



PIONEER IN HYGIENE

 **FAM** *Hymaks*

cutting edge solutions for food

Converting sanitation theory into practice

The new **FAM Hymaks®** is specifically developed for the cheese and meat industry. It marks a new era in machine hygiene and ranks this dicer to be the pioneer in converting sanitation theory into practice.

Food sanitation is a major issue affecting not just the regulatory authorities, but also food processors, retailers and consumers, who deeply care about this critical topic. FAM® cutting machines are at the centre of the food processing industry; hence their outstanding performance in terms of hygiene and cleanability are FAM's top priority.

Today, as a result of continuous efforts in product engineering, the **FAM Hymaks** is ready to meet the highest standards to fulfil the most stringent requirements on hygiene and sanitation. A new competitive standard has been set, all to the advantage of the food processor.

The **FAM Hymaks** is a prime example of what FAM defines as 'cutting edge solutions for food'.



The FAM Hymaks makes product and non-product area definite opposites

Cutting Principle

Products entering the **FAM Hymaks** are cut in three dimensions by means of sharp knives. A high speed centrifugal slicer produces the **FIRST CUT** to the selected thickness.

These slices are guided and held in position between the slicing knife and slicing guide before entering the circular knife spindle making the strips as the **SECOND CUT**.

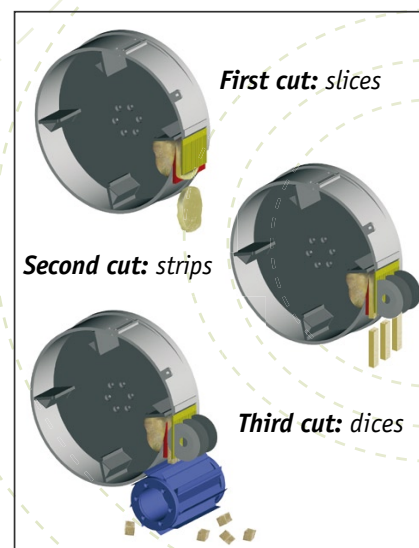
The strips are then fed directly into the crosscut knife spindle. The big diameter of the crosscut spindle provides gentle, clean, high speed cutting of the **THIRD CUT**.

Concept and Milestones

From many contacts in the industry, FAM had noted an emerging need for a more hygienic machine to cut high risk produce. A taskforce, which was set up in 2004, was given the following targets:

- market research by contacting major stakeholders in the cheese and meat processing industry in USA, Germany, Canada, France, ...
- engineering of a new machine concept in close cooperation with regulatory bodies, such as FBG (Fleischerei Berufsgenossenschaft – Germany), USDA-AMS Dairy and WDA
- setting new standards for every machine part, which can be in contact with produce to be cut

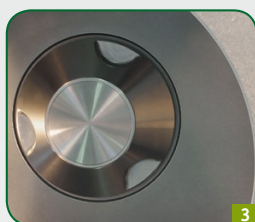
This led to a prototype, which was first tested (mid 2007) at FAM and later at major production facilities in North America and Europe. The dicer was subsequently submitted for official USDA inspection, which resulted in the **USDA Equipment Acceptance Certificate** in Autumn 2008



Mark your lead in hygiene, capacity, quality and cost efficiency

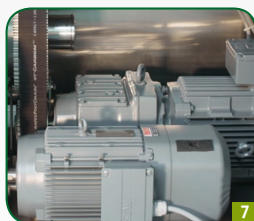
Unique and uncompromising sanitary design

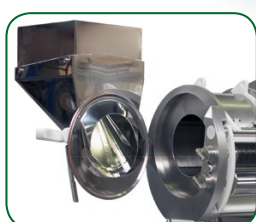
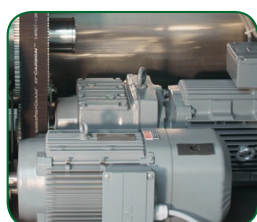
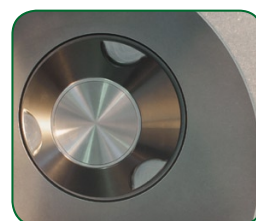
1. Significant reduction in contact surface resistance by rounding all inner corners with a radius of up to 6 mm and by applying a fine polished surface and weld finish of $0.8 \mu\text{m}$ (Ra value) .
2. Innovative 'single piece design' of product drum and slicing knife without knifeholder to prevent minute crevices.
3. No exposed bores nor a single exposed thread or bolt in the entire product area
4. Exclusion of lubricant contamination: bearings and seals more than 25mm away from produce, use of sanitary seals and gaskets closing off completely the product area from the non-product area.
5. Sanitation-driven design of the slice thickness adjustment mechanism
6. All surfaces in the product area are self draining



Distinctive capacity

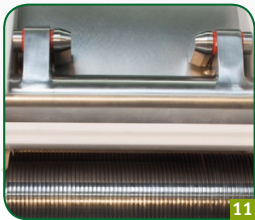
7. Striking power potential of 20.5 kW (27.5 HP) with two synchronized motors of 5.5 kW (7.5 HP) and 15 kW (20 HP)
8. Steep infeed chute results in a smooth product flow
9. Drum width of 238 mm (9-3/8").
10. Fine-tuning of drum speed with advanced DVFD (Digital Variable Frequency Drive)





High precision cut quality

11. *Increased consistency in slice thickness due to rugged, double-sided slicing gate fixing mechanism (electronically controlled)*
12. *Spindle and drum speed can each be individually set and fine-tuned via touch screen*
13. *Larger diameter crosscut knife spindle to cut perfectly squared dices*
14. *New design of slicing knife (without knifeholder)*



Designed for flexible and cost efficient performance

15. *Easily removable side guides*
16. *Fast changeover of cutting tools : no keys needed; practical auxiliary tools to remove spindles*
17. *Active Crash Protection system (ACP system) avoiding major damage to machine parts at times of a crash*
18. *Single stage drive train, no intermediate shafts*
19. *Noise reduction due to drive mechanism with timing belts*



FAM Hymaks product drum made in one single stainless steel piece.

Product characteristics

A wide range of applications

*The **FAM Hymaks** is a multi-purpose cutting apparatus, delivering an unmatched hygiene level and producing clean-cut dices and strips on a whole range of produce, ranging from dairy products to meat and poultry*

Cheese:

Capable of handling large blocks of soft, semi-hard or processed cheese - such as Mozzarella, Gouda, Emmental, Provolone; blocks can be square, rectangular or cylindrical. The cheese can either be cut chilled or frozen, with a temperature as low as -10°C (14°F).



Meat:

Bacon, poultry (breast, thigh-meat, regardless of whether it is fresh, frozen or cooked), cooked ham, salami end-pieces, cooked beef and for strip-cutting also fresh and frozen beef, pork, poultry, cured ham etc. Cut meat products can be used in salads, pizza (toppings), ready meals, meat snacks, pet food etc. Meat can either be cut chilled or frozen (as low as -16°C (3°F)).



TYPES OF CUT AND CUT SIZES

SLICES:

Flat cut, only using a slicing knife.



Cut sizes

Cut sizes: from 1.5 mm to 25 mm (1/16" to 1")

STRIP CUTS:

A slicing knife and circular spindle are used to cut strips or batons. Circular knives and crosscut knives can be combined to reduce the length of the strip.



Cut sizes

from 3.0 mm to 60.0 mm (1/8" to 2-1/3")

DICES:

For dicing, a slicing knife is used together with a circular and a crosscut knife spindle.



Cut sizes

From 3.0 mm to 40.0 mm (1/8" to 1-9/16")

TECHNICAL SPECIFICATIONS

Basic Dimensions L x W x H	2 020 mm - 1 420 mm - 2 020 mm 79.5" - 55.9" - 79.5"
Net weight	1 250 kg / 2 750 lb
Motor	Motor 1: 5 kW (7.5 HP) Motor 2: 15.5 kW (20 HP)
Variable Frequency Drive	Digital
Capacity	Between 1 600 and 5 500 kg/h (3.520 and 12.100 lbs/h)

COMPLYING WITH INDUSTRY STANDARDS

- European Standard EN 1672-2-2005
- NSF-3A-14159-1-2002
- EHEDG Hygienic Equipment Design Criteria
- USDA "Guidelines for the sanitary Design and Fabrication of Dairy processing equipment"



FAM is your trusted business partner

In order to excel in terms of reliability, ease of maintenance, hygiene and safety, FAM develops and markets state-of-the-art, innovative solutions for the precision cutting of food products.

With more than 50 years of experience and a very diverse customer base, a valuable know-how of over 1.000 different cutting applications in the food industry is readily available.

FAM is the European market leader for industrial cutting machines, and has approximately 4.000 operational machines worldwide.



FAM is the pioneer in converting sanitation theory into practice

FAM is working hard to give you the best solutions for your current and future cutting needs. As a leading and innovative company, FAM invests heavily into new concepts, which are fully in line with the most stringent demands and regulations. The truly remarkable results achieved in the field of machine hygiene are a proof of FAM's commitment in this area.

FAM Total Care Program

Your FAM machine needs to be running at the optimum standard in order to keep downtime and maintenance expenses to a minimum. The machine design itself is a first and important guarantee for this. In order to select the right solution for your application, fully-equipped test labs are at your disposal for demonstration and cutting trials with your produce.

The FAM Total Care Program covers the remainder: a vast network of agents, sales offices and service teams is on stand-by for your calls. Throughout this network, a comprehensive stock of spare parts is available for immediate shipment.



Contact and Information

For a complete overview of our machines, applications, services and agents, please go to our website. You can find there all relevant data to get in touch with FAM, its regional branch offices and its worldwide agent network. **Please visit www.fam.be.**



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