



www.foodpilot.be

Pilot equipment overview



■ **More than 50 processing machines on a semi-industrial scale**

The **Food Pilot** is an application and analysis center for food companies seeking help with product development or process optimization and for troubleshooting in case of product-technical problems.

Discuss your challenges with our food experts in a free, confidential and no-obligation consultation. We offer individualized **advice, lab analyses** and/or **pilot trials** on **semi-industrial processing equipment**.

■ Which pilot equipment?

The pilot infrastructure contains more than 50 machines for dairy, meat and plant-based products. This includes conventional processing equipment as well as innovative technologies. For technical specifications about the machines, visit www.foodpilot.be.



■ Why pilot tests?

Pilot testing is a way to test new ingredients, recipes or processes and to obtain representative results that help you when scaling up your process. This can help to optimize your process under expert guidance, without halting your own production line and losing raw material. Trials can be combined with quality analyses in the lab. Test samples can also be produced at the Food Pilot for your potential clients.

■ How do we work?

After thoroughly discussing the tests, you receive a detailed quote, after which the tests are scheduled. Our operators run the machine while you watch so you can evaluate the processing of your product.





HEATING



UHT-INSTALLATION

TYPE SPP
BRAND APV

- Heat treatment of liquid products using heat exchangers: plates, tube, scraped surface, steam injection or steam infusion
- Aseptic filling is available in bottles or bag-in-box



HORIZONTAL AUTOCLAVE

TYPE AR091
BRAND JBT

- Sterilization/pasteurization of canned tins, pouches/bags, plastic bottles, glass jars and bottles, sealed scales



COOKING KETTLE

TYPE Major Line, type Baskett 130
MODEL PRIV 130 M
BRAND FIREX

- Cooking various food products



COMBISTEAMER

TYPE OES 20-10 GN
BRAND CONVOTHERM

- Steaming, baking and frying of food products



BAKING OVEN

TYPE Condo CO6 0608
BRAND MIWE

- Baking on a metal or stone floor with steam option



BAIN MARIE

BRAND VERMO/VANTAMETAL

- Fermentation of liquid products
- Melting of solid high fat products
- Batch heating



MULTIFUNCTIONAL CHAMBER

TYPE DRKBGO-SE-I-1A
BRAND GERNAL

- Smoking, baking, roasting, grilling, thawing, drying and cooking of various food products



COOLING AND FREEZING



CRYOGENIC FREEZING

TYPE 1-wagen kast (batch vriezer)

- Monitored cryogenic freezing, chilling and thawing of food products



CONTINUOUS FREEZING DEVICE (ICE CREAM)

TYPE KF-80F
BRAND TETRA HOYER

- For making ice cream



CRYOGENIC FREEZING TUNNEL

BRAND AIR LIQUIDE

- Tunnel for cooling or freezing by spraying with N₂ or CO₂



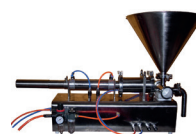
FILLING AND PACKAGING



FILLING MACHINE

TYPE HP3
BRAND VEMAG

- Filling of bound food products in sausages or in the shape of balls, burgers, or croquettes



MULTIFUNCTIONAL DOSING MACHINE

TYPE volumetrisch
BRAND FANCY FOOD

- Dosing liquids and thick products with or without pieces, directly from a tank (only liquids) or through a funnel (liquids and thick products)



PACKAGING MACHINE WITH GAS MIXER

(N₂, CO₂ and O₂)

TYPE TS 400
BRAND VC999

- Airtight packaging or after fumigation (MAP) sealing of food products

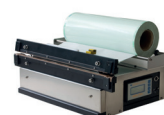


VACUUM MACHINE WITH GAS MIXER

(N₂, CO₂ and O₂)

TYPE KN5
BRAND VC999

- Vacuuming and fumigating of food products in bags



VACUUMING AND FUMIGATING OF FOOD

TYPE Medseal Digital 611 MSIDK-2
BRAND AUDION ELEKTRO

- Sealing of packaging such as coated films, coated paper bags, peelable pouches and nylon/polyester laminates



SEALING MACHINES

TYPE Polymat Varioseal PN
EN HF-500
BRAND BALLERSTEDT and PROKING

- Sealing of glass and plastic containers up to a diameter of 120 mm



CAN CLOSING MACHINE

TYPE MP 160
BRAND INDOSA

- Closing tins or cardboard tubes of various dimensions



MIXING AND REDUCING



VACUUM COOKING CUTTER
TYPE K64AC8
BRAND SEYDELMANN

- Preparation of meat products (salami, cooked sausage,...)
- Preparation of sauces
- Grinding of all kinds of food products



MEAT MINCER
TYPE MD 114 automatenwolf
BRAND SEYDELMANN

- Grinding, fine mincing or mixing of food products



M4E TEST UNIT MAGNETS FOR EMULSIONS
TYPE Test Unit
BRAND M4E

- For stable emulsions via venturi and magnet
- Disperse powders without lumps or shear



COLLOID MILL
TYPE 'toothed mill' and 'stone mill'
BRAND FRYMAKORUMA

- Production and processing of suspensions and emulsions
- For the wet milling of liquid to highly viscous products



VACUUM HIGH SHEAR MIXER
TYPE Labmaster
BRAND DANIMATECH

- Mixing system that can also establish cooling, heating and a vacuum



STEPHAN MACHINE
TYPE USMK 60 E
BRAND STEPHAN

- Mixing, homogenizing and emulgating, cooled or warmed, for the preparation of various products



MICROCUTTER
TYPE MC10/2
BRAND STEPHAN MICROCUT

- For stable emulsions, dispersing of powders with minor aeration, fine grinding



MILLING MACHINE
TYPE QUADRO
BRAND LAARMANN

- Milling of dry food products



MILLING MACHINE
TYPE Ball mill
BRAND LAARMANN

- Milling of food products (dry or wet)



3-ROLL WALS
TYPE Exakt 3-wals 80E
BRAND E&R

- Reducing particle size, e.g. of chocolate



CUBE - STRIP CUTTER
TYPE ARGON Type 410
BRAND TREIF

- Cutting (cubes or strips) of food products



PLANETARY MIXER
TYPE BT40/20
BRAND FELINO

- Mixing and beating dough or other food products using a hook, beater or whisk



SPIRAL KNEADER
TYPE SP24 F/T/E/U
BRAND DIOSNA

- Kneading dough



HIGH PRESSURE HOMOGENIZER
TYPE Ariete NS3006L Energy
BRAND GEA NIRO SOAVI

- Improving emulsion stabilities of liquid products (e.g. infant formula)



DRYING



FREEZE DRYER
TYPE Epsilon 2-10 D LSC
BRAND MARTIN-CHRIST

- Freeze drying of both solid and liquid products in bulk and in many different types of packaging (ampoules, vials, glass bottles,...)



AIR DRYER
TYPE DRKBGO - SE-I-1A
BRAND Gernal

- Drying



EVAPORATOR
BRAND Schmidt

- Removing moisture from products under vacuum



SPRAY DRYER
BRAND ANHYDRO / LAARMANN

- Drying of liquid food products without pieces

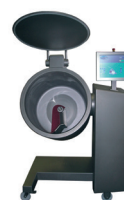


OTHER



BRINE INJECTOR
TYPE PI 54 MC²R
BRAND GÜNTHER

- Injection of meat, poultry, fish, cheese and fruit infusion



TUMBLER
TYPE MKR 150
BRAND RUHLE

- Dry salting, marinating, mixing and tumbling of food products



FRUIT AND VEGETABLE PRESS
TYPE VAC 1000-300
BRAND VACULIQ

- Extraction of juices out of food products



MULTIFUNCTIONAL CHAMBER
TYPE DRKBGO-SE-I-1A
BRAND GERNAL

- Smoking, baking, roasting, grilling, thawing, drying and cooking of various food products



CLIMATE CONTROLLED CHAMBER
TYPE Airmaster KRK2500
CLIMASTAR
BRAND REICH

- Drying and maturing processes of various products, as well as preservation tests with fumigation



COATING SYSTEM WITH SPRAY GUN
TYPE ADG 65-30 KHR
BRAND FRIEDHELM STECHEL

- Coating of food products, e.g. with chocolate or sugar solutions



AERATION MACHINE
TYPE T-50
BRAND TREFA

- Aeration of food products



VIBRATING SIEVE
TYPE Finex 22
BRAND RUSSELL FINEX

- Separation based on particle size of dry and wet food products



DOUGH SHEETER
TYPE Rondo Mat
BRAND RONDO

- Rolling dough



CHEESE TANK/DRAINING TANK
BRAND VAN 'T RIET

- Preparation of different types of cheese (Gouda, St.-Paulin, Cheddar, Feta,...)



OIL PRESS FOR SEEDS AND NUTS
TYPE Komet CA59G FU
BRAND IBG MONFORTS

- For pressing oil from seeds and nuts



EXTRUDER WITH 'HIGH MOISTURE EXTRUSION' MODULE
TYPE BC 45
BRAND CLEXTRAL

- For texturising protein rich foods
- Includes a high moisture extrusion module



For more details or a free consultation? Contact

Food Pilot

ILVO • Brusselsesteenweg 370 • 9090 Melle, Belgium

T +32 9 272 30 15

foodpilot@ilvo.vlaanderen.be

Who are we?

The Food Pilot is a collaboration between ILVO and Flanders' FOOD, embedded within ILVO (Flanders Research Institute for Agriculture, Fisheries and Food), located near Ghent, Belgium. Call now to make an appointment with one of our experts.



ILVO

FF
FLANDERS'
FOOD

www.foodpilot.be

FOOD PILOT

AGENTSCHAP
INNOVEREN &
ONDERNEMEN



EFRO
EUROPEES FONDS
VOOR REGIONALE
ONTWIKKELING

