

Helping  
with process  
solutions



# uni-chains<sup>®</sup> Modular Spiral Belts

Best in Class for the Food Industry





Highest Hygiene

Long Service Life

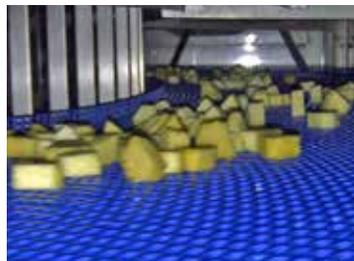
## Improved air circulation for an efficient consistent production

For cooling, chilling, freezing, proofing, steaming, pasteurizing or just inclined or declined conveying, long stretches of belt conveyors and thus production space are necessary. Spiral belt conveyors may be used to concentrate these applications in one location.

Ammeraal Beltech manufactures uni-chains® belts for spiral conveyors, offering improvements to your food safety, product quality, process efficiency, energy efficiency, and lower maintenance costs. Thorough understanding of industry needs and built-up valuable knowledge of spiral applications, spiral systems and spiral belts ensure that Ammeraal Beltech can make a real difference.

Ammeraal Beltech sets new standards with uni-chains® modular spiral belts and its belting technology. The unique patented belt designs provide extremely strong belts and enable the highest hygiene level to be obtained. uni-chains® all-plastic modular spiral belts operate for many years and often exceed the life time of steel belts.

uni-chains® spiral belts are used to obtain the lowest cost of system ownership and maximum process efficiency. Good air circulation results in fast heat transfer rates and subsequent process energy savings. The all-plastic construction means low belt weight resulting in driving energy cost savings. Non-stick food safe belt materials, kind carrying surface profiles, and uniform heat transfer across the belt width all result in more consistent products.





*These are only some examples of Modular Spiral Belts strengthening production processes*

*Is your challenge not mentioned?  
Contact the Spiral Team for a solution*

## Ammeraal Beltech's

### One-Stop-Shop

#### Knowing your process

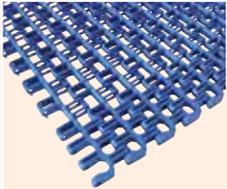
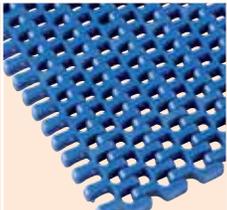
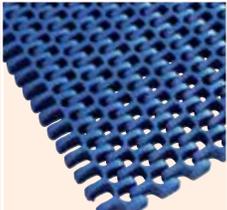
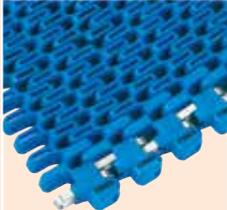
Industry and product knowledge are the foundation of an innovative and service-oriented organization

#### All your belting needs

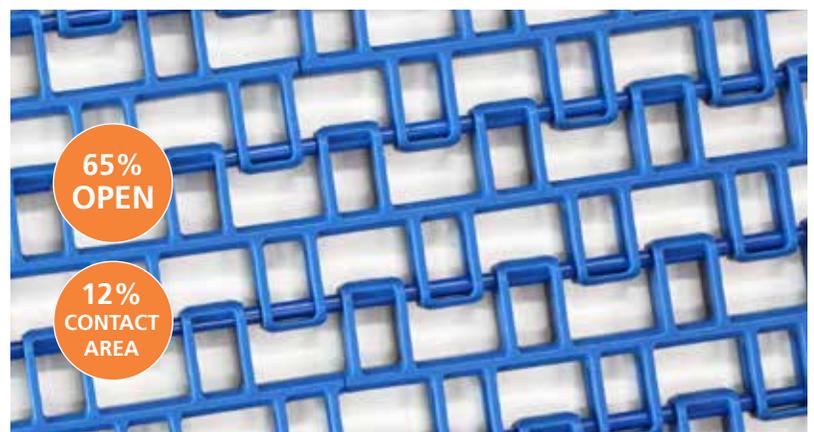
Ammeraal Beltech developed a wide range of belting and accessories to assist in improving hygiene levels to protect against food borne disease causing bacteria

#### Just-in-time delivery

World-wide distribution and large service network; skilled fitters are on call to repair and install belts using professional equipment, suitable for food plants

Application	Recommended Solutions
<ul style="list-style-type: none"> <li>Spiral coolers</li> <li>Spiral freezers</li> </ul> <p><i>For optimum high efficiency</i></p>	<p><b>uni Flex OSB &amp; L-OSB</b></p> <ul style="list-style-type: none"> <li>Excellent vertical airflow</li> <li>Low surface contact</li> <li>Uniform opening across width</li> <li>No crumb retention</li> <li>High beam strength</li> </ul> 
<ul style="list-style-type: none"> <li>Spiral coolers</li> <li>Spiral freezers</li> <li>Spiral proofers</li> <li>Side-flexing conveyors</li> <li>Compact, space saving spirals</li> </ul> <p><i>For products that need more base support</i></p>	<p><b>uni Flex ASB &amp; L-ASB</b></p> <ul style="list-style-type: none"> <li>Robust construction</li> <li>Optimum product support</li> <li>Non-snag belt edges</li> <li>Unique load sharing design</li> </ul> 
<ul style="list-style-type: none"> <li>Spiral coolers</li> <li>Spiral freezers</li> <li>Spiral proofers</li> <li>Side flexing with reduced product surface contact</li> </ul> <p><i>For products that stick to flatter belt surfaces</i></p>	<p><b>uni Flex ASB-CS</b></p> <ul style="list-style-type: none"> <li>Non-stick curved belt surface for easy product release</li> <li>Scraping of curved surface possible</li> <li>Robust construction</li> <li>Easy to clean</li> <li>Non-snag belt edges</li> </ul> 
<ul style="list-style-type: none"> <li>Spiral pasteurizers</li> <li>Spiral cookers, steamers</li> <li>Spiral dryers</li> </ul> <p><i>For more demanding production processes</i></p>	<p><b>uni Flex SNB Hybrid</b></p> <ul style="list-style-type: none"> <li>Robust spiral belt</li> <li>Stainless steel tension members</li> <li>High working capacity</li> <li>Working temperature 100°C</li> <li>Non-stick surface</li> <li>High beam strength</li> </ul> 

## Cooler than ever!



**NEW uni Flex OSB & L-OSB**

**Most open belts on the market**

## Spiral belt use to the limit

<i>Retain products on the belt</i>	Integrated side guards ensure products stay on belt
<i>Keep mixed product flows separated</i>	Belt lane dividers keep flows in line and separated; open area lane divider to help horizontal air flow
<i>Maintain alignment of process trays</i>	Flights in belts for tray spacing and alignment
<i>Products slip or loose position</i>	High friction inserts to keep products in position
<i>Products stick to belts</i>	uni-chains® non-stick polymer belts
<i>Non-standard radius spiral</i>	Solutions to match different spiral radius layouts
<i>Metal belts: metal oxide contamination, marking on food</i>	Retro fit uni-chains® all plastic spiral belting
<i>Elimination of belt lubricants use in food processing</i>	Retro fit uni-chains® all plastic spiral belting and run a dry lubricant free system
<i>Decrease process downtime and maintenance</i>	Retro fit uni-chains® all plastic spiral belting for highest productivity and lowest downtimes
<i>Lower cost of operating your spiral</i>	Contact Ammeraal Beltech's Spiral Team for advice on optimizing your operation and lowering costs



## Trouble-free Running Lower Cost of Ownership

### Seeing is believing

- Ammeraal Beltech's Spiral Team can present references showing belts that have been running trouble-free for many years in numerous applications world-wide.
- The Team will help in achieving maximum performance and ensuring that belts run exactly as intended and calculated. This includes on site measurement of belt tension during system commissioning.
- Procurement is backed up by a written guarantee. This warranty gives the assurance that if a problem arises, this will be handled to your satisfaction.

### Full support

- The Spiral Team will guide you through every project step and provide the best feasibility advice. This begins with an assessment of the application and, if necessary, a visit on site. Once the Team has good confidence in the proper outcome, you will receive an offer accompanied by thorough technical advice and calculations.
- The Team will support during belt installation, reviewing all aspects of the belt operation from design to start-up to ensure that the belt runs properly. With this on site support nothing is left to a chance!

### Reliable retrofit

- Ammeraal Beltech knows the value and importance of quick and precise retrofits. The Spiral Team will come to you for a thorough review of all aspects of the retrofitting and provide a written report.
- Ammeraal Beltech is singly responsible for the retrofit from start to finish or can recommend a well-known partner in case of major changes in the conveyor.

Visit [www.unichains.com](http://www.unichains.com) or get in touch with one of the local sales centers for more details.

## Less Product Waste

Smart open area spiral belts allow good – even vertical – airflows and result in best heat transfer rates for uniform processing of products, better product consistency and reduced waste. The air circulation in open belts with low surface contact allows for evaporation of condensation moisture.

## Food Safety

Metal belts running over support rails cause black wear debris contaminating the food products. uni modular spiral belts are completely made of plastic, which eliminates the chance of product contamination.

## Food Grade and Hygiene

A uni modular spiral belt is easy to clean due to the improved hygienic design of the belt links. Belt designs, colours and food grade materials support your HACCP program. The curved surface of uni Flex ASB-CS forms a perfect circle which can be scraped. Food grade modular belts comply to EC1935/2004, EU 10/2001, and FDA.

## Improved Process

Consistent heat transfer can be obtained across the full width of these advanced spiral belts ensuring the best process results. Non-stick polymer belt surfaces ensure gentle product handling and damage free exit transfers.

## Lower Power Consumption

Compared to a steel belt, an all-plastic uni spiral belt will reduce belt weight and friction and consequently energy consumption. The open belt structure allows for easy air circulation and consequently reduced energy usage in vertical airflow machines.

## Operational Safety

uni modular belts are strong and offer more operational safety. Using a 1" pitch belt instead of a 2" pitch allows for smaller transfers. Flexible nylon pins instead of stiff steel pins increase the performance of the belt.

## Low Maintenance

The spiral belt is engineered to reduce crumb retention and to be easy to clean. Additionally, lower friction together with lower tension result in less wear of support strips and cage bars. This means a longer life and a decrease of necessary maintenance.

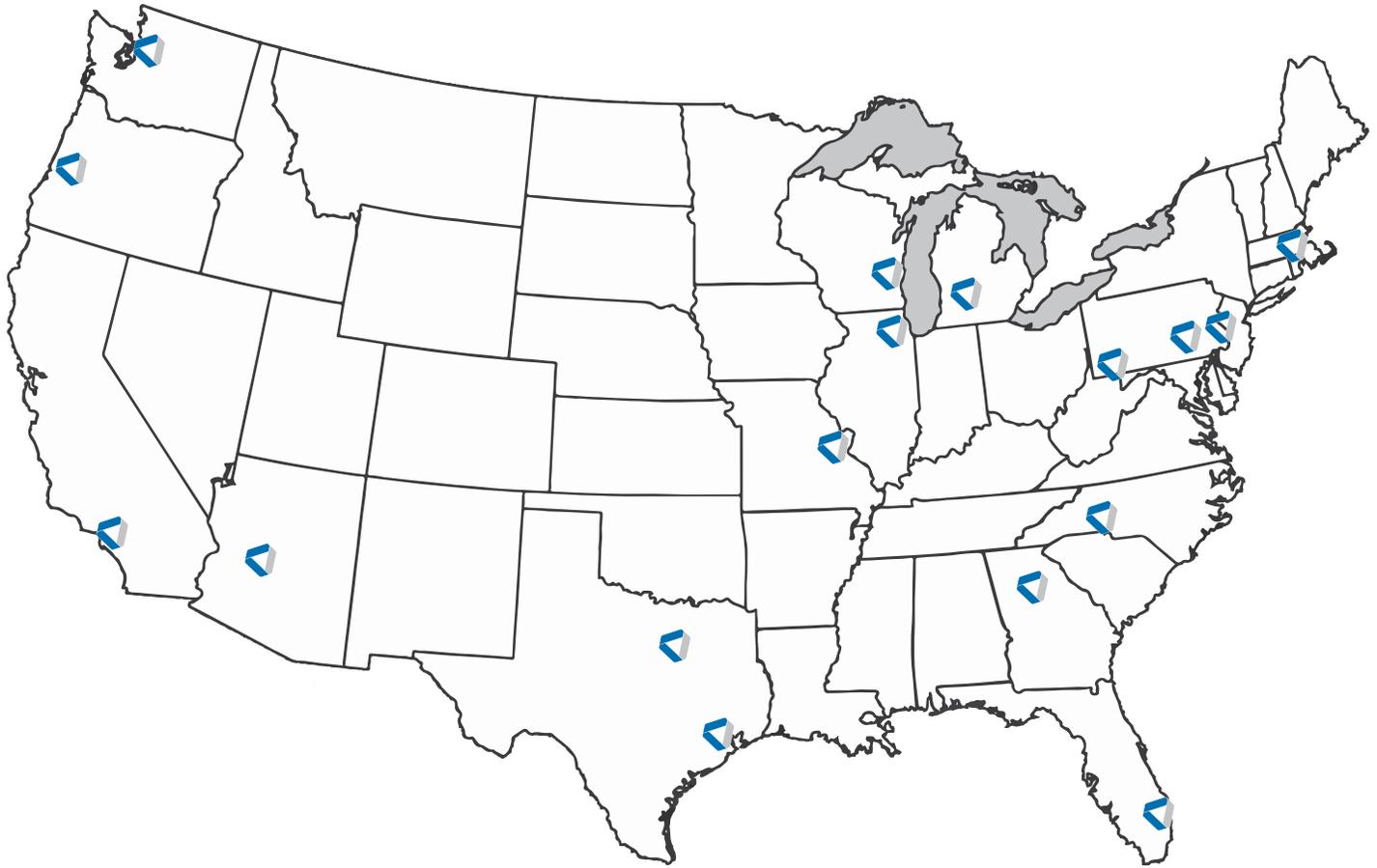


Food Grade belts comply with EC 1935/2004, EU 10/2011 and FDA standards



Ammeraal Beltech member European Hygienic Engineering & Design Group

# US Sales and Service Locations



Expert advice, quality solutions  
and local service  
for all your belting needs

## SYNTHETIC

### Ammeraal Beltech North America

7501 N. St. Louis Avenue  
Skokie, IL 60076

T +1 847 673 6720  
F +1 847 673 6373  
TF +1 800 323 4170

info-us@ammeraalbeltech.com  
www.ammeraalbeltech.com

## MODULAR

### Ammeraal Beltech North America

500 Brentwood Drive  
Reading, PA 19611

T +1 610 372 1800  
F +1 610 372 3590  
TF +1 800 937 2864

info-us@ammeraalbeltech.com  
www.ammeraalbeltech.com

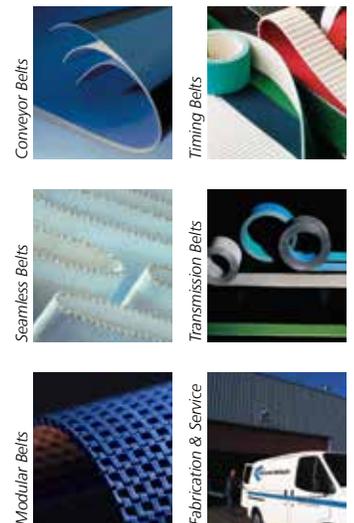
## SPECIALTIES

### Ammeraal Beltech North America

112 Nardis Drive  
Jefferson, PA 15344

T +1 847 673 6720  
F +1 847 673 6373  
TF +1 800 323 4170

info-us@ammeraalbeltech.com  
www.ammeraalbeltech.com



... and 150 more service contact points at [www.ammeraalbeltech.com](http://www.ammeraalbeltech.com)