



PRODUCT AND PROCESS INNOVATIONS  
INNOVATION GUIDE

**handtmann**  
*Ideas for the future.*

HANDTMANN

# INNOVATION GUIDE

PET FOOD





# SHORTEN YOUR MIXING TIMES

WITH EFFICIENT GEOMETRY AND FLEXIBLE CONTROL

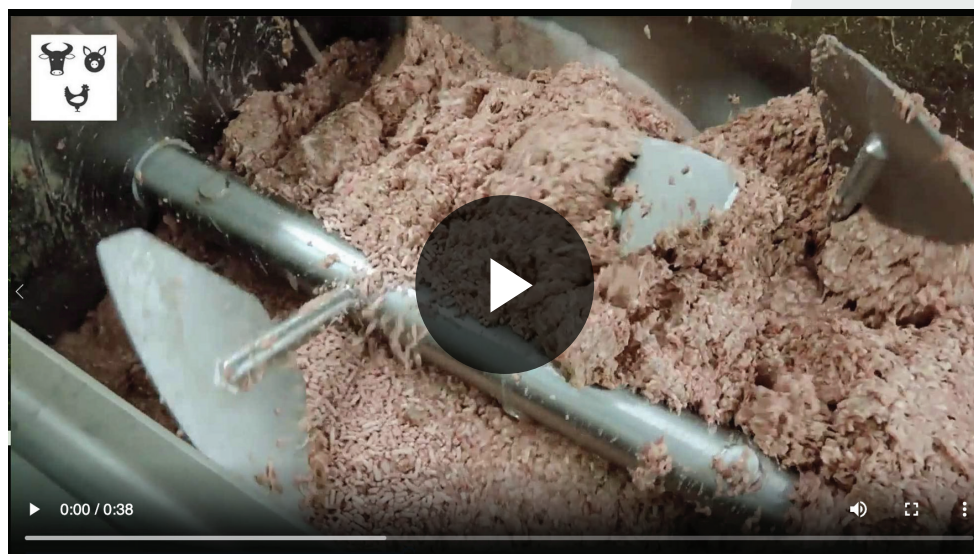
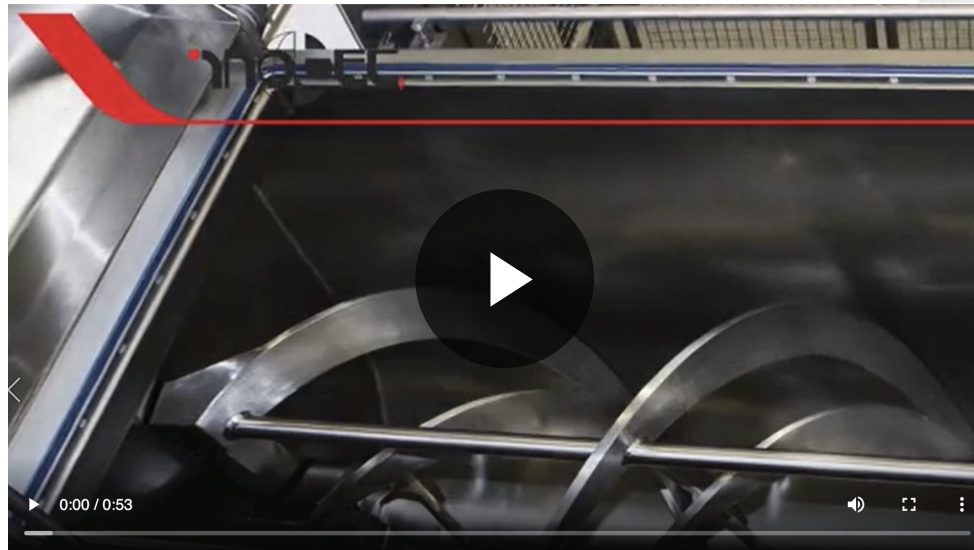
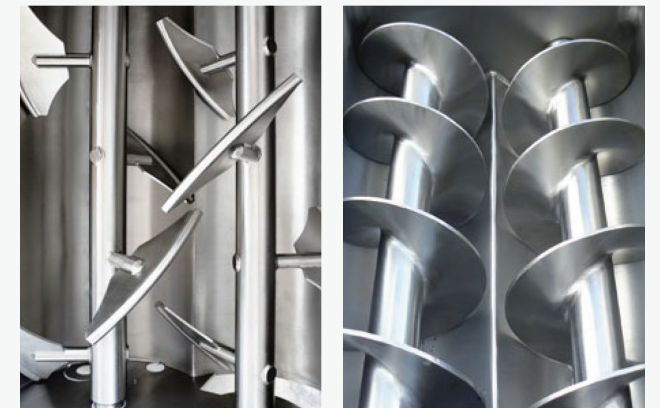
## Inotec Variomix - Mixing for Process Improvement

Two interacting spirals with separate drives are the performance heart. One mixer provides the industry's widest array of directional mixing options.



**Inotec paddle and dual spiral mixers** are offered in a wide variety of shaft configurations and they are individually tailored and manufactured to the product and power requirements of each customer.

- Maintain your consistency with the generous reserves of powerful dimensioned drives and low-maintenance shaft seals
- Customize your mixing recipes with storable and programmable mixing parameters
- Get product-specific performance with individually adapted shaft configurations
- See your product with the inotec Cam View system for visual process monitoring during the running process
- Maintain the temperatures you need with a wide range of optional warming, cooking and cooling





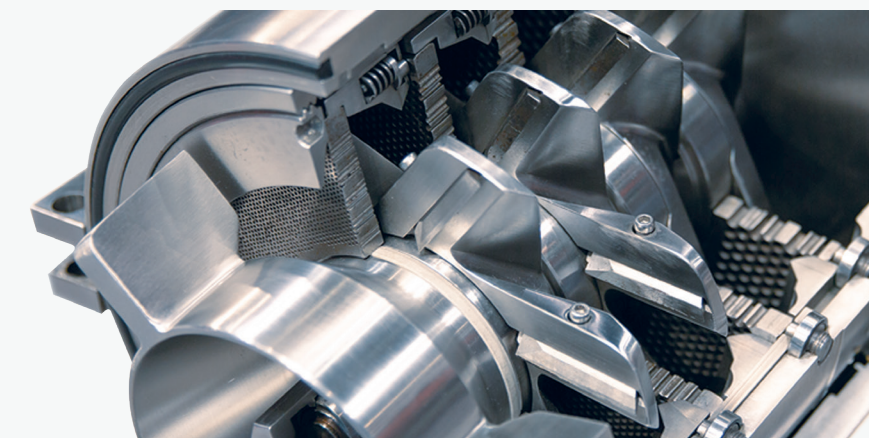
# SELF- ADJUSTING CUTTING SET REDUCES COSTS

WHAT DOES SMART  
EMULSIFYING REALLY DELIVER?

**INOTEC, a Handtmann Group company,** offers many emulsifying advancements, including a patented self-adjusting radial cutting set with automatic corrections throughout every shift, automated monitoring and alerts, and precision outlet temperature control deliver the reliably consistent emulsions needed to meet the demands of today's marketplace.

## INOTEC DIFFERENCES THAT MATTER

- Energy efficient variable speed motors with soft-start functionality*
- Narrow pre-set temperature ranges with well-managed product movement*
- Exactly managed target outlet temperatures*
- Continuous blade adjustment during operation*
- Automatic stops for unsafe temperature spikes*
- Larger pre-grinds possible with modular 1 to 4 stage cutting set options*
- Text-free controls with easy adjustments for multiple products*
- Adjustable vacuum control manages product texture*
- Traceable product quality and production records*
- Product recirculation is available*



- *Automatic cutting set adjustments reduce wear, retain accuracy and increase consistency.*
- *Energy efficient variable speed motors increase flexibility and help manage operating costs*
- *Well-managed product movement reduces batch times and maintains the highest quality*



# A SMART WAY TO YOUR PRODUCT

## INTEGRATION AND PROJECT MANAGEMENT SERVICES

Handtmann, Inc. offers Integration Services that support customers with the efficient management of complex system design, engineering and integration projects.

### LISTENING CREATES A COMMON GOAL

We work together to develop a shared understanding to address the needs and concerns. We then apply our knowledge and experience, work through options with other vendors and our customer, then collaboratively develop and iterate alternatives until the best solution within the parameters is clear – and can be clearly defined as a project with performance accountability.

### DESIGN-TO-BUILD OPTIMIZES EFFICIENCY

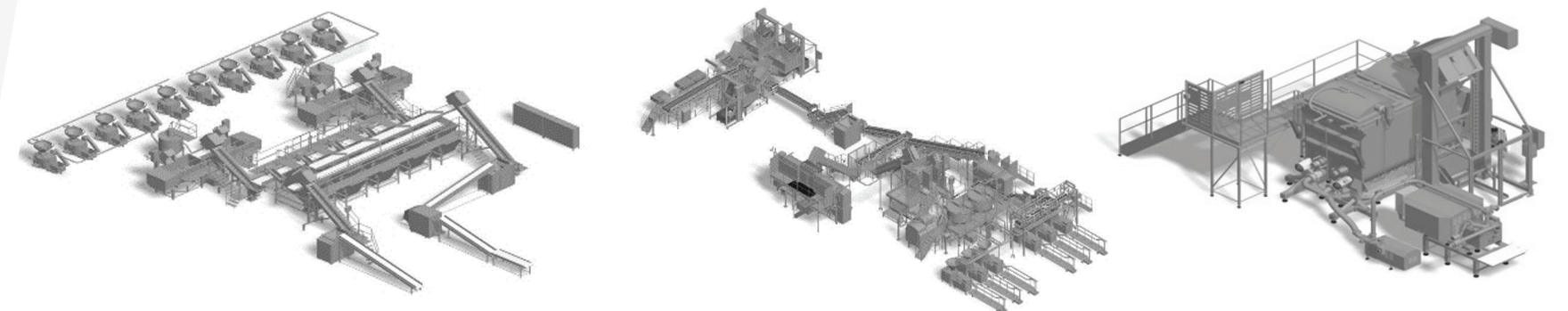
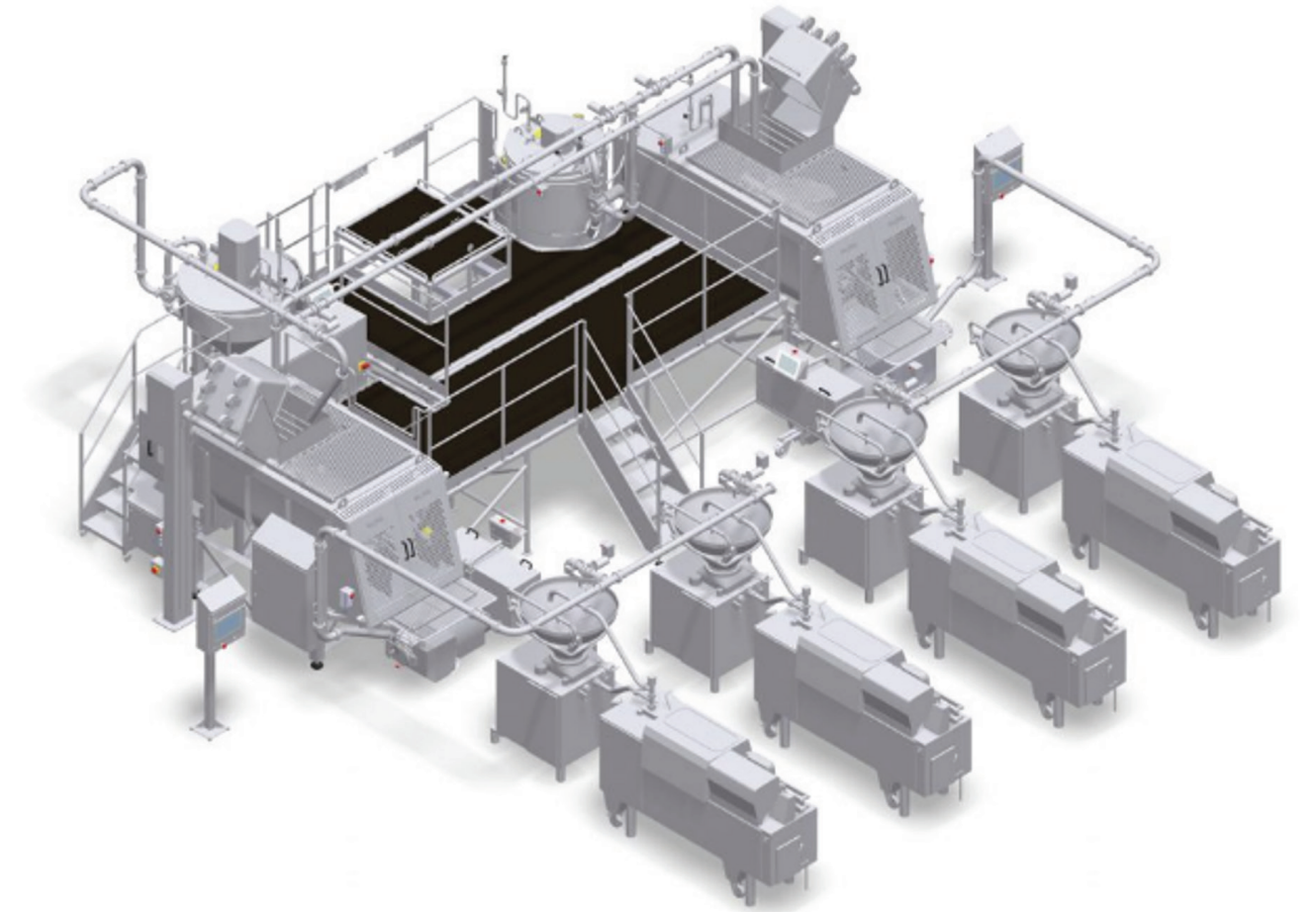
Handtmann leverages complex integration projects with our design-to-build method to deliver a variety of customer benefits. Using this practical development approach, each Handtmann integration venture is designed and managed to address its unique combination of processing room requirements – from grinding and mixing to forming and conveying.

### COMMUNICATION REDUCES STRESS

No matter the demands, the results are consistent: simple, reliable solutions to complicated processing issues – with excellent communication.

### MANAGING LANES LIMITS WASTE

We work closely with plant designers, our industry partners and our customer to ensure the best elements for a smooth, complete solution that turns each of their ideas into the solution they want.





MY **IDEA.**  
MY **SOLUTION.**



# PET FOOD – NEW CONCEPT. NEW APPROACH.

JOINT SUCCESS  
WITH CLASSICS AND  
TREND PRODUCTS.

Many things are on the move in the pet food industry and Handtmann application specialists are helping customers guide their smart ideas into profitable pet food products with innovative adaptations of classic products, the creation of new snacks and variations on their bestsellers.

We have been adapting our knowledge and skills to address the market shifts of pet food consumers and have been developing new technologies and processing systems for the production of pet food products, generating new ideas for product innovations, and optimizing production processes for these market challenges.

Though only a fraction of our entire portfolio of sustainable pet food products and process solutions, this **INNOVATION GUIDE** shows how we could work together as your innovation partner of choice – as creative thinker and solution provider – turning your ideas into product successes.

Your Handtmann Food Innovation Team







# HANDTMANN AS YOUR PARTNER

WHAT CAN WE OFFER YOU  
AS YOUR PET FOOD PARTNER?

Everyone working in pet food production is faced with the challenge of incredibly fast-moving trends and evolving consumer preferences.

Our modular Handtmann forming, co-extrusion and depositing systems deliver the industry's most accurate portions, and gently handle product to maintain product quality across the broadest range of pet food and pet treat recipes. We have process solutions for the portioning of pet food and also for the most diverse products across multiple food sectors:

- Meat and sausage products
- Vegetarian/vegan/meat substitutes
- Bakery & dough-based products
- Dairy
- **PET FOOD & TREATS**





# PRODUCT INNOVATIONS



## MINI SAUSAGES IN ALGINATE CASING

Trend	Premium. Snack. Plant-based skin. Dried snack sausage.
Product highlights	<ul style="list-style-type: none"> <li>■ Alginate casing (also for plant-based variations)</li> <li>■ Premium product with treat-snack quality</li> <li>■ Appealing sausage-shaped snack</li> <li>■ Diversity of variants (many calibers and lengths possible)</li> <li>■ Accurate-to-the-gram portion weights</li> <li>■ Continuous production process, including filling, integrated grinding, portioning, co-extruding (coating with alginate casing), linking and hanging the sausages</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Vacuum filler</li> <li>■ Integrated inline grinding system</li> <li>■ ConProLink KVLSH 162</li> </ul>

Product innovation:



## MEAT BARS

Trend	Premium snack. Naturalness.
Product highlights	<ul style="list-style-type: none"> <li>■ Dried snack with high meat content</li> <li>■ Raw appeal due to mild drying</li> <li>■ Appetising "meat look"</li> <li>■ Continuous portioning process directly onto racks with subsequent drying in tray trolleys</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Vacuum filler</li> <li>■ FS 510 forming system</li> </ul>

Product innovation:



## PET FOOD SAUSAGES IN COLLAGEN CASING

Trend	Premium. Treat snack. Dried snack sausage.
Product highlights	<ul style="list-style-type: none"> <li>■ Appealing sausage-shaped snack</li> <li>■ Choice of collagen or natural casing as sausage skin</li> <li>■ Diversity of variants (many calibers and lengths possible)</li> <li>■ Accurate-to-the-gram portion weights</li> <li>■ Continuous production process, including filling, integrated grinding, portioning, linking and hanging the sausages onto the hanging line</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Vacuum filler</li> <li>■ Integrated inline grinding system</li> <li>■ Linking and hanging line</li> </ul>

Product innovation:



## DENTAL COOKIES

Trend	Health. Snack.
Product highlights	<ul style="list-style-type: none"> <li>■ Semi-moist product</li> <li>■ Wide range of shapes possible</li> <li>■ Accurate-to-the-gram portion weights</li> <li>■ Continuous portioning process directly onto racks with subsequent drying in tray trolleys</li> <li>■ Continuous production processes for 2 to 24 lanes</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Vacuum filler</li> <li>■ FS 510 forming system incl. flow divider</li> </ul>

Product innovation:





# PROCESS INNOVATIONS



## THERMO-FORMING PACKAGING

Process innovation	Cutting and depositing process for fresh meat (B.A.R.F.) directly into thermo-forming packaging formats
Production process	Filling – portioning– cutting and depositing directly into thermo-forming packaging formats
Process highlights	<ul style="list-style-type: none"> <li>■ Depositing and cutting of chunky products in a single process step using cutting valve technology</li> <li>■ Pulling cut for the clean separation of even sinewy products (e.g. offal)</li> <li>■ Accurate-to-the-gram portions</li> <li>■ Direct connection to thermo-forming machine</li> <li>■ Continuous production thanks to automation process</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Vacuum filler</li> <li>■ SV 424 cutting valve (single- to 4-lane)</li> </ul>



## SNACK STICKS

Process innovation	Portioning, forming and depositing into containers in a single process step
Production process	Filling – portioning – flow dividing – forming – depositing into containers
Process highlights	<ul style="list-style-type: none"> <li>■ Accurate-to-the-gram portion weights</li> <li>■ Variety of shapes thanks to different nozzles/dies</li> <li>■ Direct depositing onto belt, trays or racks with subsequent drying in tray trolleys</li> <li>■ Continuous production processes for 2 to 24 lanes</li> </ul>
Handtmann system	<ul style="list-style-type: none"> <li>■ Inotec ultra-fine grinders</li> <li>■ Vacuum filler</li> <li>■ FS 510 forming system incl. flow divider</li> </ul>

