

InsideTrack

poultry processing trends and innovations



GET THE POLE POSITION
IN WHITE MEAT DEBONING
MAX 6000



FOODMATE WHITE AND DARK MEAT DEBONING SYSTEMS
EXCEPTIONAL YIELDS. NO BONES ABOUT IT.

2017

06

MAX 6000
Breast Deboner
6,000 breasts per hour

.....

10

OPTI Thigh Deboner
Now with Kneecap Remover (KCR)
6,000 thighs per hour

.....

14

CUT-UP SOLUTIONS
Complete range of Cut-up
Solutions

.....

Welcome to Bangkok

Exciting Times

After a very successful IPPE show in Atlanta, we are ready for another important exhibition but this time at the other side of the world. Although the distance is far, there are more similarities between Asia and the US than you would think. Looking at the processors on both continents there are more similarities than differences.

Line speeds are up to 13.500 BPH. both regions produce a "wet" bird and the quality standards are high. The biggest difference at the moment is the process after the chilling. Where in the US most of the cutting and deboning is done automatically, in Asia still a lot is done manually.

Foodmate was able to provide our customers in the US with state of the art cutting and deboning equipment which was highly appreciated because of the accurate cutting and high yields in combination with less labor. We believe that our customers in Asia can achieve the same results as their colleagues in the US with the Foodmate cut up and deboning solutions.

By listening to our customers we were able to develop high speed, accurate and flexible equipment that suits their needs. Virtually all cuts can be achieved on our cut up lines in combination with high speed weighing and camera grading. Foodmate has the widest range in white meat deboning, starting from a manual cone line until our newest MAX6000 system which handles all the necessary deboning recipes at a speed of 6,000 pcs per hour.

Also in dark meat deboning Foodmate is at the fore front. Our range spans from thigh and drumstick deboning at a speed of 50 pcs a minute up to a complete automated whole leg deboning system at a speed of 100 pcs a minute.

More information about our equipment can be seen in this edition. We hope you are enjoying to read our magazine and we are looking forward to welcome you at our booth at VIV Asia to share our knowledge with you.

Welcome to Bangkok



David Hazenbroek
President Foodmate BV



Hans Tieleman
International Sales manager

In this edition

SOLUTIONS FOCUSED ON YOUR CHALLENGES



RESULTS TRACKER

Foodmate OPTI Thigh Deboner brings fast return on investment



After installing a Foodmate OPTI Thigh Deboner, the results from one of our customers improved by an average of €15,700.00 per week, compared to their manual thigh deboning operation which uses hand-operated powered meat trimming knives.

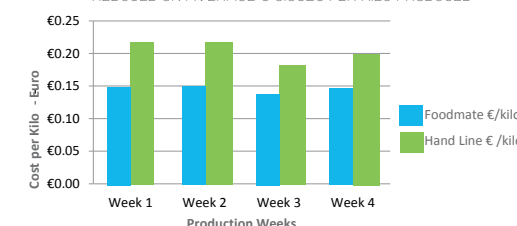
CONSISTENT YIELDS

Consistency is the key word when comparing the OPTI Thigh Deboner to manual deboning operations. When looking at the yield numbers it is evident that the Foodmate yield numbers do not deviate more than 1% over a 4 week period. The yield from the manual deboning system deviates by as much as 3% over a 4 week period. In other words, after installing the OPTI Thigh Deboner, the operation was no longer dependent on the performance of each individual operator.

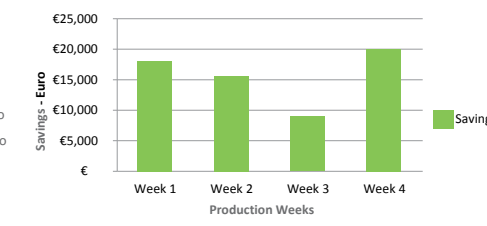
LABOR COST AND KILO PER MAN/HOUR

A cost per kilo reduction of €5.25 cents does not sound like much, but when multiplied by 110,250 kilo per week it contributed as much as €5,788.00 to the weekly bottom line for this customer. In addition, the customer saw a significant increase in kilos per man hour.

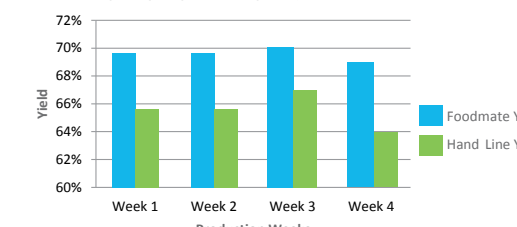
LABOR COST IMPROVEMENT
REDUCED ON AVERAGE € 0.0525 PER KILO PRODUCED



TOTAL SAVINGS PER WEEK
INCREASED ON AVERAGE €15,700 PER WEEK



YIELD IMPROVEMENT
INCREASED ON AVERAGE 4%



Comparing the Foodmate OPTI Thigh Deboner with manual deboning operations, results such as these are real and consistently achieved.

- 4 Foodmate · 10 years
- 6 MAX 6000 · Small footprint. Big results.
- 10 OPTI Thigh Deboning · Optimal Yields. Delivered. Worldwide!
- 12 OPTI LTD · Exceptional yields. No bones about it.
- 14 FLEXIBLE CUT-UP · Because chicken appreciates a clean cut!
- 16 CUT UP SOLUTIONS · Complete Range of Cut up Solutions
- 18 SUCCESS STORIES · Foster Farms
- 21 ASSET INTEGRITY PROGRAM (AIP) · Let us "ontzorg" you
- 22 PRODUCTION AND DISTRIBUTION CONTROL · Grading and Weighing Solutions



TRAINING COST AND ERGONOMIC BENEFITS

A very common problem found in manual thigh deboning operations is high employee turnover. Some plants report turnover rates of 50% or more in this process. Deboning thighs by hand, even when using powered trimming knives, requires a lot of skill and can cause a high amount of ergonomic issues such as carpal tunnel syndrome. The high cost associated with training deboners is often not accounted for during the justification or payback analysis, but it should definitely be considered when justifying the investment to switch from a manual deboning operation to a Foodmate thigh deboning operation. On average it takes 4-6 weeks to train a person to become an average hand-line deboner. The training time to operate an automated system is a week or less. In addition, the machine significantly reduces ergonomic issues, which can result in significantly reduced employee turnover.

PAY BACK ANALYSIS

To support your justification, Foodmate can put together a very detailed and customized payback analysis based on your input. In most cases this makes it evident that replacing your manual thigh deboning operation with a Foodmate OPTI Thigh Deboner offers significant financial benefits and a short payback period. Most customers that invest in a Foodmate OPTI Thigh Deboner report a payback period of 6-9 months.

2006

2006

FOODMATE WAS FOUNDED

Initially with a small team of industry experts and a focused mind in the poultry industry, brothers David and Scott ventured into the creation of Foodmate; their goal: to develop the most innovative equipment in the industry. They have not stopped since.

2010

2010

FOODMATE US WAS FOUNDED

Under full expansion mode, and new contracts and development coming in, the company expanded its worldwide distribution into North America, with the launch of Foodmate US.

2011

2011

INTRODUCTION OPTI THIGH DEBONER

Foreseeing the increased demand for deboned dark meat, Foodmate developed the OPTI thigh Deboner. As of 2016, Foodmate has installed over 175 OPTI Thigh Deboners worldwide.

2012

2012 | 2013

INTRODUCED OPTI LTD AND MAXIMA

Following market trends and demand, Foodmate developed what has become the standard in today's dark and white meat deboning arena.

2013

2014

2014 | 2015

OPTI LTD WITH AUTOMATED J-CUTTING

OPENING OF FOODMATE BRASIL

Widening the gap from competitors and further establishing themselves apart, Foodmate launches the improved OPTI LTD Whole Leg Deboner with Automated J-Cut Unit. The standard is set and expanded: Foodmate launches operation in Brazil, with Foodmate Brasil Ltda.

2015

2016

2016

NEW OPTI LTD WITH KNEECAP REMOVER LAUNCH OF AIP AND FOODMATE ACADEMY

Further investing on the now company flagship machine, the OPTI LTD Whole Leg Deboner gains automated Kneecap Remover. Foodmate raises the standard once again with added-value services and training, with the implementation the Foodmate Academy and Foodmate Asset Integrity Program (AIP).

**10
YEARS**

2017

INTRODUCTION TO MAX 6000 AND NEW OPTI THIGH DEBONER WITH KNEECAP REMOVER NEW FOODMATE HEADQUARTERS

Launching of MAX 6000 in 2017, the company revolutionizes white meat deboning: 6,000 breast caps per hour, producing butterfly fillets, half fillets and tenders / inner fillets.



MAX 6000
6,000 Breast caps per hour



Foodmate Expansion | 2017

We have much to look forward to in 2017, both our Dutch and US headquarters are expanding significantly. The brand new headquarters in the Netherlands will have a total floorspace of 12,000 m² or 130,000 sf.. This new building will allow us to grow beyond the next decade, and will house, along with R&D and engineering, a large demo room and training facility, our Inspirience Center, where we will provide in-house training on our equipment and latest development, to both customers and Foodmate service technicians.

In March 2017, Foodmate US headquarters will be at a new and much larger facility as well; only minutes away from its current location, the new Foodmate headquarters is located at 221 Turner Blvd., Ball Ground, Georgia. The 50,000 sf. building will house a 5,000 sf. demo room and training facility, the Foodmate Inspirience Center Center, where the Foodmate Academy classes will be held.



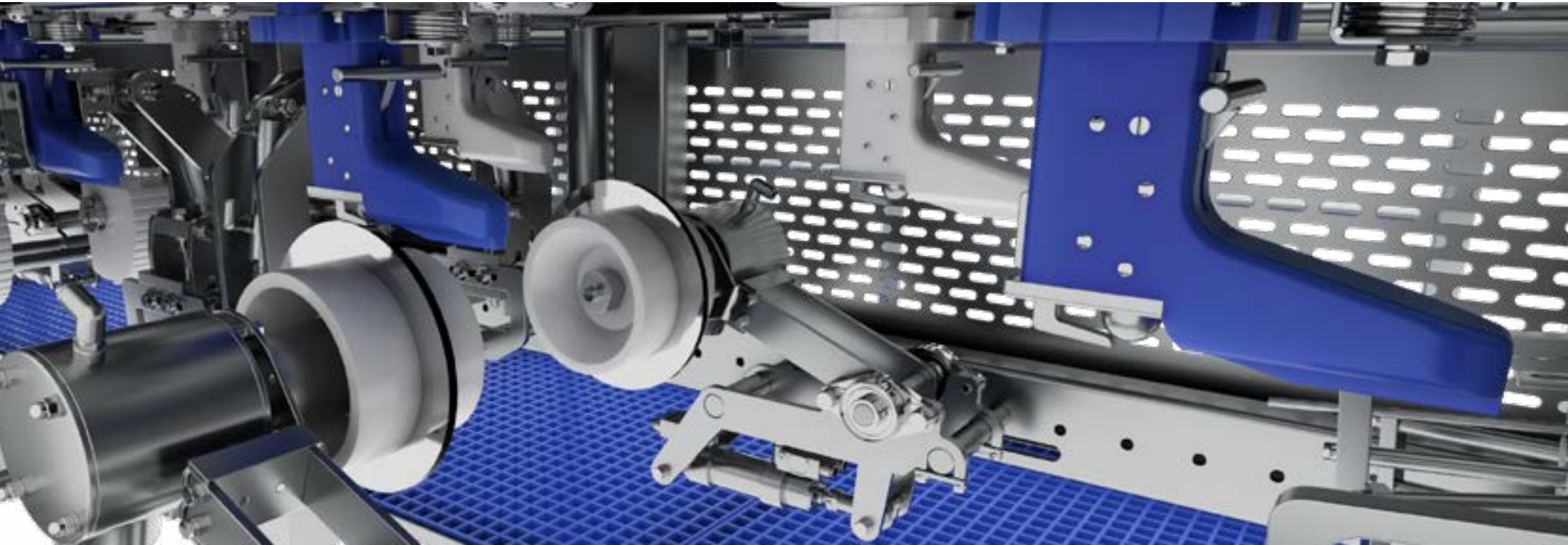
WHITE MEAT DEBONING | A NEW STANDARD IS SET

Until now, deboning breast meat has been a very labor intensive process. It required a lot of skilled labor which is becoming difficult to find, train and retain. Further, current automated debone solutions require a large footprint, are expensive to maintain and significant staffing due to rework.

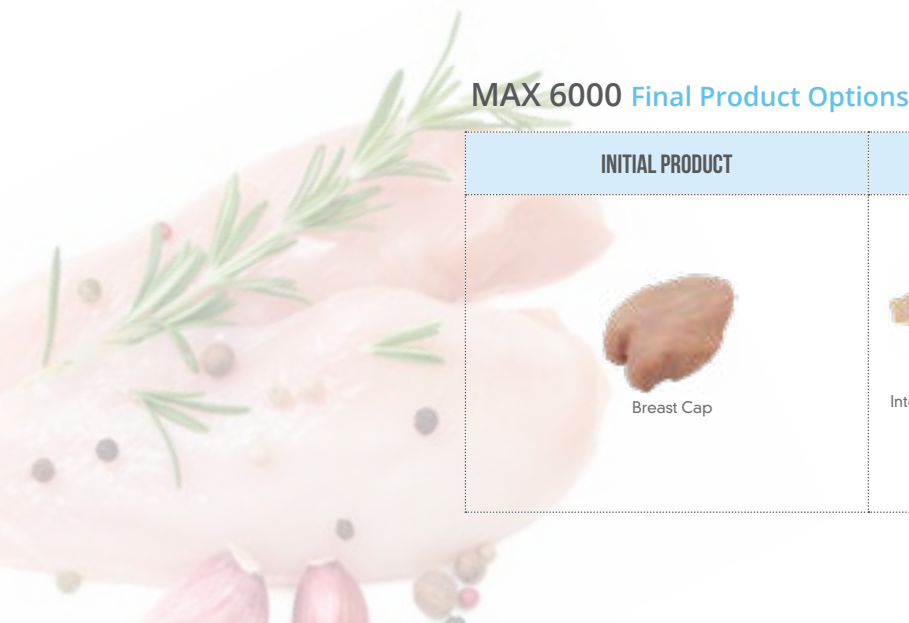
The MAX 6000 can operate at a speed of 6,000 caps per hour and only requires a 9 x 1,5 m footprint. In addition, the MAX 6000 has a user friendly and intuitive operating touch-screen panel with pre-programmed product selection. This allows the operator to easily select a particular product from the menu screen.

The system uniquely allows the user to operate two different programs, such as fillets or butterflies which can be pre-programmed, allowing you to control production on the fly and save valuable set up time.







The MAX 6000 offers exceptional flexibility with final product options such as butterfly fillets, half fillets, and tenders/inner fillets. All final products display high quality cuts, exceptional yields and presents well for tray packing and many food service applications.



- Key Benefits**
- Small footprint
 - Capacity of 6,000 breast caps per hour
 - Exceptional yield and final product presentation
 - Flexible final product selection:
 - › Butterfly fillets, half fillets, and tenders/inner fillets
 - Integrated Automatic Deskinner and Wishbone Remover
 - Integrated tender clipping and harvesting
 - Touch-screen display panel with pre-programmed product selection
 - › Dual programming option
 - All controlled and monitored by PLC (Programmable Logic Controller)
 - Easy access for cleaning and maintenance
- Integrated Features**
- Deskinner
 - Wishbone remover
 - Tender clipping
 - Tender harvesting



MAX 6000 Final Product Options

INITIAL PRODUCT	FEATURES	FINAL PRODUCT
 Breast Cap	 Skin off Integrated Deskinner  Wishbone removal Integrated Wishbone Remover	 Butterfly Fillets  Half Fillet w/o tenders  Tender/inner Fillet

BREAST CAPS DEBONING

MAX 6000

SMALL FOOTPRINT. BIG RESULTS.

The NEW MAX 6000 is a revolutionary new concept in breast deboning. It is the first breast cap deboner that allows for highly efficient breast deboning with the advantage of the smallest footprint available in the market.

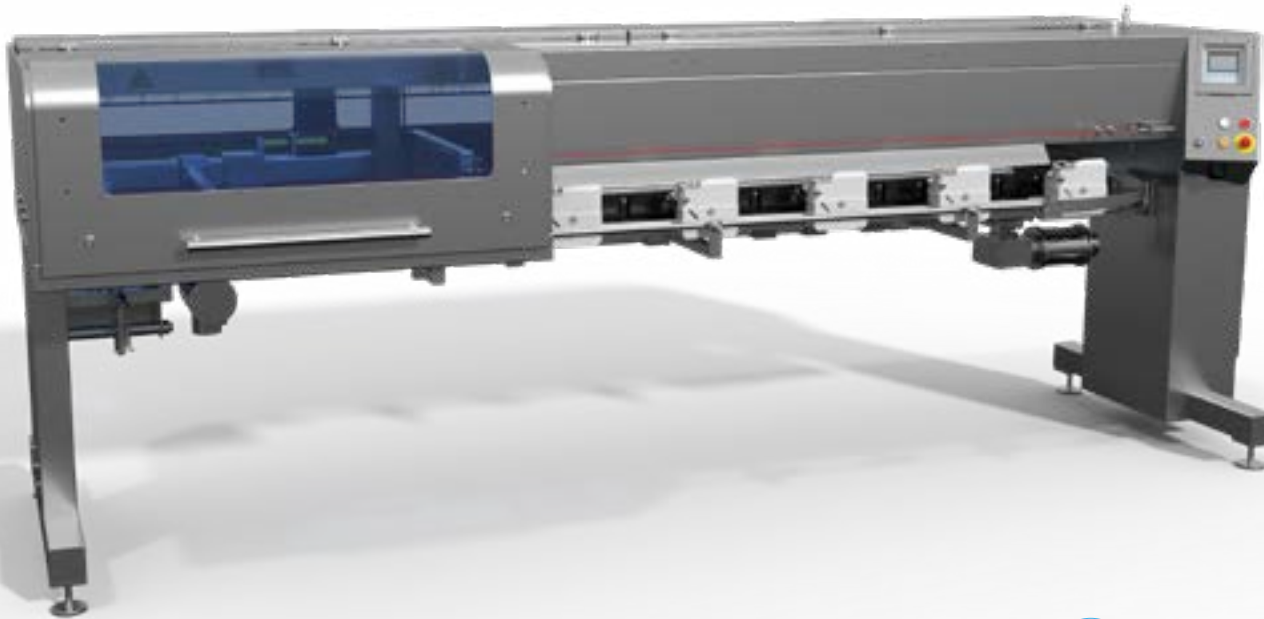


BREAST CAP DEBONING

WHITE MEAT DEBONING SOLUTIONS

COMPACT, EFFICIENT AND FLEXIBLE BREAST CAP DEBONING SOLUTIONS

Foodmate offers a wide range of breast deboning solutions



Maxima 3,000 bph

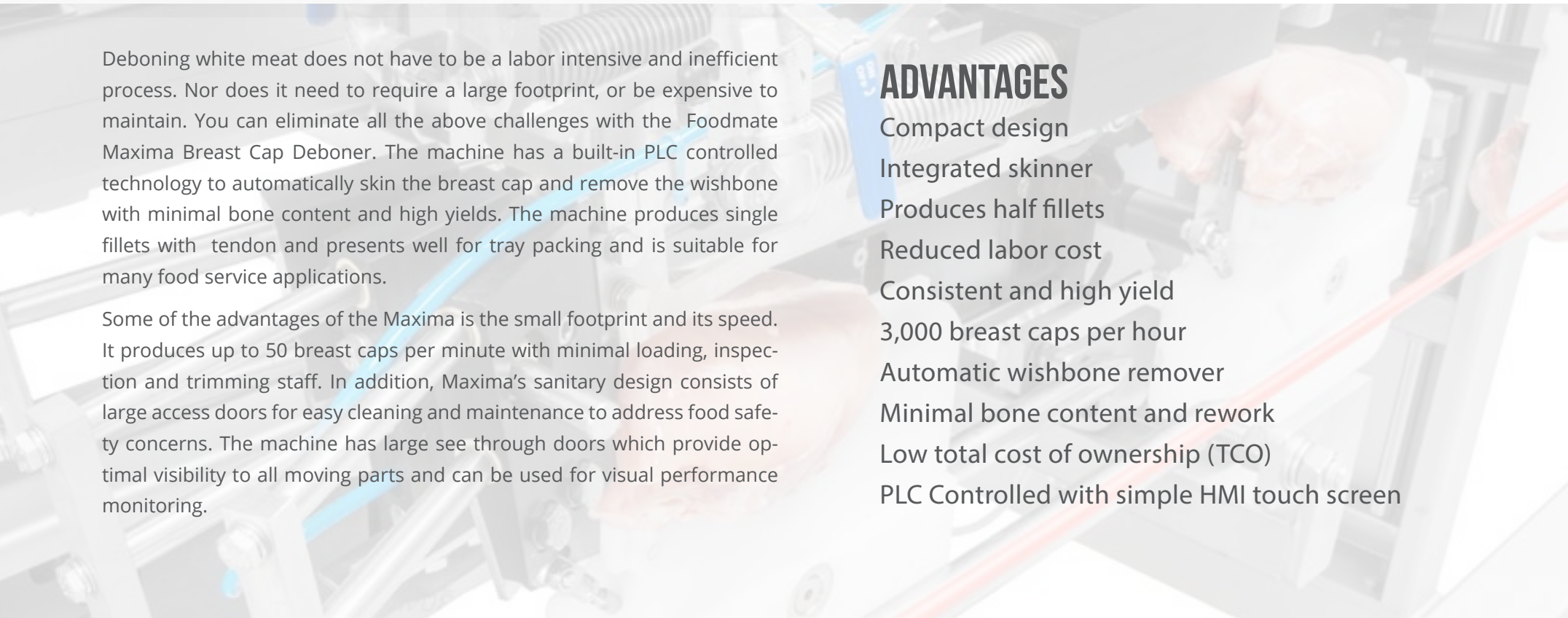
The Maxima Breast Cap Deboner is designed to automatically deskin the breast, and remove the wishbone with minimal bone content and high yields. The Maxima has a small footprint and can produce up to 50 breast caps per minute with minimal loading, inspection and trimming staff.

The Maxima's sanitary design consists of large access doors for easy cleaning and maintenance to address food safety concerns. The machine has large see through doors which provide optimal internal visibility to all moving parts and visual performance monitoring.



Maxima LT 1,400 - 2,300 bph

The Maxima LT is suitable for breasts without backbone, with or without skin. It is composed of stainless steel and food approved nylon, and has a stainless steel frame and motors.



Deboning white meat does not have to be a labor intensive and inefficient process. Nor does it need to require a large footprint, or be expensive to maintain. You can eliminate all the above challenges with the Foodmate Maxima Breast Cap Deboner. The machine has a built-in PLC controlled technology to automatically skin the breast cap and remove the wishbone with minimal bone content and high yields. The machine produces single fillets with tendon and presents well for tray packing and is suitable for many food service applications.

Some of the advantages of the Maxima is the small footprint and its speed. It produces up to 50 breast caps per minute with minimal loading, inspection and trimming staff. In addition, Maxima's sanitary design consists of large access doors for easy cleaning and maintenance to address food safety concerns. The machine has large see through doors which provide optimal visibility to all moving parts and can be used for visual performance monitoring.

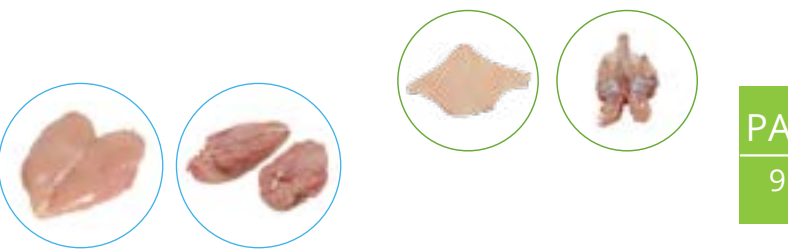
ADVANTAGES

- Compact design
- Integrated skinner
- Produces half fillets
- Reduced labor cost
- Consistent and high yield
- 3,000 breast caps per hour
- Automatic wishbone remover
- Minimal bone content and rework
- Low total cost of ownership (TCO)
- PLC Controlled with simple HMI touch screen



FM 7.50 3,000 bph

The Foodmate FM 7.50 breast cap deboning machine debones up to 3,000 breast caps per hour. The machine produces single, as well as butterfly fillets and features an automatic skinning and blister remover device. The breast cap deboner is easy to operate and can be loaded manually by one or two workers. Its design allows for adding a transport belt under the machine. The FM 7.50 requires minimal floor space and is easily moved. Constructed with stainless steel and food approved nylons for hygiene, Foodmate has taken the additional steps of equipping the FM 7.50 with stainless steel wash down motors.



DARK MEAT DEBONING SOLUTION

NEW OPTI THIGH DEBONER
WITH KNEECAP REMOVER (KCR)

Now existing and new customers can achieve an even faster return on investment with the recently developed Kneecap Remover (KCR).

Foodmate developed the KCR to provide a solution to help address staffing issues with the trimming of cartilage that stays on the meat after deboning. Due to an increasingly tight labor market, it is becoming more and more difficult to staff the trim tables and control the performance of each individual trimmer.

The Foodmate OPTI Thigh deboner has been developed to address problems commonly found in both manual and automated thigh deboning operations.

The innovative scraper design and tendon cutting system give the meat a hand cut appearance without shattering the bones. Adding the automated KCR does not impact meat quality and yields are very similar or sometimes even better than operations that manually trim.

The KCR can be installed on existing machines or it can be integrated into a new machine. The KCR is located underneath the meat scrapers and is cam and gear operated. Each meat scraper has a circular blade that comes from underneath the thigh bone to cut the tendons around the knee joint. After the tendons are cut, the meat scraper pulls the meat off the bone while leaving the kneecap attached to the bone.



Final Product
High yield, hand cut appearance without shattering the bones.

175 OPTI THIGH DEBONERS
SOLD WORLDWIDE

Since the official introduction of the OPTI Thigh Deboner in 2011, Foodmate has successfully installed over 175 machines worldwide. Customers in the US, Canada, Korea, Australia, France, Poland, Turkey, Russia, Brazil and several other countries are realizing significant yield improvements and labor savings as well as seeing improved thigh meat quality and increased shelf life.

Already have an installed OPTI Thigh Deboner at your plant?
ASK US HOW TO ADD THIS MONEY SAVING MODULE TO YOUR EXISTING MACHINE.

KNEECAP?
WHAT KNEECAP?!

Our widely used OPTI Thigh Deboner can now be equipped with an automatic Kneecap Remover (KCR). This new module provides a cartilage free* end-product resulting in less trimming.



OPTIMAL YIELDS. DELIVERED. WORLDWIDE!

100 THIGHS PER MINUTE

ADVANTAGES

- INTEGRATED KNEECAP REMOVER TO HELP MINIMIZE TRIMMING
- PROVIDES HAND CUT MEAT APPEARANCE WITH OYSTER ATTACHED
- VERY SIMPLE AND ACCESSIBLE DESIGN TO MAINTAIN EQUIPMENT
- REQUIRES ONLY 15 BLADES FOR KNEECAP REMOVER
- HIGH YIELDS WHEN OPERATED CORRECTLY
- ELIMINATES BONE SHATTERING
- INTEGRATED SKINNER

* Results are based on supplying A Grade product to equipment.

OPTI LTD WHOLE LEG, THIGH AND DRUMSTICK DEBONING SYSTEM

The newly updated OPTI-LTD Dark Meat Deboning System is a flexible, total dark meat deboning solution that produces high-yield, superior quality meat efficiently and cost effectively.

Capable of deboning 100 skinless or skin-on anatomical whole legs, thighs and drumsticks per minute, this system is so flexible that no additional parts or changes are required when switching between the various dark meat deboned products.

EXCEPTIONAL YIELDS,
NO BONES ABOUT IT.



DARK MEAT DEBONING SOLUTIONS TOTAL DARK MEAT DEBONING SOLUTION

SUCCESS STORY WHAT OUR CUSTOMERS ARE SAYING

CUSTOMER

Alatrade Foods, Boaz, AL



FOODMATE EQUIPMENT

OPTI LTD Whole Leg Deboner (1)

SCOPE

Alatrade, a Davis Lee Company, in Boaz, AL, employs 400 people. The plant operates two shifts and produces over 1.2 million pounds of boneless whole leg meat per week. Until the implementation of the Foodmate OPTI Whole Leg Deboner, about a year ago, production consisted of manual stations only. "We incorporated the Foodmate system into our production because the complexity of our staffing needs created a challenge to meet the demand of our customers. As we were not able to staff our plant as needed, the decision to purchase the Foodmate whole leg deboner was made in order to fill that gap", said James Blake, plant manager, " ... and the system has not disappointed us.", continued Blake.

The plant was operating 4 manual lines consisting of stationary hand deboning with 96 staffed positions in total or 24 per line. With the Foodmate whole leg deboner, only 13 people are required to run the machine and 2 additional people to operate the Skinner. "The Skinner has proven to be an integral part of the machine's success, as leg quality going in the machine is very important to final product quality. Having the Foodmate team assisting us with proper operational training and maintenance played a huge part in our success," stated Blake.

FOODMATE SOLUTION AND END RESULTS

Alatrade's main goal was to reduce staff and improve yields. Foodmate sales and support teams arranged for several machine tests and a visit to a plant operating the OPTI LTD Whole Leg Deboner; and after extensive reviews, the Alatrade team felt comfortable that the implementation of the system would fulfill their goals. After one year in operation, the company reports successful results: "The OPTI Whole Leg Deboner runs an average 92-95 legs a minute, requiring a total staffing of 15 people to run the line, which is about 10 less than previously required with manual deboning", stated Blake. "The plant has also seen great yield improvement. Overall yield - including both manual and automated - has improved about 0.75 - 1%, keeping in mind that only 1 of 4 lines are automated. One of my favorite features of this machine is the way it cleans the bone - the technology is impressive," added Blake.

The company attributes the consistent success of this system to their commitment to protocol adherence. The Alatrade team follows all routine recommended checks and preventive maintenance procedures suggested by Foodmate on a weekly basis. The Foodmate service and support teams work closely with Alatrade and have implemented a very successful plan including a Foodmate technician visiting the plant quarterly. Additionally, Foodmate has provided Alatrade with a week of hands on training at the Foodmate Inpiration Center, in Ball Ground, GA.

The main advantages that the Foodmate OPTI Whole Leg Deboner has brought to our plant are labor savings, yield value and improved quality of the product. This machine gives consistent results and we are very satisfied with the system. Its performance is exactly what we expected."

James Blake, Plant Manager

CUSTOMER

Gerber Poultry, Kidron, OH



FOODMATE EQUIPMENT

OPTI LTD Whole Leg Deboner (1) | OPTI Leg Processor (1)

SCOPE

Gerber Poultry in Kidron, OH, runs a two shifts operation with target live weight of 5.2lbs. Before the equipment was purchased, the client visited the Foodmate Inspiration Center located in Ball Ground, GA and performed yield tests on the OPTI Leg Processor and Whole Leg Deboner System. Testing proved that their plant could improve the labor situation, the overall dark meat yield and throughput. One of the particular requirements for this installation was to maintain the plant's daily operations during the renovation of the building. Foodmate had to be flexible and match the plant's timeframe as they went through the construction and renovation phase.

FOODMATE SOLUTION AND END RESULTS

With the plant continuing its operation as usual, addition to the building was completed, and the installation process was resumed. After a couple of months of successful operations with both the Foodmate OPTI Whole Leg Deboner and OPTI Leg Processor, the plant reported the following results:

- › Pounds per man hour increased from 42 to 52.
- › Cost decrease from \$0.36 per pound to \$0.29 per pound and 15,000 more pounds per day of dark meat produced.
- › Improved labor demand by 25 people including 10 positions were reduced on 1st shift and 15 on 2nd shift.
- › Whole leg meat yields improved from 64% to 69% (final product) and 75-77% pre-trim/machine performance yield.

"We are happy with the flexibility the OPTI Whole Leg Deboner provides and we use it mainly for whole legs but have the ability to run thigh only, which we do daily on the night shift. There is not another whole leg deboner on the market that will do that at this time. The Foodmate whole leg deboner has been a homerun for us."

Becky Rhodes, Vice President Production/Operations

FOODMATE NEW AUTOMATED J-CUTTER MAKES LEG DEBONING EVEN MORE PROFITABLE

One of the most important but also labor intensive processes to debone whole legs is to make the pre-cut (J-cut) along the drum and thigh bone. Making a proper J-cut is a critical step to ensure good yields and high quality boneless leg meat that meets all boneless dark meat requirements. With the Foodmate Automated J-Cut Unit, all the issues with manual J-cutting are addressed making the investment in leg deboning automation even more justifiable and giving it an even faster return on investment.

SIGNIFICANT REDUCTION IN LABOR COST

Not only can the new J-Cut station save up to 4-6 people per shift but it also addresses potentially costly health issues related to manual J-cutting. It also eliminates ongoing and expensive training cost, particularly in plants that have high employee turn-over.

TOTAL FLEXIBILITY

Because every application, situation and plant layout is different, Foodmate has developed both an integrated J-Cut station that is part of the OPTI LTD Whole Leg Deboner and a stand-alone machine that can be integrated into a Foodmate Flex Cut-up System.

Flexibility | This new system is comprised of two separate machines, maximizing system flexibility. One machine removes the drumstick bone from either a whole leg or just a drumstick. While the other machine removes the thigh bone from either the whole leg or just an individual thigh. If orders call for just deboned drumstick or thigh meat then one of the two machines can be bypassed and turned off depending on which product is needed. This significantly saves on wear and tear and reduces maintenance cost.

The machine's exclusive concept and design produces high quality deboned dark meat with minimum trim and inspection required. It removes the meat with low bone content left in the meat, and leaves the pin bone on the drumstick. The innovative scraper design gives the meat a hand-cut appearance and produces extremely high yields.

OPTI LTD's all-mechanical design helps to keep cost of ownership low. The system is very user-friendly, which helps continuous peak performance while keeping downtime to a minimum.

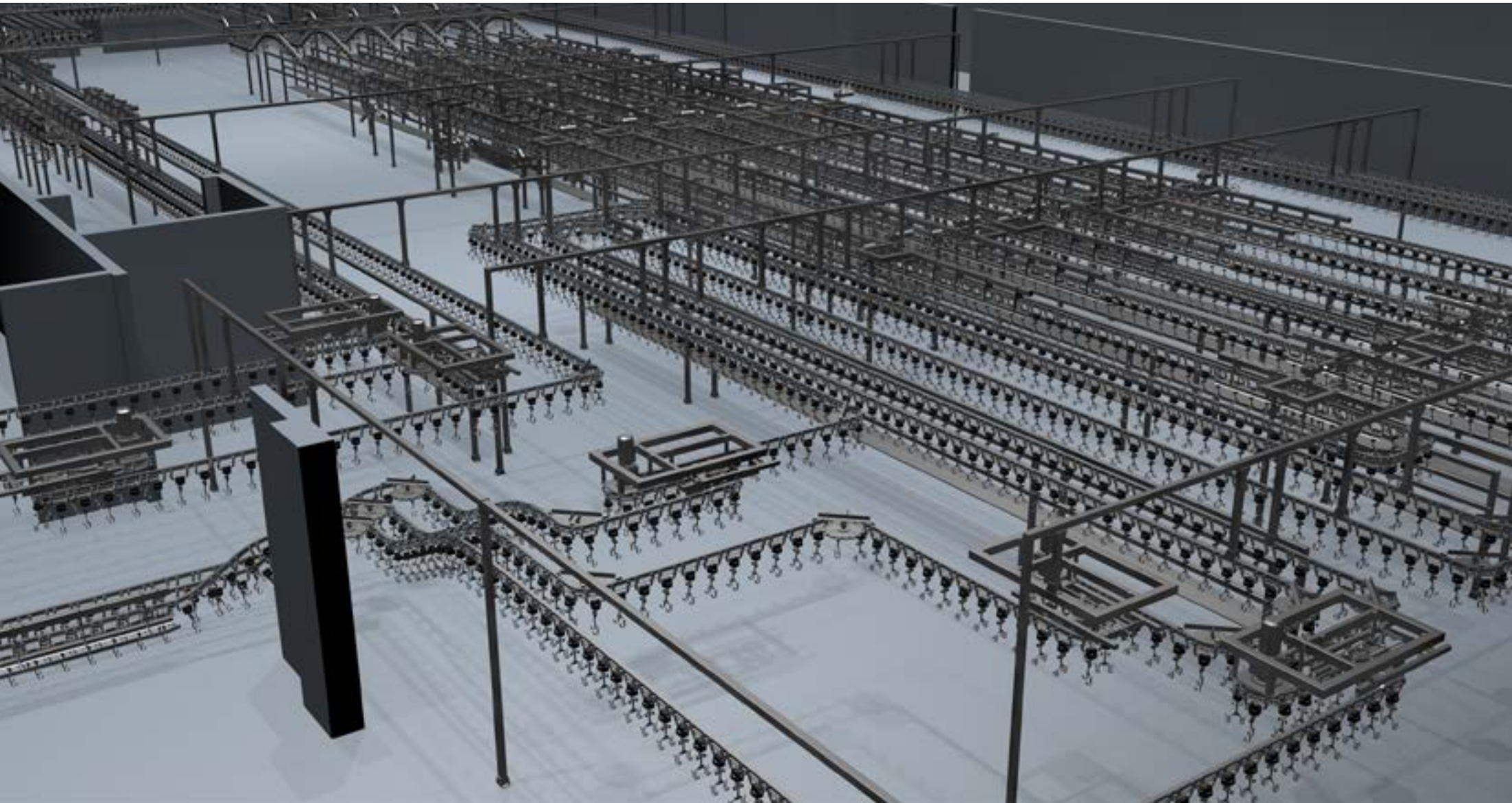


SUCCESS STORY
WHAT OUR CUSTOMERS ARE SAYING

CUT-UP SOLUTIONS

FLEXIBLE AND FRAME CUT-UP SOLUTIONS

Leading Technology in Cut-Up Solutions | Catered to our clients’ specific needs, solutions range from a self-contained frame type cut-up system, to sophisticated computer and vision camera controlled flexible cut-up systems that can deliver product to any desired location inside your cut-up area. Foodmate provides solutions to meet the widest range of products specifications and cutting requirements, meeting the highest standards set by retailers, fast food companies and institutional organizations from around the world.



FLEXIBLE CUT-UP
OPTI FLOW CUT-UP SYSTEM

Foodmate OPTI Flow Cut-up System is one of the market’s most advanced cut-up systems, offering excellent efficiency and flexibility. The OPTI Flow combines the advantage of the optimal solution for whole bird distribution based on grade and weight as well the optimal logistics solution to deliver chicken parts to any desired location inside the plant.

The system can be controlled by advanced ChickSort weighing and InVision Grading Software to help optimize bird utilization based on weight and grade throughout the process effectively by increasing A grade pack out and increasing yield value throughout the entire process. The lines can be configured with bypassable bird unloaders and bypassable cut-up modules.

Modules can be customized according to your plants’ requirements. The system is able to handle all basic cuts, such as wings, breast, whole legs and drum and thighs with a speed of up to 105 birds per minute on 12” centers and up to 140 birds per minute on select cuts on 8” centers.

Foodmate OPTI Flow is a flexible cut-up system, designed to keep maintenance and sanitation to a minimum without compromising performance and quality. One of the unique features is the self correcting magnetic cut-up shackle which prevents shackles from miss-feeding into the cutting modules.



BECAUSE CHICKEN APPRECIATES A CLEAN CUT!

FRAME CUT-UP SYSTEMS

Frame Cut-up Systems are characterized by its self-contained structure with cutting modules and is delivered pre-wired with a control panel that is already mounted to the machine. Frame cut-up systems are easy to install and only requires one power connection. The inline design easily lends itself to connect automatic transfer machines, which are often supplied by distribution lines for optimal cutting results and eliminates the manual hanging process.

All Frame Cut-up Systems are supplied with self-correcting magnetic cut-up shackles to help prevent the shackles from missfeeding when entering the cut-up modules. The unique turning point and side plate configuration makes the machine easy to clean and flexible for future line modifications. The stand-alone system requires minimal installation time because all the single point connections are integrated into the modules/machines.

Frame Cut-up Systems can be used for Food Service applications and for Traditional Cut-up applications.



COMPACT AND FOOD SERVICE CUT-UP SYSTEMS

Foodmate Compact Cut-up Systems are available in different configurations, designed to meet mainly traditional product mixes. Some systems are as simple just cutting front halves and cutting leg quarters, while others may include wing segmenting, options such as weighing and whole bird distribution. Line speeds can vary from 105 birds per minute on 12” centers and up to 140 birds per minute on select cuts on 8” centers.



Food Service Cut-up Systems are designed to meet all 8 and 9-piece cutting requirements set by various fast food chains such as KFC, Popeyes, Church’s Chicken and Bo-jangles’. This system can also be designed and customized to meet other food service cut-up requirements, from different countries around the world, such as Korea and Thailand. Foodmate has also supplied lines to make 4 and 6- piece bone-in breast cuts as well as 3 piece thigh cuts for school lunch programs in the U.S.



105 BIRDS PER MINUTE

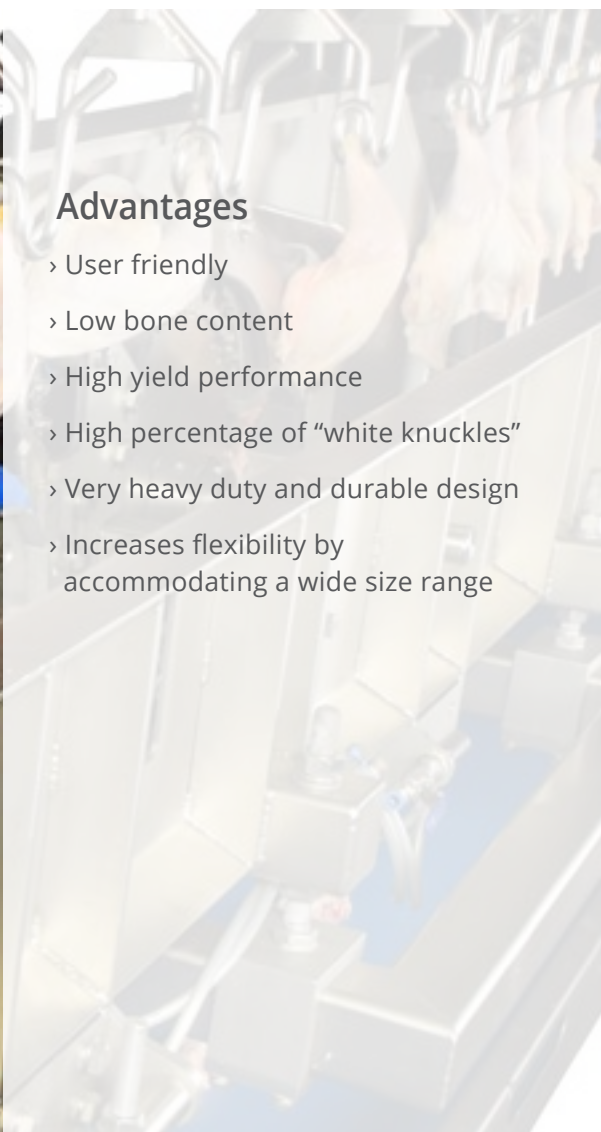
OPTI LEG PROCESSOR

Foodmate has developed a new OPTI Leg Processor to maximize bone-in and boneless dark meat yields. The machine gives a high yield anatomical cut and good meat and skin presentation. The new design is user friendly and provides low maintenance cost, as it has no springs or air cylinders. In addition, height is easily adjustable, which simplifies the process of accommodating different bird sizes. The machine was developed in the U.S., and though initially designed to address specific demands of the US market, this new version has proven to bring overall greater performance, benefiting costumers around the world. The OPTI Leg Processor can be installed in either a new Foodmate Cut-up System or it can easily be integrated into existing frame or flex type cut-up system.



Advantages

- › User friendly
- › Low bone content
- › High yield performance
- › High percentage of “white knuckles”
- › Very heavy duty and durable design
- › Increases flexibility by accommodating a wide size range



HIGH FLEXIBILITY

The leg processor can accommodate a wide size range while maintaining a high percentage of “white knuckles” and minimal bone content with minimal to no adjustments. The OPTI Leg Processor can be adjusted to accommodate the so called “big birds” or large chickens.

The OPTI Leg Processor can run up to 105 BPM. In addition, final product is consistent, with good meat and skin presentation. The OPTI Leg Processor delivers improved cut quality and yield performance as a standalone machine or when supplying product to the Foodmate Dark Meat Deboning System.

Final Product

The leg processor accommodates a wide size range while maintaining a high percentage of “white knuckles” and minimal bone content.



WING CUTTER SUPER CUT

Foodmate developed a new high yield wing cutter to better handle large birds, birds with a missing wing, and damaged birds. The machine has a very open design to allow birds with one wing, or damaged birds to easily pass through the machine without clogging the machine and stopping the line. The machine creates an anatomical cut with the option to optimize wing yield by leaving the back meat on the wing.

While designing the machine, a lot of focus was put on making the machine easily adjustable; which resulted in the ability to move the blades in or out for optimal yield and cutting results. An electric up/down is a standard feature on this machine. Customers that do not have a Foodmate cut-up system can also benefit from this machine since it can easily be installed on existing lines.



Advantages

- › Optional bypass
- › Consistent and anatomical cuts
- › Accomodates birds with one wing
- › Suitable for big and small birds
- › Leaves minimum breast meat and maximum back meat
- › Handles damaged birds without clogging the machine and stopping line



Final Product | Wing with or without scapula meat

SUCCESS STORY

FOSTER FARMS

CUSTOMER

Foster Farms, Livingston, CA

FOODMATE EQUIPMENT

OPTI Flow Cut-up System with Production & Distribution Systems (6)

SCOPE

In 2016, Foodmate delivered and installed one of the largest cut-up, grading and whole bird distribution systems installed by an American Processor. The entire project consisted of six (6) OPTI Flow Flex Cut-up lines comprised of 1.2 miles of overhead conveyor and 6,200 cut-up shackles. The system can process a stunning 37,800 birds per hour.

The Foster Farms Livingston, CA plant was in need of a solution to automate and improve their whole bird grading process since a large percentage of their production goes to Deli WOG pack out. In addition, Foster Farms also wanted a solution to increase A grade cuts, reduce labor through double handling and rework as well as handle multiple product cuts simultaneously.

"We were looking for a system to replace our old cut-up system and add production and distribution controls such as weighing and vision grading to optimize bird utilization based on weight and grade and to effectively increase A grade pack out and yield value throughout the entire process. After close evaluation of various suppliers and our engineering teams working closely together, it became evident that the Foodmate OPTI Flow Cut-up and Distribution System offered the best overall solution, based on value, space requirements and performance", stated Chris Carter, Foster Farms VP of Operations.

The capacity of the system had to be able to accommodate 635 birds per minute. Final product mix varied and needed to be flexible with options including graded whole birds for Deli WOG's, front halves with wings on, segmented wings, whole wings, split back out breast, whole back out breast, leg quarters, back in and back out thighs and drum sticks. The other requirement was that the system should be able to run all products at the same time while feeding a centralized tray pack operation with WOGs being supplied from two separate kill plants.

FOODMATE SOLUTION AND END RESULTS

The installation occurred during a two-week shutdown, the old system had to be removed and the area had to be cleaned before the Foodmate install team could start the installation and commissioning process. Foodmate brought an extensive crew of engineers, project managers, service technicians, electricians and installers to ensure this massive project would be finished on time for start up.

"Foodmate is proud to have earned the trust to be awarded such a large project. It was a major undertaking for both companies and the only reason we were able to make it such a success is because it was truly a joint effort between Foodmate and the Foster Farms engineering team, Terry Scroggins, David Hughes and Kevin Willet – all were instrumental for the implementation and success of this project" said Scott Hazenbroek, Foodmate President.

"We have continued to see substantial improvement in grading quality, A grade cuts and overall efficiency and yield. Since the startup of the Livingston project, we have also installed three (3) Foodmate OPTI Flow Cut-up Systems in Belgravia, CA, and in April 2017, we will be installing three (3) more Foodmate lines at our plant in Farmerville, LA" stated Chris Carter.

IT JUST RUNS!



FOSTER FARMS

Roots That Run Deep

In 1939, a young couple named Max and Verda Foster started Foster Farms by borrowing \$1,000 against a life insurance policy. They invested in an 80-acre farm near Modesto, California, and began raising turkeys.

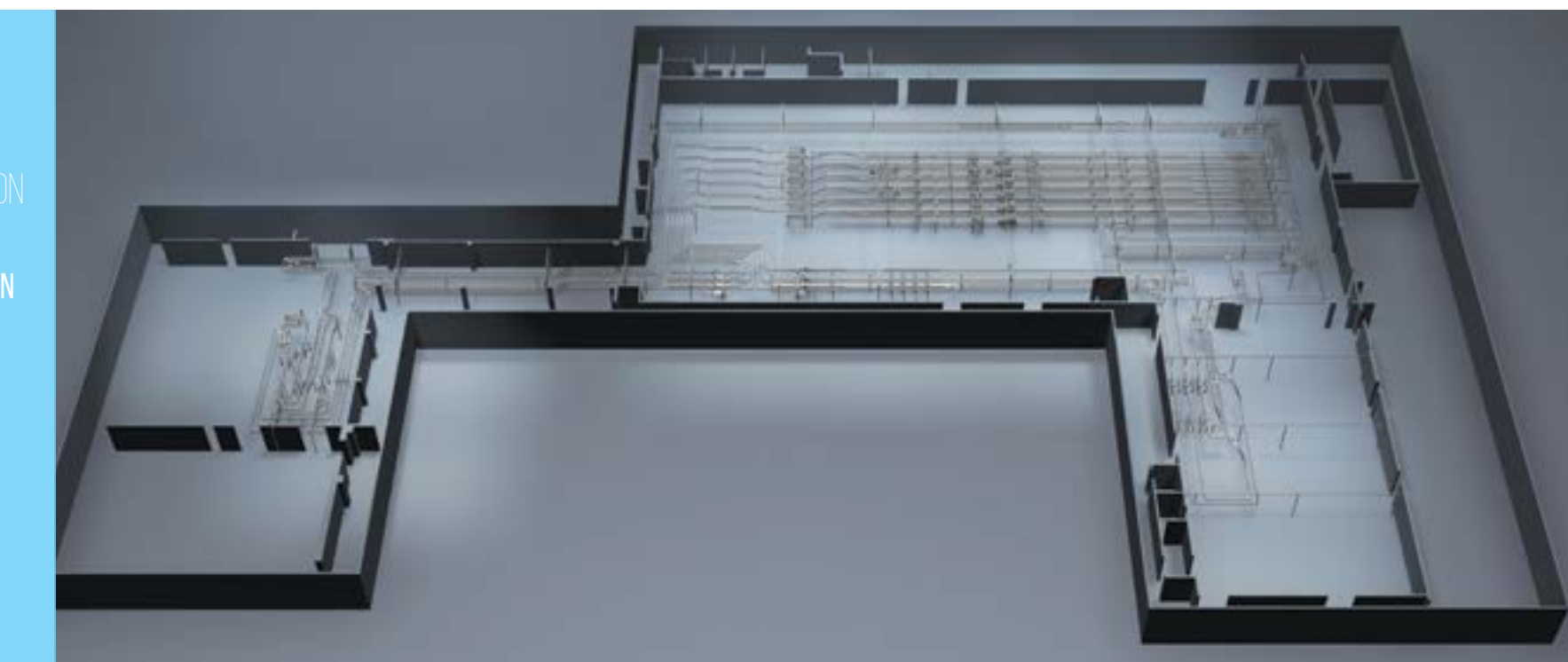
In the beginning, Max worked as an editor at the Modesto Bee, a local newspaper, to help support their young business, while Verda concentrated on raising healthy chicks. The original hatchery was built right off their bedroom because the eggs required round-the-clock care. Verda would set a timer to alert her day and night when it was time to gently rotate the eggs. A feed silo soon followed. The back porch of the Foster's home became Max's office, and business was mostly done with a handshake. Over the coming decades, Max and Verda's sons George, Paul and Tom followed them into the business, expanding it along the way, building new facilities and adding new product lines, but always remaining true to the spirit of their parents. Today, Foster Farms remains a family-owned, family-managed company.

In 2014, Foster Farms celebrated its 75th anniversary on the very farm where Max and Verda first began all those long years ago. Foster Farms' processing plants are a critical part of our dedication to producing the highest-quality, safest poultry products. They are among the most modern and technologically advanced processing operations in the nation.

FOSTER FARMS, LIVINGSTON

LARGEST CUT-UP INSTALLATION
IN THE U.S.

SIX OPTI FLOW CUT-UP LINES



1.2 MILES OF OVERHEAD CHAIN
6,200 CUT-UP SHACKLES

6 OPTI FLOW CUT-UP LINES
37,800 BIRDS PER HOUR

58 UNLOADERS
21 THIGH-DRUMSTICK CUTTERS
12 VISION CAMERAS
6 OPTI LEG PROCESSORS, BREAST PROCESSORS
FH CROSS-CUT HALVERS, WING STRETCHERS
AND WING CUTTERS SUPER CUT

1 SATISFIED CUSTOMER!

FOODMATE
ADDED-VALUE SERVICES

The Foodmate Academy opened its doors in May 2015 and has since hosted 23 individual two or five-day training classes, with approximately 140 participants in nearly 60 training days. Foodmate's training program, Foodmate Academy, has been a well received success. So much so that in February 2017, the company is expanding its Inspi-rience Center (a testing and demo room facility which holds hands-on training on our systems) to a 5,000 sf. climate controlled room in the compa-ny's new 50,000 sf. headquarters in Ball Ground, Georgia. The Inspi-rience Center is also equipped to accommodate pre-sales test run on customers' specific products.

In 2015, Scott Hazenbroek, the owner and found-er of Foodmate US, envisioned having an active training program and training facility at Foodmate, and appointed a team of poultry industry veterans to create a training environment to get the best performance from the equipment. The team was spearheaded by Todd Graff, Paul Breure and Sil-vana Paterno who have worked together to create

content and learning material to ensure a great training experience for the customer.

"When we install new equipment in a customer's plant, we sometimes see their production and technical teams are overwhelmed with new auto-mation. In addition, they have a short time to learn how to operate the equipment. By training them in advance, downtime is reduced, and allows the customer to have optimal yield with the highest quality, and an efficient operation from the start." said Scott Hazenbroek, President of Foodmate US.

In 2015, most classes were geared to the dark meat deboning, covering the Opti Thigh, Opti Drum, and OPTI-LTD Whole Leg Deoning Systems. In 2016 training was expanded to include Cut-up Systems, Weighing & Vision, and white meat deboning systems.

Training can also be arranged for recent installs, assisting with post-sales transition and ensuring ultimate post-purchase return on investment.

SUCCESS STORY

WHAT OUR CUSTOMERS ARE SAYING



Foodmate and Perdue Farms have always enjoyed a mutually beneficial relationship as a customer and OEM, however in more recent years that rela-tionship has continued to grow with the addition of service contracts or as Foodmate refers to it: Asset Integrity Program (AIP).

The AIP is in place at all the Perdue deboning facil-ities and is supported by a single point of contact, our Customer Asset Manager (CAM). In addition to the AIP and CAM, both companies participate in a collaborative conference call on a regular ba-sis to review schedules, equipment performance, opportunities, and successes. The program is also supported by the Foodmate Academy offering regular training programs onsite and offsite.

Dean Walston, Director of Operations said, "The entire program has allowed both Foodmate and Per-due Farms to remain leaders in their respective mar-kets by continuously challenging each other to find creative solutions to an ever-changing market."

KEY FIGURES

- › Foodmate has trained over 50 Perdue Farms associates in our Ball Ground, GA. facility
- › Completed well over 55 quarterly rebuilds on 18 individual pieces of equipment
- › Successfully shown that each AIP visit results in positive results in throughput, yield, and quality

"It is always a pleasure to work with Perdue Farms, their team understands that Foodmate is more than an equipment provider; we are a solutions provider."
Todd Graff, VP of Operations, Foodmate US.



LET US "ONTZORG" YOU!

"Ontzorgen" is the Dutch term we use to describe our AIP program. So, what does Ontzorgen mean? Quite literally it means "to Unburden". The ability to "unburden" the plant and protect your investment is our goal. The ability to "unburden" the plant comes with many benefits:

- Continuous and iterative training
- Pre-determined schedule for all visits
- All labor necessary for rebuilds is provided
- Operational excellence in yield, throughput, and quality
- Monthly visits by a dedicated Customer Asset Manager (CAM)
- All rebuild kits are maintained and stocked at Foodmate till just prior to the scheduled rebuild

ASSET INTEGRITY PROGRAM (AIP)

The AIP is a dedicated program which ensures equipment is kept in its best operating condition. By taking advantage of this program, a plant will ultimately see improvement in production, quality and ul-timately more consistent yield. A Foodmate Customer Asset Manag-er (CAM) schedules regular monthly visits to ensure plants have less downtime and increased performance. In addition, regular monitoring and equipment adjustments reduces risk for potential major issues. The CAM also recognizes and makes necessary recommendations for additional parts to be replaced before failure. Foodmate AIP offers added value to the customer through consistent equipment operation and increased levels of personnel performance. "As Foodmate entered the world of Service Agreements, we wanted to think of a different way to approach rebuilds to better support our customers throughout the contract." stated Nathan Carter, Customer Asset Manager (CAM).

SHOW ME THE VALUE OF 8% IMPROVEMENT

Customers have seen much improvement since the inception of this program. One Foodmate customer specifically experienced the ben-efits of the Foodmate AIP where the program brought an 8.0% yield gain. As part of the AIP contract, during the follow up visit a month af-ter re-build, the CAM discovered that the maintenance and operations departments had been able to retain the knowledge gained from the re-build review and apply it to the daily operation of the equipment. They have successfully maintained the same yield percentages.



Get Inspired. Gain Experience. Be Excellent.



"The Foodmate Training Academy sets an industry benchmark on building depth of value and partnership between equipment manufacturers and poultry processors. In a uniquely blended, hands-on approach to establishing foundational knowledge, a dedicated and knowledgeable trainer leads a small cohort of no more than eight individuals through a 2-day training program in an actual classroom that looks and feels like the processing floor, but is designed for collaborative learning. By providing a basic, entry-level program focused on machine concept and fundamentals, along with troubleshooting based on "real life" scenarios, Foodmate has developed an opportunity for team members from a variety of plant responsibilities to come together, run their plant's own product, and better understand the overall process and how each of their duties impacts the reliability of the equipment, and the quality, safety and profitability of the finished product. The Academy is a must for locations who will be installing Foodmate equip-ment, and is highly recommended as a supplement to the regular CAM visits provided through Foodmate's asset service agreement."

Brian Shafer, Maintenance, Pilgrim's Timberville, VA



FOODMATE HAS REDEFINED THE TRADITIONAL SERVICE CONTRACT AS THE ASSET INTEGRITY PROGRAM (AIP)

FEATURE	TRADITIONAL SERVICE CONTRACT	FOODMATE AIP PROGRAM
LABOR	Labor provided for supervision of rebuilds only	Labor provided to complete all rebuilds
MONTHLY VISITS BETWEEN REBUILDS	Not available	Dedicated Customer Asset Manager (CAM) - makes monthly visits between rebuilds
PARTS	Complex parts schemes based on outdated models	Simple rebuild schemes with the intent that the plant can take ownership of process
PERFORMANCE	Generally not available	Foodmate documents and shares the increased performance from all rebuilds and CAM visits
CONTINUOUS TRAINING	Usually at an extra charge	Every opportunity the CAM visits (monthly) is a training opportunity for operators and maintenance.
SPARE PARTS MONITORING	Generally not part of contract	The CAM will review spare parts in stock and advise facility
REBUILD KITS	Sent to plant ahead of time	Stocked at Foodmate US to ensure parts are not pulled by plant for other purposes

WHAT IS 8% WORTH ON ONE OPTI-THIGH?

AVG. THIGH WT.	YIELD	DARK MEAT PRICE/KG.	SCRAPE TEST DIFFERENCE BEFORE/ AFTER REBUILD	ADDITIONAL MEAT	ADDITIONAL MEAT/WK.	ADDITIONAL MEAT/YR.
226 gr.	71%	€ 1,40	8%	12.8 gr.	6129 kg or € 8581	318.708 kg or € 446.212

The AIP contract with CAM visits gives the facility the following bene-fits: Proven PM schemes, anticipated equipment maintenance bud-gets, best industry practices, objective performance monitoring, con-tinuous training to combat turn-over, and personalized attention to their process = Ontzorgen!

THE STRENGTH OF FOODMATE & CHICKSORT PRODUCTION AND DISTRIBUTION CONTROL SOLUTIONS

Allows processors achieve a high level of control and information without having to buy a complete new packing room. Systems can be integrated with any existing line equipment.
And now this advanced solution boosts a new operating system, ChickSort 3 (CS3).

PRODUCTION CONTROL AND GRADING PRODUCTION AND DISTRIBUTION SOLUTIONS

CHICKSORT 3 (CS3)

The new control system has been designed from the ground up to take advantage of Foodmate’s advanced, automated cut-up equipment. With a closer relationship between the ChickSort control system software and Foodmate hardware, ChickSort3 will scale itself according to the capabilities of the installed equipment.



Foodmate and its partner ChickSort have developed various production control, grading and distribution solutions that grade poultry products based on various weight and quality criteria. ChickSort, uses an exclusive algorithm to allow for last millisecond decisions to be made, failed selections can easily and automatically be re-routed to any downstream selection point. Automatic band widening allows the product specification to be relaxed if the required rate is not being reached. Advanced batch control may be filled simultaneously and may be controlled automatically, manually or interfaced with external hardware. Product can be distributed between drops or competing product requirements using user-selectable criteria. Systems include fail-over features and redundant hardware support facilitating advanced diagnostics while simultaneously minimizing disruption, ensuring that line sensor faults have no impact on production.

These advanced grading and weighing solutions are comprised of various technologies such as the InVision Grading; In-Line Weighing or by incorporating the Foodmate Weigh Transfer System (WTS) with ChickSort weighing controls. To optimize the grading and weighing process it is possible to install both an InVision Grading Solution in combination with one of the various other weighing solutions Foodmate offers.

INVISION DETECTION PARAMETERS:

- | | |
|--------------------|---------------------------|
| Skin flaws/Barking | Bile Stain |
| Single Leg Hang | Bruises |
| Physical Size | Feathers |
| Broken wings | Organs |
| Missing parts | Missing shackle detection |
| Hock length | |
| Hock burn | |

CHICKSORT3 OPERATING SYSTEM (CS3)

Utilizing a simple graphics based user interface ChickSort3 ensures that production control is placed firmly back in the hands of the user.

ChickSort3 ensures that every part of every bird is accounted for. Utilizing an advanced dashboard to display real time process status, management can see at a glance what is being produced where.

By splitting process control into three distinct areas: whole bird; front half; and back half, ChickSort3 permits maximum process flexibility. New users will benefit greatly from ChickSort 3’s advanced process control capabilities. Existing ChickSort users will also value the additional capabilities:

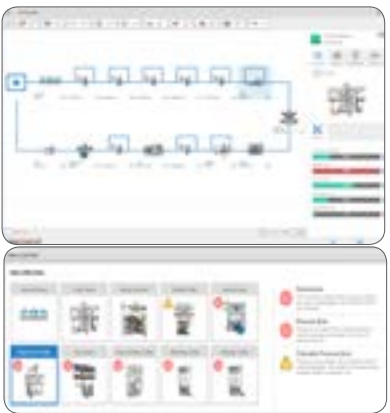
- Advanced dashboard
- Production diagnostics
- Separation of concerns
- Graphical user interface
- Visibility of all production
- Equipment duty cycle metrics
- Simplified automatic rate control



Simple image based user interface

Multiple Independent Recipes

CHICKSORT3 OPERATING SYSTEM (CS3)



ChickSort Line Builder

Intelligent, interactive, graphics based user interface.

- Full equipment metrics indication
- Simple drag and drop functionality
- Full image library of equipment and products
- Interactive warnings to ensure logical process flow

ChickSort Dashboard

Live data, anywhere, anytime.

- KPI's
- Active Recipes
- Alarms| Faults
- Real-Time Production
- Line Speed | Line Utilization
- Weight and Grade Summary
- All Interactive with Drill-Down
- Tablet, iPhone, desktop or factory floor HMI





We make it simple. You make it profitable.

Foodmate brings innovative technology and cost-effective solutions to Poultry Processing Automation



Foodmate B.V.

Röntgenstraat 18 Oud-Beijerland
PO Box 1405 3260 AK Oud-Beijerland
The Netherlands
Phone: +31-186630240
info@foodmate.nl | foodmate.nl

Foodmate US

221 Turner Blvd.
Ball Ground, Georgia 30107
U.S.A.
Phone: +1 678-819-5270
info@foodmateusa.com | foodmateus.com

Foodmate Brasil

Av. Albino J.B. de Oliveira 918 cj 11
Campinas, Sao Paulo - Brasil
Phone: +55 19 981744408
foodmatebrasil@foodmate.br.com
foodmate.nl