











# **INNOVATORS IN POTATO CUTTING TECHNOLOGY**

Offering revolutionary insights and solutions for potato chips and other dehydrated or fried snacks



# **Your perfect** partner for precision cutting solutions

**USED TO PRODUCE POTATO AND VEGETABLE CHIPS AND OTHER** DEHYDRATED OR FRIED SNACKS

\*FAM STUMABO's solution really does offer better quality and increased capacity. We've been using the technology for a while now. and we can honestly say that we are still impressed with the difference in both quality and performance. We are able to produce more product at a higher quality." Old Dutch Foods

### Fam

**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 precise cut quality, maximized yield at high capacity and operator friendliness.

## stumabo

**Stumabo International**, a manufacturer of precision blades for the food industry, produces several million blades per year. Stumabo uses their knowledge to integrate the best blade in the FAM mechanical cutters. All blades and critical cutting components are made in-house.

# Fam stumabo

**FAM STUMABO** have one goal in mind: to help potato processors cut potatoes to perfection. Our combined knowledge 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 professionals, 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**. New machines are developed with improved or new cutting methods and specially designed cutting tools that increase production efficiency and ensure improved and consistent cutting quality.

In addition we are open to develop new products in response to market needs and trends.

### 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.

#### Centris line with SureSet cutting technology

FAM STUMABO started a revolution with the introduction of the new Centris machine line with patented centrifugal slicing and shredding technology.

The patented SureSet cutting heads set **new quality standards** with the debut of a revolutionary 12 and 16-blade cutting head enhancing the cutting process with pre-set slice thickness accuracy and up to double capacity. Daily operations became simplified thanks to its light weight and reduced cleaning time.



**High precision adjustments:** SureSet dial



#### New innovative cut shapes

New and interesting shapes for potato chips are always relevant in the market as they generate consumer interest. We have all conventional shapes, along with **several new**, **innovative house shapes** available to our customers.

Several new shapes of potato chips have been the result of a close collaboration and partnership between our R&D and applications teams, as well as customer collaboration from both well-renowned and private label brands.

#### SureSet Stone Defender

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Following years of continuous improvements, FAM STUMABO launched the next generation of SureSet cutting heads, once again reinforcing its reputation of **a proven technology leader**: The **SureSet Stone Defender** is an integrated system that acts as an active crash protection system. The impact of foreign material is shifted to the blade and the clamp only. Foreign materials will no longer damage critical components of the cutting head, further reducing the Total Cost of Ownership (TCO).



### **PRODUCE KNOWLEDGE**

Fam STUMABO understand the complexities and challenges of cutting potatoes. Different variables influence the way they need to be cut.

• The growing conditions depend on factors which are very difficult to control. 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. The potato has to be used to the fullest possible extent and the waste must be minimized. According to experts, the quality of the blades and cutting method used can make a huge difference in this respect.

### **PRODUCTION PROCESS KNOWLEDGE**

FAM STUMABO designs machines, blades and cutting heads that respond to your **unique processing needs**. Fryer stability is the goal.

We understand the impact of slice accuracy to the frying step, preventing acrylamide formation, reducing scrap, preventing excess moisture and optimizing oil uptake.

Consistent slice thickness is crucial for frying

### 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.

- **Unique builds** available for batch and continuous lines, based on the feeding method that is being used
- Patented DualStage impeller wheel protects the potato in the blades against the incoming potato reducing scrap, tapers and increasing yield.
- The choice of **the ideal blade** avoids starch loss and makes cuts extremely precise, providing product uniformity and reducing waste.
- Access point for water allows the **distribution of water** during processing, for optimal product flow.
- A **trapped key interlock system** protects operators from the cutting area during machine operation.
- Equipped with a very reliable Direct Drive System. No gearbox that requires continuous maintenance.
   Sandgate segments allow small stones to glide
- through without breaking the blades.

We partner with leading suppliers of **total line solutions** both on batch lines and continuous lines. We offer you the cutting equipment that

> connects, communicates, and works seamlessly with your other equipment. We can perfectly **integrate our machines** into all known snack processing lines whether it is a continuous potato chip line, batch potato chip line or vegetable chips line.









# FAM STUMABO's revolutionary cutting heads



#### SURESET TECHNOLOGY

#### **GAPSET cutting heads**

Precision inserts for fixed thickness setting: Set and forget

Stone Defender: Active crash protection system

**GapSet 12:** Only available on Centris 315P

**GapSet 16:** Only available on Centris 400P

**Conversion kit:** Both for GapSet 12 & GapSet 16



**Precision inserts** 

SURESET cutting heads

Precise calibration of the set thickness: SureSet dial

Stone Defender: Active crash protection system

**SureSet 16:** Only available on Centris 400P

**Conversion kit:** For SureSet 16



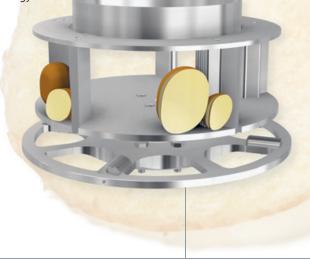
SureSet dial

# How to integrate the c

### Conversion kits: upgrade your existing lines with all the benefits of the SureSet technology.

To incorporate the wide-ranging advantages of the SureSet technology into your existing slicer, FAM STUMABO offers different conversion kits to upgrade your existing lines with all the **benefits** of the SureSet

technology.



A conversion kit comes with **the patented DualStage impeller wheel** and the support plate to fit the SureSet technology on your existing slicers. The patented DualStage impeller ensures the potato remains stable at all times during the slicing process.

### Results of high-quality precision cutting



Flat chips



Potato sticks



Crinkle chips

V-cut chips

# utting heads in your processing line?

The superior Centris product range for centrifugal slicing and shredding introduces advanced cutting technology into your potato chips line.



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Introducing the Dual Rotation Technology for unrivalled gentle and efficient slicing

- Innovative slicer featuring dual rotation technology, a system where the cutting head rotates in addition to the impeller.
- Controlled gentle cutting is achieved through this unique technology as where previously the potato was pushed against the static knife, the blade slices now through the potato and at a lower speed. The fact that the centrifugal force created by the impeller is independent of the cutting velocity results in less impact damage to the cell structure of the potato.
- Cut quality benefits:
  - Less impact damage to the potato cell structure.
  - Smoother potato slices and cracking reduced to almost zero.
- Yield benefits due to reduced starch and scrap loss resulting in less contamination of the fryer.
- Equipped with two stainless steel motors 3.7 kW (5 HP) and variable frequency drives allow for adjustment of the differential speed.
- Compatible with industry-proven SureSet 16-blade slicing heads with built-in Stone Defender components.

#### Using GapSet 16 & SureSet 16 cutting heads For highest capacities at the highest quality

400P

#### Powered with the SureSet 16P cutting technology

- The GapSet 16 and SureSet 16 cutting heads guarantee a consistent slice accuracy throughout the cutting process.
  - The cutting head weighs only 12 kg (26 lbs).
  - With 16 blades and a diameter of 400 mm (15,75") it guarantees the highest capacity.
  - The cutting heads allow an effortless adjustment of the cut size; no gauge needed.
  - The SureSet technology has yielded better results in terms of reduced starch loss, less tapered cut and scrap.
- The patented DualStage impeller ensures the potato remains stable at all times during the slicing process without shifting. It also maximizes the capacity, as it can slice two potatoes at the same station simultaneously.
- Low maintenance, direct-driven power train, with a 4 kW (5 HP) stainless steel motor.
- Incorporated trapped key safety system with mechanical lock.
- Compact design makes it easy to incorporate into most chips processing lines.

# **Vegetable chips**

Producing vegetable chips brings different challenges, thus solutions, compared to producing potato chips.





#### Using a GapSet 12 cutting head For low to medium capacities at the highest quality

#### Powered with patented GapSet 12 cutting technology

- The 100% stainless steel GapSet 12 cutting head
  - Weighs only 8 kg (16 lbs).
  - With 12 stations and a diameter of 315 mm (12,36") it allows the same infeed product size as all conventional slicers.
  - The set and forget feature guarantees a solid cut quality without adjustments. The cutting head will always stay adjusted.
  - The GapSet technology has yielded better results in terms of reduced starch loss, less tapered cut and scrap.
- Low maintenance, direct-driven power train, with a 1,5 kW (3 HP) stainless steel motor.
- Incorporated trapped key safety system with mechanical lock.
- Compact design makes it easy to incorporate into most chips processing lines.

### Centris 400

#### The Centris 400 has specific features to position, cut and handle all kinds of elongated products, with different solid contents to create the perfect slice, both longitudinal and transversal

- The special vegetable impellers ensure that elongated products position themselves during the cutting process.
  We can position elongated products for either a lengthwise cut or a coin cut depending on the desired end product.
  The product remains stable at all times during the slicing process without shifting, reducing tapered cuts.
- The patented and patent-pending SureSet technology guarantees consistent slice accuracy throughout the cutting process, and has the best protection against the impact of foreign material.
- The wide range of cut sizes can handle all possible dimensions for all kinds of vegetables.
- The Centris 400 is genius in its simplicity, making it easy to maintain and use thanks to the robust, direct-driven power train.

### **Results of high-quality precision cutting**

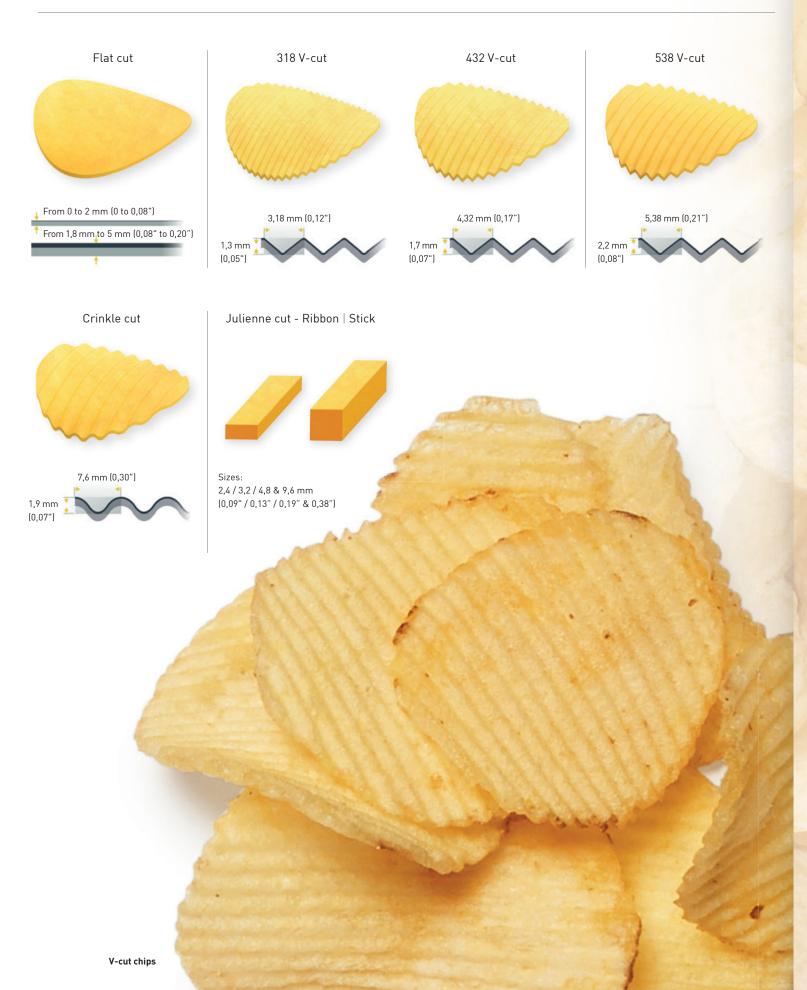




Vegetable chips

Sweet potato chips

# Shapes



WHAT OUR CUSTOMERS SAY ABOUT FAM STUMABO'S CUTTING SOLUTIONS FOR POTATO CHIPS AND OTHER DEHYDRATED OR FRIED SNACKS.

"The solid and well developed cutting heads are easy to replace and clean. The high quality blades ensure a premium cutting result, even after hours of cutting. The Centris 400P machines are easy to integrate in both our continuous and batch lines." TNA

"The quality improvement is underiable. We have a higher ROI and lower cost of ownership. The SureSet 16 is easy to operate. The microadjustments and changing of knives are dummy proof. We already placed our order for a second line and plan to gradually replace our existing cutting heads with this truly innovative technology." Better Made

"The SureSet technology is capable to handle all types of irregular products with different textures and solid contents. The knives of the cutting heads produce high quality product for many hours. We can be confident in getting constant slice accuracy." Yellow Chips

# 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.

**On-site performance trials** can let you evaluate capacity and quality at your premises. Get in touch to set up a potato chips slicing quality audit to get your **unique**, **confidential and accurate ROI projections**.



FAM STUMABO Headquarters - Belgium

### 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.



### 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.

Our solutions for a perfect final product are based on innovative cutting technology

### 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.



