How to pack and ice fish and shellfish

Learner
Workbook

Title	Understand how to pack and ice fish/shellfish
Level	2
Credit value	2

Learning Outcomes	Assessment Criteria
The learner will:	**The learner can:**
1. Know what the requirements are for packing and icing fish/shellfish	1.1 Outline the facilities required to pack and ice fish/shellfish 1.2 State the quantity of ice required to maintain the quality of fish/shellfish during distribution 1.3 Outline the labelling and traceability arrangements for despatch 1.4 Describe the limits of own authority and competence and explain the importance of working within those limits 1.5 Describe how to carry out and the importance of recording, reporting and communicating
2. Know how to prepare to ice and pack fish/shellfish	2.1 State how to obtain packing specifications 2.2 Describe how to interpret packing specifications 2.3 Describe how to set up weighing equipment ready for use 2.4 State why accuracy in weighing is important.
3. Know how to ice fish/shellfish	3.1 Outline how to identify fish/shellfish species and products 3.2 Describe what icing does as a chilling process 3.3 State how to recognise the quality of fresh fish/shellfish and products 3.4 State how icing is used to maintain the quality of chilled fish/shellfish 3.5 Describe the different types of ice that can

	be used to pack fish/shellfish 3.6 Outline how to monitor and assess the quality of ice 3.7 Describe how fish/shellfish must be handled to maintain condition and quality.
4. Know how to pack fish/shellfish	4.1 Describe how to assess the condition of packaging materials 4.2 State how to seal packaging and the importance of it 4.3 Describe the action to take when the process specification is not met 4.4 Explain why it is important to dispose of waste according to specified procedures.

Achieving the Unit

The following information will support you with the knowledge requirements to help you achieve this unit.

Whilst the booklet provides a good source of information, it is not exhaustive. We recommend that you research information yourself via the internet or at your local library. Useful sources of information include the Sea Fish Industry Authority (www.seafish.org) and the Seafood Training Academy (www.seafoodacademy.org).

Seafish has developed a range of resources on this topic including:

- Care of the catch training courses for fishermen;
- A responsible fishing scheme for fishermen;
- A range of technical reports on icing, handling etc;
- Other information.

There is more information on resources at the end of this workbook, and some videos can be accessed via the Library in the Seafood Training Academy website.

……Good Luck!

Lee Cooper
Seafish

UNIT DETAILS

Unit Number: FP.114K

Unit Qualification Number:

Title: Understand how to pack and ice fish/shellfish
Level: 2

Credit Value: 2

UNIT AIMS

This unit supports workforce development for those who pack and ice fish or shellfish, in fish processing/merchanting or related business.

The unit is designed for use primarily by operatives and others who carry out these workplace activities. The aim of the unit is to assess knowledge and understanding to recognised National Occupational Standards.

CONTENTS

SECTION ONE:

INTRODUCTION

Packing and icing fish is usually carried out by fishermen working at sea, by operatives in fish farms, fish markets and in fish processing factories. Icing of shellfish is less common at sea as shellfish are usually landed alive, indeed some shellfish are live until the point of sale and even consumption.

For the purposes of this Learner Workbook we will concentrate on the packing and icing of fish and fish products, although many of the principles and practices will also apply to shellfish once they have been part processed.

Examples of packed and iced products

At sea:

- Whole and gutted fish;
- Langoustine;
- Scallops.
- DELETE

On Land:

- Gutted fish, H&G fish, fillets and steaks;
- Smoked products;
- Scallops and other bivalves;
- Cooked crustaceans;
    - Crabs;
    - Lobsters;
    - Prawns whole and tails;
- Etc.

In short, almost any seafood product can be packed and iced at some point in its journey from the sea to the consumers' plate.

WHY ICE FISH AND SHELLFISH?

The purpose behind icing fish and shellfish is to reduce quality loss through spoilage, and this is done by reducing the temperature of the product to as close as possible to that of melting ice ($0^{o}C$), as quickly as possible.

There are other factors that influence spoilage – proper gutting and cleaning, correct and careful handling etc. These are important factors and are dealt with in other Learner Workbooks, but effective temperature control is perhaps the single most important factor influencing the long term quality losses that fish and shellfish are subject to.

About the only time that icing is not suitable, is in the transportation and distribution of live shellfish, where excessive or too rapid chilling would cause stress leading to the shellfish dying. Even here though, some careful temperature reduction can help to avoid heat stress or to reduce death rates during longer journeys.

FACILITIES, TOOLS AND EQUIPMENT

FACILITIES

Facilities for packing and icing fish and shellfish are simple, and the same as for many manual operations in the industry. This includes:

- Adequate space in which to work;
- Good lighting so you can see what you are doing;
- Equipment at the right height so you don't have to stoop down too much;
- The appropriate temperature to work in:
    - Cold enough to minimise quality losses;
    - Probably too cold for you and I, so we'll need warm clothing;
- A correctly laid out work area to help, not hinder the flow of work;
- Suitable waste disposal facilities:
    - Solid waste disposal – bins;
    - Waste water disposal;
- Hygienic and cleanable facilities;
- Anything to add? ……

These requirements apply equally well to the hold of a fishing boat, a fish factory or behind a fish counter in a supermarket.

Let's not forget facilities to make and store ice until it can be used.

TOOLS AND EQUIPMENT

Packing and icing fish and shellfish can be a simple operation, but even so you will need some equipment. Tick off from this list the equipment you have and add anything we miss.

- Weighing equipment to weigh fish/shellfish, ice and finished packs? ❒;
- Ice bin? ❒;
- Ice shovel or scoop? ❒;
- Protective film or membranes? ❒;
- Labelling equipment or labels? ❒;
- Supplies of empty boxes/cartons etc? ❒;
- Moving/handling equipment? ❒;

Add your own tools and equipment here please:

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The PPE required for icing and packing fish and shellfish will probably consist of general PPE to handle the cold wet working conditions typical of so many seafood workplaces, plus:

- Suitable gloves to protect against chills from handling large quantities of ice;
- (add your own list here)
-

If it's cold then your clothing should be suitably warm, and of course your footwear must be appropriate to a wet environment.

PPE must be fit for purpose and supplied free of charge by your employer. You have a responsibility to wear it, look after it and when it needs replacing to bring this to the attention of your employer.

The hat, hairnet, clean coat, plastic arm covers, beard snood etc are not PPE as they are not there to protect you from injury during processing. They are there to protect the food from contamination by you.

PPE is covered by Health and Safety legislation, whereas the need for hygiene clothing is covered by various Food Safety Laws.

HYGIENE CLOTHING

When handling fish it is essential that your outdoor, everyday clothes are covered. The important reason for this is to protect the product from any loose material such as hairs or fluff which might fall from your clothes onto the fish. Remember you are handling food. People will eventually eat what you are producing.

Head coverings

- Either a hairnet or hat with a snood which completely encloses the hair;
- Beard net - moustache or beard should also be completely covered.

Overalls

- Everyday clothing covered by a clean washable overall;
- Waterproof apron – disposable or washable;
- Disposable plastic sleeve protectors.

Footwear

- White rubber Wellington boots – waterproof and cleanable.

Never wear outdoor shoes in a food preparation area – if wearing special boots is impractical, outdoor shoes should be covered with disposable plastic boot covers. And, don't wear your rubber boots

outside of the work area as you don’t know what you will pick up on the soles.

Maintaining Clothing

Your hygiene clothing must be kept clean, to help prevent contamination of the products.

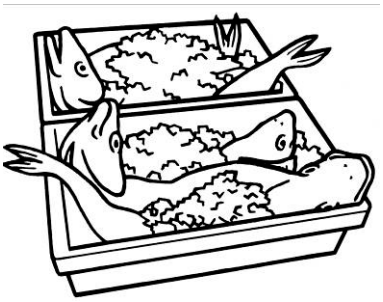
- When you have finished work, scrub clean your apron and boots, wash them with a dilute solution of detergent or bactericidal cleaner and leave to dry;
- Alternatively, you may have a cleaning service to do this for you;
- Fabric items, such as overalls and cloth hats must be laundered after each processing session;
- Disposable items must be used once only. Use fresh each time.

HOW MUCH ICE IS ENOUGH?

In section 3 we will describe the various types of ice and how different production methods produces ice of different densities.

Surprisingly you don't really need to know this to decide how much ice is enough. It is possible to carry out theoretical calculations based on thermodynamic principles, but in practice the best way to decide how much ice is necessary is to do it in practice.

There are so many factors that influence how the ice melts during storage and transport to its next destination. Some of these include:



- The starting temperature of the fish/shellfish;
- The temperature outside the box(es) during storage and transport;
- How long storage and transport will last;
- How much fish or shellfish is in a box;
- And probably several other things as well.

The one thing I can be fairly sure of is that you should use more ice than you would expect to, unless you have done some trials first.

As a rough guide you could consider the following:

Use 1Kg of ice for every 1Kg of fish for the initial chilling down to around 0^{o}C. Add extra ice to maintain temperatures during storage and distribution.

Of course, to find out how much ice is needed you can simply look at what's been written in the packing specification under 'quantity of ice'.

ACTIVITY- what ice/fish ratio do you use?

_____

PRODUCT CONTROL AND TRACEABILITY

An important aspect of seafood quality and safety assurance is to be able to trace products, ingredients, suppliers, retailer, processing operations or storage procedures through the seafood chain. This is especially important when problems occur. Traceability describes the systematic recording of information about a seafood product from point of harvesting to point of sale.

Hand in hand with traceability is product control and labelling.

Without labels that are unique to each individual product or production batch, it would be impossible to track fish and shellfish through the seafood chain, and to know at each step in the chain how they had been handled and processed.

This ability to trace and track batches of seafood and to know what you and others have done to them is a key part of product control.

It is often the person who packs and ices the fish or shellfish, who also attaches the label and/or completes the final documentation before dispatch.

Advantages of product control / traceability / labelling

- To meet legal requirements;
- An effective food safety assurance tool;
- Allows companies to manage suppliers and customers;
    - Improved mutual trust between supplier/customers;
    - Reduced quality assurance checks if the supplier is trusted;
    - Potential losses reduced if problems arise;
    - Better cost accounting means more profitable businesses;
- Automated systems can save time.

Each step in the seafood chain will potentially generate information for the product, including fish reception, processing, packing and despatch.

ACTIVITY

Discuss with your supervisor and briefly record your conclusions to the following questions about the product control and traceability arrangements in your company.

Q. What information do you need to check when receiving fish or shellfish to pack and ice?

Q. After packing and icing what kind of records must you complete?

Q. Do you understand the arrangements for product control and traceability in place in your company? Yes/ No

If No, please discus with your supervisor.

If YES, please briefly describe them here.

SECTION TWO:

PACKING SPECIFICATIONS

Each packing specification will have its own specific requirements, but almost all specifications will have common requirements. List the main requirements' of your chosen packing specification here:

- The species to be packed;
- The quantities to be packed;

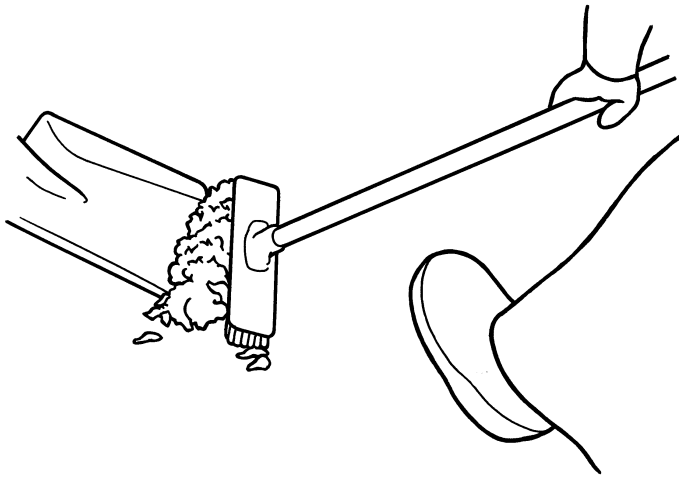
What else? Please add yours here

-
-
-
-
- Recording requirements.

If you have any problems interpreting the specification then discuss it with your line manager.

PREPARING THE WORK AREA

Before you start to pack and ice you must make sure that the area where you will be working is suitable and ready for use. Use the following checklist.



The **workroom** area should be clean and tidy, free from any rubbish, any external doors and windows should either be closed or covered with suitable barriers to exclude flies and other pests.

Tools you will need should be assembled. Check that they are clean, sharp and do not have loose handles. Any tools which you will not need must be correctly stored away from the preparation area.

Any work surfaces (tables etc) must be clean and free from all debris.

Bins for the storage of waste must be clean, and emptied as required.

Clean boxes or cartons etc for the storage of the finished product should be in place.

Supplies of **ice** for covering the fish or shellfish should be in place, and replenished as needed during the day.

Put on **protective clothing** and wash hands.

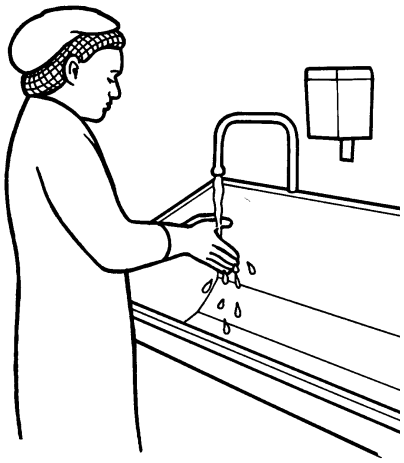
Only when you are sure that everything is ready should you begin work.

Hand Washing

Your employer will have trained you in how to effectively wash your hands and will have a procedure on when and how to do this.

We think this is so important that we're including our own brief guide to hand washing here.

Hand Washing - a summary



- Wet hands before applying liquid soap.
- Apply liquid soap (one pull of dispenser).
- Rub hands together vigorously for about 10-15 seconds (count – it's longer than you think!!).
- Make sure you wash both sides of the hands, fingers, thumbs, nails and wrists.
- Rinse thoroughly with clean water.
- Dry thoroughly with a clean paper towel.
- Apply alcohol liquid/gel to hands and massage into all surfaces.
- Allow to air dry (do not wipe your hands on your clean overall).
- If gloves are to be worn, apply alcohol liquid/gel to glove surfaces before work.

Don't Forget

- Although wearing of wedding bands is allowed in food production areas, these are a potential source of infection and can be a site for bacterial pockets. Always lift and turn the band when washing/disinfecting.
- Nail varnish should never be worn in food factories. False nails or nail extensions are also not permitted.
- Nails should always be short and clean.
- All skin lesions, cuts or abrasions should be covered with a blue plaster or official dressing. Any infected cuts or skin problems should be reported prior to work

Clean as you go

Clean as you go means keeping your work station in a tidy and hygienic condition so that you can continue to work through your shift. It also applies to you and the periodic need to change clothing and wash hands both for breaks and at other times during the working day.

SECTION THREE:

SPECIES IDENTIFICATION

It is important that you can recognise all of the various species and forms that you are likely to encounter during normal packing and icing activities.

Most seafood processing businesses will specialise in a few types of species, while fish merchants and fishmongers/retailers will need to be able to identify a larger number of species. Fishermen are likely to encounter a number of different fish or shellfish species during normal fishing, but only a few of these will be landed.

ACTIVITY

List the main species you are likely to be asked to pack and ice. How do you identify them? Most of us use one or two key features to help us distinguish from similar species. Here is an example of how I distinguish between King and Queen Scallops, even when the Kings are small.

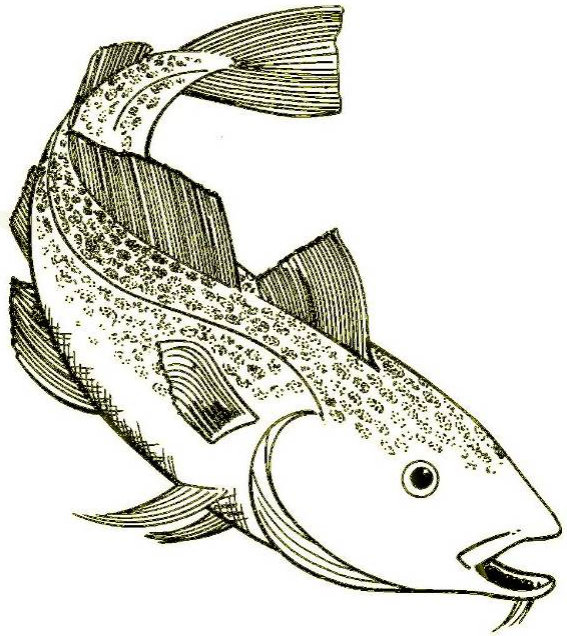
Species	Identifying features
King and Queen scallops	Typical fan shaped shell, Queens have two curved shells, Kings have one flat shell and are larger.

QUALITY

There are two aspects to fish quality that fish handlers need to be aware of.

Organoleptic quality of the fish flesh. What it tastes, looks and smells like – how fresh the fish is. This type of freshness[1] quality is very dependent upon how well the fish has been handled, how cool it has been kept since harvesting, and how long it has been out of the water.

Organoleptic (freshness) quality is gradually lost over time.



It will have an effect on the processer as poorer quality fish will have softer flesh and be harder to process well. The person packing and icing can also do their part in helping to maintain quality by using good handling practices:

- **Packing** – pack the fish, shellfish or product correctly and according to specification.
    - Don't overfill boxes;
    - Line everything up correctly in the box;
    - Use the correct lining sheets for fillets etc.
- **Handling** – handle with care, avoid bruising, stress and damage as it will accelerate spoilage;
- **Icing**- Do not expose either whole fish or processed material above 5ºC for any longer than absolutely;
    - Use the right amount of ice in the right places;
    - Keep lids on the boxes after icing;
    - Iced boxes should be handled carefully so as to not damage the box or the contents.

[1] Not to be confused with fresh meaning never been frozen.

Quality Assessment

While you will not be expected to be able to assess the organoleptic quality of fish using any of the formal systems, you should be able to spot the occasional rogue fish or shellfish that is of much poorer quality than the rest in your batch, and take the appropriate steps as prescribed by your company.

Most companies have clear guidance on what to look for and how to recognise that the products you are packing and icing are of the correct quality.

For fishermen this usually includes the minimum size of fish and shellfish, and whether or not particular crustacean species are berried and therefore not landed.

In fish processing companies key quality criteria for fillets will include the overall shape, clean cut edges, colour, presence of parasites etc.

Whatever the type of fish and shellfish being packed and iced, and wherever it is being done, you should be clear in your own mind what constitutes quality, in specification product, and what is out of specification.

If you have any doubts please discuss this with your supervisor.

ACTIVITY

Please describe below one example of how you recognise quality in one of the products you pack and ice.

Product type

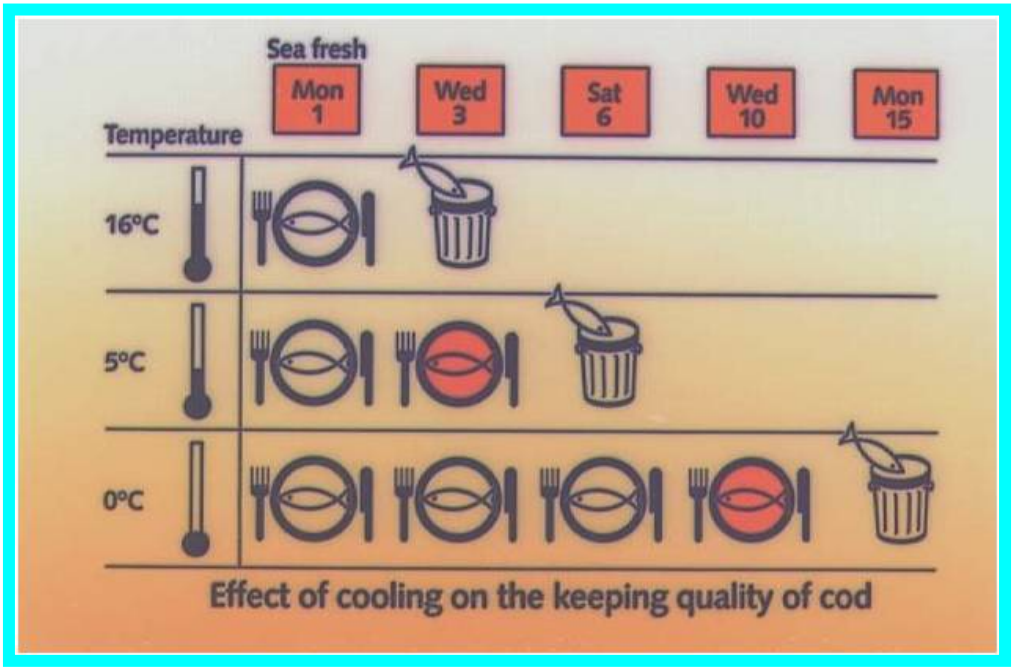
Quality indicator	What do you look for?	How do you measure it?

Examples could include:

- Oysters, still alive, close when tapped, if oyster not tightly closed I tap it gently to see if it reacts.
- Smoked cod fillets, worm contamination, small brown marks in flesh, observe fillet while on a candling table. And cut/trim to remove.

IMPACT OF CHILLING IN QUALITY

As chilling only reduces the temperature of the fish and shellfish down to around 0ºC, or a little above, it should only be regarded as a short term storage method that can provide a useful shelf life extension of 14+ days when compared to un-chilled products.



As this image shows, fish that are chilled down to around 0ºC very soon after harvesting can have a useful shelf life of nearly 10 days and should be binned by day 15. Fish kept at 16ºC (typical summer sea temperatures) are good only for the bin in just 3 days. Even at 5ºC (the temperature of a good domestic fridge) the fish are ready for the bin by day 6.

Keeping fish and shellfish chilled throughout the distribution chain is essential if the end result isn't going to be a dish that the customer throws away without enjoying.

TYPES OF ICE

For the sake of completeness, we will briefly look at other icing and chilling methods that are occasionally used in the industry.

Chilled and refrigerated seawater (CSW and RSW): seawater chilled down to around 0ºC by adding ice to the water (chilled) or by passing seawater through refrigeration equipment is a very useful way of rapidly chilling large quantities of fish rapidly. Commonly used in pelagic fishing boats for mackerel, herring, sardines etc.

Slush or pumpable ice: A slurry of ice and brine which when used correctly cools fish much more efficiently than ordinary ice. The ice mixture can be produced by hand or by machine. It differs from chilled seawater in that there is much more ice in the mixture and the temperature of the mixture is often just below 0ºC.

Pre-chilling the catch with slush ice is much quicker and can yield a 1-3 day chilled storage life advantage over that chilled with ice.

CSW, RSW and pumpable ice are usually only used for whole or gutted fish etc. As they all contain some salt in the mixture they cannot be used with fillets etc without the product absorbing some salt into the flesh.

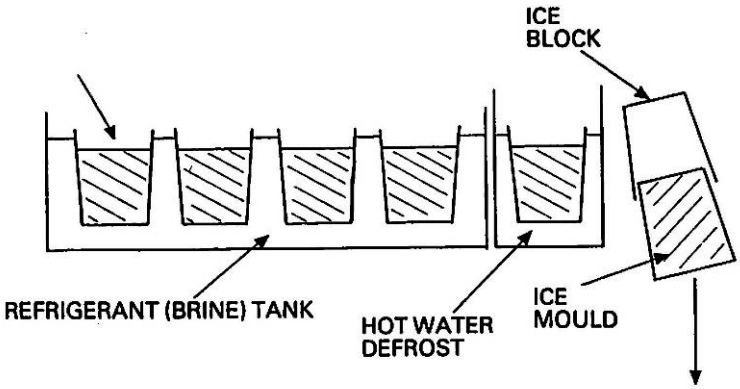
Super-chilling: There are various ways of super-chilling, or reducing the temperature of the fish and shellfish to just under 0ºC, but not low enough to freeze the flesh. Super-chilling can produce even longer shelf life but it must be carefully managed as a drop in temperature to below -2.2ºC runs the risk of partial freezing.

Hand Icing: Although often carried out by machine, this form of chilling is most often carried out by hand. Using one of the various forms of ice, fish or shellfish are placed into close contact with the ice. Chilling is achieved by the melting ice and the melt water that runs over the fish.

Types of ice: Ice for hand icing is made from potable water which freezes at 0ºC. The ice is usually stored so that it doesn't freeze into larger clumps that could cause physical damage to the product it is supposed to protect.

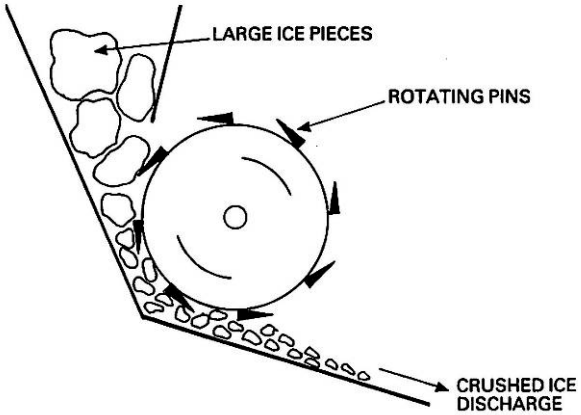
Ideally the ice will be free flowing when handled. The various types of 'hand' ice are defined by the way in which they are made. Different types of ice will have different cooling capacities depending upon how much space there is between the ice, and therefore what weight of ice will pack into a box.

- **Potable** or drinking quality water should be used for making ice, as it will contain no harmful organisms and will not contaminate the fish and shellfish it is used on. Ice should be stored and handled hygienically to ensure it remains safe to use.



- **Block** ice is usually made in batches by freezing water in a large metal mould, often in a brine tank. The blocks of ice are then broken down mechanically to produce crushed ice.

- **Crushed** ice – the fineness of the ice is dependent on the siting of the crushing rollers used. Large pieces make poor contact, melt more slowly and can mark or bruise the flesh.



- **Flake** ice is made by spraying cool water onto the surface of a refrigerated drum. The water freezes into flakes about 3mm thick and is removed by a scraper to produce small flakes of ice.

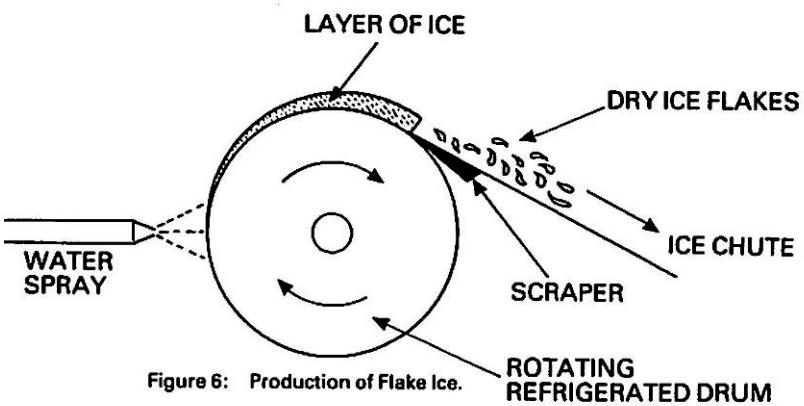
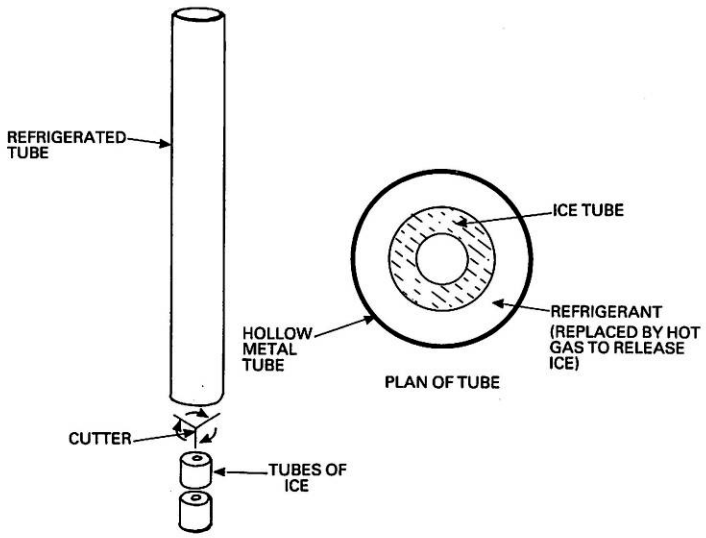


Figure 6: Production of Flake Ice.



- **Tube** ice is as the name suggests made in a tube. Cold water passing through an inner refrigerated pipe is frozen into a ice tube. The ice tubes are then released by hot gas replacing the refrigerant and the emerging ice is chopped up into convenient sized pieces.

- **Storage of ice**: The different sizes of these different forms of ice will dictate how much ice can be stored in a certain volume:
    - Flake ice is typically 0.45 tonnes per cubic metre (t/m$^{3)}$.
    - Tube ice varies from 0.5 to 0.65 t/m^3;
    - Ice blocks are 0.7 t/m^3;
    - Crushed ice is usually around 0.65 t/m^3**.**

  Ice is either stored below freezing in insulated **and** refrigerated stores or above freezing in insulated containers/stores.

ACTIVITY

Describe here the type(s) of ice you have access to, how they are stored and why this method is used.

ICING METHODS

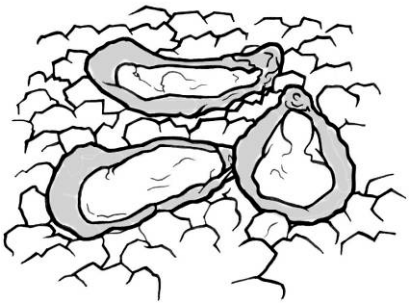
The purpose of icing is to chill the product to around 0^{o}C if necessary, and then to keep it close to that temperature until it reaches its destination.

How this is done for whole fish or shellfish is fairly simple.

- Ice on the bottom of the box;
- Ice mixed in with the product;
- Ice on top of the product.

And sufficient ice to last the journey.

Other products may be a little more complicated, but follow the same basic principles.



Oysters may be displayed on ice like this at a restaurant or in a fishmongers, but they cannot be transported whole (and alive in this way).

Usually packed in smaller boxes by the dozen, the boxes may well be placed inside a larger box and sat on a bed of ice if higher temperatures are a possible problem.

Fish fillets are simpler. Usually they are placed in cartons or boxes with ice on top and underneath. Thin, waterproof membrane sheets are often used to protect the fillets (or steaks etc) from meltwater.

Similar membranes may also be used by fishmongers if they are putting skinned fillets onto ice for display. Smoked and dyed fillets cannot come into direct contact with ice or the ice will stain, so membranes or plastic trays are often used.

ACTIVITY

Please describe a typical packing and icing operation carried out in your workplace, ideally by you. Also describe what particular steps you take to ensure good handling practice. Describe the product, how it's packed and iced and any standards you must reach[2].

Packing and Icing Description: Good Practices =?

[2] For example how much ice per box etc.

GOOD HANDLING PRACTICES

Temperature

The chilled fish chain is a term used to describe the journey that fish and shellfish take from the point of capture or harvesting through to the point at which they are sold to the final consumer.

That journey may take a week or two and may involve some or all of the following:

- Foreign fishing vessel
    - iced onboard;
- Landed at an overseas market and transhipped to UK
    - ice topped up;
- Landed UK, overland to Port Wholesale Market
    - Unboxed;
    - Graded;
    - Re-iced
    - Sold;
- Merchant –
    - Filleted;
    - Packed and iced;
    - Sent to monger;
- Fishmonger –
    - Displayed on ice;
    - Sold to customer;
- Customer
    - Car;
    - Refrigerator;
    - Eaten.

The fish in this example may well take 10 days to reach the customer, and yet they are still in a reasonable condition and will still be OK to eat. How can this be?

The fish in question may be caught in North Atlantic waters and are quickly gutted, cleaned and iced onboard in large insulated containers called bulk bins. These ensure that the fish remain around 0^0C while onboard. There are some crushing issues with bulk bins but they are excellent at maintaining a constant temperature.

The bulk bins then spend several days getting to the UK Port Wholesale Market. The topping up of the ice before transhipping is essential if the fish are to remain chilled.

Once they reach the market they are graded and re-iced into smaller fish boxes, sold and shipped to the processor.

Filleted, sent to the fishmonger and sold. During all[3] of this journey the fish have been kept as cool as possible to reduce spoilage. It's only when the fish are sold that we in the industry lose control over the fish.

Other Good Handling Practices

1. **Quick** – not rushed, but not slow either. Each stage of the chilled chain should be completed as quickly as possible, with the minimum of delay to get the product to the consumer. Speed should not compromise the other practices.

2. **Clean** – good hygiene practices at all times means that everything that the fish or shellfish comes into contact with is clean, that means:
   - You;
   - Your equipment;
   - The workplace;
   - Boxes or other packaging materials
   - The other fish or shellfish;
   - What else?
     - o
     - o [4]

3. **Careful** – take care when handling live shellfish, whole fish, fillets, meats etc. Avoid unnecessary physical abuse that can lead to accelerated spoilage.

4. **Consistent** – apply good handling practices to each and every fish or shellfish product you handle, throughout the shift and from day to day.

[3] In an ideal world.
[4] The ice. Can you add another?

SECTION FOUR

WASTE DISPOSAL[5]

Other Learner Workbooks contain a longer section on waste disposal, and can be consulted if required.

Apart from waste ice and a few solids (packaging etc), packing and icing operations tend not to produce too much waste on their own.

ACTIVITY:

For a typical working shift spent packing and icing please describe the type of operation carried out and the types of waste material produced. How are they disposed of?

Question	Answer
What kind of packing/icing operation is it? Please describe	
What kind of waste are produced? How much is produced in a single shift?	
How is it disposed of?	

[5] Seafish have extensive waste minimisation training and technical materials available.

SECTION FIVE:

RECORDING, REPORTING AND COMMUNICATING

Recording, reporting and communicating are essential activities that take place every day while we are at work. They probably take place every hour of our working day, so just what are we recording, reporting and communicating about?

Here are a few of our ideas on general issues.

- Product, processing or packaging specifications;
  - You may be given a written report on a new process specification.
- Targets, schedules or deadlines;
  - You may verbally communicate to your supervisor that a scheduled task has been completed.
- Results, scheduled milestones, routine outcomes;
  - You may record the completion of each check of the metal detector.
- Health and Safety or Food safety issues;
  - This could include you reporting problems to your supervisor, or receiving updates on changes to policy.
- Impending operational problems;
  - Verbal reports on what might go wrong.
- On-going operational problems;
  - Usually verbal reports on what's being done to fix the problem.
- Task Handovers;
  - Informing those taking over from you at the end of your shift.

These are pretty general. Can you list below three different examples of a communication, a report or a record from a typical working day during packing and icing operations?

By way of a definition:

A report is usually one way – you report to someone, or they report to you.

Communications are usually two way – information is exchanged and may be discussed.
Records – a permanent or semi permanent record of an outcome – almost always written.

Examples of Records made	
Reports – verbal or written	
Communications – what were they about?	

The Importance of Communication and Reporting

What do you think may happen if communications and reporting were absent, delayed or inaccurate?

Think about this for a moment or two before looking at our list.

Perhaps even make your own list to compare to ours.

Communications and reports that are delayed, inaccurate, incomplete or absent may lead to:

- Misunderstandings and confusion;
- Poor working relationships between colleagues and team members;
- A drop in H&S or food safety performance;
- Production problems that may lead to increased waste or increased costs;
- Damage to equipment or machinery;
- Quality losses and perhaps even product recalls;
- Loss of sales / customers due to poor quality, out of specification products etc.

When communications and reports are on time, accurate and fit for purpose, what may be the results?

- A more efficient, effective and pleasant(er) workplace.

Effective Communication

How is this achieved?

1. Providing information

- Find somewhere appropriate to communicate – where the noise levels are suitable;
- Be precise and stick to the points;
- Use notes if appropriate;
- Maintain appropriate eye contact;
- Use polite gestures;
- Pay attention to the recipient's body language;
    a. Are they showing an interest?
    b. Have you 'lost them'?
    c. Are they taking notes?
- Ask occasional questions to check their understanding of the messages.

2. Receiving Information

- Listen carefully;
- Indentify the important points;
- Take notes if appropriate;
- Ask questions to confirm your understanding;
    a. Use open questions or paraphrase what is being said;

    b. Avoid closed questions unless you really want a Yes or No as the reply;
- Check all important information with the information provider;
- Show you are paying attention by:
    a. The way you stand;
    b. Making appropriate eye contact;
    c. Asking the right questions.

Effective Recording

The main purpose of records are to provide:

- Evidence of what happened during the work period;
    - evidence that certain steps were taken;
    - evidence of any problems, or the absence of problems;
    - a record of key data such as temperatures, quantities, batch numbers etc.
- Confirmation that the people tasked with collecting and writing down data actually did so – that's why you have to sign and date forms.
- Iinformation for:
    - financial analysis;
    - problem solving and fault diagnosis;
    - traceability.

Many of the records we keep are routine, with the same data recorded batch after batch, day after day. The very routine nature of recording may make you assume it's not important and it doesn't really matter. IT DOES!

It's important to the customer, your bosses and you.

A wise woman once said: "If it's not written down, it didn't happen." We can take that to mean, if you keep careful, accurate and honest records of what you do, as required by your employer, then should a problem arise they will be your best defence, and that of your bosses as well.

This only works though if you write down what actually happens, not what you think should have happened.

So:

- Write down the actual temperature of the delivery, the one you actually measured;
- Write down the actual time the check weigher was tested, not the time it was supposed to have been tested;
- And please, don't fill in records in advance.

Recording what has happened is an important part of any seafood processing or handling operation. Almost everything you or your colleagues do will result in a record somewhere in the company.

Records and the accurate recording of data are essential if the business is to survive and prosper and your job is to be secure. We need to record all kinds of information during our working day. What kind of records do you need to complete to during a normal intake operation?

Document name	Describe its purpose

LIMITS ON AUTHORITY

We all have limits on our authority, even the Managing Director. Usually these limits are tested when something goes wrong. Do you know your limits? What you can and cannot do?

What do you do if there is something wrong with the fish you are given to process? Describe the limit of your authority in case of a problem.

What do you think are the possible problems that may be caused if you do not stay within the limits of your authority?

List them here and then talk to your supervisor to see if you have listed everything.

As you become more experienced in your job, will the limits of your authority increase? Yes / No

If yes, how will they change?

SECTION SIX:

ADDITIONAL RESOURCES

PACKING AND ICING RELATED

FISHING –

- Seafish technical report F57_11_08 Improvements to catch quality;
- Datasheet 94_29_FT effect of icing on quality of trawled whole *Nephrops*
- SR 471 small boat icing trials
-

ONSHORE

- The chilled fish chain – Seafish open learning module

For up to date information on resources please visit the Library on the Seafood Training Academy website www.seafoodacademy.org and download the Library Guide for FDQ Learner Workbooks, where you will find links to the above documents and much more.

GENERAL

1. Food Safety training courses from level 1 to level 3:
    a. Available in various languages;
    b. Available as taught courses, open learning programmes and by eLearning[6];
    c. CIEH and REHIS approved.

2. Health and Safety training courses;
    a. Level 1 taught course;
    b. Level 2 as a taught course or open learning module;
    c. CIEH and REHIS approved.

For information on all of these training resources and others, contact Seafish:

Seafish Training
Sea Fish Industry Authority
Humber Seafood Institute
Europarc

[6] A free to study, level 2 course is available at www.seafoodacademy.org

Grimsby
DN37 9TZ

Tel 01472 252300
Email training @seafish.co.uk

See also: www.seafish.org and www.seafoodacademy.org

For up to date information on resources please visit the Library on the Seafood Training Academy website www.seafoodacademy.org and download the Library Guide for FDQ Learner Workbooks, where you will find links to the above documents and much more.