



A REVOLUTION IN FOOD PRESERVATION

WHY FLAKE ICE DOESN'T WORK ANYMORE...

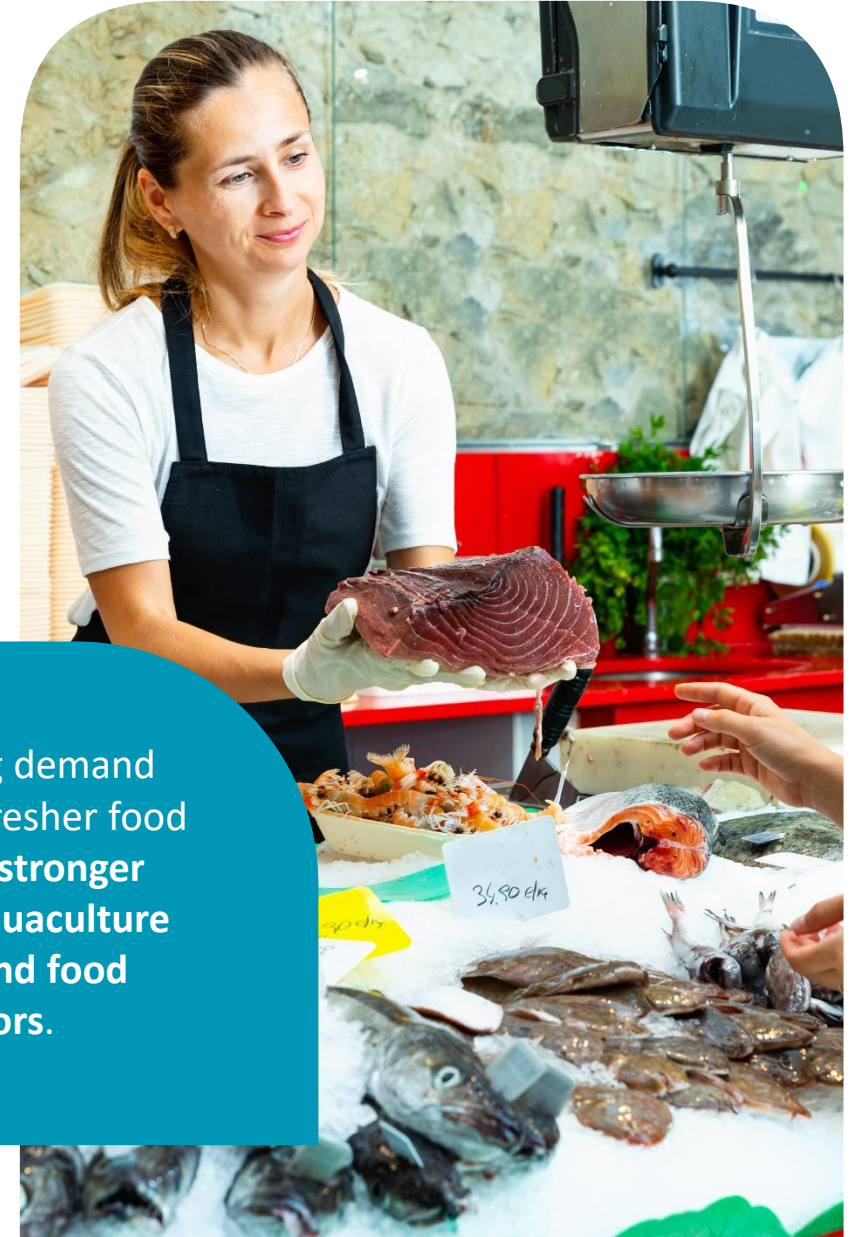
Modern consumers have become extremely aware of how important food quality is to their nutrition and way of living. Therefore, they continue to **demand food that is fresh, of higher quality, and delivered quickly** to the market.

This puts **seafood harvesters, aquaculture producers and processors** in a position where they need to adapt, but **don't have the right means to preserve harvest** for long periods of time.

Although it is the cheapest option, **flake ice cannot do the job anymore** as it:

- damages the product surface and causes breakage
- leads to shrinkage and weight loss
- and creates an environment for bacteria to cause quicker product spoilage.

All that **decreases the product value and minimizes the profit margins** aquaculture manufacturers and food processors **need to scale** in the long run.



The increasing demand for better and fresher food puts an even **stronger pressure on aquaculture producers and food processors.**

...AND SLURRY ICE DOESN'T SOLVE THE PROBLEM EITHER

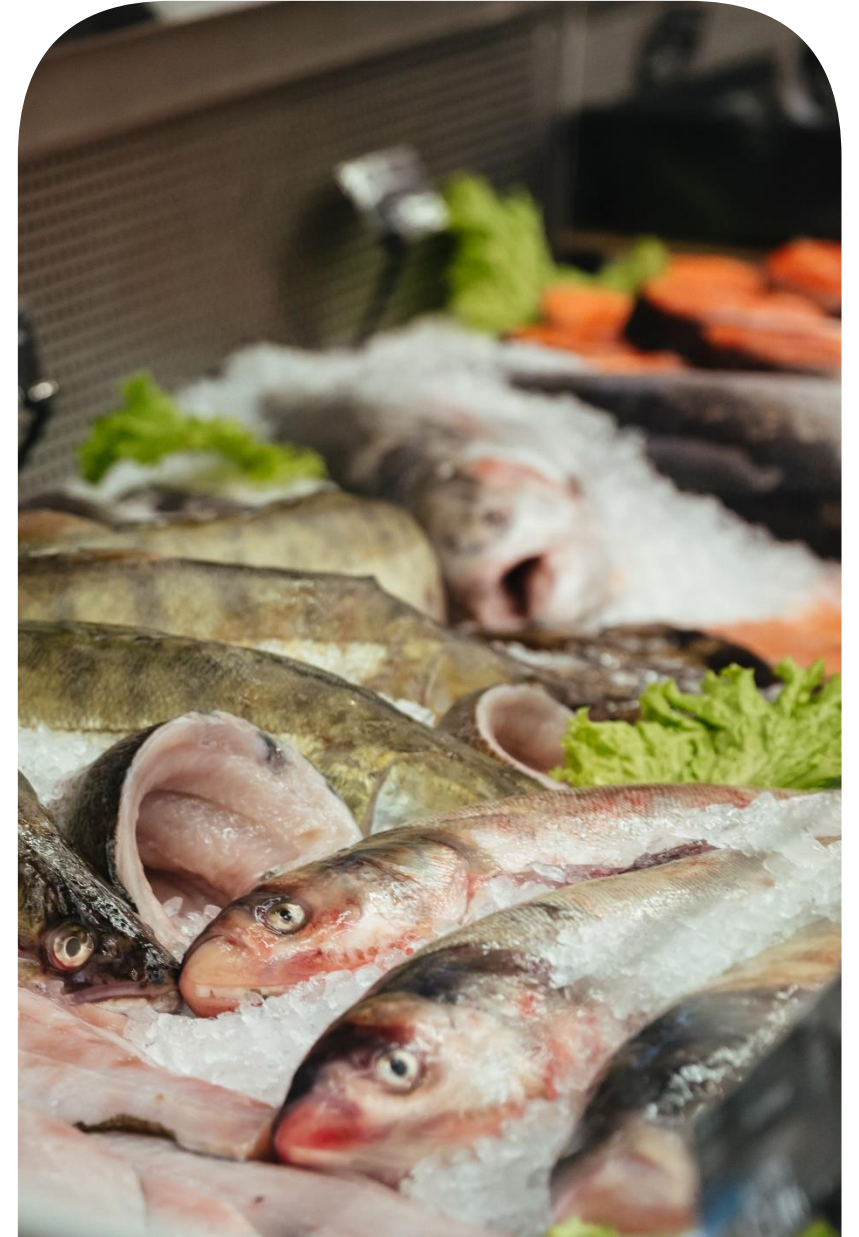
Liquid ice solutions, like slurry ice, use **small ice crystals** to absorb heat from fresh products. Usually, they have good flow properties and are easily distributed. As slurry ice creates a uniform contact with the product surface, it's **often considered an improvement over flake ice**.

However, this is only **partial**.

Slurry ice **still lacks the deepest level of cooling transfer** to products, which may lead to spoilage. Sometimes, this results in seafood harvesters, aquaculture producers and processors to use **additives in the preservation process**, which is the opposite of the consumer demand for more organic, preservatives-free products.

Slurry ice machines become and even greater **choice of compromise** as they are significantly larger, less user friendly and carry a hefty price tag.

So are these really the only options seafood producers, harvesters and processors have?



NANOICE IS A REVOLUTION IN FOOD PRESERVATION

nanoICE is an innovative molecular ice technology that keeps seafood fresh for longer in a gentle chilling process. It is far superior than other solutions like flake and slurry ice.



Rapid Core Cooling Technology

The miniscule ice particles cool your product faster than any other ice solution.



Long-Term Core Temperature Maintenance

Cooling to the core of the product helps maintain temperatures ideal for a longer shelf life.



Bacterial Growth Prevention

nanoICE creates a stable low-temperature environment that limits bacterial growth.





Reduced Shrinkage and Prevented Weight Loss

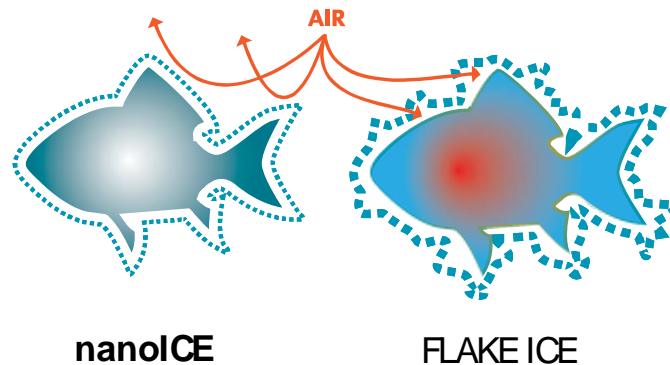
nanoICE helps you to maximize the product volume and have more sellable weight.



Preserved Product Appearance

nanoICE's silky-smooth texture with variable ice thickness is extremely gentle to products.

We like to say that nanoICE simply **improves all aspects of shelf life** (appearance, nutritional value, and taste), **optimizes production costs**, and **increases food quality**.



www.nanoiceglobal.com



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THE NANOICE MACHINES

nanoICE Our machines have a smaller footprint combined whilst still outputting much better-quality ice which means you need less ice to achieve the same result than conventional ice machines.

- ✓ Completely automated to ensure **hassle-free operation** and **increased reliability**
- ✓ Use **less energy and less refrigerant charge** than conventional ice machines
- ✓ Small and modular design with a **consistent output flow** and efficient operation
- ✓ Use both seawater or freshwater to **create pumpable ice with adjustable consistency** within just a **few minutes**

nanoICE devices
are compact, modular
and extremely easy
to use.



PRODUCT SPECIFICATIONS

Those scalable units fit all applications and output ice with adjustable consistency depending on your specific need. Moreover, all nanoICE machines use less energy than any other ice device.

	NM-3101	NM-3102	NM-3202
Dimensions (cm)	106,7 cm x 59,7 cm x 88,9 cm	106,7 cm x 59,7 cm x 88,9 cm	106,7 cm x 59,7 cm x 88,9 cm
Power configuration	230,460V @ 50/60hz	230,460V @ 60hz	208,380V @ 50/60hz
Power usage	7 kW	14 kW	14 kW
# of nanoICE lines	1	2	2
Output	5 Tons	10 Tons	10 Tons
Max Flow Rate	2 GPM (2880 G/24hr) 455 LPH (10920 L/24hr)	8 GPM (11520 G/24hr) 1820 LPH (43680 L/24hr)	8 GPM (11520 G/24hr) 1820 LPH (43680 L/24hr)

NOTE: Customized and scalable solutions are available on demand. Contact us for more information.

APPLICATIONS



Fish and seafood

nanoICE preserves your catch both on- and offshore



Meat and livestock

nanoICE keeps meat and livestock harvest fresh for longer



Poultry

nanoICE extends the shelf-life of poultry products



Produce

nanoICE is gentle to delicate fruits and vegetables

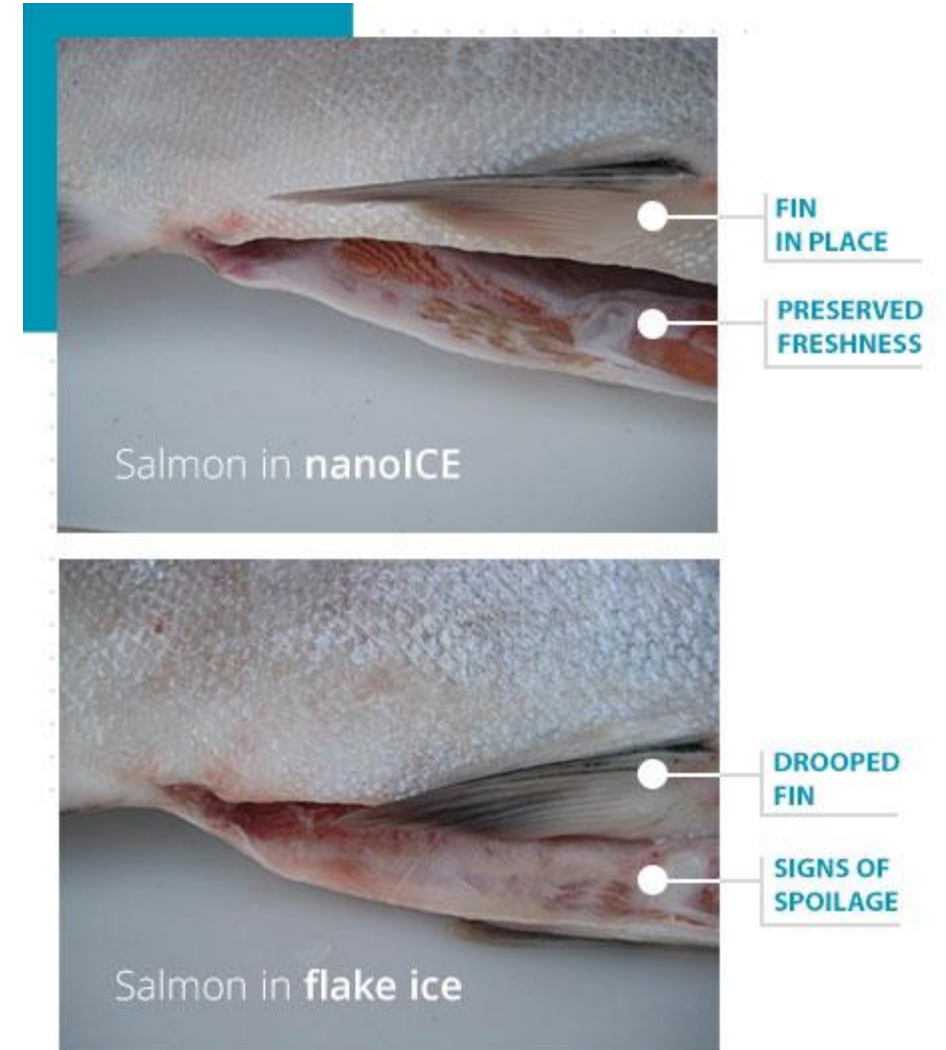
THE 72-HOUR FISH TEST

The nanoICE team self-conducted a quick experiment where we stored salmon for **3 days** in two separate containers – one filled with flake ice and the other filled with nanoICE.*

In just 72 hours, the **salmon treated with flake ice** showed signs of advanced **bacterial infection** and **discoloration**. The **fin** had slipped down and had pulled away from the flesh, which documented for ongoing **dehydration** and **enzymatic breakdown**. Additionally, there was a pool of drip loss that largely contained protein.

On the other hand, the salmon we placed in **nanoICE** didn't have **any signs of drip loss or color discoloration**. The fin had stayed in its original position. And since nanoICE is liquid, it had also penetrated the inner side of the fish, keeping its core cool inside and out.

* Third-party validation needed to prove results.



THE CHERRY TEST

In 2011, we partnered with the Washington State University to perform an extensive test with **Skeena & Rainer cherries** and evaluate the effect of both nanoICE and flake ice on such gentle products.

The cooling tests showed that **nanoICE quickly and dramatically reduced fruit temperature**. Further analysis revealed **better color grade, visual appearance and stem retention** in fruit treated with nanoICE.

- **35% increase in stem retention**
- 5.4% better firmness
- 6% improvement on storability



Fresh cherries in **nanoICE**

NANOICE PROVIDES VALUE TO YOUR BUSINESS

Easy to use machine

- Pumpable ice solution
- Intuitive touchscreen interface
- Easy and accurate hose delivery
- No more shoveling

Great customer service

- Easy to install
- Simple to maintain
- Collect sensor data
- Built-in troubleshooting

Tangible ROI

- Longer shelf life
- More sellable weight
- Preserved product quality
- Increased profit margins
- Return on capex in 18 months

Flexible solution

- Small and modular machines
- Less energy
- Less refrigerant charge
- Use in various industries
- Customizable for your needs

“nanoICE is unique to the industry; we have not experienced results like these with any other ice product.”

Director,
Foods Processor



“The fish quality is better, the buyers are happier, and we don’t have to shovel flake ice anymore.”

Captain,
Cod Trawler



“I’ve used NanoICE for 5 years. Cooling is much faster and more consistent.”

Fleet Mgr,
Shrimp/Halibut Boats



INCREASE YOUR PRODUCT SHELF LIFE TODAY

With an extensive background in harvesting, food processing, refrigeration technology and business operations, we combine the power of a unique ice solution with an innovative machine design for you to use anywhere.



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