



Project Scopes & Case Studies



FUSION TECH

CUSTOM DESIGNED FOOD PROCESSING SYSTEMS

Food processing systems are our specialty. We have over 15 years of experience designing and fabricating custom plant layout and equipment designs for the biggest names in the industry.

We work together with your team to determine project specifications and add in our mastery of the food processing industry to produce the perfect meat, poultry, bakery, dairy, pet food, and other food processing system for your needs.

By implementing a variety of design and modeling capabilities, including feasibility studies, evaluations, process design, and CIP/controls system design, we can improve production yields and ROI while optimizing your facility to live up to its fullest potential.





INNOVATING FOOD PROCESSING

At Fusion Tech Integrated, we partner with companies in the food processing industry to provide innovative solutions to increase production and sales while decreasing costs for maximum profitability. Whether you're expanding a processing plant or introducing a new product to the market, we have the expertise to design, fabricate, and install everything you need to get up and running – and we'll do it on time.



CORE EXPERTISE

Design / Engineering

1	Custom Equipment Design
1	Facility Layout

Manufacturing / Installation

1	Custom Equipment Fabrication
1	Equipment Installation

Processing

1	Ovens / Smokehouses / Dehydrators
1	Steam Cabinets
1	Slicing / Cutting
1	Tanks / Storage
2	Heat Exchangers

Automation & Control

2	Optimize Process Performance
2	Maximize Throughout
2	Improve Quality & Yield
2	Systems Integration
2	Line Integration

Safety / Ergonomics

1	Ergonomic Stands
1	Guarding / Bollards
1	Lifts
1	Anti-Slip Coating

Material Handling

1	Conveyors
1	Conveyor Belting
2	Product Manipulation
1	System Design
1	Line Integration
1	Dumpers / Tippers
1	Carts / Racks / Trays

EQUIPMENT EXPERTISE

CUSTOM EQUIPMENT

CLEAN ROOMS

Apron/Equipment Hangers
Boot & Apron Wash
Drain Hose Spray Nozzle
Equipment Wash
Sinks

CONVEYORS

EZ Clean Conveyor Design
Food Grade
RTE
Boxed / Boxing
Modular
Endless
Accumulating
Bucket
Converging & Dividing
Drag Chain
Drums
Indexing
Pack-Off
Roller
Screw / Auger
Sortation

CUTTING / SLICING

Deboning Tables
Saws
Shredders
Slashers
Slicers / Dicers
Splitters
Skinning Support
Auto Skinner Carts
Whizard Knife Brackets
Trimming

ERGONOMIC EQUIPMENT

Ergonomic Stands
Pallet Lifts
Platform Lifts
Smokehouse Cart Lifts

MATERIAL HANDLING

Dumpers
Hoppers
Tippers

MIXERS / BLENDERS

Blenders
Mixers
Tumblers

POWER PACKS

PRESSES

Belly Press
Belly Roller
Meat Press

SUPPORTING EQUIPMENT

Bins
Carts & Racks
Gambrels
Hangers
Hooks
Knife Holders
Tables
Trays
Vats

TANKS / PRESSURE VESSELS

Portable Tanks
Pressure Vessels
Stainless Steel Tanks
Troughs
Wastewater Tanks

THERMAL PROCESSING

Dehydrators
Smokehouses
Steam Ovens
Blast Chillers
Oven Rebuilds
Fermentation Rooms
Control Upgrades
Consultation

INFRASTRUCTURE

ANTI-SLIP COATING

DRAINS

Drain Baskets
Drain Grates
Floor Drains
Trench Drains

DUCT WORK

GRATING

GUARDING

Bollards
Door Guarding
Equipment Guarding
Wall Guarding

PLATFORMS

Cross-Overs
Exterior Egress Stairways
Handrails
Interior Stairways
Ladders
Personnel Catwalks
Utility Mezzanines

SINKS

Multi Station Sinks
Single Station Sinks

FUSION TECH

CASE STUDIES

Fusion Tech has been helping food processing companies improve production yields, employee safety, and food safety, all while optimizing their facility to live up to its fullest potential for over 15 years.

We accomplish this by working with a company's engineering, maintenance, production, safety, and sanitation departments to determine their operational and industry specifications, and use that information to develop product flow layouts and equipment designs.

The results speak for themselves.

View more case studies online at www.ftiinc.org/case-studies.



PET FOOD

NESTLE PURINA

HYRDOFLEX PLATFORMS

Nestle Purina, a manufacturer of pet food, came to us needing multi-level access platforms for their CG254 Hydroflex.

The project required demoing existing platforms, designing new multi-level platforms, and installing the platforms in the facility.

Upon meeting with the client and visiting the facility, our team demoed, designed, fabricated, and installed a 5-floor access platform.

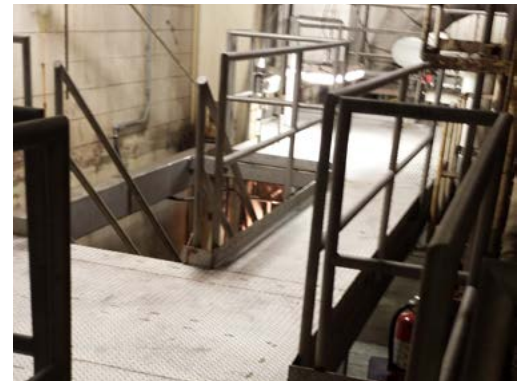
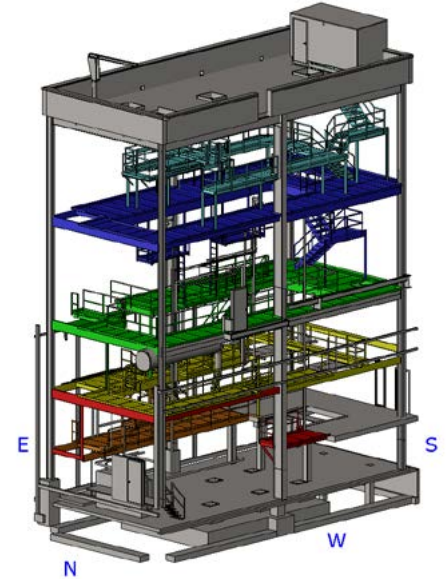
- Increased Employee Safety
- Increased Ease of Access

Nestle Purina saw a marked increase in OSHA compliance and employee safety with the multi-level platforms we designed, fabricated, and installed into their facility.

Project Scope

This project included:

- Demo existitng platforms
- Catwalks
- Platforms
- Stairs
- Ladders
- Ladder gates
- Deck pans
- Handrails



NOTABLE MENTIONS

- Design & Modelling
- Custom Platforms
- Demo & Installation



PREMIUM PET HEALTH

PET FOOD PLANT START-UP

Premium Pet Health, a manufacturer of pet food, came to us needing their new pet food manufacturing facility outfitted with platforms and equipment to bring it online.

The project required demoing existing equipment and utilities and designing the new floor and product flow used in the facility.

Upon meeting with the client and visiting the facility, our team demoed existing equipment and utilities, laid out floor and product flow, designed, fabricated, and installed equipment, platforms, and utilities to bring operations online.

- Designed Product Flow

- Installed Utilities

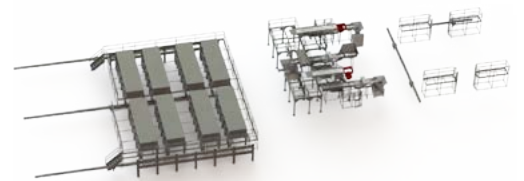
- Met Product Processing Goals

The pet food manufacturing facility layouts met all Premium Pet Health's production and operational goals determined at the beginning of the project.

Project Scope

This project included:

- Demo of current facility
- Plant layout
- Catwalks
- Piping & tubing
- Conveyors
- Tables
- Stands
- Bagging system
- Rack Lift
- Boxing line
- Blending
- Rotary fill system
- Grease pump out system
- Installed dehydrators



NOTABLE MENTIONS

- Custom Equipment Design
- Plant Layout & Build
- Demo & Installation



The image features a solid red background. In the center, the word "BEEF" is written in a bold, white, sans-serif font. Behind the text is a faint, circular, darker red shadow. Surrounding the central text are several thin, light red, overlapping circles of varying sizes, creating a complex, abstract pattern that resembles a stylized flower or a molecular structure.

BEEF

BEEF PRODUCTS INC

STEAK ROOM

Beef Products Incorporated, a provider of lean beef products, came to us needing a new process to enhance, bag, sort, freeze, accumulate, and palletize select cuts of meat.

The project required the use of a robotic palletizing line, as well as developing an accumulation system to allow the operation to keep running.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a complete, automated system that exceeded their needs.

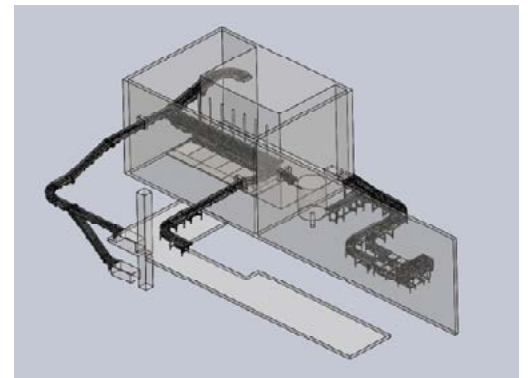
- Increased Product Output
- Decreased Processing Time
- Decreased Operating Expenses

Beef Products saw a marked decrease in the time and resources needed to bag, sort, freeze, and palletize their steak product.

Project Scope

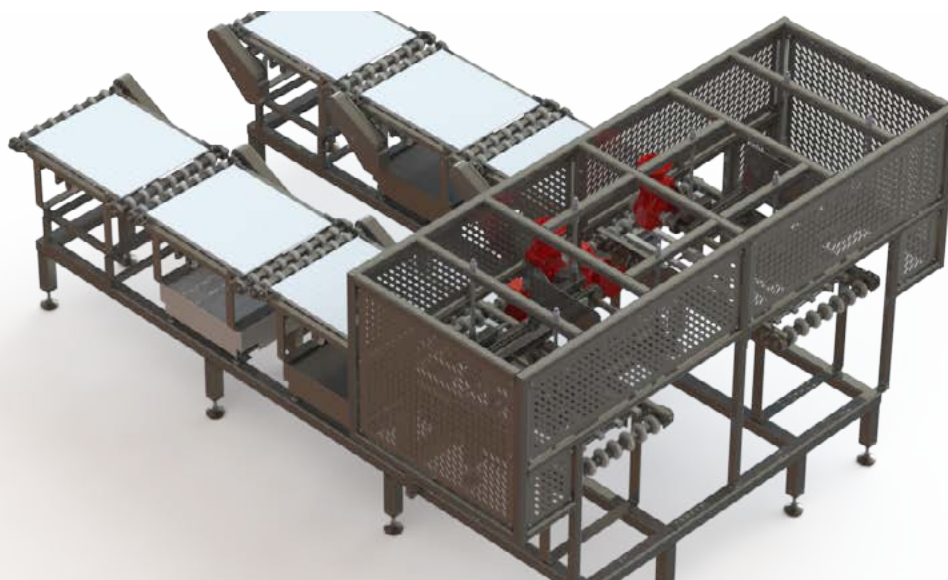
This project included:

- Model entire floor of plant
- Integration into other equipment
- Conveyors - Empty box, full box, raw materials
- Metal Detection Conveyors
- Scale Conveyors
- Reject Conveyors
- Intralox ARB Conveyors
- Baggers and bag sealers
- Ergonomic Stands
- Catwalks
- In-motion scaling
- Product classification by weight
- Product print and apply system
- Rebuilding of spiral freezer
- Pack off stations
- Accumulation conveyors
- Robotic palletizing line



NOTABLE MENTIONS

- Robotic Palletizing Line
- Intralox ARB Belting
- Accumulation System
- Print Head System
- Product Flow Design



BIRCHWOOD FOODS

TEMPERED BLOCK SYSTEM

Birchwood Foods, a provider of fresh and frozen, raw and fully cooked beef, pork, and poultry products came to us needing a new process to break apart and treat frozen beef trim blocks.

The system they were using involved moving product around to multiple facilities and required 2 shifts and 22 employees to meet production demands.

Upon meeting with the client and visiting the plant, our team designed, fabricated, and installed a complete system to take their boxed product from a microwave to a treating system.

Fusion Tech's solution increased product output and decreased processing time from a 2-shift operation manned by 22 people to a 1-shift operation manned by 7 people.

- Increased Product Output
- Decreased Processing Time
- Decreased Operating Expenses

Birchwood saw such a marked difference in their processing operation, that they purchased more systems to optimize their entire operation.

NOTABLE MENTIONS

- Custom Equipment Design
- Manual Box Tipper
- Conveyors to Turn Boxes
- Ergonomic & Safety Solutions

Project Scope

This project included:

- Model entire floor of plant
- Integration into other equipment
- Custom tempered block breaker design & fabrication
- Incline and specialty conveyors
- Platform and stairs
- Manual box tipper
- Product prep table
- Product diverters
- Trash chute and collection system
- Ergonomic stand
- Safety guarding
- Controls & Automation



Fusion Tech worked with us to take our current operation of processing frozen beef trim blocks that took 2 shifts and 22 employees to reach our product goals and reduced it to a 1 shift operation manned by 7 people. They designed a new piece of equipment for us that took our semi-frozen trim blocks and gently broke them up so we could treat each piece to eliminate any bacteria. We told them what we needed the system to do, and they went to work researching options and designing a system that met our needs and saved us time and money. We are able to process the same amount of product in 1 shift that we did in two. I would highly recommend working with the team at Fusion Tech.

- Charlie Tamburelli



CREEKSTONE FARMS

BEEF PROCESSING SYSTEM

MPC Incorporated, a design build company, came to us needing a new operation to process beef for their client, Creekstone Farms.

The project required working with a design build company to layout and model the entire system, as well as provide integration with other existing OEM equipment.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a system to automate various full and pack-off lines.

- Increased Product Yields
- Decreased Operating Expenses
- Increase Employee Safety

Creekstone Farms and MPC saw a marked increase in product yields and employee safety, on top of a decrease in operating expenses.

Project Scope

This project included:

- Model entire system
- Integration with other OEM existing equipment
- Transfer conveyors
- Leaker return conveyors
- Packaging conveyors
- Empty box conveyors (from tray formers to pack off stations)
- Full box conveyors
- Box turners
- Sub Primal platform stations
- Packaging operator platforms
- Bagging stations
- Check weight bench scales
- Bagging tables
- Crossovers
- Pack-off stations
- Ergonomic stands
- Accumulation conveyors
- Automation and controls

NOTABLE MENTIONS

- Controls & Automation
- Custom Equipment Design
- Integration with Existing Equipment
- Ergonomic and Safety Solutions

Fusion Tech designed and manufactured an entire beef processing system I was working on for one of my clients. Their team provided myself and the client with 2D prints and 3D models of the entire system, as well as each individual piece of equipment. They were able to integrate their equipment with pre-existing equipment and automate the system to increase product yield and reduce unnecessary expenses. My clients are pleased with the system and the resulting benefits of automating this product flow. I highly recommend Fusion Tech and the services they provide.

- Tim Foster



CARGILL MEAT SOLUTIONS

NSGB PACKAGING ROOM

Cargill Meat Solutions came to us needing a new packaging plant layout for one of their frozen food facilities.

The project required us to model the entire system, manage the project, as well as integrate existing OEM equipment into the line.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a line to transfer and package frozen product.

This project is still in progress, so results have yet to be determined.

Project Scope

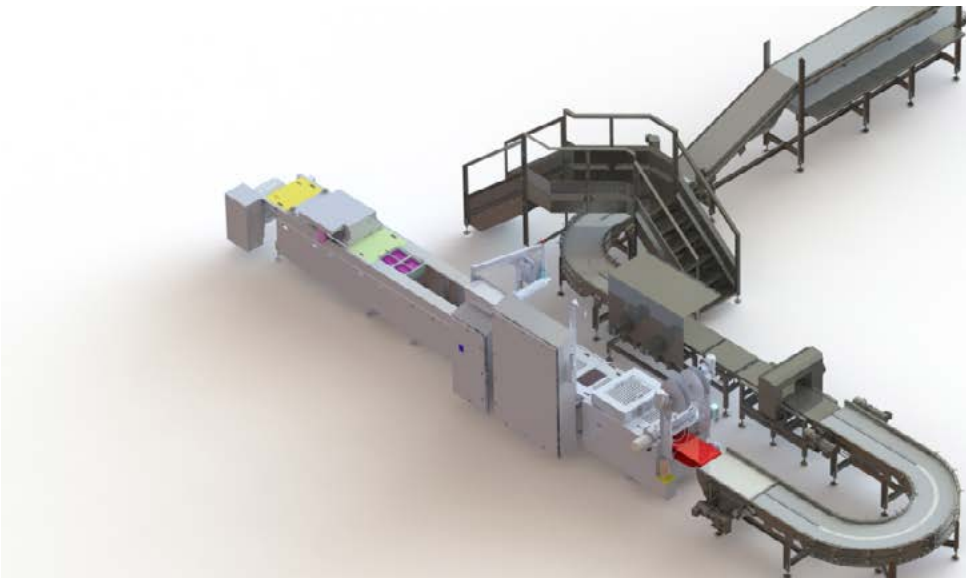
This project included:

- Model entire system and all equipment
- Project Management
- Frozen food conveyors
- Auger conveyors
- Empty box conveyors
- Scale weighing and automation conveyors
- Pack-off stations
- Controls and automation
- Platforms
- Egress crossovers
- Stairs
- Installation



NOTABLE MENTIONS

- Controls & Automation
- Custom Equipment Design
- Egress Solutions



GOLDEN CRISP PREMIUM

YAMATO SCALE SYSTEM

Golden Crisp Premium, a provider of bacon products, came to us needing a new process to load and transfer product into and from a Yamato scale.

The project required integrating a recently purchased Yamato scale into their current operation, as well developing a system for easy cleaning of the scale buckets.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a system complete with a manual pack kick-off to maintain product yield goals.

- Increased Product Yields
- Decreased Operating Expenses
- Improvement Sanitation Process

Golden Crisp Premium saw a marked increase in product yields, as well as a decrease in operating expenses and the time it took to clean and sanitize the Yamato scale buckets.

NOTABLE MENTIONS

- Controls & Automation
- System Integration
- Custom Equipment

Project Scope

This project included:

- Model entire system
- Yamato Scale Platform
- Conveyor extensions
- Reversing feed conveyor
- Wash cabinets to hang scale buckets
- Utilities





POULTRY

SUGAR CREEK

RAW POULTRY ROOM

Sugar Creek, a manufacturer of packaged foods for retail and food service channels, came to us needing to bring their poultry processing operation into one room.

The project required integrating operations with existing equipment, increasing safety, and decreasing processing time.

Upon meeting with the client and visiting the facility, our team designed, fabricated, and installed a complete and automated system to extract, grind, weigh, and vat off product to precise recipe based weights without stopping lines to remove full vats.

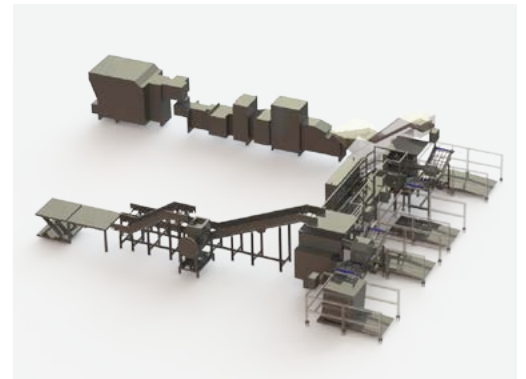
- Integrated Operations
- Increased Employee Safety
- Decreased Processing Time

Sugar Creek saw such a marked difference in their processing operation, safety, and processing time that they hired Fusion Tech to take the lead on more of their projects.

Project Scope

This project included:

- Model entire floor of plant
- Pallet lift
- Tables
- Conveyors
- Extractor
- Vats
- Platforms
- General contracting
- Utilities / Electrical
- Installation of equipment
- Controls & automation
- Project management



NOTABLE MENTIONS

- Controls & Automation
- HMI
- Product Recipes
- X-Ray
- General Contracting
- Utilities
- Electrical
- Project Management



The background is a solid dark red color. Overlaid on this are several thin, light red, irregular circular outlines that overlap each other in a complex, organic pattern. In the center of the composition is a solid, slightly darker red circle. The word "PORK" is written in white, bold, uppercase letters across the center of this central circle.

PORK

JOHN MORRELL

PORK BELLY LINE

John Morrell, a manufacturer of packaged meats, came to us needing a new process to consistently flatten, scan and weigh, waterjet cut, and sort pork bellies.

The pork belly processing line needed to be secured and designed around a third party detection system that John Morrell had already purchased.

Upon meeting with the client and visiting the plant, our team designed, fabricated, and installed a complete system to press, skin, cut and sort the pork bellies.

We also performed a Factory Acceptance Test of the system at our facility with representatives from John Morrell and the third party detection system company.

- Increased Product Output
- Decreased Processing Time
- Decreased Operating Expenses

John Morrell was impressed with the service and quality of equipment Fusion Tech provided in this project.

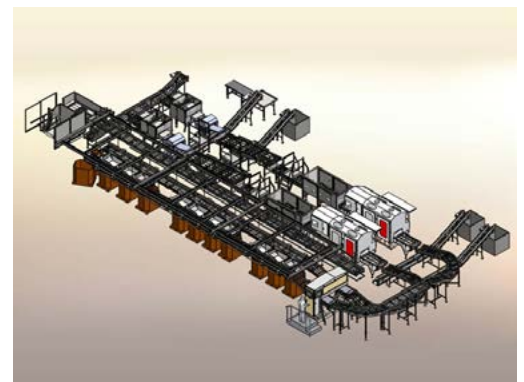
NOTABLE MENTIONS

- Controls & Automation
- HMI
- Product Recipes
- X-Ray
- General Contracting
- Utilities
- Electrical
- Project Management

Project Scope

This project included:

- Model entire floor of plant
- Partnership and Integration with other OEM equipment
- Belly roller press conveyor
- Belly flattener conveyor
- Belly skin conveyor
- Belly sortation line
- Skin patch conveyor
- Chutes and hoppers
- Vat dumper
- Tables
- Whizard knife mounts
- Ergonomic stands
- Crossovers and stairs
- Mechanical utilities
- Factory Acceptant Test



AMERICAN FOODS GROUP

SPIRAL FREEZER DISCHARGE

American Foods Group, the fifth largest beef processing company in the United States, came to us needing a new process to transfer multiple types of product to bulk or bagged pack-off locations.

Space constraints played a huge role in the design and development of their system, as well as sanitation and inspection concerns.

Upon meeting with the client and visiting the facility, our team designed, fabricated, and installed an entire system to take product from the exit of the spiral freezer to their existing palletizing line.

The system we designed made the product transfer process faster and easier for the client.

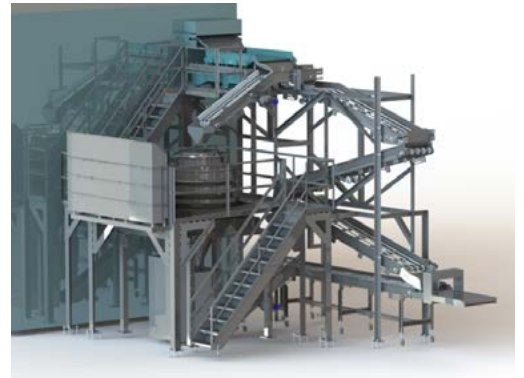
- Improved Transfer Process
- Maximized Minimal Floor Space
- Increased Sanitation

American Foods Group saw a marked decrease in the time it took to transfer product from the spiral freezer to their palletizing line.

Project Scope

This project included:

- Model entire system and all equipment
- Scale platforms
- Scale bucket wash stations
- Reversing conveyors
- Custom designed decline conveyor system
- Product transfers
- Pack off
- Roller conveyors
- Chutes
- Installation



NOTABLE MENTIONS

- Custom Equipment Design
- System Design & Layout



GENESYS SYSTEMS

TIPPER-TIE SYSTEM

Genesys Systems Integrator, a business, technology, and process integrator, came to us needing a new process to move product in between existing Tipper Tie, slicing, and packaging stations.

The system needed to integrate into the Tipper Tie controls to keep the OEM's machines full while in operation, which required photo-eye integration, controls and automation, and accumulation conveyors.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a complete, automated system to keep product flow in line with production goals.

- Increased Product Yields
- Decreased Processing Time
- Decreased Operating Expenses

Genesys Systems' client experienced an increase in product yields and a consistent flow of product into their Tipper-Tie machines, reducing down time and operating expenses.

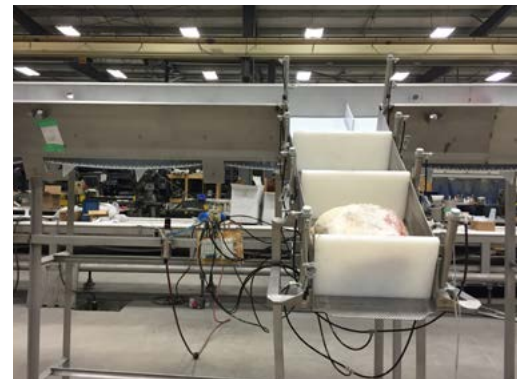
NOTABLE MENTIONS

- Controls & Automation
- Custom Equipment Design
- Integration with Existing Equipment

Project Scope

This project included:

- Model all equipment
- Integration with existing equipment
- Integration into Tipper Tie controls to keep Tipper Ties full
- Angled conveyors
- Ham loading chutes
- Crossovers
- Accumulation conveyors
- Photo-eye integration
- Controls and automation





READY TO EAT

MPC INCORPORATED

LID STOCK SYSTEM

MPC Incorporated, a design build company, came to us needing a new process to deliver empty boxes to a pack-off station for one of their clients.

The system needed to automate delivery of boxes to employees for packing, while also increasing safety and ergonomics for their employees.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a system to automate delivery of boxes and increase safety and ergonomics for their employees.

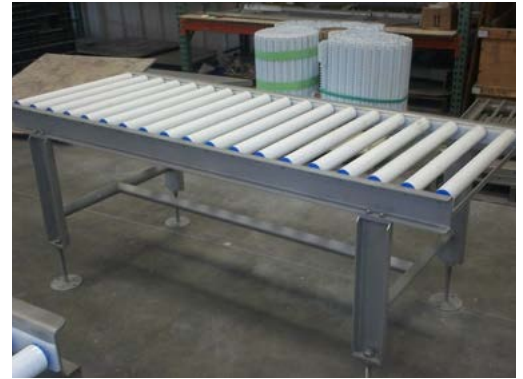
- Increased Product Output
- Decreased Packing Time
- Increased Employee Safety

MPC Incorporated's client experienced an increase in product packaging output, decrease in packing time, and a marked increase in employee safety.

Project Scope

This project included:

- Model entire system
- Integration with existing equipment
- Design custom boxing tables
- Box delivery shelf
- Ergonomic and safety solutions
- Custom designed conveyors



NOTABLE MENTIONS

- Controls & Automation
- Custom Equipment Design
- Integration with Existing Equipment



LIGURIA FOODS

FORMULATION ROOM

Liguria Foods, a manufacturer of premium quality meat toppings, came to us needing a new process to automate a grinding and stuffing operation.

The system needed to integrate with existing equipment, automate the recipe blending process, and guarantee that the stuffers remained full.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a complete system to automate product flow from grinding to stuffing.

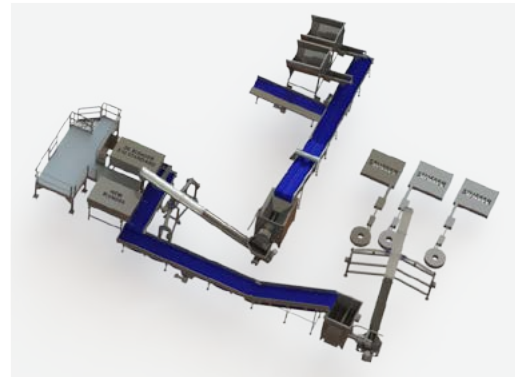
- Increased Product Yields
- Decreased Operating Expenses

Liguria Foods experienced a marked increase in product yields and decrease in operating expenses with the new, fully automated system.

Project Scope

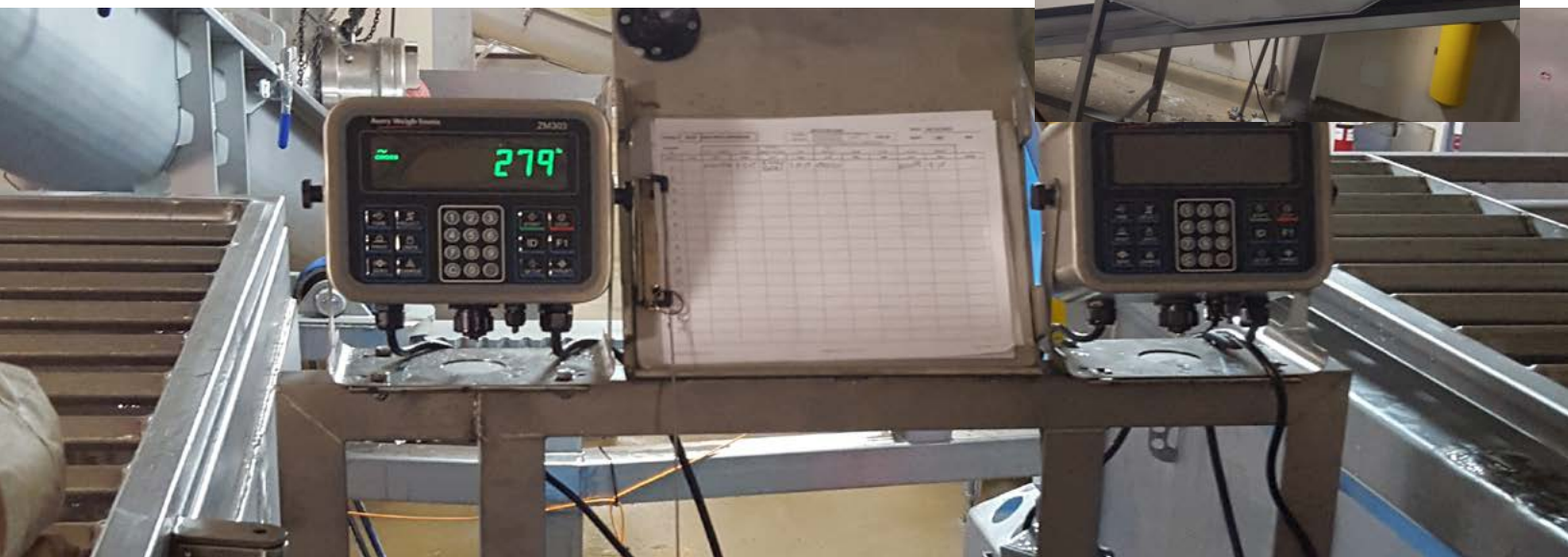
This project included:

- Model entire system and all equipment
- Rebuild auger transfer conveyors
- Design double pivot augers
- Integrate with existing equipment
- Automated recipe blending
- Controls to keep stuffers full



NOTABLE MENTIONS

- Custom Equipment Design
- Controls & Automation
- Metal Detection



PATRICK CUDAHY

BOX DELIVERY

Patrick Cudahy, a provider of pork products, came to us needing a new process to deliver empty boxes to pre-existing packing stations.

The system needed to integrate with current operations and keep packing stations supplied with boxes through the use of operator controls and photo-eye controls.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed and fabricated a complete, automated system that keeps packing stations supplied with boxes.

- Increased Product Output
- Decreased Packing Time
- Increased Employee Safety

Patrick Cudahy experienced an increase in product packaging output, decrease in packing time, and a marked increase in employee safety.

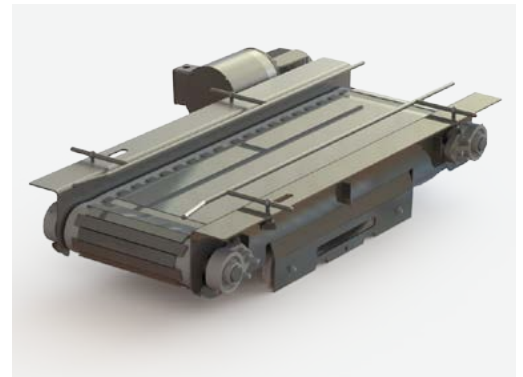
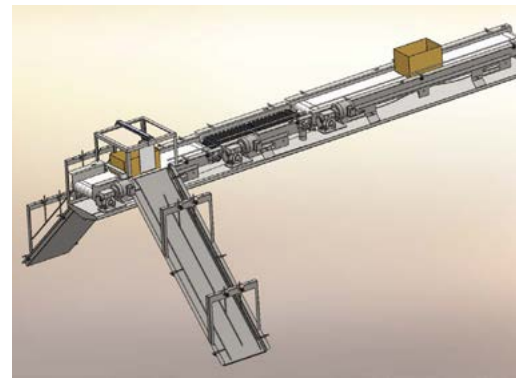
NOTABLE MENTIONS

- Controls & Automation
- 3D Modeling
- Hang Conveyors from Bar Joists
- Accumulation System

Project Scope

This project included:

- Model entire system with existing equipment
- Integrate with existing equipment
- Accumulation conveyor
- Diverter conveyor
- Speed up conveyor
- Chutes
- Box making table
- Operator controls
- Photo eye controls
- Box diverter options



The background is a solid dark red color. Overlaid on this background are several thin, light red lines that form a series of overlapping circles or ellipses, creating a complex, abstract pattern that resembles a stylized flower or a molecular structure.

THERMAL PROCESSING

LANDMARK SNACKS

CUSTOM SMOKEHOUSES

Landmark Snacks, a family owned meat processing company and manufacturer of the Blue Valley Brand, came to us needing a set of custom designed smokehouses to increase their production capabilities.

The client also wanted a marked increase in product consistency over the former smokehouses in their facility.

Upon meeting with the client and visiting the facility, our team designed, fabricated, and installed a number of smokehouses outfitting with our Total-Flow-Control system to meet their need for increased product consistency and decreasing their processing time.

- Improved Product Consistency
- Increased Product Production
- Decreased Processing Time

Landmark Snacks saw such a marked improvement in their product and processing operation, that they have ordered another set of smokehouses for their facility.

NOTABLE MENTIONS

- Custom Smokehouse Design
- Control Programming

Project Scope

This project included:

- Smokehouse Design
- Smokehouse Manufacture
- Installation and training
- Control programming



BOAR'S HEAD

BLAST CHILL CABINETS

Boar's Head, a provider of quality delicatessen meats and cheeses, came to us needing new blast cell chiller cabinets for their processing facility.

Upon meeting with the client and visiting the plant, the Fusion Tech team designed, fabricated, tested, and installed a custom blast cell chiller.

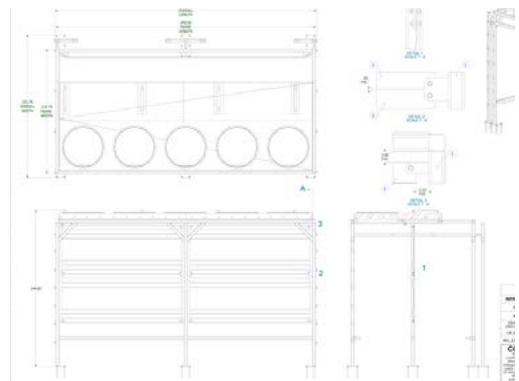
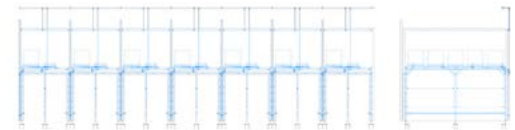
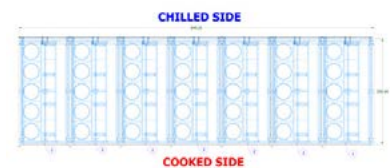
- Improved Product Yields
- Increased Product Production
- Decreased Operating Expenses

Boar's Head saw a marked increase in product output as well as a decrease in operating expenses with their new blast chill cabinets.

Project Scope

This project included:

- Project concept and layout
- Custom fabrication
- Testing and installation



NOTABLE MENTIONS

- Custom Equipment Design
- Concept and Layout



WHAT CAN FUSION TECH DO FOR YOU?

As a manufacturer of custom designed food processing systems and facility layouts, Fusion Tech is positioned to provide you with a system to increase product output, decrease processing time, increase employee safety, and meet the needs and goals of your specific application.

We'll design, manufacture, and install the system for you — eliminating the need for multiple vendors and simplifying the processing for you.

The only question that remains is: *what can Fusion Tech do for you?*





**CUSTOM SOLUTIONS FOR THE
FOOD PROCESSING INDUSTRY**
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