

# Profitable Processing

*Optimizing existing processes, designing new production processes or looking for alternative applications for waste product streams? NIZO can assist you with practical solutions, applying its profound knowledge on process-product-cost interactions.*

*Team up with NIZO and together we will bring your processing activities to the next level!*



## Your next level in...

### Reduced production costs

Reduce your processing costs and your profits can increase rapidly. Reduction of your process costs can be obtained by optimizing processes and products, but also by increasing robustness, by reduction of waste streams, or by outsourcing of first productions.



### New process design

New functionalities and products require new process designs. Together with NIZO you can realize fast process development, thereby reducing time-to-market.

### Waste stream valorisation

Production is often associated with waste or by streams that are either disposed or applied for low value products. Turning these streams into high value applications can offer large profits and more sustainable processes.



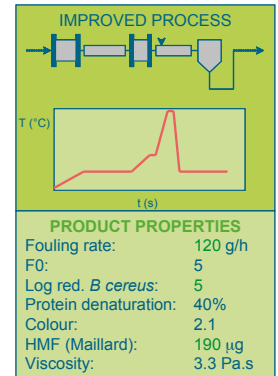
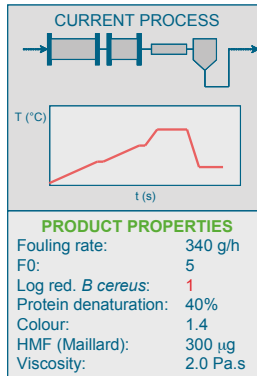
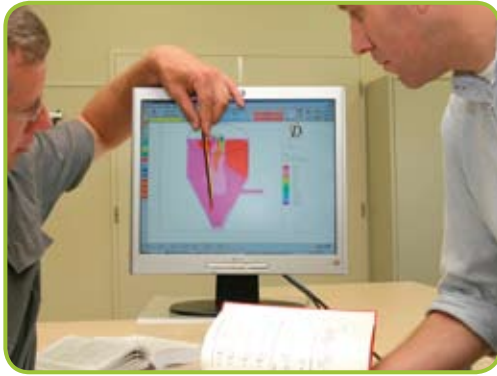
***“A process scan results in large cost savings with little investment”***,

says Martijn Fox, project manager at NIZO food research



### Why NIZO?

- 60+ years experience in process optimization
- Large track record on process and product design
- Multidisciplinary approach
- Food-grade test facilities from laboratory to semi-industrial scale



## What we offer

### Process optimization

- Process scans to increase process efficiency (20-60%)
- CFD calculations to optimize operation of spray dryers (e.g. improved solubility, elimination of fouling)
- Troubleshooting of production processes (e.g. solving contamination or fouling issues)

### Track record

- Increasing production run time from 2 to 8 hrs using our predictive modelling platform (NIZO Premia)
- Process scans resulting in € 200,000 cost savings in a cheese production line



### Process design

- Rapid product benefit-based process development using industrially proven simulation software (Premia) and the micro pilot plant:
  - Microheater
  - Microcheese
  - Microspraydryer

### Waste stream characterisation

- Valorisation scan identifying valuable components (scoring highest potential)
- Process design, small scale testing, scaling up & production
- Technology transfer to production facility

### Capacity on demand

Manufacturing for consumer testing and small scale production

### About NIZO food research

NIZO food research is a leading, independent contract research organization located in 'Food Valley', the Netherlands. Our services support your innovations (flavour, texture, health), cost management (process efficiency, ingredient replacement, test productions), and responsible entrepreneurship (food safety and quality, sustainability, evidence-based health claims). **Creating benefits together with you**

### For more information, please contact:

NIZO food research, Dr. Martijn Fox  
 T: +31 (0)318 659 513  
 E: martijn.fox@nizo.nl  
 W: www.nizo.com