

Food Processing Technologies



J-Tec Material Handling creates solutions for storing, handling, dosing and processing dry and liquid ingredients.

Solutions can extend from food-grade components, to plant extensions or to turnkey processing lines.



OUR PEOPLE MAKE THE DIFFERENCE

J-TEC MATERIAL HANDLING

Key challenges in food and beverage processing

CHALLENGES

ENSURE FOOD SAFETY

By avoiding contamination

Consumers and public health organizations worldwide are increasingly sensitive to the quality of the products on the market. Good manufacturing processes have emerged to ensure standards of hygiene which are essential in the food and beverage industries.

In consultation with you, J-Tec determines the sensitivity of the product to growth of microorganisms, and hence the requirements that the production area must meet. The level of hygiene is also determined by the ambient conditions surrounding the product: temperature, humidity, and whether the process is open or closed.

J-Tec ensures that issues of cleanability and contamination are dealt with in your installation. Plant enclosure, air stream and water-related aspects are taken into account.

Apart from **microbiological** contamination, J-Tec will take the necessary measures to **avoid product contamination** (e.g. allergens, colored products, flavors) and **foreign body contamination** (e.g. packaging material, bolts and nuts, etc.).



SOLUTIONS



Hygienic design



Cleanability



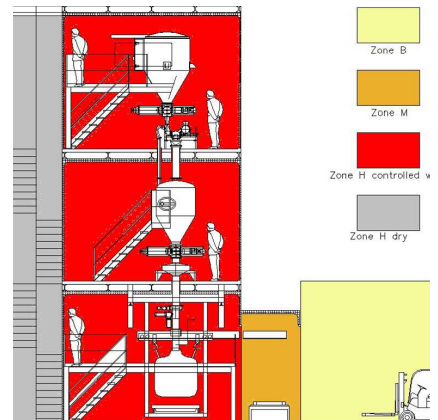
Accessibility



Waste management

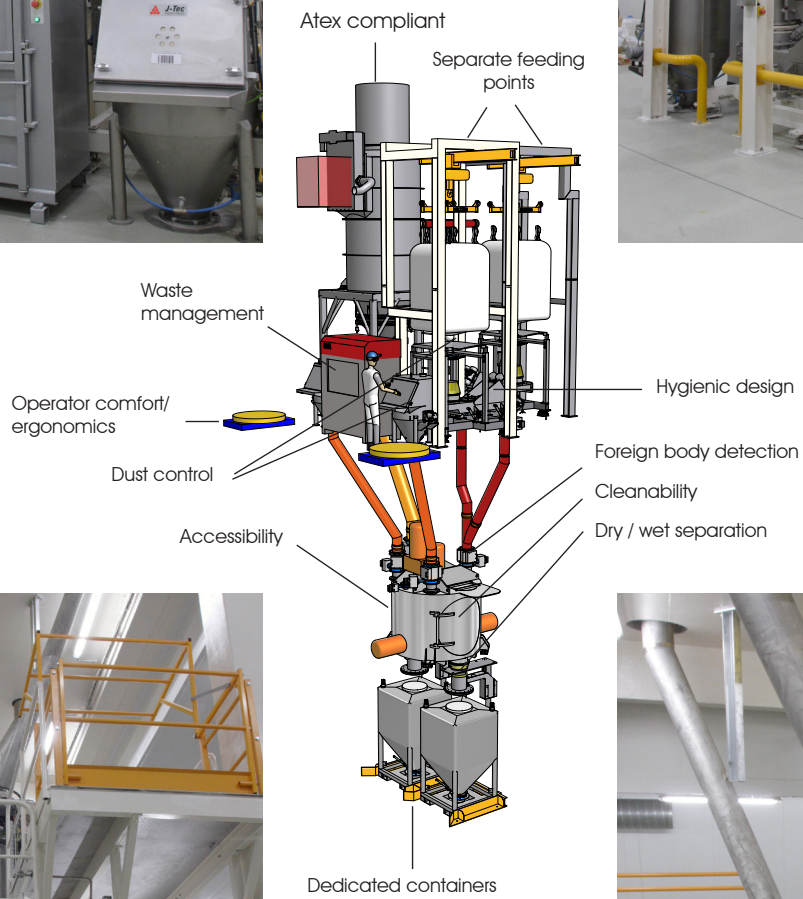


CIP and SIP



Zoning classification and dry/wet separation

Up to validation (IQ, OQ, PQ)



CHALLENGES

ENSURE FOOD SAFETY

By tracking & tracing

To obtain full traceability of the food ingredient throughout the production chain the food products need to be:

- > Identified at the production intake (e.g. scanning of the labels)
- > Followed throughout the process (by means of automation systems and correct weighing systems)
- > Sampled to check the quality
- > Packed and labeled correctly

In addition, the waste product flow needs to be controlled.

ENSURE OPERATOR SAFETY AND COMFORT

- > Optimal human/machine interfaces e.g. by means of touch screens
- > Controlled dedusting installation at discharging points
- > Optimal use of equipment to ensure ergonomic handling of bags and FIBCs (scissor tables, bag tilting units)
- > Make sure the equipment is easy to access and easy to dismantle
- > Ensure compliance with CE and ATEX regulations.

NICHES IN THE FOOD INDUSTRY



—
INFANT NUTRITION



—
SNACKS & BAKED FOOD



—
FOOD INGREDIENTS

J-Tec Competence Center

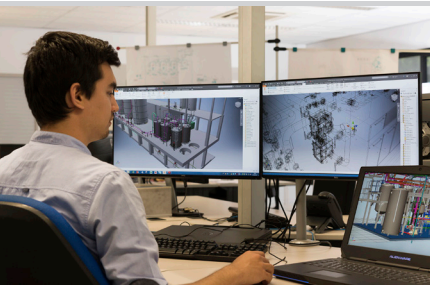


PRODUCT & PROCESS DETERMINATION

Lean and modular designs that are best suited to your own specific ingredients and recipes - challenge us and we'll be glad to find solutions and test them for you.

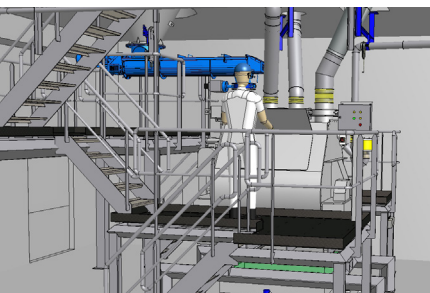
CONCEPTUAL DESIGN

Up-front design of plant layout, processing lines, civil structures, utilities, electronic controls, all are developed sharing your own experience with J-Tec's software tools and plant build track record.



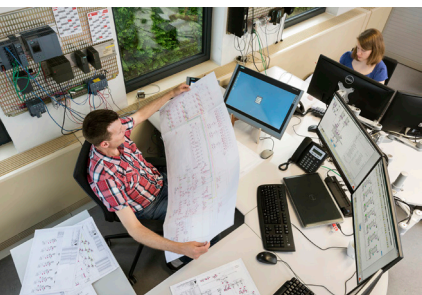
TEST ROOM

The food and beverage industry is one of the fastest movers out there: new dry and liquid ingredients are constantly being researched to make that essential market difference in taste and texture... Simulating real-life situations with these ingredients and recipes provides peace of mind during the project build.



PLANT LAYOUT

Our experienced design teams then integrate the conceptual design and test results to produce detailed engineering proposals to meet the latest legislative requirements in your market. With 3D modelling you can make sure that everything will fit and that there is sufficient accessibility to the machinery.



PROCESS AUTOMATION

Contrary to many in the materials handling and process business, J-Tec has invested in a team of highly qualified in-house IT engineers. Return on experience is maximized and maintained. Clients benefit from proven solutions in recipe management, in tracking and traceability, and maybe above all, in continuity for smooth integration of future plant modifications to maintain that lean and modular concept.

INSTALLATION, COMMISSIONING AND STARTUP

J-Tec engineers accompany you from A to Z in ensuring that plant performance meets your expectations - installation, dry and wet runs, recipe validation, operator training, maintenance programs, remote controls ... are all part of the offer available from J-Tec.



OUR PEOPLE MAKE THE DIFFERENCE

J-TEC MATERIAL HANDLING



A global solution for the food industry



Contact

J-Tec Material Handling **Food division**

Lieven Gevaertstraat 11
B- 2950 Kapellen, Belgium

 +32 3 660 51 11
 +32 3 660 51 10

 info@j-tec.com
 www.j-tec.com

J-Tec Material Handling, the Process Technology business unit of Katoen Natie, offers almost 50 years of experience in dosing, feeding, processing and storage... of liquid and solid ingredients, around the globe.

Specialist consulting and advice on key processes like granulation, blending, sieving or upgrading your existing plant by integrating new techniques into it: our people know how to find the most effective solution.

Whether your project is building a new greenfield site, turnkey, or an extension or the upgrade of your current facility: J-Tec Material Handling has the competence and experience to be your trusted partner.