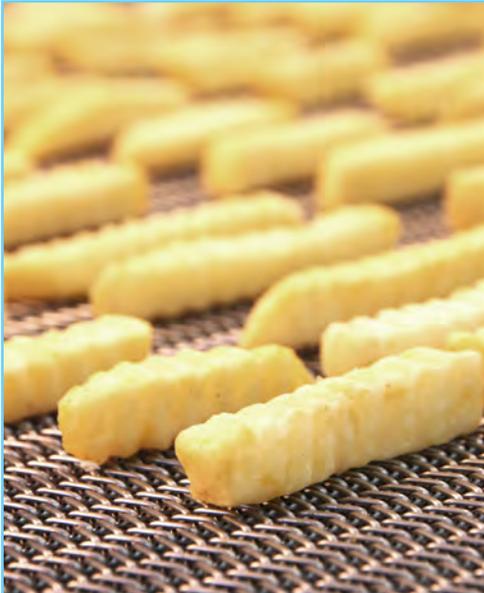
Technical Specs

- Widths up to 156" (396cm)
- Speeds to 150fpm (46m)
- Temperatures up to 1000° (538°C)
- T304SS
- See page 14 for sprockets

REAL PEOPLE REAL RESULTS

Cookie-Cutter Belt Couldn't Cut It

When a popular cookie baker couldn't keep their sandwich cookies together, they called on Cambridge to clean up the crumbs and save some dough. Our cracker-jack team discovered an inferior belt was stretching while the cookies cooled, causing them to lose orientation and miss their sandwich crackers and more than doubled belt life.



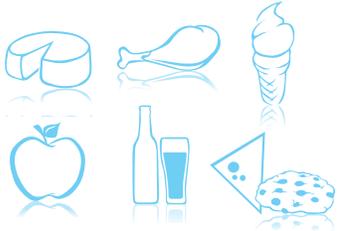
Precision



Most precise belts, sprockets and drive rolls on the market

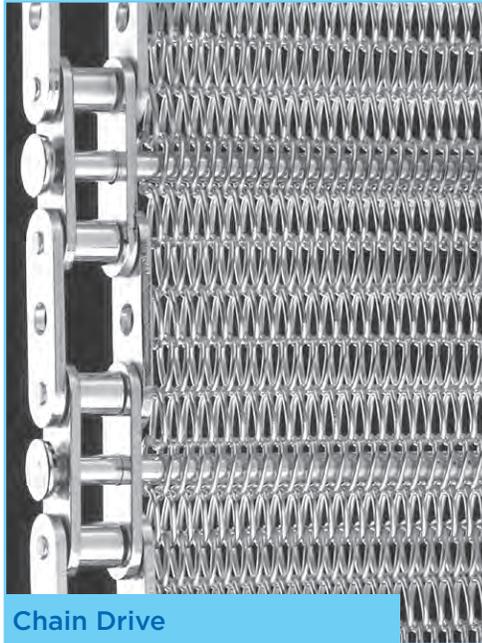
Features

- Truest tracking belt
- Widest range of custom options available, hinges around 1/4" nosebar
- 5x longer life than similar belts
- Stable product carrying surface
- Unique sprocket/belt match allows thermal expansion and contraction



Technical Specs

- Widths up to 156" (396cm)
- Speeds to 600fpm (183m)
- Temperatures up to 1000°F (538° C)
- T316LSS, T304SS, HCS
- See page 14 for sprockets



Chain Drive

Custom solutions for tough applications requiring tight tolerances

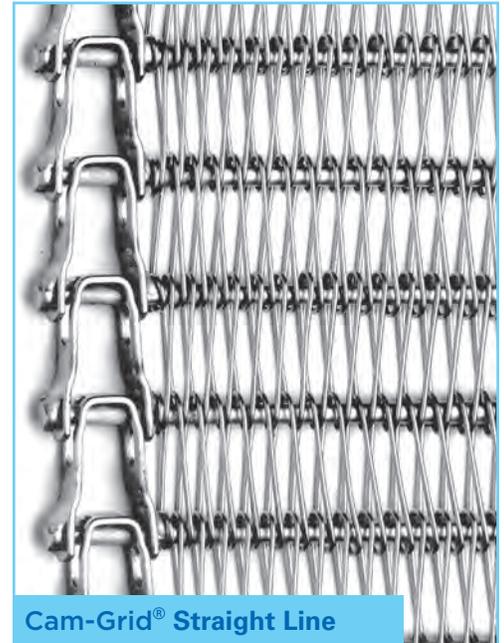
Features

- Handles heavy loads and slippery conditions
- Ideal for inclines, declines, freezers and fryers
- Unlimited mesh variations



Technical Specs

- Widths up to 156" (396cm)
- Speeds to 150fpm (46m)
- Temperatures up to 1000°F (538° C)
- T316LSS, T304SS, HCS

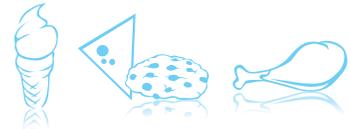


Cam-Grid® Straight Line

Lightweight alternative for typical chain drive applications

Features

- Positive drive ensures smooth product flow
- Reduces waste, protects quality
- Easy to clean



Technical Specs

- Widths up to 75" (191cm)
- Speeds to 80fpm (24m)
- Temperatures up to 1000°F (538° C)
- T316LSS, T304SS, HCS
- See page 14 for sprockets

REAL PEOPLE REAL RESULTS

Something Fishy Afloat

We thought there was something fishy about a seafood processor having to continually shut down their line to repair stretched belting and clean product build-up. With fresh eyes and a fresh approach, Cambridge installed our patented **PacTitan®** belt. With its self-cleaning sprockets and clinched edge, we got this plant swimming again.



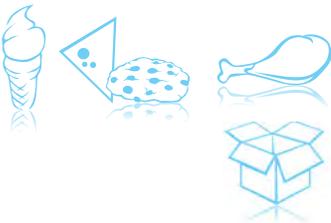
PacTitan



Only flatwire belt with customized openings on the market

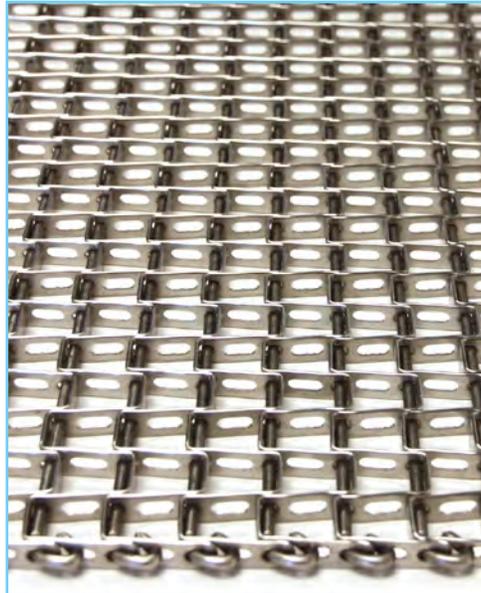
Features

- Lasts up to 30% longer than traditional flat wire
- Variable openings for cooling and freezing
- NokLok™ picket technology
- Standard and heavy duty available
- Less stretch and distortion



Technical Specs

- Widths up to 256" (650cm)
- Speeds to 250fpm (76m)
- Temperatures up to 1000°F (538° C)
- T316LSS, WRSS, T304SS, HCS, Galv.
- See page 14 for sprockets



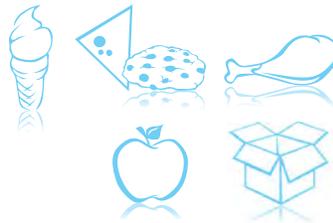
PacLite



All the advantages of PacTitan with even less weight

Features

- Newest, lighter weight flatwire belt
- Variable openings for cooling and freezing
- NokLok™ picket technology
- Standard and heavy duty available
- Less stretch and distortion



Technical Specs

- Widths up to 256" (650 cm)
- Speeds to 250fpm (76m)
- Temperatures up to 1000°F (538° C)
- T316LSS, WRSS, T304SS, HCS, Galv.
- See page 14 for sprockets

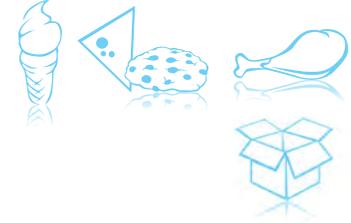


PacTite®

Nesting picket design with clinched edge delivers truer tracking, longer lasting belt

Features

- Clinched combination eliminates stretch and distortion
- Reduces product tipping and vibration
- Better product stability
- Strong, rugged, durable construction
- Standard and heavy duty available



Technical Specs

- Widths up to 256" (650cm)
- Speeds to 200fpm (61m)
- Temperatures up to 1000°F (538° C)
- T316LSS, WRSS, T304SS, HCS, Galv.
- See page 14 for sprockets

LEADING EDGE®

WIDER FASTER STRONGER

Than any spiral belts in the market, these patented systems are designed to process and move baked goods, meats, poultry, fish

and prepared foods of all kinds. Versatile and perfectly suited for a wide variety of light and heavy duty applications including heating, cooling, proofing and freezing at sustained speeds to 250fpm.

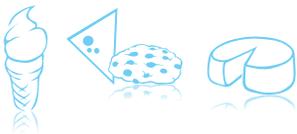


Leading Edge® Performance Link^P

Strongest spiral cage belt on the industry for heavy loads & high volume

Features

- Open link construction for air circulation and drainage
- Exceptional strength and stress resistance
- Trouble free operation
- No flipping required



Technical Specs

- Widths up to 60" (152cm)
- Speeds to 250fpm (76m)
- Turn ratio 1.5 - 4.0 x belt width
- Tension rating up to 650lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets



DuraLite®^P

Customized openings reduce weight and increase airflow

Features

- More product carrying capacity
- Improved efficiency to chill and freeze foods faster
- Strong and lightweight
- Easy to clean
- Energy saving and efficient



Technical Specs

- Widths up to 60" (152cm)
- Speeds to 130fpm (40m)
- Turn ratio 1.15 - 4.0 x belt width
- Tension rating up to 400lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets



Leading Edge® DuraLite®^P

Combining Leading Edge's strength and carrying capacity with Duralite's customizable openings.

Features

- Customized openings reduce weight and increase airflow
- Exceptional strength and stress resistance
- More product carrying capacity
- Improved efficiency to chill and freeze foods faster



Technical Specs

- Widths up to 60" (152cm)
- Speeds to 200fpm (61m)
- Turn ratio 1.15 - 4.0 x belt width
- Tension rating up to 550lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets

Long recognized for leadership in the design and manufacture of spiral cage and turn belting, Cambridge produces the industry's proven performers. We have many metal belting options available for spiral cage and systems for cooking, baking, cooling and freezing. Let us help you determine the best metal belt option for the longest belt life and maximum product throughput. All of Cambridge's specified belts for use in spiral cages are compatible with systems from all major OEMs.



Leading Edge® Performance Grid P

Strongest mesh grid belt in the market (available in mesh overlay and rod only designs)

Features

- Faster, wider and heavier loads
- Oblong rods prevent link wear/distortion
- Superior design and construction
- Easy to clean



Technical Specs

- Widths up to 60" (152cm)
- Speeds to 250fpm (76m)
- Turn ratio 2.2 - 4.0 x belt width
- Tension rating up to 450lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets

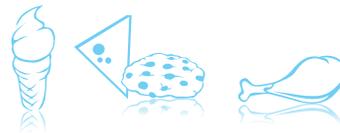


Cam-Grid® Xtra P

More product carrying capacity without the extra weight

Features

- Trouble-free operation in tough applications
- Wears evenly for extra-long life
- Increased product carrying capacity
- Available in mesh overlay and rod only designs



Technical Specs

- Widths up to 56" (142cm)
- Speeds to 150fpm (46m)
- Turn ratio 1.6 - 4.0 x belt width
- Tension rating up to 300lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets

“ Cambridge is very thorough and makes sure the proper and most economical belt is used. Customer service is simply amazing whether turning around quotes, responding to engineering questions or addressing any concerns.

- Maintenance Manager, Bakery



Cambri-Link®



Cam-Grid®



Heavy Duty Tight Radius Cam-Grid®

Cambridge's standard spiral cage link belt

Features

- Open mesh for circulation and drainage
- High strength to weight ratio
- Collapsible for easy cleaning
- Standard, reduced and tight radius options

Cambridge's standard spiral cage grid belt *(shown as rod only; available in mesh overlay)*

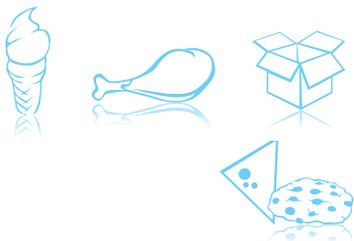
Features

- Positive drive ensures smooth product flow
- Reduces waste, protects quality
- Collapsible for easy cleaning

Maximum throughput with minimal footprint and tightest turn radius

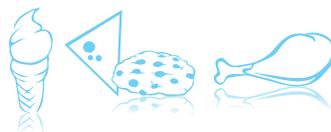
Features

- Highest strength to belt weight ratio for tight radius belts
- Improved efficiency chills and freezes food faster
- Available in mesh overlay and rod only designs



Technical Specs

- Widths up to 60" (152cm)
- Speeds to 130fpm (40m)
- Turn ratio 1.0 - 4.0 x belt width
- Tension rating up to 400lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets



Technical Specs

- Widths up to 56" (142cm)
- Speeds to 80fpm (24m)
- Turn ratio 1.1 - 4.0 x belt width
- Tension rating up to 150lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets



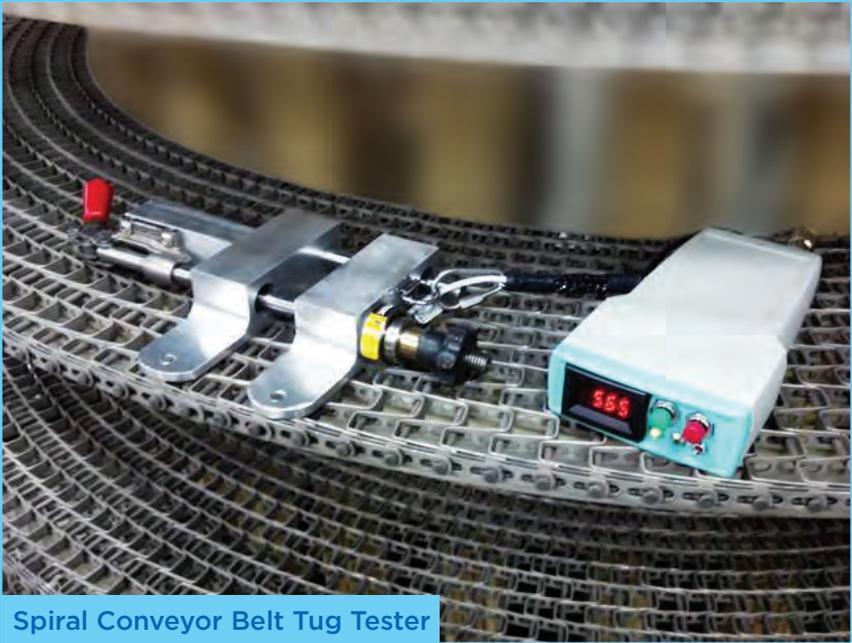
Technical Specs

- Widths up to 54" (137cm)
- Speeds to 150fpm (46m)
- Turn ratio 1.1 - 1.7 x belt width
- Tension rating up to 250lbs
- T316LSS, WRSS, T304SS
- See page 14 for sprockets

REAL PEOPLE
REAL RESULTS

Scooping Up Business

An ice cream manufacturer watched profits melt away when its spiral freezer belt couldn't keep up with business. Looking for a way to churn out more scoops, they turned to Cambridge. We installed **DuraLite®** and froze out the competition with a durable, long lasting belt. Now everyone's chilling.



Spiral Conveyor Belt Tug Tester

Measures tangential tension by tier as belt cycles through system to identify operating conditions.

Used for spiral cage conveyor belts, Cambridge offers the tug tester as both a diagnostic service and a product. The life and behavior of spiral cage system belts are heavily dependent on tension levels. Being able to measure spiral cage tension to:

- Prevent downtime
- Diagnose problems
- Extend belt life

Specifications

- Mounts on a spiral cage
- Collects data on tensions



“ The Cambridge belt lasted three times longer than the one we were using and generated a huge cost savings for our customer, as well as peace of mind. The service we received from our local representative has been stellar.

- Manager, Poultry Manufacturing Distributor

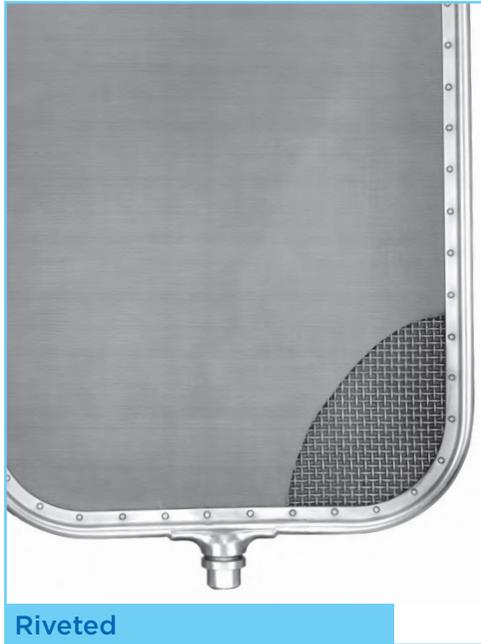
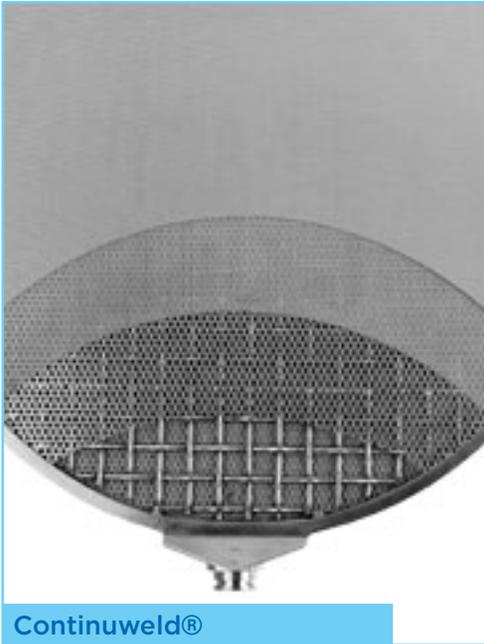


**REAL PEOPLE
REAL RESULTS**

Waste Not, Wine Not

A wine producer's filter leaves turned into sour grapes when continuous clogging led to costly and time consuming repairs. Cambridge diagnosed double trouble in the vessel when loose rivets and warping had caused unreparable damage. We replaced their outdated riveted screens with **Continuweld® Filter Leaves**. Now the winemaker whines no more.

Cambridge offers a wide range of wire cloth products. From top quality filter leaves used in food processing to open weaves used in sizing and dewatering, good filter leaf design requires careful selection of each component to meet the requirements of both operation and product. We combine high quality materials, components and design to help you achieve high performance at the minimum cost.



Leak proof, durable and repairable

Features

- State-of-the-art pressure filter technology
- Available in 5 and 7 ply
- Easy to repair and recondition
- Designed to prevent warping
- Continuous weld eliminates pockets, prevents bacteria growth
- Reduces maintenance downtime



Quality design, materials and construction equal outstanding performance

Features

- Quality filter cloth
- Precision fit frames
- Proper cloth tension
- Extra-heavy support or drainage screens
- Machined outlets



Customized wire cloth for dewatering, washing and sizing

Features

- Square mesh or oblong weave
- Edge aligned with wire cloth
- Back up screens, tensioning and half panels
- Available with shaker hooks



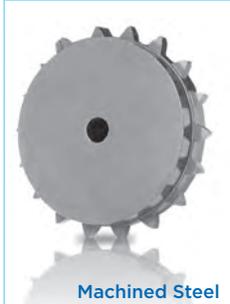
Cambridge filter leaves and filtration products are fabricated to produce maximum results based on the nature of the application and product. Call us for a consultation and evaluation designed to achieve your filtration goals.

Cambridge's custom engineered and precision fit sprockets are available for our positive drive conveyor belts in six types of materials. Specifications and material are determined based on application and belt specifications.

Sprocket drive provides a smooth, positive means of driving the belt, serves to keep the belt properly aligned and provides accurate synchronization of belt movement with operations.



PacTite Family



Machined Steel



Self Cleaning



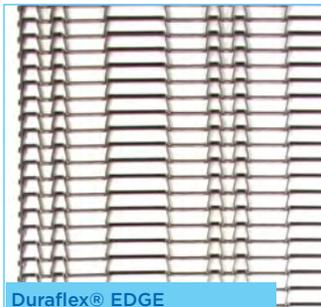
VSHT



UHMW



Cast Iron



Duraflex® EDGE



Stainless Steel



Acetal



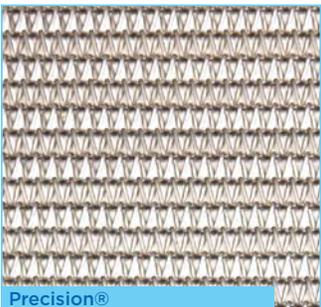
Durahinge®



Stainless Steel



Acetal



Precision®



MTR Plus Roll



Self Cleaning Roll



Stainless Steel



Acetal



Sanigrid®



Stainless Steel



UHMW



2 Piece



Spiral Cage



Stainless Steel



UHMW

INDUSTRY TERMS

- Balanced Weave** Woven mesh belt consisting of alternating right and left hand spirals joined by crimped or straight connecting rods to form a continuous belt.
- Chain Driven** Positive drive belt construction that incorporates two or more rows of chain with woven spiral fabric that creates the carrying surface.
- Curling** Term used to reference over-tensioned flex style belting's edge damage. Belts are tensioned to the point the edges need to flare upward for relief causing them to fray and snag the adjacent conveyors in production lines.
- Duty Cycles** The number of times a spiral cage belt collapses and extends in one complete belt path.
- FPM** Acronym used for Feet Per Minute
- Friction Drive** Belting that is driven by a pulley system where the friction created between the pulley and belt causes the belt to move forward.
- Galv.** (Galvanized) Material used where temperature, abrasion, or corrosion are a non-issue.
- HCS** Acronym used for High Carbon Steel which is a material used for abrasive applications where corrosion will not be an issue.
- Positive Drive** Belting that is driven by some type of engaged sprocket, which allows for more reliable performance than friction drive.
- Spiral Cage** Specialized conveyor that utilizes a helical path to contain a large amount of belting in a small footprint; important for slow processes such as cooling, freezing, proofing, and drying.
- Sprocket** A type of drive gear for positive drive belts where the teeth engage inside of the actual belt and/or chain.
- Spring Tempered** A type of wire used in some metal belts with a very high yield strength. This allows it to return to its original shape for abusive applications. This is beneficial for product release where knife plates and stainless chutes are required.
- Stainless Steel** A type of steel resistant to corrosion due to large amounts of nickel and chromium.
- Tangential Tension** Term for the amount of force applied to the outside edge or load carrying point for turn belt and spiral cage systems.
- Turn Ratio** This is relevant in turn and spiral cage systems and can be found by dividing the inside radius by the belt width (IR/BW).
- UHMW** UHMW-Acronym for Ultra High Molecular Weight, a type of plastic utilized to make sprockets for positive drive metal belting.

CAMBRIDGE TERMS

- ContinuWeld®** This is a patented process used by Cambridge in the process for manufacturing filter leaves. The layers of cloth are stacked with the top cloth pulled tight and uniform across the leaf and then a continuous weld is applied to the entire perimeter for no leads or gaps and better product flow eliminating contamination.
- Flat Seat®** Type of belt design that virtually eliminates initial belt stretch and camber due to the flattened, thin spiral which has no surplus wire to distort or elongate.
- Machined Tooth Sprocket(MTS)** Precise cut sprockets that match Cambridge Precision belting that allows for no gap engagement due to the tooth shape matching that of the belt, between the belt and sprockets which creates the backbone of the Precision system.
- NokLok™** The design of the pickets in DuraFlex and PacTitan belting that creates a proprietary form of perfect and interlocking with increases strength, durability, product stability, and reduced stretch.
- TugTester** Unit designed to measure tangential tension by tier as belt cycles through the spiral cage system to identify peak operating conditions.
- VSHT** Aerospace technology process (Vacumn Solution Heat Treat) utilized to make Cambridge's T316 Stainless Steel sprockets for Pactitan, PacLite, and Pactite belting.
- WRSS** Wear Resistant Stainless Steel is manganese enhanced stainless which becomes harder as it is used, providing the strongest stainless steel available in metal belting.

Cambridge is a member of:



PRIMEAdvantage

Cambridge is certified:



Cambridge is the only metal conveyor belt company certified halal compliant by Islamic Services of America.

Cam-Grid® 11

Cam-Grid® Straight Line 7

Cam-Grid® Xtra 10

Cambri-Link® 11

Chain Drive 7

Continuweld® 13

Compound Balance Weave 5

DiaCrimp® 5

Duraflex® EDGE 6

DuraHinge® 6

DuraLite® 9

Heavy Duty Tight Radius Cam-Grid® 11

Leading Edge® Duralite® 9

Leading Edge® Performance Link 9

Leading Edge® Performance Grid 10

Oven Balanced Flat Seat® 5

PacLite 8

PacTite® 8

PacTitan 8

Precision 7

Riveted Filter Leaves 13

Sani-Grid® 6

Spiral Conveyor Belt Tug Tester 12

Sprockets 14

Vibrating Screens 13