Custom Solutions for Food Processing
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.
THE STORY
BEHIND IT ALL

Fusion Tech started as a fabrication shop in a small two-car garage outside of Roseville, Illinois in 1998 with only 3 employees. The quality and timeliness of our work caused the company to grow, landing some big-name clients in the food processing industry.

This growth caused us to expand quickly to the facility we have now — over 50,000 square feet of manufacturing floor space complete with a drafting and design office and near 100 employees.

We currently have two offices: our main headquarters in Roseville, Illinois — the same location where we started back in 1998, and a second design office in Dakota Dunes, South Dakota.

Our dedication to quality and drive for innovation keeps Fusion Tech as the preferred food processing system provider for some of the largest companies in the food processing industry.
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.
MEAT & POULTRY
We offer a full range of equipment solutions for the meat and poultry industry including, but not limited to:

- Forming
- Cutting / Saws
- Brine Injection
- Ovens
- Smokehouses
- Conveyors
- Dumpers
- Lifts
- Shredders
- Slicers
- Weighing & Sorting Systems
- Packaging Equipment
- Hanging Systems
- Blending
- Tables
- Tanks / Piping
- Sanitation Systems
- Thermal Processing

Learn more at www.ftiinc.org/food/meat-poultry

BAKERY & SNACKS
We offer a full range of equipment solutions for the bakery and snacks industry including, but not limited to:

- Depositing
- Dividing
- Mixing / Blending
- Thermal Processing
- Conveyors
- Dumpers
- Lifts
- Tanks / Piping
- Packaging

Learn more at www.ftiinc.org/food/bakery

PET FOOD
We offer a full range of equipment solutions for the pet food industry including, but not limited to:

- Mixing / Blending
- Pumping / Stuffing
- Thermal Processing
- Conveyors
- Lifts
- Dumpers
- Tanks / Piping
- Packaging

Learn more at www.ftiinc.org/food/pet-food

DAIRY
We offer a full range of equipment solutions for the dairy industry including, but not limited to:

- Mixing
- Blending
- Filtration
- Tanks / Piping
- Thermal Processing
- Conveyors
- Dumpers
- Lifts
- Packaging

Learn more at www.ftiinc.org/food/dairy
NAPKIN SKETCH
TO REALITY

We are experts at taking your initial ideas — those “napkin sketch” notes and drawings — and delivering detailed designs, layouts, 3D models, project schedule, and budgetary estimations.

Our fully staffed drafting and design team specialize in problem solving and operational troubleshooting — allowing us to modify your existing operations or layout a whole new plant expansion.

Upon approval, our fabrication and installation teams manufacture and install all the equipment in the layout.

We turn your napkin sketch ideas into reality.
LIST OF SERVICES

- Project Management
- Design & Engineering
- Process Flow Layouts
- 3D modeling
- Custom Equipment Design
- Maintenance Contract Service
- Custom Equipment Fabrication
- Control & Automation Services
- Custom Equipment Installation
- Utility Pipe Installation
- Process Piping & Tubing
- Beam & Rail Installation
- Demolition
- Smokehouse Rebuilds
- ASME Pressure Vessel Fabrication & Repair

Learn more at ftiinc.org/services
FOOD PROCESSING OVENS
- Dehydrators
- Smokehouses
- Steam Ovens
- Fermentation Rooms / Cabinets

OVEN ACCESSORIES
- Smoke Generator
- CIP Skid
- Oven Trucks
- Oven Trees
- Screen Wash Cart
- Smoke Stick Cart
- Screens
- Belly Combs
- Trays

Learn more at ftiinc.org/cook

BLAST CHILLERS

OVEN REBUILDS

SERVICE & SUPPORT
- Airflow Simulation
- Consultation
- Control Upgrades
- Technical Support
- Troubleshooting Support

Size Reduction Solutions

EQUIPMENT
- Cutter Blades
- Grinders
- Saws
- Shredders
- Slicers
- Slashers
- Splitters

ACCESSORIES
- Deboning Tables
- Cutting Tables
- Auto Skinner Carts
- Whizard Knife Brackets
- Trim Stations
- Knife Holders

Learn more at ftiinc.org/cut
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

Learn more at ftiinc.org/move

DUMPERS

HOPPERS

TIPPERS

ACCESSORIES
- Bins
- Carts & Racks
- Vats

SPECIALTY EQUIPMENT
- Home Style Patty Maker
- Meat Log Peelers
- Meat Log Sanitizers
- Tempered Block Breaker

MEAT PRESSES
- KT Meat Press
- Belly Press
- Belly Roller
- Roller Conveyors

ACCESSORIES
- Gambrels
- Hangers
- Hooks

Learn more at ftiinc.org/process

MIXERS / BLENDERS
- Blenders
- Mixers
- Tumbers

TABLES

TANKS
- Portable Tanks
- Stainless Steel Tanks
- Troughs
- Melt Tanks
- Glycol Tanks
- Wastewater Tanks

Processing Solutions
WEIGHING
- Scale Platforms
- Scale Conveyors
- Scale Table
- Scale Stands

BAGGING
- Pneumatic Actuated Bagger
- Bagging Horns
- Bagging Stations
- Stuffing Tables
- Bagging Conveyors
- Bag Cart
- Roll Film Lift Mounts
- Bagging Reels

BOXING
- Pack Off Conveyors
- Pack Off Stations
- Roller Top Conveyors
- Empty Box Delivery System
- Packaging Tables
- Boxing Tables
- Box Off Tables

METAL DETECTION
- Metal Detector Conveyors

Learn more at ftiinc.org/package

DRAINS
- Trench Drains
- Floor Drains
- Slot Drains
- Drain Baskets
- Drain Covers

GUARDING
- Bollards
- Door Guarding
- Equipment Guarding
- Wall Guarding

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

Learn more at ftiinc.org/build
ERGONOMICS
- Ergonomic Stands
- Pallet Lifts
- Platform Lifts
- Smokehouse Cart Lifts

ANTI-SLIP
- GripTECH Coating
- GripTECH Stair Treads
- GripTECH Drain Covers

SAFETY
- Chemical Containment Tanks
- PushPal Cart Safety Handle
- Custom Safety Guarding

Learn more at ftiinc.org/protect

CHANGING ROOM
- Boot Racks
- Coat Racks
- Coat Hanging Strips

PPE WASHERS
- Apron & Glove Washers
- Boot Washers

EQUIPMENT WASH STATIONS
- Vat Sanitizers
- Scale Bucket Wash Walls
- Dicer Wash Walls

ACCESSORIES
- Screen Wash Cart
- Smoke Stick Cart
- Bag Holders
- Paper Towel Holders
- Soap Bottle Holders
- Hose Hangers
- Hose Reels
- Drain Hose Spray Nozzle

Clean & Sanitation Solutions

Learn more at ftiinc.org/clean
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
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.

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

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
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.
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.

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

Thank you for providing such great service and quality equipment for the water jet project. Nick is a top notch manager and a pleasure to work with. His work ethics and commitment to quality are commendable. Having Jeremy in the office allowed us to communicate ideas throughout the project, and I am very impressed with Jeremy's computer skills and vision of equipment assembly. I received positive comments from management on the project layout, installation, and start-up.

- Chris Hanisch
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
DAILY’S PREMIUM MEATS

PORK BELLY PRESS & PUMP

Daily’s Premium Meats, a manufacturer of smoked and processed meats, came to us needing two systems for their state-of-the-art bacon processing plant in St. Joseph, Missouri: pork belly press line and pork belly pump line.

Upon meeting with the client and visiting the facility, our team designed, fabricated, and installed two pork belly lines:

- **Belly Press**: a system to safely and easily remove pork bellies from smokehouse trees, remove belly combs, and align bellies to be fed into a belly press
- **Belly Pump**: a system to take pork bellies from a stainless steel vat through a brine injection system, to a cone insertion conveyor and onto a load station for hanging bellies onto smokehouse trees

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

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

Daily’s Premium Meats was impressed with the service and quality of equipment Fusion Tech provided in this project.
SMITHFIELD FOODS

HAM TREE DESIGN

Smithfield Foods, the world’s largest pork processor, came to us needing an updated oven tree for cooking hams that would increase capacity and help improve product coloring.

The new ham trees needed to integrate with their current overhead track system and remove easily for cleaning and maintenance.

Upon meeting with the client and visiting the facility, our team designed, fabricated, and helped install new ham trees that integrated into their system and greatly increased product capacity.

- Increased Capacity from 785 to 1,440 Hams per Oven
- Improved Product Color Consistency
- Integrated and Easily Removable

Smithfield Foods was greatly impressed with the service and quality of equipment Fusion Tech provided, and ordered more ham trees to use in other facilities.

Fusion Tech designed an impressive new ham tree to help optimize our cooking processing. We are very happy with the results. The new design increased capacity from 785 hams per oven to 1,440 per oven — a 45% increase! We've also seen a marked increase in the consistency of the color of the hams due to the even spacing and airflow on the trees. The Fusion Tech trees improved our cooking capacity and product coloring so much, we ordered more to use in our other facilities. If you're looking to optimize your facility, I highly recommend working with Fusion Tech.

- Chris Jordan
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.

NOTABLE MENTIONS
- Custom Equipment Design
- System Design & 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?