



## INNOVATORS IN POTATO CUTTING TECHNOLOGY

Offering longstanding and advanced knowledge

Your perfect partner for potato cutting solutions





**FAM** designs and supplies cutting solutions for a multitude of food applications with over 40 years of experience combined with a global presence. Over the years, FAM has built up strong partnerships with leading potato processors worldwide. Our mechanical cutting solutions are known for their reliability, high capacity and cut quality.



**Stumabo International**, a manufacturer of precision blades for the food industry, produces several million blades per year. Stumabo is known in the industry for their progressive industrial potato cutting solutions, and innovative shapes produced through hydrocutting systems. Stumabo also uses their knowledge to integrate the best blade in the FAM mechanical cutters. All blades and critical components are made in-house.



**FAM STUMABO** has one goal in mind: to help potato processors cut potatoes to perfection. Our combined **knowledge** of both mechanical and hydrocutting allows us to offer our customers the exact **innovations** and revolutions they have been looking for. We have **Centers of Excellence** for potato cutting solutions in both our Belgian headquarters as well as in our North American offices. These facilities provide demonstration labs supported by application specialists, local (after) sales and service support, spare parts, training and more to support the demanding potato processing industry.

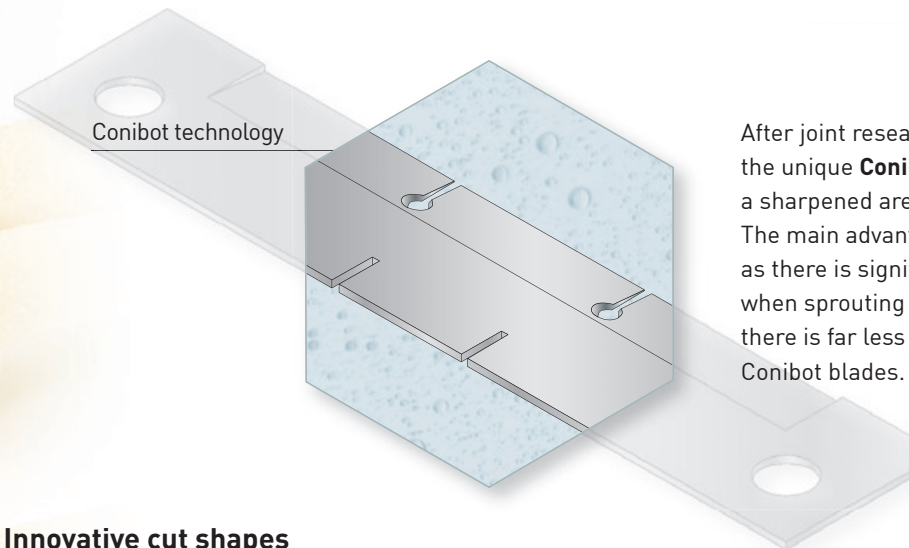
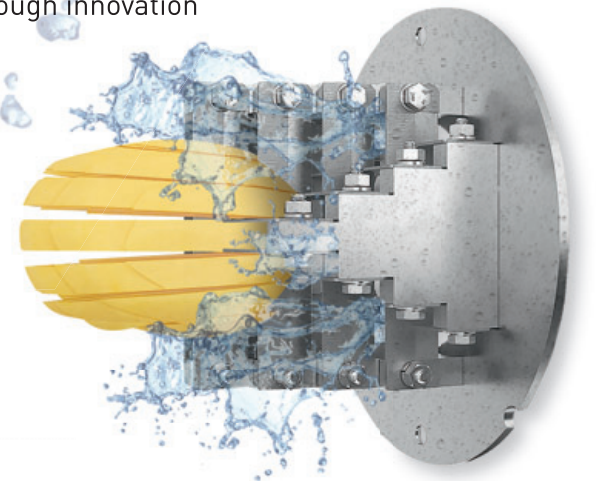
We are a well-established, **global player** with a strong reputation for **quality, creativity and customer support**. We take into account the specific needs of our customers by offering different product-driven models of machinery without compromising quality and safety. We work with you **to tailor solutions** to your specific needs.

## AT THE LEADING EDGE OF CUTTING POTATOES

Innovation has always been at the heart of our success. This has been done through listening to the requirements and needs from our customers, through innovation and through co-creation:

### Stumabo hydrocutting heads (chip gun heads) and blades

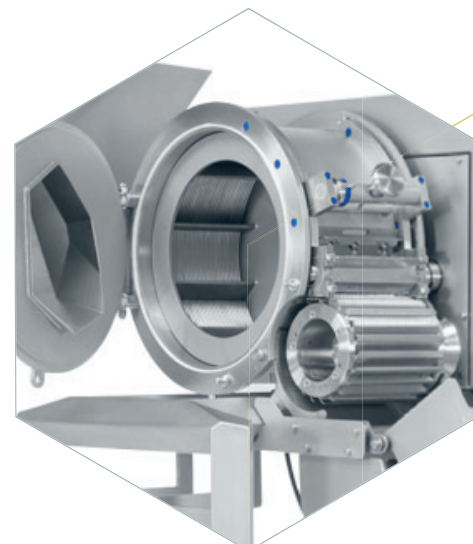
Reputable customers from all over the world prefer the Stumabo blades for cutting potatoes into fries (chips), because of better cut quality, prolonged blade life, increased efficiency and higher yield. Extensive ROI studies guarantee the best selection of stainless steel knives, selected particularly for the specific conditions of potato processing. On top, our automated manufacturing process ensures consistent sharpness and longevity of the knives.



After joint research with customers, Stumabo introduced the unique **Conibot technology**. This technology features a sharpened area at the bottom of the slots in the blades. The main advantage is that the cut quality remains superior, as there is significantly less obstruction in the cutter heads when sprouting occurs on the potatoes. As a consequence, there is far less shattering / feathering with the use of Conibot blades.

### Innovative cut shapes

New and interesting shapes of French fries, specialty products and appetizers are always relevant in the market as they generate consumer interest. Many new types of French fries and special potato products have been the result of a close collaboration and partnership between our R&D and application teams and our customers. For example we have popular shapes specifically designed for dipping into sauces.



### Tridis 240P

An evolution out of the iconic and very successful ILC series. It was a milestone in the French fry business, chosen for flat/crinkle/deep crinkle fries, dices, and slices at the highest capacities. The Tridis 240P incorporates the voice of the industry and was developed in close partnership with global, leading French fry producers.

## PRODUCE KNOWLEDGE

FAM STUMABO understands the complexities and challenges of cutting potatoes. Different parameters influence the way the potatoes needs to be cut, such as:

- The growing conditions depend on factors which are very difficult to control, such as the weather conditions. Therefore, the solution to obtain a perfect final product relies more and more on the processing technology. Selecting the right cutting technology for potatoes is a crucial step in the journey a potato makes from initial harvest to its end form and quality.

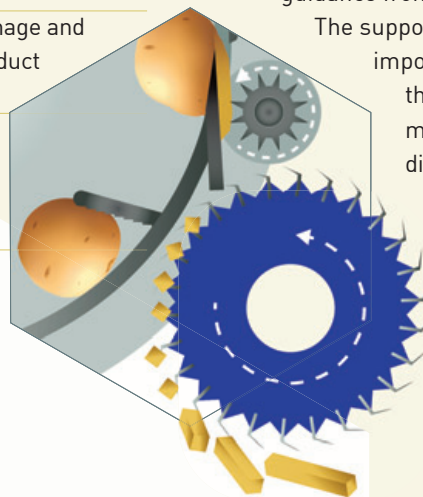


Four Tridis 240P machines integrated in a high capacity French fry production line.

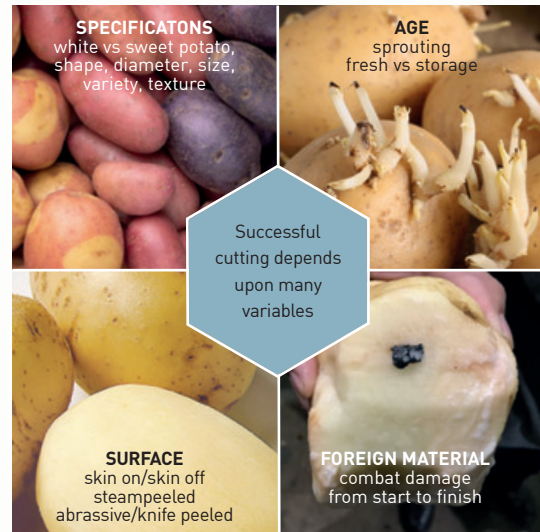
## MACHINE DESIGN KNOWLEDGE

Our design engineers use knowledge and practical experience to create machines with maximum value for the user. There are important elements that are included in the design to maximize your production output. At FAM STUMABO we don't just design a standard model, we have the **P series** in which the capital **P** stands for "specially designed for **P**otato cutting", assuring regular cuts, maximum length, and minimum breakage and feathering.

- **Specially designed infeed systems** guide the potato into the drum or V-belt with perfect orientation every time, maximizing the output.
- The choice of the **ideal blade** avoids cell damage and makes cuts extremely precise, providing product uniformity and reducing waste.
- Auxiliary tools ensure the safety of operators and maintenance personnel at every level. Designed for flexible and effortless operation.



- **Special impellers with grooved paddles** under a certain angle. These special impellers give the potato the best guidance from the infeed chute to the slicing knife. The support of the grooved paddles is extremely important to maximize yield and to control the **crinkle pattern**. The number of paddles maximizes capacity. Based on the size and diameter of the product we can offer various impeller wheels with a range of 4 to 12 grooved paddles.



## PRODUCTION PROCESS KNOWLEDGE

FAM STUMABO designs machines, blades and cutting heads that respond to your **unique processing needs**. This allows you to easily integrate our products into a full line.

We offer you the cutting equipment that connects, communicates, and works seamlessly with your other equipment.

Active crash protection systems with integrated slip detection help to deal with the impact of foreign material, and integrate the machines as a smart and active component of the line.

We partner also with leading suppliers of **total line solutions** to add value for each customer.

# Machines for high-quality French fry cutting

**SureTec**  
240P



## Versatile high-capacity French fry cutter / potato dicer featuring the SureCut Unit

The SureTec 240P features the unique concept of the SureCut unit (SCU). The SCU allows the cutting components to be preassembled in one piece and the cut size is preset.

- A 240 mm (9 29/64") wide drum is available for flat, crinkle and deep crinkle applications, an essential requirement if long potatoes are to be cut at full length.
- The 4 kW (5.5 HP) stainless motor and VFD contribute to the highest throughput and optimized cutting speed.
- A variety of impellers with a different number of paddles are available to suit different size products and to align them properly.
- The slipper clutch and slip detection system will avoid expensive downtimes and prevent the parts from severe damage or wear due to foreign objects.
- The SCU allows even non-technically trained operators to install the cutting tools on the machine in a very fast, uncomplicated and error-free manner.

**Tridis**  
240P



## This recently designed, high capacity machine meets all the needs of a modern potato processor

This machine is a good example of how innovation allows the standards to be raised. This versatile dicer/French fry cutter, running at the highest capacities, is a reliable production machine built to deliver top-quality products.

- The drum of 240 mm in depth (almost 9,5"), available for flat and crinkle allows to cut large diameter and long potatoes to maximum length.
- The 4 kW (5,5 HP) stainless steel motor contributes to the highest throughput.
- Improved cutting technology assures the highest quality/yield.
- The curved infeed chute allows potatoes to align parallel to the slicing knife to maximize length of French fries.
- Set & Forget features: cutting tools can be replaced and adjusted effortlessly. There is no need for specially trained operators.
- Special grooved impeller wheels with 4/5/6/8/10/12 paddles.

*"We have chosen Tridis 240P because we needed a robust and reliable machine that guarantees minimum downtimes. We need to handle gigantic quantities of potatoes to produce dice, fries, and other shapes. In Tridis 240P we can put our trust to maximize our running time."*

Lamb Weston/Meijer

# ng and dicing



## Tridis 180P



### The right choice for medium-high capacities

This machine incorporates the benefits of the Tridis 240P, but is tailored for medium-high volumes.

- The 180 mm (7,1") wide drum, available for flat, crinkle and deep crinkle applications, is essential if long potatoes are to be cut full length.
- Driven by a 2,2 kW (2,95 HP) motor.
- Improved cutting technology assures the highest quality.
- Set & Forget features: cutting tools can be replaced and adjusted effortlessly. There is no need for specially trained operators.
- Special grooved impeller wheels with 4/5/6/8/10/12 paddles.

## Dorphy



### Entry level dicer and French fry cutter (only flat cut available)

This most operator friendly entry-level food dicer keeps labor cost down while maximizing productivity.

- Compact design takes little floor space. Driven by a 1,50 kW (2 HP) motor.
- Quick feeding and increased production speed reduces preparation time from hours to minutes.
- Easy and quick cleaning saves valuable time while maintaining superior hygiene.
- Machine operates with very low maintenance costs, no lubrication required.
- 3 machine executions: in-line model, stand-alone model (lower infeed for batch feeding), and Eurobin model.

### Results of high-quality French fry cutting and dicing



Deep crinkle fries



Crinkle fries



Flat fries



Dices

# Machines for high-quality slicing, shredding

**Centris**  
400P



## Versatile centrifugal slicer/shredder

Designed for high capacity applications.

- Low maintenance, direct-driven power train, available with a 4 kW (5HP) or 7,5 kW (10HP) stainless steel motor.
- Patented DualStage™ impeller wheel maximizing quality and capacity.
- Incorporated trapped key safety system.
- Large vertical swivel infeed offers uniform product flow to the cutting heads.

## Powered by the innovative SURESET 16P cutting head

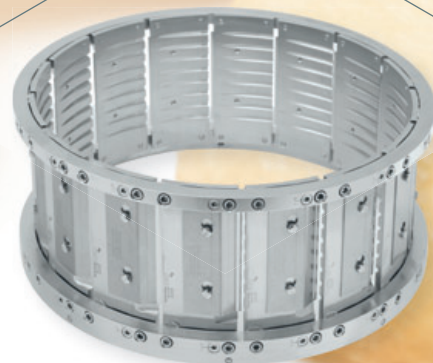
- 16 blades deliver the highest capacity.
- The cutting head will always stay adjusted. High cut accuracy results in a higher yield and less scrap. The SureSet dial allows an effortless adjustment (no gauge needed) of the cutting head between changing solid contents or different potato quality.
- The incorporated "Stone Defender" offers the best protection against the impact of foreign material, lowering the total cost of ownership.
- Light weight 100% stainless steel design.

## Versatility: with grating head

- The Centris™ grating head increases your options with a variety of cut sizes and styles that offer extra cutting possibilities. You therefore reduce the number of machines you need in your production line.
- The grating heads will produce all types of size-reduction solutions, starting from whole fresh or cooked potatoes, or from pre-cut product (fries, dices etc.).
- The grating head is available with easily replaceable screens for different grating sizes.



Hashbrowns produced with  
grated potato pieces



*"The Centris grating heads allow us to grate blanched potato pieces at high capacity and in any size needed for our different potato specialty products."*

Wernsing

# and grating

## Volantis



### V-belt slicer, perfectly suited for the transverse slicing of oblong or elongated potatoes

This machine produces a high quality cut on flat and crinkle slices, at medium to high volumes.

- The special infeed chute will bring the potato up to speed before entering the V-channel, preventing the potato from tumbling.
- The wide infeed channel will perfectly align the potatoes towards the slicing wheel.
- Programmed speed settings of the slicing wheel and the V belts allows the maximum cut quality at the highest capacity.
- Designed to reduce the cost of ownership and to increase productivity.
- Great product flexibility and unparalleled ease of operation.

### Results of high-quality slicing



Flat slices



Crinkle slices

## Glide



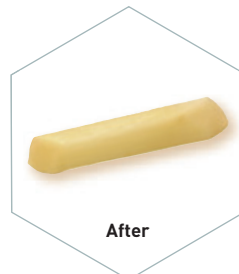
### Black spot cutter for recovering reject fries

The process of optical sorting fries involves waste products. The Glide has been developed to keep this waste as low as possible.

- This mechanical strip topper has been proven to take out 50% of black spots in its first pass.
- An installation with a strip topper in the processing line is very simple. There are no extra computers and camera's involved, and the maintenance is very low.
- Cuts reject French fries into two or more pieces, with an adjustable cut size on the first cut from 10 to 25 mm (3/16 - 1") and a further fixed cut size of minimum 25 mm (1").
- Capacity up to 900 kg (1 980 lbs) per hour.



Before



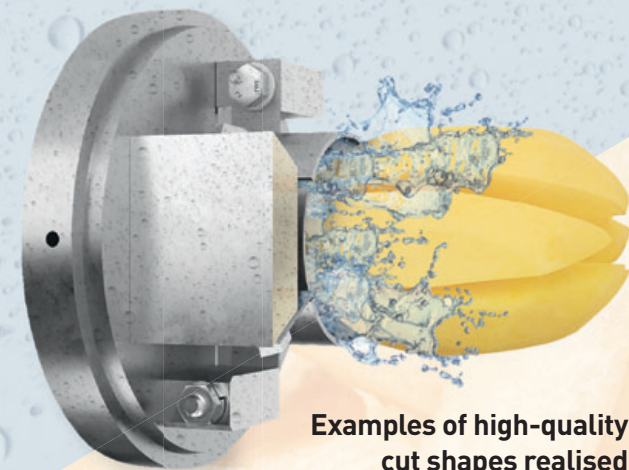
After

### Stumabo hydrocutting heads and blades

Stumabo hydrocutting heads are used in hydrocutters, using water to transport the potatoes at a high speed through a set of fixed blades.

Sharp Stumabo stainless blades, combined with the advantages of a hydrocutter, produce a very clean cut with an optimised length and high efficiency at the highest volumes.

- Delivers a consistent cut quality, regardless of whether you cut slices, fries or wedges.
- Our Conibot technology is a further asset in achieving the best and most appropriate cutting result.
- There is an enormous variety of cut sizes and -shapes, thanks to different head build-ups and blades. This ranges from square cuts, rectangular cuts, wedges to slices in both flat and crinkle cut. This is topped up by specialty cuts such as the crinkle steak, befeater, deep crinkle wedges,... We invite you to let your imagination be the guide for new shapes.
- Stumabo hydrocutting heads and blades can be integrated into all known hydrocutters in the world.



### Examples of high-quality cut shapes realised with Stumabo hydrocutting heads



Flat fries



Dippers

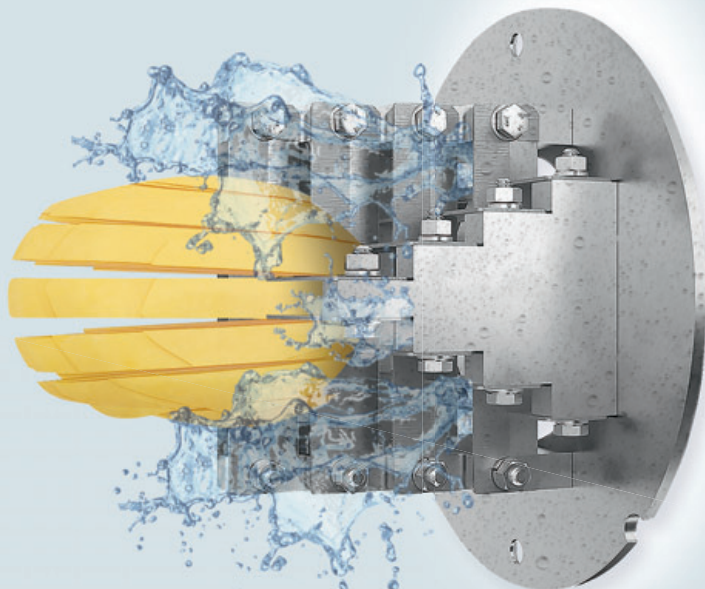


Wedges

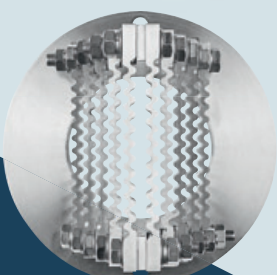


Grandma cut fries

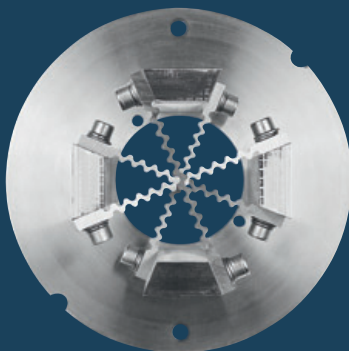
# stumabo hydrocutting heads and blades



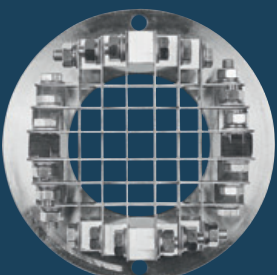
Hydrocutting head in action



Crinkle slices



Crinkle wedges



Fries

*"FAM STUMABO is always ready to accept new challenges. Together we continuously work on the development of new products and shapes, improvements in the field of starch loss, increase of capacity and yield and other opportunities."*

Antoon Wallays,  
Founder Agristo

## Support to build your business on

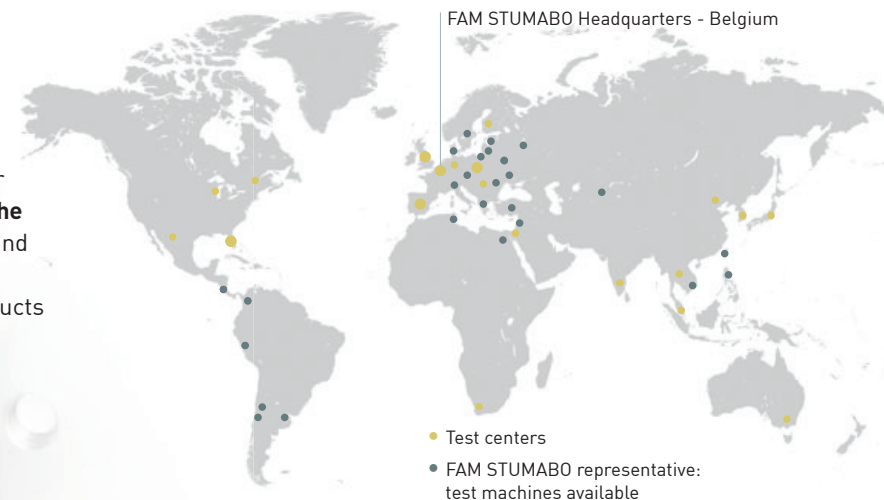
### PRODUCT TESTING TEST BEFORE YOU INVEST

Before you invest, take advantage of our **demonstration equipment** and our **expert advice** to identify the ideal cutting equipment for the results you want. We deliver cut product samples, together with detailed test **summary reports**, pictures, video footage and recommendations.



### PRODUCT DEVELOPMENT SHARING OUR KNOWLEDGE

We encourage you to use our resources to develop your food products. Our **fully equipped test centers around the world** are available to let you evaluate product quality and appearance. This is just one way to help you test or create new products or refine existing ones.



FAM STUMABO Headquarters - Belgium

- Test centers
- FAM STUMABO representative: test machines available

### OUR PRIORITY KEEPING YOUR MACHINE RUNNING

At FAM STUMABO our **customer care support team** guarantees rapid, premium support for your business whenever necessary. In order to maximise your running time, we offer **service support** ranging from troubleshooting to engineering and application assistance. In addition, we **stock a large inventory of commonly sold parts** and provide sharpening equipment and services for your blades.



### GUARANTEED PRODUCTIVITY, SAFETY AND LONG-LASTING CUTTING EQUIPMENT

High-volume production requires solid **maintenance programmes**. FAM STUMABO offers several packages for **preventative maintenance**. Our in-depth **training programmes** are perfect for improving operator knowledge and the overall effectiveness of your installation.



**Please contact us for any application you would like to discuss.**



T. +32 3 450 92 20 | E: sales@fam.be | [www.fam-stumabo.com](http://www.fam-stumabo.com)

