



LESS WATER. MORE VALUE

A hi-tech company providing the most advanced preservation method: lyophilisation, widely known as freeze-drying.

ENTER THE WORLD OF FREEZE DRYING



PHARMACEUTICALS

FOOD

NUTRACEUTICALS

R & D



**Would you buy a 10-year old salmon filet?
Never, and I'd never eat it... unless,
of course, it's been freeze-dried!**

What is probably edible -though questionably nutritious- after 5 years in a tin can, if freeze-dried, it can still be confidently consumed with its protein, vitamins, carbs and other nutrients unaltered even 20 years later!

Impressive, isn't it?

LYOPHILIZATION MADE SIMPLE

FOR
PHARMACEUTICALS
FOOD
NUTRACEUTICALS
R&D

AND A LOT OF OTHER
APPLICATIONS IN EVERY
INDUSTRY

**LESS
MOISTURE**

**BEST
QUALITY**

**LESS
BACTERIA**

**LONGEST
SHELF LIFE**

**LESS
DEGRADATION**

**OPTIMUM
LOGISTICAL COST**

PROVEN BY SCIENCE OFFERED TO THE PRODUCER

Unlike scientists, manufacturers and product developers are not familiar with Lyophilization -freeze-drying, in layman's terms. Like most innovative technologies, freeze drying has been adopted by large-scale producers, but for the majority it is still uncharted waters.

Nevertheless, the time has now come to literally take the water away from the foods and help you chart a course for your next leap forward in the business world by increasing the variety of products you can offer!

No pinch of salt needed!



WHY GELLEST ENGINEERING?

We have been born into a family of suppliers of high-tech equipment for academia and business. When we first came across the freeze-drying methods in the late 00's, we could straightforward see the pro's and con's of the then available technology and set out to develop even better solutions.

Try the freeze-drying technology yourself, make your own experiments and calculations and see the benefits for yourself; enjoy the experience at your convenience on your own premises.

OUR MISSION IS
TO PROVIDE THIS
SUPERIOR TECHNIQUE
TO EVERY PRODUCER,
ON EVERY SCALE,
WITH EXPERT ADVICE
AND THE BEST EQUIPMENT
MONEY CAN BUY.

Scale it up at your own pace!



FORLONG™

**HIGH QUALITY,
FULL TASTE,
GREAT VALUE
FOR HOW LONG?**

Forlong™ is an advanced technology setup for food industries. An ever growing number of manufacturers, R&D scientists, and product developers endorse the Forlong™ lyophilisation technology and equipment to improve the quality and longevity of their produce.

THE LONGEST
EVER SHELF-LIFE

-

THE PRODUCT
IN PERFECT
SHAPE AND QUALITY

-

10 TIMES THE AROMA
AND FLAVOURS
OF THE ORIGINAL

-

OPTIMUM ROI



BEFORE



AFTER



PRESERVATION, A LEVEL UP

To a growing global demand for better nutrition, health and environmental protection, advanced technology offers yet another convincing answer: lyophilisation, in other words, freeze drying. It is simply the best and all-natural way to preserve natural ingredients for food, beverages, pharmaceuticals, and biotech, among other industries.

We offer this superior preservation method to producers no matter the quantity!

Starting today!



ON THE CLOCK FOR GENERATIONS

Our Neanderthal ancestors enjoyed the benefits of meat fermentation for millennia; gazelle ribs and tenderloins were smoked and dried 19 thousand years ago in present-day Jordan. Neolithic hunter-gatherers cooked and preserved vegetables in clay pots in what is now known as the Sahara Desert and Scots and Irishmen buried butter in peat bogs from the Bronze Age throughout the 18th century. Salt has been widely used as a food preservative from antiquity to this day. The perennial struggle against food spoilage continues.

GELLERT Engineering

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LABORATORY / HORECA [5kg]

CRYO 5™

Ice condenser capacity:	5kg
Ice condenser performance:	5kg/24hr
Ice condenser temperature:	-50 °C
Chamber volume:	65 L
Shelf dimensions:	535x165 mm (B x T)
Number of shelves:	6 + 1
Shelf area:	0,529 m ²
Shelf spacing:	10 mm - 215 mm
Shelf temperature:	up to +50 °C

Material

(Chamber & condenser): st. steel 304 or 316

Accessories:

- Electromagnetic pressure control and stop valve
- Manifold horizontal with rubber valves for connection of 4 round flasks

PILOT [20kg]

CRYO 20™

Ice condenser capacity:	20kg
Ice condenser performance:	18kg/24hr
Ice condenser temperature:	-50 °C
Chamber volume:	300 L
Shelf dimensions:	500x700 mm (B x T)
Number of shelves:	6 + 1
Shelf area:	1,95 m ²
Shelf spacing:	40 mm
Shelf temperature:	-35°C to +50°C

Shelf temperature accuracy:

max. ±1 °C

Ice condenser cooling system:

Air cooled

Shelf cooling system:

(see ice condenser cooling system)

Unit dimensions:

1878 x 1082 x 1062 mm (H x W x D)

COMMERCIAL [300kg]

CRYO 300™

Ice condenser capacity:	300kg
Ice condenser performance:	300kg/24hr
Ice condenser temperature:	-65 °C
Chamber volume:	15000 L
Shelf dimensions:	1200x2000 mm (B x T)
Number of shelves:	12 + 1
Shelf area:	25 m ²
Shelf spacing:	40 mm
Shelf temperature:	-35°C to +50°C

for ice condenser at -50 °C

Shelf temperature accuracy:

max. ±1 °C

Ice condenser cooling system:

Air cooled (optionally hybrid)

Shelf cooling system:

(see ice condenser cooling system)

Chamber dimensions:

2000x3000 mm (diam x D)

Don't freeze your business
don't let your potential dry up
freeze dry instead!



CRYO 5™

CRYO 10™

CRYO 20™

CRYO 40™

CRYO 300™