

NIZO food grade processing centre

Speeding up your ingredient business

For process and product development and test productions, pilot facilities are essential. The food grade processing centre of NIZO food research is a highly flexible production environment where a large variety of unit-operations can be combined to produce your (new) product or ingredient.

The NIZO food grade pilot plant offers you solutions for:

1. test production and tolling of high value ingredients
2. productions for consumer tests and clinical trials
3. scaling up and process optimization trajectories

Facilities and services

As an independent food research company NIZO is appreciated partner for many



food and ingredient companies world wide. The processing centre contains a pilot plant and application kitchen.

With over 2500 m² the food grade pilot plant of NIZO is the largest of its kind in Europe. Last year, several hundreds of ingredients and food applications were made.

Why NIZO (according to our customers)

- NIZO can speed up time to market
- Combination of practical and fundamental know-how
- Wide range of food grade unit operations
- Understanding of hygienic concepts
- (combination of) Trials, applications and productions
- QA, Kosher, Halal, SKAL, Under legislation of the European food law

Your benefits

- Capacity on demand
- Production and planning flexibility
- Decreased time to market
- Cost reduction
- Scientific back-up
- Quick delivery
- Immediate problem solving



1. Production of high value ingredients

The NIZO pilot plant is ideal for production of high value ingredients such as bioactive peptides.

To open up the market and target potential customers, you need to have samples of newly developed ingredients and products. Options to produce test material at your own facilities may be limited, costly and interfering with daily practice. NIZO's pilot plant offers you an alternative.



The following is a typical process performed at NIZO to produce a high value added value ingredient.

- Ingredient mixing
- Hydrolysis
- Heating
- Ultra filtration
- Evaporation
- Spray drying

2. Productions for consumer tests and clinical trials

Market trials are an essential part of new product development. To survey health benefits of your new ingredient clinical trials are needed. NIZO food research has all facilities to produce liquids, pastes and powders for such trials. In addition, NIZO has analysis and sensory evaluation facilities on-site.

To illustrate this, a process for sauce production at NIZO contains:

- Ingredient mixing
- Homogenization (high pressure)
- Heating (indirect, direct)
- A septic filling
- Sensory evaluation



A public selection of consumer products NIZO has worked on

3. Scaling up and process optimization

New product concepts require scaling up from laboratory to industrial scale. NIZO food research combines its unique set of predictive models with its pilot plant facilities to accelerate scaling up and process optimization.

The models available evaluate:

- Product quality
- Microbial stability
- Fouling reduction and
- Energy consumption



About NIZO food research

NIZO food research is an independent and one of the most advanced research centres in Europe. We provide industry with solutions they require by developing and applying technologies for innovations in the areas of flavour, texture, health, food safety and process optimisation. The food-grade industrial pilot plant is used for development and testing at industrial level and is available for test productions. The NIZO application centre provides industry with facilities for product development & product oriented research.

For more information, please contact:

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