





In the early years of this millennium, Ruitenberg invented Rudin VegaCasing, a paste based on seaweed extract that forms an edible skin around a sausage by using co-extrusion technology. It's a simple, continuous process that has revolutionized the method of sausage production for many applications.

Sausages have been made all over the world for thousands of years. Traditionally, ani mal guts have been used as a casing. Over the past hundred years, several alternative casings like collagen and cellu lose have been developed to overcome the drawbacks of using animal guts. Each of the alternatives, however, had its own limitations. But with the introduction of Rudin VegaCasing, a new era of sausage production has arrived. Rudin VegaCasing overcomes the limitations of previous casing alternatives by providing continuous, cost-efficient, flexible, healthy and food-safe sausage production.

Continuous process Where animal guts and preformed collagen are limited in length, and therefore require regular machine stops to change the infeed of casing, Rudin VegaCasing is coextruded in a continuous sau sage-production process. This means you can increase pro duction efficiency substantially and require less manpower in operations. Because of the rel atively low investment in ma chinery, continuous sausage production is nowadays within reach of many medium-sized companies.

Cost efficient

The continuous process, in combination with attractively priced Rudin VegaCasing and the possibility to extrude a very thin skin, makes the cost-inuse calculations for VegaCasing favorable over animal guts, preformed collagen, col -

lagen paste and cellulose. The ingredients of Rudin VegaCasing enjoy a dependable avail ability and a stable price level.

With calibers ranging from 8 to 32 mm by simply using dif ferent co-extrusion heads, and with the option of Rudin Vega-Casing for all types of sausage, this innovative solution provides enormous flexibility. It is being successfully applied to meat, fish, poultry, vegetarian or cheese products, processed into fresh, dried, smoked or cooked sausages, all on the same co-extrusion machine.

Healthy & food-safe Rudin VegaCasing is based on alginate, extracted from sea weed, and is a 100% vegetarian paste. It is perfectly suited

for production of vegetarian, Halal or Kosher sausages. Ru din VegaCasing improves food safety by avoiding risks of animal diseases like BSE. It is produced in our modern. BRC-certified facility.

READY-TO-USE

Rudin VegaCasing is a ready-to-use gel, prepared on one of our dedicated, ultra-modern production lines. Ruiten berg's many years of experience and our specially designed pro duction lines guarantee a gel with a consistently high quality, without lumps that could clog the filter of the coextrusion machine.





FRESH SAUSAGES

With the introduction of Rudin VegaCasing, producers of fresh sausages could for the first time benefit from a continuous production process. The use of collagen paste in fresh sausages is not possible because of the necessity to crosslink it with liquid smoke.



However, Rudin VegaCasing requires just a simple and fast (within seconds) fixation with calcium after co-extrusion. It makes the process simple and the investment in equipment surprisingly low.

Compared with the traditional animal gut casings and preformed collagen casings applied on fresh sausages, the cost savings of Rudin Vega-Casing are remarkably sub stantial. Rudin VegaCasing guarantees a sausage produc tion that is consistent in terms of appearance and weight. The transparent skin contains no fat or calories, has a pleasant mouth-feel and bite.



Various types of VegaCasing are available for fresh sau sages, varying from shiny to matt in terms of appearance. Recently, Ruitenberg has de veloped a new, innovative VegaCasing with internal sta bilization which can eliminate the need for adding calcium to the meat dough and thereby contributing to clean labelling of the final sausage.

DRIED SAUSAGES

The extra processing step for dried sausages, preparing them in a drying/smoking cabinet, requires additional functionality of the casing. For hanging dried sausages, the casing should be strong enough to resist gravity during drying or smoking. cific types of Rudin VegaCasing are developed for hanging sau sages and resisting the temperature and handling challenges.

Furthermore, the skin should remain stable over time and have a nice texture and bite. Rudin VegaCasing creates a



skin that perfectly retains the smoke aromas of the sausage.

Over the past decade, Rudin VegaCasing has successfully been applied to a large variety of dried sausages, produced around the world, including small caliber salami sticks as small as 8mm that could not be produced before with sheep casing.

The economic advantages of using VegaCasing for dried



sausages over natural gut casings and preformed collagen are huge. Ruitenberg Ingredi ents can provide various types

of VegaCasing for dried sau sages, depending on the meat dough used and the desired final sausage appearance.



Did you know...

Whether it is about VegaCasing, liquid smoke, grill flavours, meat mixes or meat fillings, our products bring added value through their innovative and high quality properties. For more information, please contact our team.



DEEP FRIED SAUSAGES

Deep frying is done all over the world. It is an especially popular way of preparing breakfast sausages. However, deep frying has an enormous impact on the casing appearance, particularly when sausages are fried from frozen. Casing may burst and come loose from the sausage because of high temperatures and moisture release.

Ruitenberg ingredients has developed a specific type of VegaCasing for deep-frying applications that resists the big challenges of high temperature and moisture release during deep frying. The Rudin VegaCasing has a perfect adhesion and allows deep frying without the casing bursting, even when sausages are prepared from frozen.





COOKED SAUSAGES

Cooked sausages, including types like Frankfurter and hot-dogs, represent the biggest share of the world-wide sausage market. Traditionally, natural casings are used, but the most wide **spread nowadays for large-volume production is collagen paste or peel-off cellulose. Both** casings have their own pros and cons, but with the introduction of VegaCasing, it is now possible to eliminate the disadvantages of the currently used casing techniques by using a simple and revolutionary technique: water cooking.



VegaCasing makes it possible to set up a continuous, in-line process of co-extrusion, water cooking and packaging. No need for the space- and time-consuming process of crosslinking collagen. No need to peel off and dispose of cellulose casing and no need to interrupt the production process for changing casing infeed or hanging sausages in a smoking cabinet.

The water-cooking process of VegaCasing is truly unique, and the economic benefits are so immense that it will completely change the game of cooked-sausage production in the years to come.

SKINLESS

Ruitenberg Ingredients has recently developed a special 'skinless'
VegaCasing, providing a casing which forms and protects the sausages in the co-extrusion steps, but which integrates with the sausage during the water-cooking step. It eliminates the need to peel-off the casing and creates the appearance and bite of a peeled sausage.



Did you know...

At your request, we look for alternative ingredients to substitute additives or allergens to create clean label. For more information, please contact our team.



Schwarz Australia 132 Woodlands Drive, Braeside, VIC 3195. www.schwarz.com.au sales@schwarz.com.au Ph (613) 8586 6001 Fx (613) 9587 011



Customerspecific solutions

With more than a decade of experience in applying VegaCasing in all sorts of applications, Ruitenberg ingredients has assisted many customers in finding a specific solution for their sausage production. Ruitenberg Ingredients has developed casings with specific color or appearance, and casings with a special taste or herbs. Rudin VegaCasing has also successfully been applied to non-meat applications like cheese and vegetarian products. The possibilities with VegaCasing are only limited by your imagination.

TECHNICAL SUPPORT BY OUR EXPERTS

The successful implementation of Rudin VegaCasing is dependent on many parameters that will vary from one sausage type to another, from one machine to another and from one meat dough to another. Ruitenberg Ingredients offers free support by our specialized technologists to help you set up the co-extrusion line and to develop and fine-tune the sausage you have in mind. Once running in production, Ruitenberg remains available for technical support in case of questions or new ideas.

In partnership with our clients we guarantee a solution that works to ensure a truly long-term relationship. The success of this formula is what makes Ruitenberg an established name in the meat industry – worldwide.

