

SELF-CONTAINED CUBER MACHINE A GLAÇONS A BAC INTÉGRÉ STECKERFERTIGER WÜRFELEISBEREITER IJSBLOKJESMACHINE MET INGEBOUWDE OPSLAGBUNKER FABRICADOR INTEGRADO DE CUBITOS DE HIELO CUBETTATRICE AUTONOMA

(E

INSTRUCTION MANUAL NOTICE D'UTILISATION BEDIENUNGSANLEITUNG GEBRUIKSAANWIJZING MANUAL DE INSTRUCCIONES MANUALE D'ISTRUZIONI

IM-21CLE IM-25CLE IM-30CLE **IM-45CLE-25** IM-45LE IM-65LE **IM-65LE-25 IM-100LE IM-130ME** IM-240M2E IM-25WLE IM-30WLE IM-45WLE IM-65WLE IM-100WLE **IM-130WME IM-240WM2E**

IMPORTANT

- This booklet is an integral and essential part of the product and should be kept and preserved by the user. Please read carefully the guidelines and warnings contained herein as they are intended to provide the installer/user with essential information for the proper installation and the continued safe use and maintenance of the product. Please preserve this booklet for any further consultation that may be necessary.
- 2. This is a commercial icemaker, and should be destined only to be used for the purpose for which it has been expressly designed. Any other use should be considered improper and therefore dangerous. The manufacturer will not be held liable or responsible for any damage caused by improper, incorrect and unreasonable use.

I. INSTALLATION INSTRUCTIONS WARNING

The installation must be carried out by qualified personnel, in accordance with current regulations, according to the manufacturer's instructions.

1. UNPACKING

WARNING — Children should not be allowed in reach of the packaging elements (plastic bags and expanded polystyrene) as they are potential sources of danger.



- After removing the packaging, make sure that the icemaker is in good condition. If in doubt, please do not use the equipment but apply to professionally qualified personnel.
- 2) Remove shipping tape holding the Door and Front Panel.
- Remove the protective plastic film from the exterior. If the icemaker is exposed to the sun or to heat, remove the film after the icemaker cools.
- 4) Remove the package of accessories, and check the contents:

a) Installation Kit (Air-Cooled)		
Inlet Hose	1	
Outlet Hose	1	
Installation Kit (Water-Cooled)		
Inlet Hose	2	
Outlet Hose	2	
1/2-3/4 Nipple	2	
b) Scoop	1	
c) Adjustable Leg (Except IM-21)	4*	
* Provided for Europe/General(G50)/Australia only		

5) Remove shipping tape holding the Bin Control Switch by opening the Bin Door and reaching in (see Fig. 2).



[All models except IM-21/25/30/45CLE]



2. LOCATION



- This icemaker is not intended for outdoor use. Normal operating ambient temperature should be within 1°C to 40° C. Normal operating water temperature should be within 5° C to 35°C. Operation of the icemaker, for extended periods, outside of these normal temperature ranges may affect production capacity.
- 2. The icemaker should not be located next to ovens, grills or other high heat producing equipment.
- 3. The location should provide a firm and level foundation for the equipment at normal counter top height.
- Allow 15 cm clearance at rear, sides and top for proper air circulation and ease of maintenance and/or service should they be required.
- 5. This appliance is not suitable for installation in an area where a water jet could be used and where dripping is not allowed.
- 6. Do not place anything on top of the icemaker or in front of the Louver.
- This icemaker will not work at subfreezing temperatures. To prevent damage to the water supply line, drain the icemaker when air temperature is below zero (see "II. 2. PREPARING THE ICEMAKER FOR LONG STORAGE").

3. INSTALLATION

- * Incorrect installation can cause harm to people, animals or things, for which the manufacturer cannot be held responsible.
- * Place the icemaker in the selected permanent site.

4. ELECTRICAL CONNECTIONS

This icemaker requires an earth that meets the national and local electrical code requirements. To prevent possible severe electrical shock to individuals or extensive damage to equipment, install a proper earth wire to the icemaker. Remove the plug from the mains socket before any maintenance, repairs or cleaning is undertaken.

- * This icemaker must have a separate power supply or receptacle of 220 240V.
- * The main control box fuse is rated at 5A and should only be replaced by a qualified service engineer.
- * Usually an electrical permit and services of a licensed electrician are required.
- * If the supply cord and the plug should need to be replaced, it should only be done by a qualified service engineer.

For the U.K. and the Republic of Ireland only

* The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow = Earth Blue = Neutral Brown = Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Green-and-Yellow must be connected to the terminal in the plug which is marked with the letter E or by the symbol \perp or coloured Green or Green-and-Yellow. The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black. The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

* Should the socket outlets in the installation site not be suitable for the plug supplied with your product, the plug must be removed (cut off if it is moulded on plug) and an appropriate plug fitted.

If the non-rewirable plug has been cut from the power supply cord, it must be disposed of. There should be no attempt to reuse it. Inserting such a plug into a socket elsewhere presents a serious risk of electrical shock.

* The non-rewirable plug must never be used without a fuse cover being fitted.

The correct replacement for the detachable fuse cover is identifiable from the manufacturer's reference number stamped on the plug.

Supply of replacement fuse covers can be obtained from Hoshizaki Parts/Service Centres.

Fuses should be rated at 10A and approved to BS 1362.

5. WATER SUPPLY AND DRAIN CONNECTIONS

(For the U.K. only, the connections must be in accordance with current requirements of the Model Water Byelaws 1986 SI No. 1147)

- * Only potable water should be used for this icemaker.
- * Water supply pressure should be minimum 0.5 bar and maximum 8 bar. If the pressure exceeds 8 bar, use a pressure reducing valve. Do <u>NOT</u> throttle back the supply tap.
- * A plumbing permit and services of a licensed plumber may be required in some areas.
- * On water-cooled models, a back flow preventer may be required in the cooling water circuit.
- * Water should drain into an open trap.
- * The icemaker drain is gravity flow, so ensure drain pipe has an adequate pitch or fall.
- * To prevent a backflow into the Storage Bin, the outlet hose must be laid as shown in Fig. 3.



[Air-Cooled Model]

- Attach the angled end of white flexible inlet hose (accessory) onto the G3/4 fitting on the rear of the icemaker as indicated (Fig. 4), ensuring rubber sealing washer is correctly positioned. Hand tighten sufficiently to provide leak free joint.
- 2) Attach the other end of inlet hose to the water tap (Fig. 5), noting washer is correctly positioned before hand tightening as above. It is a wise precaution to have a stop valve within easy reach.
- 3) Hand tighten grey flexible outlet hose (accessory) onto the R3/4 fitting on the rear of the icemaker as indicated (Fig. 4), ensuring rubber sealing washer is correctly positioned to obtain a leak free joint. The pipe can be cut to length as necessary to suit position of main drain.
 - Note: Jointing compounds should be approved and suitable for potable water use.



[Water-Cooled Model]

- * Hoshizaki recommends that the water-cooled Condenser should be connected to a closed circuit recirculating type cooling system utilizing a tower, water chiller or similar (see Fig. 6 and 7). Water make up should be via a ball valve/break tank arrangement.
- * Whilst connecting a water-cooled Condenser to a mains water (potable) supply will not affect the performance of the machine, it will most certainly cause a high use/waste of a valuable resource and is not recommended.
- * The services of a licensed or coded plumber should be used to ensure a correct installation.
- * The connections should be made properly in compliance with the applicable national or local regulations.

[a] Standard connections according to WRC regulations in U.K. (Fig. 6 and 7)

* When selecting a Cooling Tower, refer to the following peak values of heat flow in the Condenser:

1odel	IM-25/30/45W:	295 - 760 W
	IM-65W:	875 W
	IM-100/130W:	1165 W
	IM-240W:	5235 W

- * Pipes between the Cooling Tower and the icemaker should be at least 20 mm DIA to reduce pressure loss, even though the icemaker fittings are 13 mm DIA.
- * Pressure loss in the water circuit inside the unit will be 5 to 6 m when the cooling water flows at the ratio of 4 to 5 lit/min.
- * Select a Circulating Pump referring to the above values of heat flow.
- * Do not use a Cascade Pump, or the Water Regulator will vary the flow and stop it during the defrost cycle.
- * The Strainer must be cleaned periodically.
- [Icemaker Connections]

N

- Attach the angled end of white flexible inlet hose (accessory) to the G3/4 fitting on the rear of the icemaker as indicated, ensuring rubber sealing washer is correctly positioned. Hand tighten sufficiently to provide leak free joint.
- 2) Attach the other end of inlet hose to the water tap (Fig. 5), noting washer is correctly positioned before hand tightening as above.

Note: If filtration or treatment is used, ensure icemaker section only is on treated water supply, not the Condenser.

- 3) Attach grey flexible outlet hose (accessory) to the R3/4 fitting on the rear of the icemaker as indicated, confirming fitment of rubber washer before finally hand tightening the joint. This pipe can be cut to length as necessary to suit position of main drain (Fig. 3).
- 4) By means of a suitable spanner or wrench, tighten the 1/2-3/4 nipples (accessory) into the Rc1/2 fittings on the rear of the icemaker as indicated. P.T.F.E. tape and/or a suitable sealing compound should be used to obtain a leak free joint.
 - Note: Jointing compounds should be approved and suitable for potable water use.
- 5) Connect the Condenser cooling circuit to the free ends of 1/2-3/4 nipples as indicated (Fig. 6), using a suitable rigid type pipe. P.T.F.E. tape and/or a suitable sealing compound should be used to obtain a leak free joint.





[b] Connections according to regulations other than WRC by utilising accessory hoses (Fig. 8)

- 1) Follow the instructions from 1) to 4) in [a] above.
- 2) For Condenser connections, use supplied accessory hoses and make the same connections as 1) to 3) in [a] above to the free ends of 1/2-3/4 nipples as indicated (Fig. 8).



II. OPERATING INSTRUCTIONS

- WARNING
 Machine A store edible ice.
 To keep the icemaker hygienic:
 - * Wash your hands before removing ice. Use the Plastic Scoop provided (accessory).
 - * The Storage Bin is for ice use only. Do not store anything else in the Bin.
 - * Clean the Storage Bin before use (see "III. 1. CLEANING").
 - * Keep the Scoop clean. Clean it by using a neutral cleaner and rinse thoroughly.
 - * Close the Door after removing ice to prevent entrance of dirt, dust or insects into the Storage Bin.
- The use of any electrical equipment involves the observance of some fundamental rules. In particular:
 - * Instances of high humidity and moisture increase the risk of electrical short circuits and potential electrical shocks. If in doubt, disconnect the icemaker.
 - * Do not pull the power cord in order to disconnect the icemaker from the feed network.
 - * This appliance is not suitable for unsupervised use by young children or aged or infirm persons.
- 3. All parts are factory-adjusted. Improper adjustments may result in failure.
- If the unit is turned off, wait for at least 3 minutes before restarting the icemaker to prevent damage to the Compressor.

1. OPERATION

The installer will normally commission the icemaker to start the automatic icemaking process. To ensure continuous operation, make sure that:

- * The water supply tap is on, and
- * The icemaker is plugged into the power supply.

2. PREPARING THE ICEMAKER FOR LONG STORAGE

- 1) Unplug the icemaker or disconnect the power supply.
- 2) Close the water supply tap, and remove the Inlet Hose.
- 3) Remove all ice from the Storage Bin, and clean the Bin.
- 4) Ask for draining of the icemaker by professional qualified personnel.

III. MAINTENANCE

1. CLEANING

- WARNING –
 Before carrying out any cleaning or maintenance operations, unplug the icemaker from the electrical supply network.
- 2. Ask a trained service person to clean and sanitize the icemaker water system at least twice a year and to check and clean the Condenser at least once a year.
- 3. This appliance must not be cleaned by use of a water jet.

[1] Exterior

Wipe the exterior at least once per week with a clean, soft cloth. Use a damp cloth containing a neutral cleaner to wipe off grease or dirt.

[2] Scoop and Storage Bin Handle Cleaning/Sanitisation (Daily)

- Either mix 3 litres of water with 11 ml of 5.25% sodium hypochlorite solution in a suitable container, or the recommended Hoshizaki sanitiser as directed.
- 2) Soak the Scoop in the solution for more than 3 minutes. Rinse thoroughly, and shake to remove surplus liquid.

Note: Using a cloth to dry may re-contaminate.

- 3) Use a neutral cleaner to wash the Storage Bin Handle. Rinse thoroughly.
- Soak a clean cloth with the sanitising solution, and wipe the Handle. Use fresh water and a clean cloth to rinse/dry.

[3] Storage Bin Interior Cleaning/Sanitisation (Weekly)

- 1) Open the Storage Bin Door, and remove all ice.
- 2) Wash the Bin liner with a neutral non-abrasive cleaner. Rinse thoroughly.
- Soak a clean cloth with the neutral cleaner, and wipe both sides of the Slope and the Door inner surface. Wipe off the cleaner with a clean damp cloth.
- 4) Either mix 3 litres of water with 11 ml of 5.25% sodium hypochlorite solution in a suitable container or the recommended Hoshizaki sanitiser as directed.
- 5) Soak a clean sponge or cloth with the solution, and wipe the Bin liner, Bin Door and Slope.
- 6) Rinse thoroughly with fresh water and a clean cloth to wipe off the solution. Close the Bin Door.

Note: Some solutions may cause damage to the Bin liner surfaces or corrosion on the metal parts. Always rinse the sanitiser unless directed otherwise by Hoshizaki guidelines.

[4] Air Filter (Air-Cooled Model Only)

A plastic mesh Air Filter removes dirt or dust from the air, and keeps the Condenser from getting clogged. As the Filter gets clogged, the icemaker's performance will be reduced.

[IM-45LE/65]

Remove and clean the Air Filter at least twice per month:

- 1) Remove the Front Panel (Lower).
 - Note: Do not put your hand inside the machine compartment.
- 2) Remove the Air Filter.
- Clean the Air Filter by using a vacuum cleaner. When severely clogged, use warm water and a neutral cleaner to wash the Air Filter.
- 4) Rinse and dry the Air Filter thoroughly, and place it in position.

[IM-21/25/30/45CLE/100/130/240]

Contact an authorised Hoshizaki service company to complete Air Filter cleaning as part of a regular maintenance programme.

[5] Icemaking Water System

To keep the icemaker hygienic, periodic cleaning of the icemaking water system is recommended. Always ask a trained service person to clean the water system.

- Note: 1. The Washing Switch on the side of the Control Box is intended for use by service personnel only.
 - 2. During normal icemaking operation, keep the Washing Switch in the "ICE" position.



[Except IM-21/25/30CLE, 240M2E/WM2E]



2. BEFORE CALLING A SERVICE AGENT

If the icemaker does not work properly or does not work at all, before calling for service, check that:

* The power is supplied to the unit.

- * The water is turned on.
- * The Air Filter is clean. (Air-Cooled Model for IM-45LE/65 Only)

For further assistance or advice, contact your local Hoshizaki service agent.

3. WARRANTY

Hoshizaki warrants to the original owner/user that all Hoshizaki branded products shall be free of defects in material and/or workmanship for the duration of the "warranty period". The warranty shall be effective for two years from the date of installation.

Hoshizaki's liability under the terms of the warranty are limited and shall exclude routine servicing, cleaning, essential maintenance and/ or repairs occasioned by misuse and installations not in accordance with Hoshizaki guidelines.

Warranty repairs should be completed by an approved Hoshizaki dealer or service agency using genuine Hoshizaki components.

To obtain full details of your warranty and approved service agency, please contact your dealer/supplier, or the nearest Hoshizaki Service office:

Europe

U.K./Ireland - Hoshizaki UK TEL: +44 (0)845 456 0585 FAX: +44 (0)1462 499080

Holland - Hoshizaki Europe TEL: +31 (0)20 6918499 FAX: +31 (0)20 6918768

Belgium/Luxemburg - Hoshizaki Belgium TEL: +32 (0)2 7123030 FAX: +32 (0)2 7123031

Germany/Switzerland/Austria - Hoshizaki Deutschland TEL: +49 (0)2154 92810 FAX: +49 (0)2154 928128

France - Hoshizaki France TEL: +33 (0)1 48639380 FAX: +33 (0)1 48639388

Spain/Portugal - Hoshizaki Iberia TEL: +34 (0)93 4780952 FAX: +34 (0)93 4780900

Other countries - Hoshizaki Europe TEL: +31 (0)20 6918499 or +44 (0)845 456 0585 FAX: +31 (0)20 6918768 or +44 (0)1462 499080

Other than Europe

Hoshizaki Singapore TEL: +65 6225 2612 FAX: +65 6225 3219

Hoshizaki Lancer Pacific TEL: +61 8 8268 1388 FAX: +61 8 8268 1978

Hoshizaki Suzhou TEL: +86 512 62807850 FAX: +86 512 62807860

This product includes a hermeticall that contains fluorinated greenh Kyoto Protocol:	y sealed refrigeration system ouse gases covered by the
IM-21CLE	R134a / GWP 1300 / 0.11kg
IM-25CLE, IM-30CLE	R134a / GWP 1300 / 0.13kg
IM-45CLE-25, IM-45LE, IM-65LE-25	R134a / GWP 1300 / 0.21kg
IM-65LE	R134a / GWP 1300 / 0.23kg
IM-100LE	R134a / GWP 1300 / 0.38kg
IM-130ME	R404A / GWP 3260 / 0.52kg
IM-240M2E	R404A / GWP 3260 / 0.67kg
IM-25WLE, IM-30WLE	R134a / GWP 1300 / 0.16kg
IM-45WLE	R134a / GWP 1300 / 0.24kg
IM-65WLE	R134a / GWP 1300 / 0.25kg
IM-100WLE	R134a / GWP 1300 / 0.35kg
IM-130WME	R404A / GWP 3260 / 0.45kg
IM-240WM2E	R404A / GWP 3260 / 0.42kg

EC DECLARATION OF CONFORMITY				
Manufacturer:	Hoshizaki Europe Ltd.			
Address:	Unit A, Stafford Park 18, Telford, Shropshire TF3 3DJ England			
We hereby declare that the machine(s) listed below and manufactured by us meet the essential health and safety requirements demanded by the following EC regulations:				
EC Regulations:	EMC Directive (89/336/EEC, 92/31/EC, 93/68/EEC, 2004/108/EC) Low Voltage Directive (2006/95/EC)			
Harmonised European S	tandards applied:	EN 55014-1 (EMC) EN 55014-2 (EMC) EN 61000-3-2 (EMC) EN 61000-3-3 (EMC) EN 61000-4-2 (EMC) EN 61000-4-3 (EMC) EN 61000-4-3 (EMC) EN 61000-4-5 (EMC) EN 61000-4-6 (EMC) EN 61000-4-11 (EMC) EN 60335-1 (LVD) EN 60335-2-24 (LVD) EN 50366 (EMF)		
CE Marking first affixed:	1996			
Product Description:	Hoshizaki Ice Make	Hoshizaki Ice Maker		
Model(s):	IM-21CLE, IM-25CLE, IM-30CLE, IM-45CLE-25, IM-45LE, IM-65LE, IM-65LE-25, IM-100LE, IM-130ME, IM-240M2E, IM-25WLE, IM-30WLE, IM-45WLE, IM-65WLE, IM-100WLE, IM-130WME, IM-240WM2E			
Name: Akira Kami	<u>ya</u>	Position: Managing Director		
This declaration will no longer be valid if any alterations are made to the machine(s) without our approval.				