



Always around

WIENIE-PAK

CELLULOSE CASING | PRODUCT GUIDE | 2016

WIENIE-PAK
TAILOR-MADE CASING TO FIT YOUR NEEDS

Content

There is only one Wienie-Pak _____	6
A perfect solution _____	8
Wienie-Pak – Rapid peel _____	10
Wienie-Pak – D-Tech _____	12
Wienie-Pak – Window _____	14
Wienie-Pak – Multicolor _____	17
Wienie-Pak – Grillmark _____	18
Wienie-Pak – Printed Smash _____	21
Wienie-Pak – Logoprint _____	22
Product options _____	24
The best way to achieve optimal efficiency _____	29
Recommended stuffing machine settings _____	30
Casing Properties _____	30
Hornfit (mm) _____	31
Meters per case _____	31
Stand length (mm) _____	32
Strands per caddy _____	32
A different Wienie-Pak for each application _____	34
60 years of casing _____	36
Principles & guiding values _____	38



VISKOTEPAK MORE THAN CASING

ViskoTeepak is a world leader in the sausage casing industry. We strive for perfection in everything we do, to make sure you receive the best experience possible. Our Wienie-Pak is produced in Lommel, Belgium, and converted in Brno, Czech Republic. We offer a very competitive and complete portfolio of products that meet the requirements of the most demanding applications. We achieve this through strong cooperation with local partners. We tailor our products to your specific needs. We achieve the most productive solutions in the cellulose casing business.

ViskoTeepak verifies that all information given in this product brochure is based on our best knowledge and information. ViskoTeepak does not guarantee the accuracy and/or completeness of the information. This brochure is solely intended for general information and is not intended to be used as the primary basis for commercial decisions. When starting to use ViskoTeepak products, it is always recommended to complete a product qualification process. The risks associated with the use of ViskoTeepak products is limited to the conditions defined in the "General conditions of sale". These can be consulted at www.viskoteepak.com.

The name ViskoTeepak, the product names Wienie-Pak and Nova and the ViskoTeepak logo are trademarks or registered trademarks of ViskoTeepak Belgium NV and may not be used without the permission of the company.

There is only one
WIENIE-PAK

Wienie-Pak is a shirred cellulose casing used for the processing of all kinds of Frankfurters, hot dogs, beer sausages, mini-salamis and similar skinless sausages. With Wienie-Pak, we seek to provide you with the most efficient cellulose casing on the market.

Cellulose casing

Wienie-Pak casings are made of regenerated cellulose that is extruded to create a strong and tough small caliber casing ideal for wieners and frankfurter type sausages. Wienie-Pak casings are smoke, air and moisture permeable and will provide customer satisfaction with consistent quality and efficiency every time.

Wienie-Pak is available in all sizes. The casing can be bought as clear, transparent film, but can also be bought with different colors. It can be manufactured with stripes or printed. The product can be supplied in a variety of lengths, with different types of end closures. It can be tailor-made according to specific requirements, depending on the customer's needs.

High yields and a nice look

Wienie-Pak casing is supplied to meet various stuffing requirements. It is available in transparent form and in several different colors and can be supplied with stripes. These stripes are very useful for identification and food safety purposes. They are available for all current codes and strand lengths as well as in different colors.

The proper selected casing for your product will ensure an efficient stuffing process and increased productivity. Proper, efficient thermal processing of your product will facilitate best overall productivity. The casing is usually peeled off after the smoking and cooking cycles have been completed.

When using Wienie-Pak as final packaging, the casing can also be printed by one color with customer logos or in line with customer-specific requirements to achieve a more attractive final product. One or both sides can be printed.



Tailor-made product

Wienepak is available with two different types of internal coating – Smash and Rapid Peel (RP). The Smash coating is primarily used in applications where peeling requirements are low, or in situations where the product is not peeled during production. The Rapid Peel coating is designed for use in applications where fast, efficient peeling is required.

We can tailor-make our Wienie-Pak product towards the needs in your product or production process. We can provide a casing for use in an application with maximum stuffing horn diameter for increased efficiency of the stuffing operation.

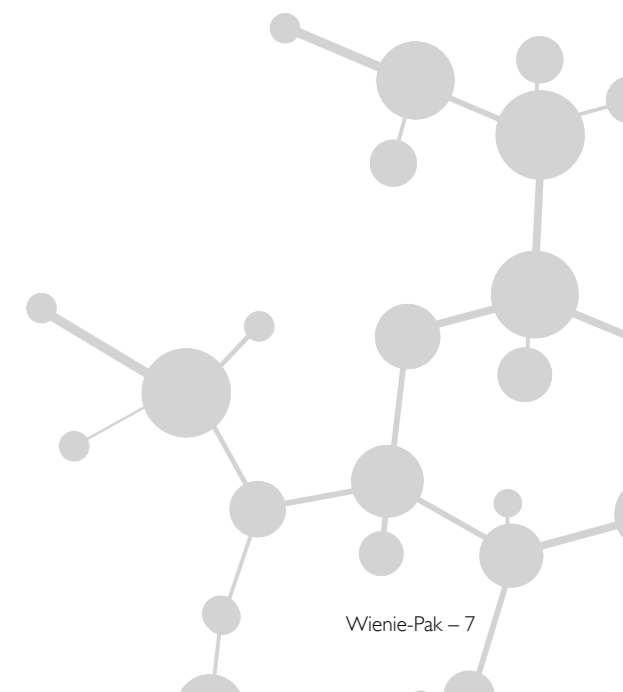
For high speed stuffing equipment and in fully automatic lines, we can offer different types of closed ends and we shirr with open ends for use in manual stuffing operations. Wienie-Pak can therefore be tailored to meet the demands of both big and small producers as well as precise, fast production processes.

Read the product pages in this brochure to learn more about Rapid Peel and our Printed casing. If you want to know more about our tailor-making capabilities, please view the product options page in this brochure.

Sustainable product meeting logistics needs

ViskoTeepak can offer various packaging types and alternatives for the convenience of the user, and to minimize ecological and sustainability effects. The different packaging alternatives can lead to significant savings in shipping costs due to weight and volume reductions. We can even offer logistical solutions with zero cardboard waste.

With Wienie-Pak cellulose casing, there are no waste disposal problems. The casings are biodegradable and suitable for composting. With effective logistics and ecologically-friendly disposal routes, Wienie-Pak is a product that conforms to ViskoTeepak's way of looking at our environment and how we will achieve sustainable development.



A PERFECT SOLUTION

Wienie-Pak cellulose casing seeks to improve and streamline customer productivity, yield and quality requirements. The yield and quality are dependent on the sausage-making process and how the casing performs. Requirements are also driven by the internal need for efficient, consistent production.

The requirements of the Wienie-Pak cellulose casing and different products are primarily formulated by the sausage-making process. This means taking into consideration how the casing will perform in stuffing, during the thermal process, during peeling and in packaging.

Faster stuffing

From the stuffing stage in Wienie-Pak, the casing needs to have as big an inside diameter of strand as possible to be able to use the largest possible stuffing horn for faster stuffing with the best possible quality.

Maximum length in shortest strand

To maximize the output in stuffing operations, we always seek to provide the longest possible casing length with the shortest possible strand length. This will allow for uninterrupted stuffing, and with minimum interruptions you will reach higher productivity and better flow in your operations. ViskoTeepak always aims to keep the highest quality in all our Wienie-Pak products.

A high-tech product

To maximize the benefits Wienie-Pak can bring to your production process, it is important to analyze the production process and parameters. Based on the variety of choices, we can select the most suitable casing for your process. Recent developments in casing production technology have allowed ViskoTeepak to make the optimal combination of stuffing horn diameter, casing length and strand length. Finding the optimal combination of these parameters for your stuffing and cooking equipment can lead to significant efficiency and productivity gains.

We want to help

Since there are many parameters to take into consideration, we have made it our task to help in any way we can. To be able to maximize your process and develop a perfectly tailored product for you, we will need to know some basic data. This is always necessary for successful developing of a newly ordered product. Please see the Wienie-Pak request form at the end of the brochure for more information.

This form has been developed to make sure all the necessary information is gathered and documented to lead to the fastest possible product development and provide you with our solutions in a convenient way. You can fill in this form by yourself or with the help of the ViskoTeepak partner in your area. When this information reaches the responsible ViskoTeepak Sales Manager or ViskoTeepak Customer Sales coordinator, we will make sure the development starts immediately. The result will be the most productive solution for you!



WIENIE-PAK – RAPID PEEL

Wienie-Pak Rapid Peel casing is a casing that allows for easy peeling of the casing, producing skinless franks. Wienie-Pak Rapid Peel casing is treated to meet the demands of modern sausage production. It allows for peeling under the most demanding peeling requirements, and extremely high speeds. In combination with the correct size and construction of the casing, we can maximize your output and low cost process.

The differences between competitors in cellulose casing are often small and subtle. Therefore, it is necessary to tailor-make and optimize the product to the specific customer needs. We believe this is the best way to benefit from the advantages of Wienie-Pak.

It goes without saying that the optimal product is always developed in close cooperation with the customer that will use it. When working with the biggest partner network in the business, we can tailor the best-fit Wienie-Pak solution possible. In this high volume business, small differences can have a big impact.

Build your benefits on the unique features of Wienie-Pak

In ViskoTeepak, we never compromise on quality and product features. This has resulted in a casing that can add subtle but important benefits to your operation and product.

Once a customer understands how to use these product features, it will be highly unlikely that he will consider an alternative. Some of the features that are worthwhile evaluating include the following:

Improved yields with less twists

More than any other cellulose casing, Wienie-Pak has the tendency to shrink back and tighten around the sausage after stuffing. This benefit can be used in multiple ways. By itself, it can result in a nicer-shaped sausage with excellent shoulder formation and a well-defined shape. If this is not considered a critical parameter, it is possible to reduce the amount of twists during linking.

Example: If a normal process requires 2 twists, the yield improvement in stuffing can be significant. For example: When twisting 2 times with 6 sausages in a pound, 7.4 percent of the casing

is used in twists. When reducing the twists to a maximum of 1.5, the loss of casing use is reduced to 5.5 percent, improving the yield by 1.9 percent.

Less smoking time and even better bite

Wienie-Pak has a high permeability to smoke, which can result in reduced smoking time. Even with reduced smoking times, the improved permeability of Wienie-Pak can result in similar skin and color formation to other casings but with shorter processing times. Depending on the emulsion and processing conditions, we have seen improvements of up to 10% in some of our test cases. Because of our unique extrusion technology, the better skin formation of the sausage can sometimes be achieved. This creates the potential for steam reduction during peeling.

Wienie-Pak Rapid Peel casings are easily identified by the yellow label on the packaging.



WIENIE-PAK – D-TECH

Wienie-Pak D-Tech is designed for full automation, process control and maximum speed. The goal was to develop a casing solution that would make it easier for sausage producers to detect pieces of casing in peeling operations, while still being able to track the colour formation of the sausage during processing. The result was a completely new innovation in the world of casing.

the casing is fully coloured when under suitable conditions, and every piece can be clearly detected. Perhaps the biggest advantage is the fact that this casing allows for full automation of the detection and eventually the separation process in combination with the correct equipment.

A complete cellulose casing portfolio

The requirements in food safety will continuously increase. ViskoTeepak can now provide the most complete range of cellulose casings to help reduce the exposure of manufacturers. We

take these concerns seriously and, by doing so, provide support for a long term sustainable business. ViskoTeepak cellulose casing can be delivered in various styles: coloured, striped, printed and with various closed ends.

With D-Tech development in combination with the Genius system, it is also possible to detect shapes and other deviations, and you can automatically sort based on the combined input of D-Tech casing detection, shape and quality deviation.



In the production of skinless sausages, it is essential to guarantee that all fragments of the casing are removed from the surface of the sausages after peeling. ViskoTeepak has therefore developed a variety of casing types that allow producers to verify that the casings are completely removed.

Automatic detection with D-Tech

At the top of the Wienie-Pak line, and unique in the industry, you will find Wienie-Pak D-Tech. The project has been developed in tandem with our partner company Tomra, which is a sensor-based pioneer in food-sorting, recycling and other industries. The company has more than 60 years of experience in delivering high-performance sorting, peeling and analytical

solutions and is a global market leader with more than 5,000 of its systems installed at food growers, packers and processors worldwide.

D-Techtion

This type of casing contains a special component in the full body of the casing. This component leaves the casing fully transparent in normal conditions, but it creates strong reflections that can be used for automatised sorting in reaction with the Tomra Genius optical and sensor based detection systems.

During processing of the sausages, the colour formation of the sausages can be followed as in a regular clear casing. Additionally,

Skinless products

Wienie-Pak casings are used to produce skinless type sausages, of all types, including frankfurters, hot dogs, mini-salamis and much more. The types of sausage made are often very different depending on the eating habits of the region, the type of meat emulsion used and the processing conditions. At the end of the process, prior to packaging, the casings are usually peeled off in the production facility. The efficiency and completeness of the peeling can be influenced by many factors such as the condition of the peeler or the cooking and smoking.

*The pioneer in foodsafety
for sausage production*

WIENIE-PAK – WINDOW

Wienie-Pak Window casing is designed for ultimate process control while keeping maximum speeds. The goal was to develop a casing solution making it easier for sausage producers to detect pieces of casing in peeling operations, but still being able to track color formation of the sausage during processing.

The Window casing is designed to meet the increasing requirements in food safety. Particularly in the production of skinless sausages, it is very critical to guarantee that all fragments of casing are removed from the surface of the sausages after peeling. By using pigments in about 80 percent of the casing it is possible to verify that all casing is peeled in process. With 20 percent still completely transparent, it is still possible to follow color formation in cooking.

We recommend this type for applications where a high level of food safety is required, but that are not subject to extreme difficult peeling conditions.

Skinless sausages

Wienie-Pak casings are used to produce skinless type sausages, in a large variety, ranging from frankfurters, hot dogs, minisalami's and much more. The types of sausage made are often

very different depending on the eating habits of the region, the type of meat emulsion used and the processing conditions. At the end of the process, before the packaging, in most cases the casings are peeled off in the production facility. The efficiency and completeness of the peeling can be influenced by many factors such as the condition of the peeler or the cooking and smoking.

A complete cellulose casing portfolio

The requirements in food safety will continuously increase. ViskoTeepak can provide the most complete range of cellulose casings to help reduce the exposure of the manufacturers. We take these concerns seriously and by doing so, providing support for a long term sustainable business. ViskoTeepak cellulose casing can be delivered in various constructions, coloured, striped, printed and with various closed ends.



The Window casing is designed to meet the increasing requirements in food safety



WIENIE-PAK – MULTICOLOR

Optimize your visibility in the market with the highest quality multiprinting on ViskoTeepak Wienie-Pak casings. Our high productivity and easy handling cellulose casing can be tailored with customer specific printing options.

ViskoTeepak offers the multicolor printing options for an increased appeal of your products. It can be printed with customer logos or in line with customer specific requirements to obtain a beautiful, attractive final product.

It combines excellent technical characteristics with the possibility to print according to requirements. We offer a complete range of colors, and will precisely match the design you desire.

Sell casing on

In a number of countries, a popular option is to sell the finished sausage with the cellulose casing left on, leaving it for the consumer removing it prior to consumption. Where sausage producers are attempting to garner brand loyalty, brand promotion on the casing is one excellent way in which to let the consumer know whose product they purchased and therefore a superb method of advertising their products.

New generation printing

ViskoTeepak Multicolor printing creates completely new possibilities for more attractive customer product presentation.

Multicolor printing of cellulose Wienie-Pak casing is produced with state of the art printing tech-

nique. The casing can be printed up to 6 color with customer logos or in conformity with customer specific requirements to have more interesting final product. One or both sides can be printed. When the both side printing is used than each side can be printed up to 6 color.

Innovation is tradition

Development of printing machines is driven by the goal to achieve the highest printing quality in the market. Top performance in consistency and production of high quality products has always been top priority at ViskoTeepak, the new Multicolor machine development is no exception.

The Multicolor printing machine is equipped with most modern technology which brings highest quality level of printing:

- Continuous line printing possibilities,
- Sharper printed edges,
- Better uniform covering of printed area,
- Very effective IR drying system,
- Precise winding tension control system.

Continuous line printing possibilities



WIENIE-PAK – GRILLMARK

How do you attract customer interest and create a more attractive product. With the new Grillmark product from ViskoTeepak, you have the opportunity to promote your products even more successfully.

Create a high quality outlook

Sausage producers from around the world are constantly looking to find new ways of catching the attention of customers. Grillmark Wienie-Pak casing uses a special thermal process to make the surface of frankfurters, hot dogs and similar types of sausages more attractive and create an out of the box grill pattern as standard. The Grillmark casing aims to do exactly what it suggests, highlighting traditional grill marks on the sausage surface and give the perception of being a more high quality product. It is not possible to create the optical pattern or style without the

special casing. By optimising and customising the thermal process and permeability structure for each customer, ViskoTeepak can accommodate all types of designs and customer wishes.

Simple operations

Both traditional and liquid smoke types can be used to produce the Grillmark effect. The casing is thereby essential in achieving the desired effect. The casing can be combined with the following cooking cycles:



Operation	ViskoTeepak (std smoke)			ViskoTeepak (liquid smoke)		
	Time (min)	Temperature (deg. C)	Moisture (% Rh)	Time (min)	Temperature (deg. C)	Moisture (% Rh)
Reddening	20	55	80	20	55	80
Drying	20	60	35	20	60	35
Smoking	20	68	65	8 (LS)	65	65
Ventilation	2	68	65			
Drying				15	65	35
Smoking				8 (LS)	68	65
Drying				10	68	35
Cooking	20	75	100	20	75	100
Showering	15	cold water	100	15	cold water	100

LS – Liquid Smoke.

Liquid Smoke Atomising Red Arrow system - 4 minute cycle (1 min spraying, 1 min blowing of tubing, 2 min circulation)



WIENIE-PAK – PRINTED SMASH

Wienie-Pak printed is a cellulose casing that will combine high productivity and easy handling with the increased appeal of your products. It can be printed with customer logos or in line with customer specific requirements to obtain a beautiful, attractive final product.

Wienie-Pak printed casing is designed for customers who sell sausages with the casing on, without peeling. It combines excellent technical characteristics with the possibility to print according to requirements. We offer a complete range of colors, and will precisely match the design you desire.

Create your brand

A very nice way to achieve visibility in the market and in stores is by printing your own brand on the casing. This can be combined with product identification for a complete and unique way of safely branding your product in the market.

By using a colored casing as a base, a very nice package is created that will support and highlight your unique product in a very visible way in the retail chain.

Double side printing

With Wienie-Pak, you never have to compromise profitability for the benefit of a great look. We can offer one color printing on one or both sides that is ready to use straight out of the box.

No waste

Since printed Wienie-Pak can be used as the final package, an extremely environmentally friendly product is created. Because Wienie-Pak is fully biodegradable, a package is created that has virtually no environmental impact and is hygienically safe when treated correctly.

Higher yields and reduced waste

Wienie-Pak has a unique and truly excellent combination of stretch and shrink properties, a big benefit since it helps maximize stuffing weights. Wienie-Pak is produced under a high level of quality assurance throughout the whole process and our goal is always to provide you with a superior quality product.



Wienie-Pak casings can be printed in many different colors, based on your design and requirements

WIENIE-PAK – LOGOPRINT

Highlight your brand on both the casing and the actual sausages. The new ViskoTeepak Logo-Print casing provides you with the unique possibility to promote your brand by imprinting it on your final product.

Promotional benefits

Through a special process using a special ink for blocking smoke penetration, the LogoPrint casing can be customised with any design or brand. The casing therefore allows for a completely new and attractive appearance while supporting the customer logo, product names or other advertising texts.

Great results with standard processes

Both traditional and liquid smoke can be used for this application. In the optimised thermal process, the surface is affected on all types of frankfurters, hot dogs and similar sausages. Call your ViskoTeepak representative to pick up your LogoPrint Wienie-Pak and give us the chance to develop and customise a new and innovative sausage product with you.



*Highlight your brand on both
the sausage and the casing*



PRODUCT OPTIONS

Size Choices

ViskoTeepak Wienie-Pak has a complete range of sizes, ranging from the smallest caliber 13 for mini salamis and snack products to size 40. For every size demand in the market, we have a casing.

Construction types

Wienie-Pak casings are used in a wide range of applications. It is necessary to modify the casing to fit the demands of the application perfectly. We have developed casings with special properties to achieve this.

The following types are available:

- W** = most elastic casing (cocktail sausage)
- O** = standard construction
- G** = designed to use for smallest caliber
- J** = designed to use on twist linker

In most cases, the standard O-construction can be applied for optimal performance. Specific types of processes may require special variations. It is best to discuss the specific needs with your ViskoTeepak representative in order to make the final selection of product. Not all variations are available for all calibers.

Printed casing

We can offer you one color printing on one or both sides. Print your company logo or the list of contents and use Wienie-Pak as the final packaging.

With Wienie-Pak, you never have to compromise profitability for the benefit of a great look, and as ever it is ready to use straight out of the box.



Color options

ViskoTeepak offers two options from which to choose. Wienie-Pak casings can be delivered with stripes or with a solid color.

Solid colored casings

Solid colored Wienie-Pak casings are widely used in the industry. The pigments used are integrated in the casing structure for safe application. The main reasons for using solid colored casings are the following:

Peeling control: In addition to the control options that stripe casings can provide, a solid blue colored casing provides 100% coverage of the sausage surface. Any risk of small pieces of the casing remaining on the final sausage can be prevented in this way.

Appetizing look: When the sausages are sold with the casing on, a smoke color can provide a more appetizing look. Often, these colors are combined with printing for a very appealing product and brand strengthening.

Colored stripes

The Wienie-Pak stripes are produced using patented technology. The stripes are embedded in the casing structure during extrusion. This guarantees that there is no risk of contamination of the sausages. There are two main reasons why stripes are selected:

Product identification: Often, multiple types and qualities of sausages are produced in the same production line. Wienie-Pak stripes provide an excellent way of identifying the production. A combination of different colors and amount of stripes on the casing provides a wide range of possibilities with which to achieve this. We offer 6 different colors and 1 to 6 stripes on the casing circumference.

Peeling control: To minimize the risk of small pieces of casing remaining on the sausages after peeling, a contrasting stripe color can be used that is easily detectable after peeling. This can provide an extra guarantee against contamination of the final sausage with pieces of casing.

Colors

Solid colors		Stripe colors	
	Clear 001		White
	Smoke Light		Black
	Smoke Medium		Blue
	Smoke Dark		Red
	Blue		

Please look at our color books for the most accurate color sample

End-closure types

Wienie-Pak strands can be delivered with OE (open end) or CE (close end). Strands with OE are produced for use in manual stuffing operations. Strands with CE are especially designed and produced for use on high-speed stuffing equipment. Wienie-Pak can therefore be tailored to meet the demands of both big and small producers and for precise, fast production processes.

Open End (OE)



Wienie-Pak Open End casings are mostly used in butchers' shops, with manual stuffing equipment. The use of these types of casings is very similar to the use of a natural casing.

Standard (CE)



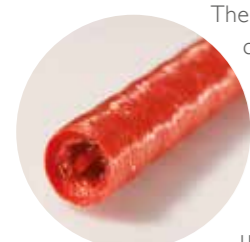
This is the most versatile type of end closure for a wide variety of automated stuffing equipment. The CE type is unique in the industry because it is a solid and reliable closure that contains a vent hole. This allows for very fast entrance of the stuffing horn in the strand without any risk of premature release of the closure.

Push Pak (CE-P)



The Push Pak closure is most often used in stuffing applications where there is a risk that the meat emulsion might leak through the vent hole of the CE closure. This can occur in circumstances where a liquid meat emulsion is used. It is mainly used on stuffing machines with break.

Knotted (CE-KN)



The Knotted Closure provides the most complete and ultimate closure on the market. It is suited for all types of stuffing machines. With this closure, there is virtually no casing loss at the beginning of the strand during stuffing. It also provides the possibility for a first usable link.

Packaging for every need

Wienie-Pak casings can be delivered in various types of packaging depending on the demands and priorities of the customer. They can be delivered in cartons, Jumbo packaging (big paper carton) or Bulk packaging (wire cage). Wienie-Pak casings conform to customer individual production preferences, end use and satisfy customer requirements for uniformity and quality.

Boxes



Normal cardboard boxes are the standard way of packaging. They can contain anything from 2,820 to 8,690 meters, depending on the casing size and length.

Cardboard Bulk



For customers who wish to purchase larger quantities with significantly reduced packaging waste, we can offer cardboard bulk. In this type of packaging, the casings are packed in a pallet-sized cardboard box. This can decrease the shipping and handling cost significantly and have a very positive effect on the environment. The bulks can contain between 30,000 and 150,000 meters of casing, depending on the casing size and length. This bulk is available on request and requires some level of customization.

Wire bulk



With this type of packaging, we can completely eliminate the cardboard. The casings are packed in a sturdy wire cage in one or multiple layers. This type of wire bulk needs to be returned after the use of the casing.





The best way to achieve **OPTIMAL EFFICIENCY**

At ViskoTeepak, we have developed a shirring technology that is unique in the cellulose industry. This allows us to achieve the optimal combination of final shirred strand parameters. The meters per stick, stick length and horn diameter are parameters that directly affect your production efficiency. Maximizing the hornfit will allow for a maximum speed of the meat through the stuffing horn, without creating a smearing effect or destroying the look of your sausages.

The casing length in the stick allows for a maximum efficiency of your stuffing equipment, without productivity loss due to multiple stops of the machine.

Shirred sticks are available in many lengths and are perfectly matched with the different hopper sizes of the stuffing machines. The optimal combination of the above parameters will help you generate the most out of the equipment investment you have made in your production. We are experts in tailoring these parameters to your needs.

Recommended stuffing machine settings

Casing size			Caliber (mm) RSD*	Marel-Townsend FAM				Other metric horn (mm)
N-cal	EU size	US size		Horn		Chuck number	Linking chain	
			mm	"/32	"/32			
13	1300	13	14,0	7,9	10	13, 14	C	8
14	1400	14	15,2	8,7	11	14, 15	C	8
	1450	15	15,8	8,7	11	14, 15	C	9
15	1550	16	16,2	9,5	12	15	C	9
16	1600	17	16,8	9,5	12	15, 16	C	9
	1650	18	17,5	10,3	12	16, 17, 18	C	10
17	1700	19	18,3	3	13	17, 18, 19	C-S	10
18	1750	20	18,9	11,1	14	18, 19	C-S	11
19	1850	21	19,5	11,1	14	19, 20	C-S	11
20	1950	22	20,0	11,9	15	20, 21	S	11
21	2050	23	21,0	11,9	15	20, 21, 22	S	12
22	2150	24	22,0	12,7	16	21, 22	S-L	12
23	2250	25	23,0	12,7	16	22, 23	S-L	12
24	2350	26	24,0	13,5	17	23, 24	S-L	13
25	2450	27	25,0	13,5	17	24, 25	S-L	13
26	2550	28	26,0	15,9	20	25, 26	L	16
27	2650	29	27,0	15,9	20	26, 27	L	16
28	2750	30	28,0	16,7	21	27, 28	L	17
30	2950	32	29,5	16,7	21	29	L	17
32	3150	34	31,5	17,5	21	29	L	18
34	3350	36	33,5	18,3	23	32	L	19
38	3750	40	37,0	19	24	34	L	19

Customized products are developed and available. | * RSD - Recommended stuffing diameter

Casing Properties

Casing size			Caliber (mm) RSD	Construction	Solid Color	Stripes Color	Number of stripes	Printed	Definition
N-cal	EU size	US size							
13	1300	13	14,0	0	C, SL, BI	W, Bk	3, 4	No	
14	1400	14	15,2	0	C, SL, BI	W, BI	3, 4	No	Solid colors
	1450	15	15,8	0, G	C, SL, BI	W, Bk, BI, R	3, 4	No	
15	1550	16	16,2	0, G, W	C, SL, BI	W, Bk, BI, R	3, 4	No	C= Clear SL= Smoke Light
16	1600	17	16,8	0, G, W	C, SL, BI	W, Bk, BI, R	3, 4	No	
	1650	18	17,5	0, G	C, SL, BI	W, Bk, BI, R	3, 4	Yes	SM= Smoke Medium
17	1700	19	18,3	0, G, UW	C, SL, BI	W, Bk, BI, R	3, 4	Yes	
18	1750	20	18,9	0, G, W	C, SL, BI	W, Bk, BI, R	3, 4	Yes	SD = Smoke Dark
19	1850	21	19,5	0, G, W	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	
20	1950	22	20,0	0, G, W	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	BL= Blue
21	2050	23	21,0	0, W	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	
22	2150	24	22,0	0, G, J, W	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	Stipe Colors W = White Bk= Black BI= Blue R= Red
23	2250	25	23,0	0, J, W	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	
24	2350	26	24,0	0, J	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	Construction 0 = Standard G = Stiff W = Flexible J = Super Stiff/ Less Strong
25	2450	27	25,0	0	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	
26	2550	28	26,0	0, J	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	Construction 0 = Standard G = Stiff W = Flexible J = Super Stiff/ Less Strong
27	2650	29	27,0	0	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	
28	2750	30	28,0	0, J	C, SL, SM, SD, BI	W, Bk, BI, R	3, 4	Yes	Construction 0 = Standard G = Stiff W = Flexible J = Super Stiff/ Less Strong
30	2950	32	29,5	0	C, SL, SM, SD, BI	W, BI, R	3, 4	Yes	
32	3150	34	31,5	0	C, SL, SM, SD, BI	W, BI, R	3, 4	Yes	Construction 0 = Standard G = Stiff W = Flexible J = Super Stiff/ Less Strong
34	3350	36	33,5	0	C, SL	BI, R	3, 4	Yes	
38	3750	40	37,0	0	C, SL	BI	3, 4	No	

Customized products are developed and available. | * RSD - Recommended stuffing diameter

Hornfit (mm)

Casing size			Caliber (mm) RSD	Casing Length ft/mt							
N-cal	EU size	US size		55 16,8	70 21,3	84 25,6	95 29,0	110 33,5	125 38,1	140 42,7	160 48,8
13	1300	13	14,0	8,0	8,0	8,0					
14	1400	14	15,2	8,7	8,7	8,7	8,7	8,7	7,8		
	1450	15	15,8	9,5	9,0	9,0	9,0	9,0	9,0		
15	1550	16	16,2	9,5	9,5	10,3	10,3	9,5	9,5	8,7	
16	1600	17	16,8	9,5	9,5	9,5	9,5	9,5	9,5	9,5	
	1650	18	17,5	10,3	10,3	10,3	10,5	10,5	10,3	9,5	9,5
17	1700	19	18,3	10,5	10,5	10,5	11,0	10,5	10,3	10,5	9,5
18	1750	20	18,9	11,1	11,1	11,1	11,1	11,1	10,3	10,3	9,5
19	1850	21	19,5	11,1	11,1	11,1	11,1	11,1	11,1	10,3	11,0
20	1950	22	20,0	11,9	11,9	11,9	11,9	11,9	11,9	11,1	11,9
21	2050	23	21,0	11,9	12,7	11,9	11,9	11,9	11,9	11,1	11,9
22	2150	24	22,0	12,7	12,7	12,7	12,7	12,7	11,9	11,9	12,7
23	2250	25	23,0	12,7	12,7	12,7	12,7	12,7	12,7	12,7	12,7
24	2350	26	24,0	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5
25	2450	27	25,0	13,5	13,5	16,0	13,5	13,5	16,0	14,0	
26	2550	28	26,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0
27	2650	29	27,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	
28	2750	30	28,0	17,0	17,0	17,0	17,0	17,0	17,0		
30	2950	32	29,5	17,0	17,0	17,0	17,0	17,0			
32	3150	34	31,5	18,0	18,0	18,0	18,0	18,0			
34	3350	36	33,5	19,0	19,0	19,0					
38	3750	40	37,0	19,0	19,0						

Other hornfits and lengths are available on request.

Meters per case

Casing size			Caliber (mm) RSD	Casing length ft/mt							
N-cal	EU size	US size		55 16,8	70 21,3	84 25,6	95 29,0	110 33,5	125 38,1	140 42,7	160 48,8
13	1300	13	14,0	6 720	8 540	7 680					
14	1400	14	15,2	6 720	8 540	7 680	8 690	10 080	11 430		
	1450	15	15,8	6 720	8 540	7 680	8 690	10 080	11 430		
15	1550	16	16,2	6 720	8 540	7 680	8 690	6 720	7 620	8 534	
16	1600	17	16,8	6 720	8 540	7 680	8 690	6 720	7 620	8 534	
	1650	18	17,5	6 720	8 540	7 680	8 690	6 720	7 620	8 534	4 876
17	1700	19	18,3	6 720	8 540	7 680	8 690	6 720	7 620	8 534	4 876
18	1750	20	18,9	6 720	8 540	7 680	8 690	6 720	7 620	8 534	4 876
19	1850	21	19,5	6 720	8 540	7 680	8 690	6 720	7 620	8 534	4 876
20	1950	22	20,0	6 720	8 540	7 680	8 690	6 720	7 620	8 534	4 876
21	2050	23	21,0	6 720	6 405	5 120	5 792	6 720	3 810	4 267	4 876
22	2150	24	22,0	5 040	6 405	5 120	5 792	6 720	3 810	4 267	4 876
23	2250	25	23,0	5 040	6 405	5 120	5 792	6 720	3 810	4 267	4 876
24	2350	26	24,0	5 040	6 405	5 120	5 792	6 720	3 810	4 267	4 876
25	2450	27	25,0	5 040	6 405	5 120	5 792	6 720	3 810	4 267	
26	2550	28	26,0	5 040	6 405	5 120	5 792	6 720	3 810	4 267	
27	2650	29	27,0	5 040	6 405	5 120	5 792	6 720	3 810		
28	2750	30	28,0	2 820	3 587	2 867	3 244	3 763	3 810		
30	2950	32	29,5	2 820	3 587	2 867	3 244	3 763			
32	3150	34	31,5	2 820	3 587	2 867	3 244	3 763			
34	3350	36	33,5	2 820	3 587	2 867					
38	3750	40	37,0	2 820	3 587						

Meters per bulk - information is available on request.

Stand length (mm)

N-cal	Casing size		Caliber (mm) RSD	Casing length ft/mt								
	EU size	US size		55 16,8	70 21,3	84 25,6	95 29,0	110 33,5	125 38,1	140 42,7	160 48,8	
13	1300	13	14,0	215	280	310						
14	1400	14	15,2	215	310	310	360	420	420			
	1450	15	15,8	215	280	310	360	420	420			
15	1550	16	16,2	215	280	310	360	420	420	420		
16	1600	17	16,8	215	280	310	360	420	420	420		
	1650	18	17,5	215	280	310	360	420	420	420	510	
17	1700	19	18,3	215	280	310	360	420	420	420	510	
18	1750	20	18,9	215	280	310	360	420	420	420	510	
19	1850	21	19,5	215	280	310	360	420	420	420	510	
20	1950	22	20,0	215	280	310	360	420	420	420	510	
21	2050	23	21,0	215	280	310	360	420	420	420	510	
22	2150	24	22,0	215	280	310	360	420	420	420	510	
23	2250	25	23,0	215	280	310	360	420	420	420	510	
24	2350	26	24,0	215	280	310	360	420	420	420	510	
25	2450	27	25,0	215	280	310	375	420	420	420		
26	2550	28	26,0	215	280	310	375	420	420	420		
27	2650	29	27,0	215	280	310	375	420	420			
28	2750	30	28,0	215	280	345	375	420				
30	2950	32	29,5	215	280	345	375	420				
32	3150	34	31,5	215	280	345	375	420				
34	3350	36	33,5	215	280	345						
38	3750	40	37,0	215	280							

Other strand and casing lengths are available on request.

Strands per caddy

N-cal	Casing size		Caliber (mm) RSD	Casing length ft/mt								
	EU size	US size		55 16,8	70 21,3	84 25,6	95 29,0	110 33,5	125 38,1	140 42,7	160 48,8	
13	1300	13	14,0	50	50	50						
14	1400	14	15,2	50	50	50	50	50	50			
	1450	15	15,8	50	50	50	50	50	50			
15	1550	16	16,2	50	50	50	50	50	50	50		
16	1600	17	16,8	50	50	50	50	50	50	50		
	1650	18	17,5	50	50	50	50	50	50	50	50	
17	1700	19	18,3	50	50	50	50	50	50	50	50	
18	1750	20	18,9	50	50	50	50	50	50	50	50	
19	1850	21	19,5	50	50	50	50	50	50	50	50	
20	1950	22	20,0	50	50	50	50	50	50	50	50	
21	2050	23	21,0	50	50	50	50	50	50	50	50	
22	2150	24	22,0	50	50	50	50	50	50	50	50	
23	2250	25	23,0	50	50	50	50	50	50	50	50	
24	2350	26	24,0	50	50	50	50	50	50	50	50	
25	2450	27	25,0	50	50	50	50	50	50	50		
26	2550	28	26,0	50	50	50	50	50	50	50	50	
27	2650	29	27,0	50	50	50	50	50	50	50		
28	2750	30	28,0	28	28	28	28	28	28			
30	2950	32	29,5	28	28	28	28	28				
32	3150	34	31,5	28	28	28	28	28				
34	3350	36	33,5	28	28	28						
38	3750	40	37,0	28	28							



A DIFFERENT WIENIE-PAK FOR EACH APPLICATION

Wienie-Pak is a big volume product, but it is not a standard solution. Wienie-Pak is always tailored to fit each customer's process and application requirements. After making the choice between Rapid Peel and Printed Smash casings, the casing can be tailored in multiple combinations both for increased efficiency and added appeal. History has proven that we have something to offer all types of cellulose casing customers and we will support you in developing the most optimal solution for you.

Technical sales service support

ViskoTeepak has always been known as a customer-oriented company and we have made customer service a top priority. In order to further develop this aspect of our service and to serve our customers even better, we have established a TSS group with expertise in casing technology, customizing and sausage making. The Technical Sales Support Team will be responsible for creating new business solutions for a value-driven environment and to support the customer in improving his business and provide solutions to problems. The members of the team have many years of experience, both theoretical and practical, from casing manufacturing and customizing to the development and processing of sausages and meat products.

Maximizing your business

Our TSS group will help you tailor the optimal solution for your process. They will try to maximize the benefits of casing usage. That means marrying the right products with the right application. In partnership with the customer, our TSS group will optimize the customer process parameters and troubleshoot the operation of casing and sausage production. We will help you in efficient cost control, new product development and in educating your personnel on the casing industry and meat technology.

Would you like to give it a test?

A Wienie-Pak request form will be filled in with all the details given by you to the Sales Manager. This request will then be given a test number and a Test will be produced based on the information received from you. The delivery times for tests have to be agreed upon with ViskoTeepak marketing personnel on a case-by-case basis. We recommend that customizing is done by the same customizer used in the normal operations of the business.

New product development

When the development of a new product is finished, the first testing batch will be produced and sent to the customer for initial testing. Based on customer feedback, the development of a new product will continue or material for a confirmation test will be prepared and sent to the customer for testing.

General rules and principles

The principle is that we work in a confidential, proprietary relationship with every customer. The information provided by our Technical Sales Support function is based on our own research and development work and is, to the best of our knowledge, reliable. Users should, however, conduct their own tests to determine the suitability of our products, recipes, etc., for their own specific purposes. All information is given in good faith but should not be considered as a warranty of any kind, expressed or implied.

Always tailored to fit each customers process



Customer identification

Customer name:.....

Customer location (town, country):.....

Partner name/country:.....

Potential delivery quantity (MM/year):.....

Competitor (name):.....

Competitor product (specify):.....

Price level (€/KM):.....

Requested date

Final product description

Stuffing diameter of sausage (mm):.....

Stuffing length of sausage (mm):.....

Weight of one sausage (g):.....

Casing peeled off after processing Yes: No:

Form of packaging

No packaging: Yes: No:

Vacuum packaging: Yes: No:

MAP packaging: Yes: No:

Can packaging: Yes: No:

Glass packaging: Yes: No:

Other packaging:.....

Strand description

Casing caliber: US size: EU size:

Casing color:.....

Stripes:..... Yes: No:

Color:Numbers:.....

Casing length in strand (ft):.....Strand length (mm):.....

Inside diameter of strand (mm):.....

Rapid Peel or Smash coating (RP/SMH):.....

Casing to be printed: Yes: No:

Print description

One or two side printing: One side: Both sides:

Color of first side print (Pantone number):.....

Color of second side print (Pantone number):.....

Design of print (attach to the form, please):.....

Other remarks:.....

Meat emulsion

MDM: Chicken: Pork: Beef:

Mix (specify):.....

Emulsion viscosity (low/medium/high):.....

Other remarks:.....

Stuffing machine

Townsend (specify model):.....

Handtmann (specify model):.....

Vemag (specify model):.....

HiTech (specify model):.....

Hopper length (mm):..... Stuffing tube size (mm):.....

Other remarks:.....

Stuffing conditions

Stuffing speed (RPM, Production rate):.....

Number of twists:.....

Other remarks:.....

Processing conditions

Smoke chamber used (specify type):.....

Continuous process line used (specify type):.....

Liquid smoke used (specify type):.....

Dry smoke used: Yes: No:

Other special remarks:.....

Peeling conditions

Peeler (specify type):.....

Peeling is performed immediately after processing: Yes: No:

Peeling performed on the second day: Yes: No:

Storage temperature (deg. C):.....

Other remarks:.....

Form filled in by:

Name:.....

Company:.....

Date:.....



1952
Today

60 YEARS OF CASING

The ViskoTeepak story begins some 60 years ago with Gunnar Eriksson enjoying the buffet on the ferry between Åland and Stockholm. During the 1950s, and still today, one Nordic tradition is to always enjoy the delicacies of the smorgasbord when taking the ferry between Finland and Sweden.

On this very trip, Mr. Eriksson noticed that on his plate was a piece of sausage made in artificial casing. Einar Söderman, Mr. Eriksson's friend who was also on this trip, had been working with a casing producer in Sweden and knew that what they were looking at was cellophane casing made from cellulose.

Gunnar Eriksson became so interested that he took a piece of the casing with him to a laboratory in Helsinki. Olov Barck, who was working at the university in Helsinki, was asked by Gunnar Eriksson to do some analysis of the casing.

To make a long story short, Gunnar Eriksson was able to raise money to start the Visko Company and Olov Barck was successful in his analysis of the casing. The Visko casing company was founded in 1952 and production was planned to begin in an old butter-factory in Hanko, which had been empty since the war. The Teepak Europe adventure starts with Teepak looking for a way to meet the increasing casing demand and a way to enable shorter delivery times. They decide to open a new production facility in Europe in 1975, the location of which was in Lommel, Belgium. Already at this point Teepak has a fibrous converting facility in Delfzijl, The Netherlands and later expand even further when in 1994 opening the Wienie-Pak shirring centre in Slavkov. This same operation and production was moved to Brno in 2012. Nova plastic casing production was established in Godby, Finland, in 1995. All production was later moved to Nuevo Laredo, Mexico, in 2004, where it is fully operational today.

ViskoTeepak today

ViskoTeepak took its current form in the beginning of 2007 after the big merger of Visko and Teepak. We are a world leading international manufacturer of cellulose, fibrous and plastic casings for the food industry.

With our 6 production and converting plants together with 7 sales office around the world we employ over 1000 people. We have the biggest partner network in the world and customers in over 80 countries. We strive for perfection in everything we do and we are always around to support you.

We are working according to three guiding values; **Partnership, Productive Solutions and Tailor-Making.**



The Visko casing company was founded in 1952 by Gunnar Eriksson

Partnership

We strive to be a strong partner and provide you with the best possible support. With the biggest partner network in the casing world combined with our wide product offering, we can tailor-make our fibrous to fit just about any brand and application perfectly. And that is our aim, to provide you with the most productive casing solutions in the market. We achieve success in partnership with you, we are in it for the long run and we are always around to support you.



Productive Solutions

We offer some of the most productive sausage casings in the world. Our products are used daily for the effective processing and packaging of frankfurters, hot dogs, dry and semi-dry sausages, smoked meats, hams, deli meats, poultry, dairy products and similar products.

Tailor-made

We are not just selling sausage casing; we are also offering some of the best technical knowledge and expertise in the business, through our partners and through our own technical sales department. Our goal is to tailor make all our innovations to the best fit for each process and business.



PRINCIPLES & GUIDING VALUES

Being a good employer

We take responsibility for workplace safety and the health of our employees. ViskoTeepak has a social obligation to our employees. We feel our future lies in conducting business with good ethics and in a responsible way.

Sustainable development for the environment

All over the world, we see the effects of a global industrial evolution and growing concern over the greenhouse effect and climate change. We feel it is every company's and every individual's responsibility to play their part in order to protect our planet's future. At ViskoTeepak, we have implemented systems and procedures for waste management and energy control.

Global Reporting Initiative

To be transparent, we have chosen to use the GRI reporting framework designed by the United Nations. It allows us to report on what we do in a systematic way and to choose the items we want to prioritise. By reporting the annual ViskoTeepak Sustainability report, we can track progress and also explain what is behind the figures.

Health & Safety

The health and safety of our employees and the community around us will always come first in ViskoTeepak. The viscose process and casing production has certain associated risks and our success depends entirely upon ensuring safety in all parts of our operations. We follow the guidelines and audit ourselves through the established routines of the BRC-Packaging standard.

On top of this, we try to anticipate and recognise health hazards in the working environment and work with effective risk management, by monitoring all parts of our operations and working for a safety first culture. We drive and support each other by using common courtesy in everything we do; for us, it is showing respect to our employees and the first step in working in an ethically sustainable way. We also always take responsibility for our actions and stand accountable if something goes wrong.

The highest level of certification

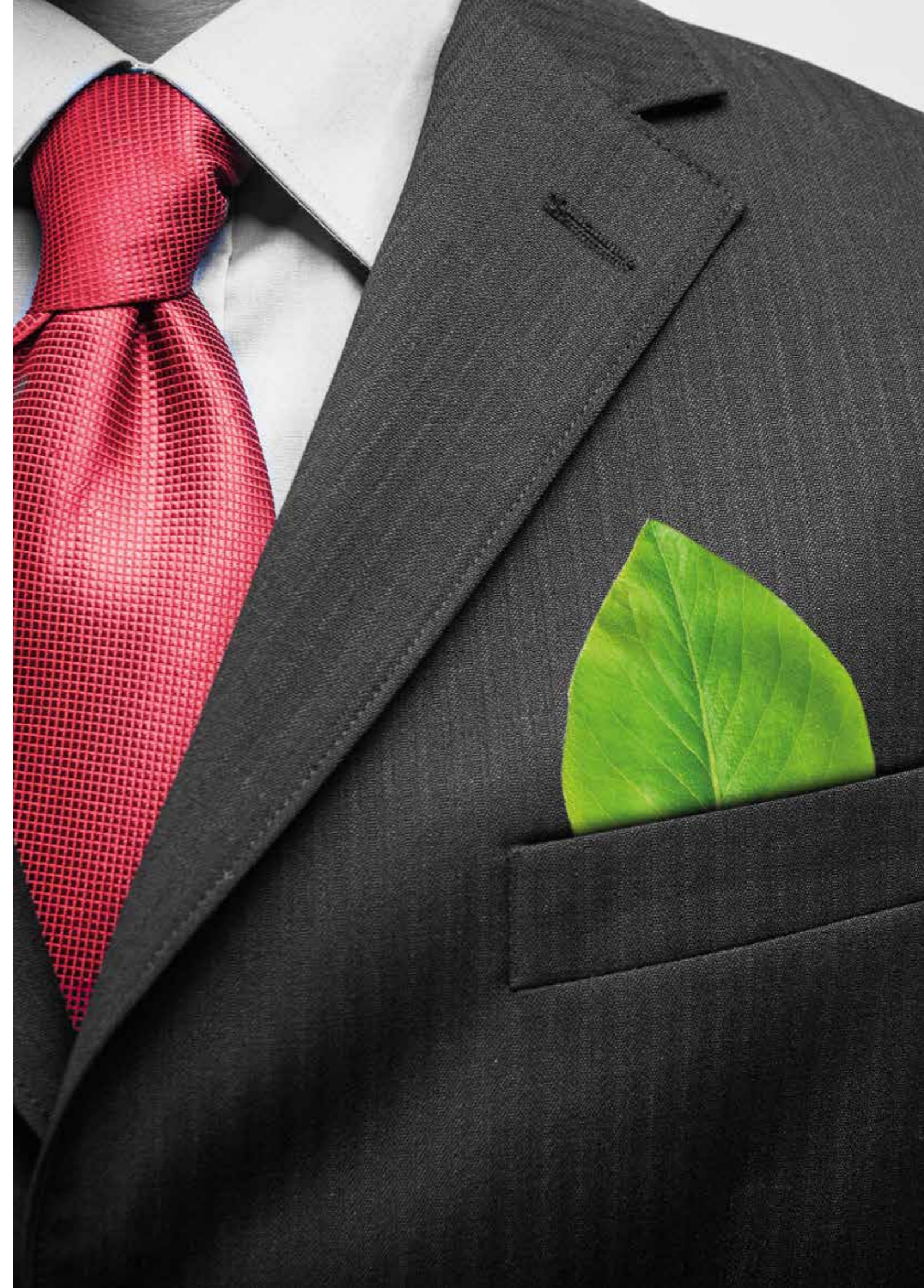
ViskoTeepak has the highest level of certification in the casing industry. We accept our responsibility when it comes to quality, health & safety and the environment.

For example, did you know that ViskoTeepak Lommel was the first plant in the casing business to achieve the ISO 9001 quality certification in the early 1990s and has never failed an audit since. ViskoTeepak is also the first company to have BRC-IOP certification for all the product lines for cellulose, fibrous and plastic. Today, all our production and converting operations are certified with the BRC-IOP as well as being in accordance with the ISO standards

All of our certificates are available to download on our website www.viskoteepak.com.

Certificates	Lommel	Hanko	Nuevo Laredo	Delfzijl	Brno
BRC Packaging	✓	✓	✓	✓	✓
Quality: ISO 9001	✓	✓	✓	✓	✓
Environment: ISO 14001	✓	✓	✓		
Safety: OHSAS 18001	✓				
Kosher standard	✓	✓	✓	✓	✓
Halal standard	✓			✓	✓
EU food contact Regulation (EC) No 1935/2004	✓	✓		✓	✓
FDA food contact regulations	✓	✓	✓	✓	✓

Periodical audits by the Lloyd's Register, Inspecta certification and DNV.
All of our certificates are available to download on our website www.viskoteepak.com





Always around

Sales

Tom Pussinen

Vice President,
Sales and Marketing
+358 18 526 733
+358 400 526 323
tom.pussinen@viskoteepak.com

Steve Van Zeeland

Vice President,
Sales & Marketing, USA
+262 697 6502
+262 818 1843
steve.vanzeeland@viskoteepak.com

Stefan Dälken

Sales Director, Germany
+49 405 4000 331
+49 173 9286 096
stefan.daelken@viskoteepak.com

Esa Hihnala

Business Line Director Fibrous
+358 207 599 400
+358 408 303 400
esa.hihnala@viskoteepak.com

Marc Vrijzen

Business Line Director Cellulose
+32 115 50920
+32 477 8701 95
marc.vrijzen@viskoteepak.com

Diego Perez

Plant manager &
Business Line Manager Plastic
+52 (867) 718 2818
+52 (867) 198 5932
diego.perez@viskoteepak.com

Eric Gijzen

Sales Director
+32 475 5999 51
+32 475 5599 51
eric.gijzen@viskoteepak.com

Tom Borenus

Sales Director
FIN +358 405 9608 94
US (+1) 954 3979 689
tom.borenus@viskoteepak.com

Petri Kippilä

Sales Director
+358 207 5993 18
+358 408 3033 18
petri.kippila@viskoteepak.com

Johan Lönngren

Sales Director
+358 207 5994 99
+358 408 3033 12
johan.lonnngren@viskoteepak.com

Esa Setälä

Sales Director
+81 903 9096 737
esa.setala@viskoteepak.com

Russia, Armenia, Azerbaijan,
Belarus, Georgia, Kazakhstan,
Kyrgyzia, Moldavia, Ukraine,
Uzbekistan, France, Italy,
Portugal, Spain

North & South America,
Mexico & Central America

Austria, Benelux, Denmark, Finland,
Iceland, Ireland, Norway, South
Africa, Sweden, Switzerland, UK

Bosnia, Bulgaria, Crete, Croatia,
Cyprus, Czech Republic, Estonia,
Greece, Hungary, Israel, Kaliningrad,
Latvia, Lithuania, Macedonia, Malta,
Poland, Romania, Serbia, Slovakia,
Slovenia and Turkey, Middle East
Africa

Bangladesh, Cambodia, China, Indo-
nesia, India, Japan, Korea,
Laos, Malaysia, Myanmar,
Pakistan, Philippines, Singapore,
Sri Lanka, Taiwan, Thailand,
Vietnam, Australia, New Zealand

Plants

Finland

Viskontie 38
FI - 10900 Hanko
+358 207 599 499

Belgium

Maatheide 81
BE-3920 Lommel
+32 11 550 711

Mexico

Galeria 8 Parque
Industrial América
Nuevo Laredo, 88277
Tamaulipas
+52 867 718 2818

Czech Republic

Vlastimila Pecha 1270/14
627 00 Brno - Slatina
Czech Republic
+420 544 125 111

The Netherlands

Rondeboslaan 18
NL - 9936 BK Delfzijl
+31 596 646 444

USA

1126 88th Place
Kenosha, Wisconsin
53143-6538
+1 (800) 558-4058

Sales offices

Russia

Sivtsev Vrazhek
per., 25/9 bld. I
119002 Moscow, Russia
+7 499 745 00 48

China

Room 401, 2 building
690 Bibo Road, Zhangjiang
Hi-Tech Park
Shanghai 201203
+86 21 610 42230
+86 21 610 41412

Mexico

Orion 76
Col. Prado Churubusco
Del. Coyoacan CDMX
C.P. 04230
Mexico
+52 55 9000 1217

Japan

6-38-1 Todoroki
Setagaya-ku
Tokyo 158-0082
+81 90 3909 6737

Switzerland

Obfelderstrasse 31
CH-8910 Affoltern am Albis
+41 43 333 9720
+41 79 279 3151

Germany

Ottensener Str. 14
DE-22525 Hamburg
+49 1739 286 096

Head office

Finland

Torggatan 13 A
FI-22100 Mariehamn
Phone +358 18 526 708