



FLAKE ICE MACHINE

Data Sheet

500 kg to 30 tonper Day

Product Data Sheet

Product Overview

The ICEMAC Flake Ice Machine is a high-performance industrial ice maker designed for continuous production of dry, sub-cooled flake ice. It delivers reliable output from 0.5 to 30 tons per day. Built with premium 304 stainless steel and vertical evaporator technology, it ensures corrosion resistance and maximum cooling efficiency. Available with both fresh water and sea water variants. Featuring air-cooled and water-cooled configurations, PLC touchscreen automation, top brand compressors, and water recycling for optimal efficiency. The machine is the ideal choice for fisheries, food processing, concrete cooling, and industrial applications.

Materials and Construction

Body: Durable 304 and 316 stainless steel for excellent corrosion resistance and structural integrity.

Evaporator: Vertical type for superior heat transfer, sub-cooling ice to -4°C / -8°C . Ice thickness 1.5 – 2.2 mm.

Control System: LCD/PLC touchscreen automation with English language support.

Surface Finishing

Ice output temperature: -5°C / -8°C . Top brand compressors (Dorin, Semi-Hermetic).

Air cooling and water cooling system options available.

Water recycling system – all unfrozen water is recycled back.

Assembly Options

Fresh Water Flake Ice Machine: 500 kg/24h to 30,000 kg/24h. Hermetic and semi-hermetic compressor options.

Sea Water Flake Ice Machine: 1,000 to 5,000 kg/24h, built with 316 stainless steel.

Containerized systems: 20ft and 40ft containers for turnkey ice plants.

Accessories

Ice Storage Bins: Insulated storage with automatic level sensing.

Ice Rake & Delivery System: Automated conveying with screw mechanism and PLC control.

Ice Carrying Counter: Lifting crane and transposition system.

Containerized Systems: Complete turnkey plants in 20ft and 40ft containers.

Applications

The ICEMAC Flake Ice Machine is designed for extensive use across a wide range of environments, such as fisheries, concrete plants, food processing facilities, supermarkets, dairy plants, chemical industries, and medical facilities. It serves as a critical component in cooling and preservation systems, ensuring rapid and efficient cooling with maximum surface contact while preserving freshness and quality of perishable products.

The machine produces dry, sub-cooled flake ice with 1,600 m²/ton cooling surface area for superior cooling performance. It can also be configured for sea water operation with 316 stainless steel depending on the specific cooling requirements of the application.

The vertical evaporator design facilitates easy installation and maintenance. A spiral ice scraper peels ice from the evaporator surface automatically. The machine body is manufactured from high-quality premium 304 and 316 stainless steel for corrosion resistance and long-term durability.



Fresh Water Flake Ice Machine – Technical Specifications

Available from 500 kg/24h to 30,000 kg/24h. Hermetic, semi-hermetic, air-cooled and water-cooled options.

Specification	FI-05	FI-10	FI-15	FI-20	FI-25	FI-30	FI-50	FI-80	FI-100
Ice Capacity	500 kg/24h	1000 kg/24h	1500 kg/24h	2000 kg/24h	2500 kg/24h	3000 kg/24h	5000 kg/24h	8000 kg/24h	10000 kg/24h
Cooling Capacity	2.9 kW	5.2 kW	7.6 kW	12.4 kW	14 kW	17 kW	33 kW	52 kW	56 kW
Ambient Temp.	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C
Water Input Temp.	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C
Condensation Temp.	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C	45°C
Ice Output Temp.	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C
Ice Thickness	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2.2 mm
Cooling Mode	Air	Air	Air	Air	Air	Air	Water	Water	Water
Refrigerant	R 404A	R 404A	R 404A	R 404A	R 404A	R 404A	R 404A	R 404A	R 404A
Evaporator Type	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Compressor	Dorin 3hp Semi-H.	Dorin 7hp Semi-H.	Dorin 10hp Semi-H.	Dorin 10hp Semi-H.	Dorin 15hp Semi-H.	Dorin 20hp Semi-H.	Dorin 2x10hp	Dorin 2x40hp	Dorin 4x40hp
Power Supply	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz
Power Consumption	2.7 kW/h	4.2 kW/h	8 kW/h	11.3 kW/h	13 kW/h	15.8 kW/h	26 kW/h	63 kW/h	119.6 kW/h
Evaporator Dim. (WxLxH cm)	81x58 x88	81x58 x88	130x97 x90	130x97 x90	130x115 x138	130x115 x138	135x135 x235	135x135 x235	135x135 x235
Machine Dim. (WxLxH cm)	130x74 x81	130x74 x81	130x97 x90	130x97 x90	130x115 x138	130x115 x138	245x190 x157	289x210 x250	330x315 x250
Net Weight	210 kg	310 kg	410 kg	500 kg	550 kg	650 kg	1050 kg	3550 kg	5800 kg

Flake Ice Machine Fresh Water

Technical specifications and performance data



Sea Water Flake Ice Machine – Technical Specifications

For marine and coastal applications. Built with 316 stainless steel for salt corrosion resistance.

Flake Ice Machine Sea Water

Technical specifications and performance data



Specification	SFI-10	SFI-15	SFI-20	SFI-30	SFI-50
Ice Capacity	1000 kg/24h	1500 kg/24h	2000 kg/24h	3000 kg/24h	5000 kg/24h
Cooling Capacity	5.2 kW	15.6 kW	21.4 kW	22 kW	56 kW
Ambient Temp.	30-40°C	30-40°C	30-40°C	30-40°C	30-40°C
Water Input Temp.	5/25°C	5/25°C	5/25°C	5/25°C	5/25°C
Condensation Temp.	45°C	45°C	45°C	45°C	45°C
Ice Output Temp.	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C	-4/-8°C
Ice Thickness	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm	1.5-2 mm
Cooling Mode	Air	Air	Air	Air	Air
Refrigerant	R 404A	R 404A	R 404A	R 404A	R 404A
Evaporator Type	Vertical	Vertical	Vertical	Vertical	Vertical
Compressor	Dorin 7hp Semi-Hermetic	Dorin 15hp Semi-Hermetic	Dorin 20hp Semi-Hermetic	Dorin 30hp Semi-Hermetic	Dorin 30hp Semi-Hermetic
Power Supply	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz	3P / 380V 50 Hz
Power Consumption	4.3 kW/h	15.8 kW/h	15.8 kW/h	26 kW/h	26 kW/h
Evaporator Dim. (WxLxH cm)	93x68 x130	130x115 x138	130x115 x138	160x128 x138	245x180 x157
Machine Dim. (WxLxH cm)	130x97 x90	130x115 x138	130x115 x138	160x128 x138	245x180 x157
Net Weight	500 kg	500 kg	500 kg	900 kg	1500 kg
Ice Storage Bin (Optional)	500 kg	1000 kg	1000 kg	1500 kg	On Request

* We can provide Ice Machines which work in high temperatures such as 45-50 degrees.

* Containerized flake ice plant and ice storage & delivery systems available for custom requirements.