



# experience in your store!

A chilled beverage served with hot and flavorful food is ideal for a guick break in the daily rush.



A selection of fresh foods displayed on a bed of ice enhances the menu appeal to health-conscious customers.





Take-away ice bags added to the product offering normally rank amongst the top list of fast moving items.



An ice display in a colorful merchandiser will drive impulse-purchase for drinks, fresh juices and dairy-based products.







Scotsman offers a number of specific solutions for Soft Drinks

Nugget & Cubelet ice

# **>>>** Fast Food Restaurants

The one common denominator that attracts people to Quick Service Restaurants is **the desire for "good food fast"**.

Quick service, a priority, together with a convenient location, an appealing menu, the quality of food, are in the "top five" reasons to choose this kind of Restaurants. Often customers are looking for a balanced food offer, with "healthy" options. Customers have a limited amount of time, so everything has to happen..."quickly".

Drinks must be cold and refreshing, fast. Different sizes of soda fountain drinks are inevitably served with ice.

Fast cooling is best achieved with a type of ice that offers a large contact, heat exchanging surface.

While ice Cubes are the widely adopted solution in this specific application, Nugget is the fastest moving ice-type in QSR applications in the last few years.

## Soda Fountain Drinks "prefer" Nugget & Cubelet ice.

Water, CO<sup>2</sup> and syrup are mixed together just before the "soda" is dispensed in the cup. Ice is always poured as first. In drinks, the CO<sup>2</sup>, being very volatile and with a tendency to bubble-out is best "trapped" in the drink by small bits of ice, floating on the surface of the drink itself. Nugget and/or Cubelet ice will provide amongst the best liquid displacement factors, and create a "cap" that prevents carbonation loss.



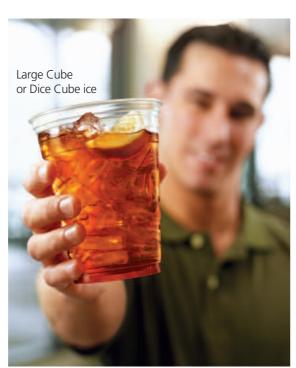


# If the drink is consumed without a straw, larger ice cubes are preferable.

The large contact surface of the Scotsman ice Cube grants a quick cooling of the beverage, especially when servings are Large or Extra Large (XL cups may contain up to 500 cl!).

Ice Cube being the traditional choice for QSR Restaurants, up-scale QSR's will prefer the Scotsman Gourmet Ice cube, in its Small cube size.

Bright, appealing, perfectly shaped and crystal clear, the Small Gourmet Cube is an excellent option, particularly for the Restaurants where glasses are preferred to paper cups.









# **Scotsman** offers a number of specific solutions for Soft Drinks

# **Fast Food Restaurants**



**Nugget ice** is becoming more and more popular in the Quick Service Restaurant segment.

Here are the main reasons behind the success of this type of ice:

Nugget ice is easier to transport and allows for under-counter installation of the ice machine with vertical transport system making ice available over-the-counter (NVT);



- closed systems such as the NVT greatly reduce cross contamination risks, minimizing the concerns about hygiene conditions in the ice served;
- Nugget ice is "best in class" in terms of drink displacement. Small, compressed ice chunks will float on the surface of the drink, preventing drink oxidation while preserving the sparkling effect of CO<sup>2</sup>;
- Nugget ice making technology ranks highest in energy efficiency all the water fed into the system is turned into ice. The elimination of the harvest cycle allows for a more conscious use of natural resources.

**"Chewable" ice** (Nugget and Cubelet ice) absorbs the flavour of the drink and becomes a "treat" as the liquid product is finished.

Customers love chewing on the small ice bits! Market research show that, given the option, drinks served with chewable ice will be preferred by most.

We have mentioned the growing preference for balanced menus: fruits and vegetables, often in the form of salads, and dairy products, especially yogurt, are offered as healthy options - a nice bed of Scotsman's flake ice will create and maintain the right temperature and humidity conditions, granting a longer shelf-life, enhancing the appeal of the displayed items.

Ice is usually associated with the idea of freshness and joyful consumption!

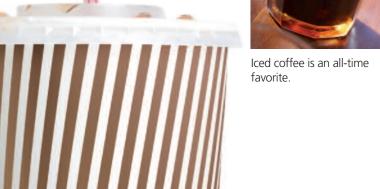
# Coffee shops and "Smoothie" chains are fast-growing QSR Concepts

Coffee Shops serve coffee and snacks, whereas "Smoothie" Bars extend into the healthy lifestyles.

These are often strategically located in the vicinities of gyms, swimming pools, beauty parlours...

Cubelet and Nugget ice better meet the specific requirements of these concepts. For preparation of coffee and syrups (or fruit) based "Smoothies": pre-crushed ice will speed up the preparation of these drinks, while reducing the workload on crushers and blenders.









# **Scotsman** offers a number of specific solutions for Soft Drinks

# Free-flowSelf-Service Restaurants

These two restaurant concepts are herewith described since they are different from the traditional "sit-down", table service restaurants.

Customers may "stroll" freely through different food counters where various kinds of food and beverage are displayed for self-service. At the end of this pathway stands the drink station, hot or cold.



▶ The best companion for cold drinks is Nugget or Cubelet ice. A drink station is the perfect location for a cubelet ice countertop dispenser, such as the **Scotsman TC180**.



Alternatively, for countertop space saving coupled with high production capacity, the actual Nugget ice maker may be conveniently located under the counter, while the dispensing head will be installed on the counter. This is the configuration available through our brand new **Ice Tower** Concept.

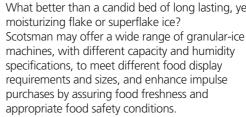


The Ice Tower combines a high output nugget refrigeration system with the simplicity that is found on long lasting, reliable machines. Ice dispensing is activated by the touch of a button; pictorials remind the Operator about the three different dispensing options:

- a) "Press for ice": the more you press the more you get
- b) "Touch-n-Go" timer based ice dispensing
- c) Water only (non refrigerated).

A real breakthrough!

Ice is transferred from the ice maker into the ice hopper by the sheer pressure of the ice making auger. No additional mechanisms, no complicated transport systems, no difficult parts to clean and sanitize: **and the assurance of non-stop dispensing of freshly made Nugget ice at the speed of 7x50 g portions per minute, all day long!**  Free-flow & Self service restaurants also offer vegetables salads, plates of cold cuts and dairy products, not to mention desserts and fruit salads: all of these must be refrigerated and rehydrated while being displayed.







# >>> Convenience Stores

"C-stores", where food and beverage items are made available for Customers that usually stop to pick up the daily grocery needs while filling-up their cars with gasoline, are something in between a small-size supermarket and a small free-flow restaurant

Here, from coffee to newspaper, it's all about self-service: our TC180 self-service ice dispenser is the perfect solution to install in any "convenience" concept - its stylish look will make it perfectly complementary to any drink offerings found on the menu, from soda to fruit juices, in bottles/cans or served through bag-in-box or post-mix systems.

Sales of bagged ice is really profitable only when ice is bagged on the premise, and not brought in through a vendor.

Scotsman offers many different solutions, both in daily production and in storage capacity, to suit the entrepreneurs that knows own to use their time and resources profitably!









Scotsman has been one of the key players in Countries outside the US for the diffusion of the square (dice) cube. The Cube, with its six sides, allows for an excellent heat exchange contact surface, hence, fast chilling of all

W 11 x D 24 x H 22 mm

W 22 x D 24 x H 22 mm

The dice cube adapts very well to any size and shape of

The vertical evaporator, well known and appreciated, allows to obtain high levels of production at reasonable operating

The Vertical Cube evaporator technology, which has been recently upgraded to **meet and exceed stringent water** and electricity consumption limits, is found on Scotsman MV & MV Prodigy Series.

It guarantees excellent operating performance under any circumstances, even in very "hard" water condi-

Equipment Lifetime operating costs are reduced to a minimum through excellent engineering and final design of these units.

Nugget and Cubelet ice cubes are made from compressed flakes of ice.

The result: convenient micro-cubes for multiple uses, in place of standard cubes or as small, long-lasting ice nuggets hygienic and easy to use.

Scotsman applies this technology in all its ice dispensers in the MDT - TC - NVT lines, where the needs to have fast ice dispensing and avoid ice manipulation find a great solution!

Nugget & Cubelet ice cubes are **excellent** when used in conjunction with carbonated drinks: in fact, they form an ice-cubes layer that floats on the drink surface, thus separating the drink itself from the environment and avoiding its premature oxidation

Micro ice-cubes are today so well accepted and in demand that stores on various segments proudly feature them as an indication of the level of quality offered to their customers!





# Ice makers-Large and Half Large, \*\*\* Dice and Half Dice Cubes

Scotsman proudly introduces "Prodigy", state-of-the-art technology part of our on-going effort to reduce the consumption of utilities in ice making! The Prodigy technology, made available in Scotsman Vertical Evaporator Cubers Line in 2008, is based upon three key assumptions:

**Energy Saving:** the automation of the "harvest" system for the detachment of the ice-cubes from the evaporator plate "waffle", using the dual action of thermal and mechanical effects. Reducing the last phase of the production cycle - the actual defrost - to a matter of just 30 seconds, i.e. one-sixth of the time required by a standard ice-cuber.

This reduction translates into a significant improvement in terms of energy efficiency, as the working time of the compressor in its reversed cycle is shortened accordingly.

**Water Saving:** we often consider mains water in urban areas to be of constant quality. On the contrary, the quality of water may vary a great deal, even in the same location.

To remove any residual minerals that remain after the freezing of one batch of ice, in-between production cycles the water sump is flushed with fresh water prior to starting a new cycle. Consequently, a different mineral content water will require a different length of wash-out cycle. In Prodigy ice machines, a **sensing probe** measures the electrical conductivity of the water coming from the mains, which varies according to the mineral content, and adapts the flush cycle duration to the local conditions of water-hardness, avoiding unnecessary waste. The smart way of reducing water consumption!

**Labour Saving:** the new ice machine is a "Prodigy" in name and deed: the self-diagnosis control board allows for unprecedented ease of use and maintenance. All the units' functions are visually presented by the means of codes, easy to understand for both the technician and the end user, thus greatly reducing training needs for routine maintenance operations and

Where ice requirement is seldom consistent through the working week: Prodigy Varismart kit, offered as an option, allows the programming of the delivery of different levels of ice into the bin, according to the real demands, translating into increased versatility of the unit and a smarter use of ice, whilst ensuring consistently "fresh" ice, of the best quality, in the

The revolutionary Prodigy technology is currently available in **three different** configurations:

MV "6-Series" Increased energy efficiency ▼ Ice Makers \_\_★ in its simplest configuration! All the ice machines in this series feature the "Fast Drop" system, to reduce the harvest cycle and power consumption. while electronic components have been simplified allowing for one of the best Price/Value ratio in the market

Scotsman



- MV Series



is becoming more and more relevant.

Prodigy Series offers a great number of models and capacities to meet any requirement in terms of ice cube **consumption**. The main feature in this line of ice machines is the side-mounted evaporator, which leaves an easy front access to all the main components. Daily capacities range from 150 to 1,000 kg of ice-cubes, available in dice or half-dice



The "All US-made" line within the

size. Prodigy Ice Machines, the Smart Choice in ice. **Production** Series



## **Technology**

VDS - Vertical Dice System

Same evaporator style as in the Scotsman Contour System (Vertical Evaporator) the ice type produced by the Prodigy is the "traditional" dice cube, best used in those market segments where great quantities of ice are required.

To remove all minerals that remain after the freezing of one batch of ice, in between production cycles the water sump is flushed with fresh water prior to starting a new cycle. A different mineral content water will require a different length of the wash-out cycle. In the Prodigy ice machines, a sensing probe measures the electrical conductivity of the water coming from the mains, which varies according to the mineral contents, and adapts the flush cycle duration to the local conditions of water-hardness, avoiding unnecessary waste. The smart way of reducing water consumption

**THC - Total Hygiene Concept**There is no better food-grade material than stainless steel. Scotsman machines are built with stainless steel frames and side panels for rust free durability, ease of cleaning, and hygiene. Large and accessible ice storage areas allow for a quick and easy sanitising routine.

AgION-Scotsman is proud to offer (in most of its models) AgION™ a silverbased anti-microbial compound that reduces the growth of bacteria, micro-organisms, algae, mould and slime on ice machine surfaces.This innovation makes available to Scotsman customers a specific, reliable, and durable technology against ice microbial contamination, feature which is to be appreciated especially in this day-and-age: hygiene cannot be compromised!

On-Off Main Switch -catching illuminated main switch ensures ease of operation in superb style!

Proximity Condenser Air Filter

To avoid reduction in your ice maker capacity, air cooled condensers need to be kept free from dust and grease. The Scotsman proximity air filter is mounted next to the condenser, for best air filtration results. Simple and effective, the Scotsman proximity filter is conveniently accessible from the front panel. When the "clean me" light flashes, the manual cleaning routine takes only one minute

Internet Enabled Units

Complete Internet Connectivity brought to your Scotsman ice machine. Easily connect and exchange information over the Internet for remote diagnosis of operational and technical issues

Direct access to machine data through a non-dedicated phone line allows for remote machine management & troubleshooting:

• real-time service alarms • information on technical problems provided by email before service call is dispatched • pro-active maintenance • based upon equipment running time vs. calendar schedule • control of machine's cleaning cycles and maintenance • remote

Optional electronic control added to the Smart Board allows for programming of the ice level into the bin for a one week period suring the best quality of ice and a smart use of utilities.

Automated "harvest" system for the detachment of the ice-cubes from the evaporator plate "waffle", using the dual action of thermal and mechanical effects. Reducing the last phase of the production cycle - the actual defrost - to a matter of just 30 seconds, i.e. one-sixth of the time required by a



With innovative patented technology, Scotsman has produced a smarter ice machine

Note: do not double-stack

that is more reliable, smaller, and so quiet that the only noise you will hear is the sound of

perfectly chilled drinks being served.

Building on the smart, energy-efficient Prodigy ice machine platform, Eclipse technology adds new dimensions to Scotsman reliable, easy-to-use ice machines. Eclipse cuber technology moves the compressor and condenser to the roof, moving noise and heat away from customers and workers for an all-around quieter environment. It is an ice machine that is so guiet and small, that it can be used at a drive-through window, a self-serve beverage station, or anywhere you need a high-capacity ice source that won't interfere with its surroundings.



Prodigy, the for ward-thinking choice!





# 



**Scotsman's range** of automatic ice and water dispensers offers bespoke solutions to specific applications in the QSR sector. Versatile, high cooling power, dry and compressed Nugget and Cubelet ice. Both made available with the patented touch-free dispensing system, ideal in a sector where hygiene is critical. Scotsman's range of automatic ice and water dispensers features different options in terms of configuration and capacity, all with inbuilt storage bins. Machines include the TC180 range in its many versions and the MDT range, which offers many options in terms of capacity and dimension of the storage hopper. The TC 180, which produces up to 140 kg per day, offers two storage bin options: the standard 5 kg unit and the "Long Range" 9 kg version, for higher amounts of ice served at once. Water dispensing is offered as an option by most of the Scotsman Automatic Ice dispensers. The interior of the automatic ice dispenser has been designed to make cleaning and preventative maintenance operations simple and straightforward.

Ice and water dispenser, available in different configurations (ice only, ice and water, with infra-red or push **button activation)** with high cubelet ice production.

The TC180 is at the forefront of hygiene safety with its patented "touch-free" dispensing system, that virtually eliminates any risk of cross contamination, eliminating any contact between machine and end user.

#### Two brand new versions are now available:

the "Long Range" version with a storage bin of 9 kg, enough to ensure ice availability even where large quantities of ice are required;

the "Short" version, with its reduced depth, allows for installation on smaller counters. The storage bin in the standard 5 kg is enough to offer a good supply of cubelet ice in every situation.



MDT 5<sub>N</sub>25 Ice and Water Dispenser



Automatic dispensers of nugget ice

These units offer a high output (up to 240 kg of nugget ice in 24 hours, with a 12 kg storage bin).

CE TOWER

High Volume -Nugget Ice Dispenser with undercounter

production unit

and/or water, for counter top installation.

The infra-red "touch-free" system, offering hygienic safety and ease of use,

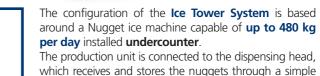
comes as a standard in all the models of this range. The stainless-steel frame allows for ease of cleaning and is resistant against accidental knocks and damage.

TC 180 Short





- Ice only configuration



The production unit is connected to the dispensing head, which receives and stores the nuggets through a simple and ingenious vertical transport system.

Despite the limited storage capacity (approx. 5 kg), thanks to the very high capacity production unit the ice tower will dispense nugget ice, or ice and water in adjustable portions virtually non-stop throughout the day!



THC - Total Hygiene Concept

**Technology** 

CFS - Co-Axial Flake-ice System

food-grade material than machines are built with

Static evaporation the natural shape of flake ice. The best solution is a vertical, cylindrical evaporator with an that extrudes ice flakes Static evaporators can't cope with the natural shape of flake ice. The

Flake-ice auger that extrudes ice flakes through an ice breaker. Scotsman has perfected

its solid stainless steel evaporator through years of experience applying the advanced technology of

direct refrigerant expansion to ice production offering maximum durability and efficiency.

stainless steel frames and side panels for rust free durability, ease of cleaning and hygiene, Large and accessible ice storage areas allow for a quick and easy sanitising routine. LWC - Low Water Content

Low Water Content Ice with a low water content. Recommended for all high volume medical applications, combining slow-melt, large size ice-grains with moisture exchange to allow for best results in heat removal from large surfaces of

TFS - Touch Free System

Physical contact with ice may contribute to contamination. Ideally, ice should fall directly into the ice system pouch. Truly non-mechanical, one-hand operation provided by sensor to determine when to dispense ice. Ice and water dispensing is also available through the setting selector. Dispensing chute is easily removed for cleaning and sanitization.

All models offer bacterial protection control though the usage of AglON®, an antibacterial compound that is incorporated during production, into all plastic narts that come in contact with water AdION ™ a silverbased anti-microbial compound that reduces the growth of bacteria, micro-organisms, algae. mould and slime on ice machine surfaces.

This innovation makes available to Scotsman customers a specific, reliable, and durable technology against ice microbial contamination. feature which is to be appreciated especially in this day-and-age: hygiene cannot be compromised

## Both versions are available in the following options:

## TC S-L 180 AS



Touch free dispensing

- Ice & water configuration

TC 180

Dispenser

Ice and Water



Manual version with 2 push bottons

- Ice & water configuration
- Easv clean

### **TC S 180 AS-EVO**



Touch free dispensing

- Ice only configurtion
- Easy clean
- Specific for self-service use

### **TC S 180 NW**

Manual version with

- No water

**Scotsman**<sup>®</sup>

>>> Ease of use comes as standard. Hygiene is paramount.



# Nugget and C ubelet ice ...







N 622 Modular



In cases of very high demand for Nugget ice, the N 622 paired with an adequate storage bin, provides a capacity to meet every specific need.



# MFN Series Modular ice makers



- installation.
- Double-fly auger and reinforced ice breaker ensure better extruding action of dryer, harder pieces of ice.
- Stainless steel structure with scotch-brite finish, rounded corners combine ease of operation and a modern looking design
- · ABS top panel.
- Removable side panels allow easy access from all sides.
- Electronic control board for all machine functions, self diagnosis system and display of operational alarms.



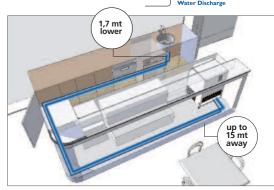
# AFC134 Self-contained ice machine



The first Cubelet Ice Maker with large ice storage: up to 40 Kg of ice immediately at hand.

AFC134 is the "Cubelet" most innovative ice maker: combines a large-scale production (130 kg) to an ice storage capacity unique on the market, up to 40 kg.





PWD - (Progressive Water Discharge) is the smart, pressurized discharge system that will allow you to reach remote water drains to dispose of the left over water at the end of each production cycle, as well as the water resulting from the ice melting over time in the storage bin. A non-return valve prevents any potential drain water backflush into the system, greatly improving the overall hygiene



# **Technology**

CFS - Co-Axial Flake-ice System



Flake-ice through an ice breaker. Scotsman has perfected its solid stainless steel evaporator through years of experience applying the advanced technology of direct refrigerant expansion to ice production offering maximum durability and efficiency.

stainless steel. Scotsman machines are built with stainless steel frames and side panels for rust free durability, ease of cleaning and hygiene. Large and accessible ice storage areas allow for a quick and easy sanitising routine.

LWC-Low Water Content medical applications, combining slow-melt, large surfaces of in large hospital environments.

TFS - Touch Free System
Physical contact with ice may

into the ice pouch. Truly non-mechanical one-hand operation provided by the Touch Free System uses its unique infrared sensor to dispensing is also available through the setting selector. Dispensing chute is easily removed for cleaning and sanitization.

protection control though the usage of AglON®, an antibacterial compound that is incor-porated come in contact with water. AgION TM a silverbased anti-microbial compound that reduces the growth of bacteria, micro-organisms, algae, mould and slime on ice machine surfaces.

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# "Rule-of-thumb" advi ce on how to choose the right ice maker, suitable to s ustain expected ice requirements









Cube ice, Dice ice, Nugget ice... Each of these different types of ice is meant to meet and fulfil a specific requirement. They are produced by inherently different ice making machines. Other than by type of ice, differences may also be found in daily output capacity. More importantly, in the **storage bin capacity**, directly related to the footprint and the produc-

The true parameter that should be followed when choosing an ice machine is the quantity of ice that the machine can hold in its **storage bin**, which equates to the actual quantity of ice that is

available to the operator "here and now" as well as for the remainder of the evening hours.

The refill capacity of ice machines during service hours is in fact relatively limited. Consider that the hourly output of a medium-small ice machine ranges from 2 kg per hour for medium-size models, going down to 0.8 kg per hour for the smallest units. It is strongly advisable to verify that the storage bin capacity is such that it will sustain your ice requirements from the early-on aperitives through to after-dinner digestives. Some of the smallest ice machines within the 20 kg of daily production capacity, in fact, feature a storage bin capacity of only 4 kg!

The first rule-of-the-thumb is that the storage bin capacity should ideally reflect 50% of the machines **daily production**. Keep in mind that once the storage bin is full, the ice machine stops producing ice. It will only restart when ice is removed from the storage bin.

A storage bin that is unable to store the "closing hours production capacity" of the machine will therefore limit the daily actual capacity of the unit, whilst delivering only a limited amount of ice when the need is at its peak.

In order to serve your customers with the "perfect drink" you need crystal-clear, pure, transparent and full cubes, to avoid

"watering down" the drinks. In detail: a hollow cube, a "cube with the hole" will offer a larger heat exchange surface than a massive cube, which in turn will cause the cube to melt guicker. Hollow cubes usually melt prior to the average consumption time of the drink. Very guick cooling of the drink will therefore occur, as well as its (premature) warming up once the ice cubes have melted. A **full cube**, on the contrary, will chill the drink reflecting the consumption

pattern: promptly, but not abruptly, durably and not prematurely, preserving the drink quality rather than diluting it. Massive cubes will last through the drink and more, for the

enjoyment of those who love chewing on the residual ice cubes...

Let us now find our way through the technologically advanced and Customer-oriented world of the Quick Service Restaurants: we will provide some suggestions as to which one of our ice machines better fits into any

The **common denominator** may be identified in the kind of beverages sold by OSR restaurants: most of such kind of foodservice outlets serve mainly carbonated drinks, or "soda"; waxed-paper cups, sealed with a plastic lid are most

Carbonated drinks are best when served with ice: ice maintains the correct temperature, improves on syrup yield, and, when used in the form of small bits of ice, able to float on the beverage surface, a positive effect of beverage oxidation process slow-down is obtained, thus preserving its best tasting features.

The most common ice machine found in QSR outlets is usually capable of producing large amounts of dice or half-dice cubes, are equipped with a simplified cleaning system and are praised for their reduced lifetime

**operating costs**. Scotsman has been a **key player** in this market segment by offering its "MV-Modular Vertical" dice and half-dice cubers line.

Today, this range has evolved into three different versions, in order to meet different Customer requirements: the "entry-level" MV-range offers top performance and proven reliability at a very competitive price; for those looking for more sophisticated features, the "Prodigy-MV" range additionally offers an advanced electronic control board, used to monitor all of the machine operating parameters and provide self-diagnostic capabilities.

Last, but not least, the "Prodigy" range, all made in the USA, extends our product capacity offer up to 1,000 plus kilograms of ice per day.

**Nugget ice**, as well as **Cubelet ice**, are quickly building up a reputation as a great alternative to dice cubes in carbonated drinks.

The small, "hard ice bits" defined as "nuggets" and "cubelets" are best-inclass in terms of drink displacement, will melt slowly not to compromise the taste of drinks, while incorporating the flavour of the beverage, and turning into an extra "post-drink treat" to all those that love to "chew on ice".

Nugget and Cubelet ice will attract shops selling coffee-based products and/or fruit smoothies, as the small bits of ice will lessen the wear & tear on the **blenders blades and motors**: shorter serving time, less work for the crew and less noise in the restaurant!

Self-service, automatic dispensing systems are also best in terms of hygienic **safety**, as any risk of cross-contamination of ice is greately reduced if not totally

All along, Nugget ice is also a perfect solution for "traditional" applications such as ice-bed displays to exhibit fresh fruits, dairy products, salads, and so on, as one may find in "free-flow" restaurant.

In terms of equipment configuration and capacity. Scotsman offers plenty of solutions to choose from, starting from the table-top **TC180** Cubelet ice dispenser, all the way to large capacity, modular units, such as the MFN 46 and MFN 56 models, that produce respectively up to 250 kg and 480 kg of nugget ice per day, and are applied in sophisticated **ice transport solutions** such as the Ice Tower and the **NVT - Nugget** Vertical Transport system.











 Fast Food **Restaurants** 

20

# Choose your own "Large", "Half Large", "Dice" and "Half Dice" Cubes...





(\*) CBT cover to be matched with the ice machine.

# **Matching storage Bins**



252 Kg Storage Bin

**UBH 1600** 

HD 30 B

Capacity

**Cubes Dispenser** 

75 Kg Storage

812 Kg Storage Bin



406 Kg Storage Bin

SB 948



SB 1025

SIS 1350

759 Kg Storage Bin

478 Kg Storage Bin







## Crushman 360 Ice Crusher

**SIS Cart** 

• width 63,6 cm • depth 108,8 cm height 89,8 cm











HD 22 B

Capacity

Push-button

activated

**Cubes Dispenser** 

75 Kg Storage

391 Kg Storage Bin





EDB650 SA

Available with coin activated

dispensing mechanism

(on request, with price surcharge)

Ice storage bin (290 Kg) with stored

ice agitation Cube ice manually

activated dispensing into bags,

carts pails or totes ice carrier.

Ice storage bin (454 Kg) with stored ice agitation Cube ice manually activated dispensing into bags, carts pails or totes ice carrier.

# Automatic ice bagging Systems EDB1000 SA



\*For detailed technical information www.scotsman-ice.it



For details visit www.scotsman-ice-on-tablet.com



Fast food

Restaurants

# Choose your own "Dice" and "Half Dice" machine... >>





Technology

	Model	Max Production 24h.	Dimensions	Matching storage bins
		Ambient Temp. 21°C Water Temp. 10°C	WxDxH H	
	C 0522	201 Kg	56x61x58 cm	SB322-SB393*-SB530*-HD22 B
4	C 0530	237 Kg	76x61x58 cm	SB530-SB948*-SB1025* UBH1100-HD30 B-EDB650 SA EDB1000 SA
	C 0630	328 Kg	76x61x58 cm	SB530-SB948*-SB1025* UBH1100-UBH1600-SIS700 HD30 B-EDB650 SA-EDB1000 SA
	C 0830	382 Kg	76x61x74 cm	SB530-SB948*-SB1025* UBH1100-UBH1600-SIS700
ret	C 1030	456 Kg	76x70x74 cm	SB530-SB948*-SB1025* UBH1100-UBH1600-SIS700 HD30 B-EDB650 SA-EDB1000 SA
As .	C 1448	657 Kg	122x70x74 cm	SB948-SB1025*-UBH1100 UBH1600-SIS1350-HD30 B EDB650 SA-EDB1000 SA
CW CW	C 1848	807 Kg	122x70x74 cm	SB948-SB1025*-UBH1100 UBH1600-UBH2250-SIS1350 HD30 B-EDB650 SA-EDB1000 SA
rois.	C 2148	884 Kg	122x70x74 cm	SB948-SB1025*-UBH1100 UBH1600-UBH2250-SIS1350 HD30 B-EDB650 SA-EDB1000 SA
	( <i>Eclipse</i> ° EH 222	300-400-500 Kg*	56x42x71 cm	SB322-UBH1100
	(Eclinse)			CD0.40 LIBLI4.400

76x61x71 cm

# **Matching storage Bins**



**UBH 1100** 

SIS 700

391 Kg Storage bin

with one 73 Kg cart

553 Kg Storage Bin



UBH 1600

1125

SIS 1350

759 Kg Storage bin

with two 73 Kg carts

812 Kg Storage Bin











**Crushman 360** Ice Crusher

**SIS Cart Totes** Max 6 Totes per Ice Cart

• width 31,4 cm

• depth 17,5 cm • height 38,7 cm

(optional) Capacity 16 liters









## HD 30 B **Cubes Dispenser** 75 Kg Storage



HD 22 B **Cubes Dispenser** 75 Kg Storage Capacity



Available with coin activated

dispensing mechanism (on request, with price

EDB650 SA

Ice storage bin (290 Kg) with stored

ice agitation Cube ice manually

activated dispensing into bags,

carts pails or totes ice carrier.

Ice storage bin (454 Kg) with stored ice agitation Cube ice manually activated dispensing into bags, carts **Automatic ice bagging Systems** pails or totes ice carrier.

### **EDB1000 SA**



\*For detailed technical information www.scotsman-ice.it

Scotsman

(\*) CBT cover to be matched with the ice machine.

SB948-UBH1100

UBH1600

600-900-1000 Kg\*

(Eclipse

EH 444







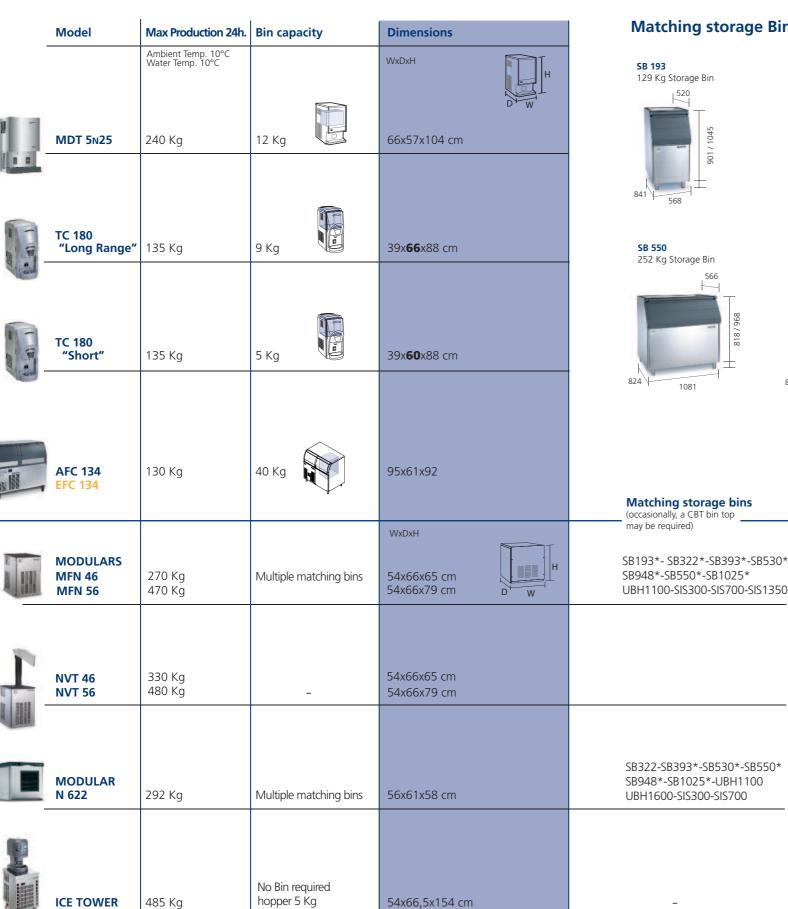
- Free-flow Restaurants Convenience
- Stores
- Self-service applications

# 









# **Matching storage Bins**











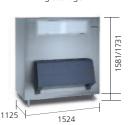


SIS 700

391 Kg Storage Bin

with one 73 Kg cart





**UBH 1600** 

SIS 1350



with two 73 Kg carts

 width 63 6 cm • depth 108.8 cm • height 89,8 cm 759 Kg Storage Bin

> Max 6 Totes per Ice Cart (optional) Capacity 16 liters

**SIS Cart Totes** 

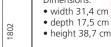
Capacity: 73 Kg

**SIS Cart** 

Dimensions:

• width 31,4 cm • depth 17,5 cm





# **TFS - Touch Free System**

210 Kg Storage Bin

with one 73 Kg cart

Physical contact with ice may contribute to contamination. Ideally, ice should fall directly into the customer's glass or cup.



Truly non-mechanical, one-hand operation provided by the "Touch Free System" uses its unique infrared sensor to determine when to dispense ice, water or both. Dispensing chute is easily removed for cleaning and sanitization.

\*For detailed technical information



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# Scotsman Solutions for QSR Installations

Ice requirements vary greatly within the QSR spectrum of restaurant styles.

A number of variables come into play and impact the selection of shape and size of ice cube, as well as the ice machine style or configuration:

- Individual heat absorption vs drink dilution performance of each shape of ice;
- Beverage consumption habits, local culture;
- Customer traffic, overall and impact capacity requirements;
- Beverage quality standards as per Corporate directives;
- Restaurant style and menu offerings;
- Store lay-out;
- Visual ice quality impact on marketing campaigns launched to introduce a new line of beverages;

Elements of ice Cubes performance vs Nugget or Cubelet ice bits are herewith described on page 11.

Once a preferred type of ice has been selected, the next step is choosing the **right model in terms of daily ice production. Customer traffic** as it relates to the **number of beverage portions served** during the total amount of restaurant opening hours is the parameter to be estimated while calculating in the selection of the model by daily ice production.

Peak-period consumption, and the succession of peak-serving times, also regarded as "impact capacity" is to be considered instead as we look at ice storage capacity, possibly the most critical element of choice in an ice maker.

A foodservice outlet such as a school cafeteria will have to work through **peaks of customer traffic** in correspondence of meal breaks, and the storage capacity will have a far greater impact vs total daily output.

The very same concept located in a train station or in an airport will be facing a different customer traffic flow: this time, it will be **largely distributed around the day**, with lesser of a traffic variation during rush hours. Now, the main requirement will be a production capacity that will be able to assure a steady output of ice throughout the day, that will probably be served minutes after having been produced.

For more details about the above mentioned topics, please refer to page 18 & 19 herewith.

Last but not least, the equipment selection process needs to keep into consideration the **equipment footprint** in relation to kitchen or dining area space restraints

Please find herebelow an overview of the different equipment configurations that Scotsman Ice Systems may offer as solutions to specific install requirements typically found in the QSR segment:



# "Back-of-the-house" Installation

This is the "traditional" ice maker installation, where the ice machine and its storage bin are positioned in the kitchen area. Ice is transported by the crew in buckets or carts to the beverage dispensing area, to be readily available during beverages preparation. The large quantities of ice required in QSR operations are usually best accommodated in this type installations by dice or ice Cubes

### **ADVANTAGES**

- Simplicity: ease of installation, ease of access for daily cleaning, preventative maintenance and technical service;
- As the frequency of ice collection and transport during the day is lower if compared to other foodservice equipments, the ice making unit may be placed practically anywhere in the kitchen, hence total floor space requirements are minimized;
- In critical installation conditions, such as in airflow restricted or radiant heat impacted areas, where the machine may not "breath" sufficiently, the use of remote condenser as well as water cooled condenser versions are best preferred;

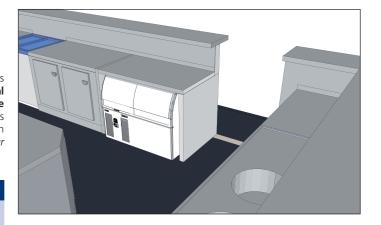


# Undercounter Installation

In **low volume stores**, the most common install solution involves a **self-contained ice machine "embedded" in the central island**, or **back-counter**, just below the **post mix beverage dispensing unit**. Choice of ice for undercounter installations is once again dice and half dice ice, as well as "gourmet" ice through the new Scotsman model MC16 "Short" (please refer to our HoReCa Segment Buying Guide for information).

#### ADVANTAGES

- Proximity: Ice is produced nearest to the point-of-use.
   No need for ice transportation from the kitchen area all the way to the beverage serving area;
- Reduced workload for the crew;
- Reduced ice manipulation and related risks of bacterial contamination:





# Countertop Installation







Best preferred in low to medium volume stores, usually in a drink station at the end of a self-service area or **directly in the dining area** for free refills, this install solution is by far the most interesting in terms of **ease of installation**, **cleanliness and hygiene**, **visual impact** on the Customers, and **user-friendliness**.

Mostly used are ice dispensers, whereas the same machine produces, stores and dispenses ice.

**Customers help themselves to ice.** Ice dispensing is either "Touch Free", activated by an infrared sensor, or manual, activated by the means of push buttons.

Choice of ice for countertop installations is Nugget or Cubelet ice. "Ice only" or "Ice and Water" dispensing models are available.

Two different configurations to choose from: the "Long Range" with a 9,5 kg built-in storage bin, and the "Short" with a reduced depth of 60 cms only, in order to fit even the smallest counter-tops.

### **ADVANTAGES**

- Proximity: this solution offers the advantage of having ice available right at Customer reach, or even in the dining area;
- Hygiene: ice is dispensed right in the beverage cup, without coming in contact with ice scoops or ice buckets. The risk of cross-contamination is virtually eliminated;
- Speed of service is assured by the automatic ice and beverage dispensing system
- Space-saving: the system may be installed outside of the kitchen, making best use of floor space
- Reasonable overall daily capacity of up to 140 kg.

# "Ice Tower" installation

This very innovative equipment configuration and install solution is a combination of undercounter and countertop installation: nugget ice is produced in the lower portion of the machine, designed for under-counter installation.

It is then dispensed through the **Ice Tower spout** at a touch of a button. Ice is fed through a maintenance-free, connecting "ice-chimney", into a 5 kg capacity Ice Hopper, housed in the dispensing-tower head.

This system is indicated for high volume self-service restaurant, and virtually allows for a continuous dispensing of nugget ice throughout the day. Pictorials remind the Operator about the three different dispensing options:

- a) "Press for Ice": the more you press the more you get
- b) "Touch-n-Go" timer-based ice dispensing
- c) Water only (non refrigerated).

**Standard UV-lamp** assures **microbial control** on incoming water, while built-in Water minerals control & anti-algae **Water Filtration System**, with easy to replace filter cartridge, assures **ice quality through water minerals reduction.** 

Last but not least, **anti-microbial vapours** prevent micro-organism proliferation in ice-hopper (food-safe sanitizer pouch requires monthly replacement).



## **ADVANTAGES**

- Proximity and Capacity: this solution combines the advantages of having large volumes of ice available right at Customer reach, in the dining area;
- Hygiene: ice is dispensed right in the beverage cup, without coming in contact with ice scoops or ice buckets. The risk of cross-contamination is virtually eliminated;
- Speed of service is assured by the automatic ice and beverage dispensing system
- Space-saving: the system may be installed outside of the kitchen, making best use of floor space
- Ease of routine cleaning and maintenance





Scotsman<sup>®</sup>

# Ice machine

# Combination of a modular ice machine and beverage dispensing tower

Very well accepted due to its ability to reduce total footprint of the beverage preparation equipment in medium to high volume stores, this install solutions

brings a modular ice machine on top of a soda dispensing system, placed once again in the "center island", just behind the cash registers.

Scotsman modular ice machines from MV and Prodigy MV lines are best adaptable with the design standards of the beverage dispensing towers available on the market, and may be installed on any model of each brand, either as it is, or with the use of readily available install adaptors, eg, when a 22" ice machine is to be installed on a 30" wide

beverage dispenser. The meaningful quantities of ice required and the space constraints are commonly accommodated in this type of installations by dice or half-dice ice cubes.

#### **ADVANTAGES**

- Proximity and volume: both in "cold-plate" or in "prechilled" post-mix system, this solution combines the advantages of having large amount of ice available right at the beverage preparation area;
- Hygiene: ice is dispensed right in the beverage cup, without coming in contact with ice scoops or ice buckets. The risk of cross-contamination is virtually eliminated;
- Speed of service is assured by the automatic ice and beverage dispensing system
- No transport: reduced workload for the crew
- Space-saving: the system develops vertically, making best use of floorspace

# Combination of the ice making evaporator and water system (Eclipse system) on a beverage dispensing tower or automated beverage system

Latest and greatest install solution, this is a variation of the ICE BEVERAGE TOWER install solution just described, very well accepted in North America and coming to the Rest of the World as we speak.

This install solution is based on the **separation of the refrigeration system of the ice machine from the actual ice making system and hydraulic components.**Only the ice making "head" (ie, the evaporator and the water circulation system) is actually in the serving area, on top of the beverage dispenser.

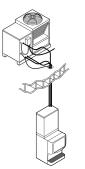
**Both condenser and compressor are positioned outside of the restaurant**, usually on the roof, bringing the refrigeration system noise and condenser generated heat out of the restaurant.

Given this difference, all other aspects of this solution resemble the previous description: placement is usually in the "center island", just behind the cash registers. Scotsman "Eclipse" units have been perfected to best suit this type of installations.

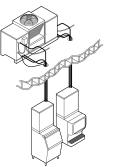
**30"** or **48"** wide models may accommodate even the highest ice making capacity requirements in dice or half-dice ice cubes.

#### **ADVANTAGES**

- Technologically advanced: the state-of-the-art in terms of "split" systems "Slim-line", reduced footprint of the Eclipse units (remember, the complete refrigeration system is on the roof!) eases the cleaning of the storage bin of the drink dispenser thanks to greater accessibility;
- High production capacity, meeting most requirements in terms of "impact capacity" ice availability
- Specialisation: this system is specifically designed for drive-thru installs, matched with automated beverages systems, as well as f free-refill stations in dining areas.
- Ease of service: technicians may access the refrigeration system even during peak serving hours, as the split system is not in the preparation or serving area, but outside of the restaurant



Eclipse System connected to single remote condenser



Two Eclipse Systems connected to a dual remote condenser



# **Matching Storage Bins**

		SB193	SB322	SB393	SB530	SB550	SB948	SB1025	UBH1100	UBH1600	UBH2250	SIS300	SIS700	SIS1350
	Kg	129	168	181	243	252	406	478	553	812	1068	137	318	613
MV306	154	<b>V</b>	()	CBT30EMCD	CBT30EMCD									
MV426	225	<b>V</b>	()	CBT30EMCD	CBT30EMCD									
MV430	210	<b>V</b>	()	CBT30EMCD	CBT30EMCD									
MV456/P-MV	240				<b>V</b>	CBT42EMCD ↔ →	CBT48EAMCD	CBT52EAMCD	\$ /					
MV460	220			<b>V</b>	<b>V</b>	CBT42EMCD ↔ →	CBT48EAMCD	CBT52EAMCD	<b>&amp;</b> /					
MV606/P-MV	320			<b>V</b>	$\checkmark$	CBT42EMCD ↔ →	CBT48EAMCD	CBT52EAMCD	<b>&amp;</b> /	<b>&amp;</b> /			<b>*</b> *	
MV806/P-MV	430			<b>V</b>	<b>V</b>	CBT42EMCD ↔ →	CBT48EAMCD	CBT52EAMCD	\$ /	\$ /			<b>\$</b> *	
MV1006/P-MV	465			$\overline{\checkmark}$	$\overline{\checkmark}$	CBT42EMCD ↔ →	CBT48EAMCD	CBT52EAMCD	\$ /	4			<b>\$</b> *	<b>\$</b> *
C0522	201		$\checkmark$	CBT30/52AMCD	CBT30/52AMCD									
C0530	237				$\checkmark$		CBT48EAMCD	CBT52EAMCD	\$ ■					
C0630	328				$\checkmark$		CBT48EAMCD	CBT52EAMCD	\$ ■	\$ ■			<b>*</b> *	
C0830	382				$\checkmark$		CBT48EAMCD	CBT52EAMCD	\$ ■	\$ <b>I</b>			<b>\$</b> *	
C1030	456				$\checkmark$		CBT48EAMCD	CBT52EAMCD	\$	\$			<b>\$</b> *	
C1448	657						<b>V</b>	CBT30/52AMCD	\$	\$				<b>\$</b> *
C1848	807						<b>V</b>	CBT30/52AMCD	\$	\$	4			<b>\$</b> *
C2148	884						<b>V</b>	CBT30/52AMCD	\$	\$	4			<b>\$</b> *
MFN46	270	CBT22EFCD ✓	CBT22EFCD ✓	CBT30EFSD ↔ → 🗗	CBT30EFSD ↔ → ⊟	CBT42EFSD	CBT48FMCD	CBT52FMCD	<b>♣</b> ■			4	4	
MFN56	470	CBT22EFCD ✓	CBT22EFCD ✓	CBT30EFSD ≪ » □	CBT30EFSD ↔ → 🗗	CBT42EFSD ← →	CBT48FMCD	CBT52FMCD	\$	\$		4	\$	\$
N622	292		$\checkmark$	CBT30EFSD ()	CBT30EFSD ()	CBT42EFSD	CBT48FMCD	CBT52FMCD	\$ ■	<b>\$</b> ■		\$	4	

115/60/1	230/60/1
CU 2026 CU 3030 C 0522 C 0530 N 622 MDT5N25 HD22 HD30	MV 306 MV 426 MV 456 MV 606 MV 806 MV 1006 Crushman 360 CU 2026 CU 3030 C 0522 - C 0530 C 0630 - C 0830 C 1030 - C1448
230/60/3	TC 180 CD 40
C 1448 C 1848	

<sup>\*</sup> Please contact technical department for special instructions

Perfect combination - Matching between ice maker and bin Cover included (CBT22EFSD)

**↔** Ice maker deeper then storage bin by +/- 6/9 cm

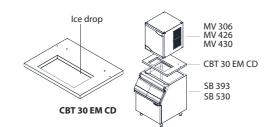
☐ Ice maker daily production too high compared to bin capacity

() No anchor points between ice maker and bin

■ NEED ADDITIONAL BIN TOP cm 25161163

Ice chute cut-out performed upon installation

lce maker daily capacity, too low compared to bin capacity







# lce since 1950...

Scotsman has been designing and manufacturing ice machines since 1950 - and for half a century innovation and reliability have always been our top priorities.

Our ice machines, proudly made in Italy in our plant near Milan (Pogliano Milanese) or in Fairfax, South Carolina, USA, are nowadays distributed in more than 100 countries, with more than one million units installed worldwide!

Scotsman has been known as the benchmark in the Quick Service Restaurants, Free Flow and Self Service Restaurants Segment, where it is a synonym of "ice". Scotsman machines are a "classic", but now, with the new MV-Prodigy MV Lines they once again raise the bar for quality, design, and innovation in those details that most matter to Owner/Operators. Further innovations have been brought to life in what we define "bringing ice at arms reach" of the Operator, maximising hygiene, ergonomics, and ease of use. Here comes dispensers, in various configurations, vertical ice transport systems, machine dimensions that adapt to each and every installation conditions.

Scotsman is the true answer to all needs of production, storage and distribution of quality ice!

# **Experience, Innovation, Reliability, Technical Support.**

Innovation is at the base of the Scotsman philosophy and translates into a 'modus operandi' based upon three principles:

Listen: with more than one million ice machines installed around the globe we receive constant feedback - at Scotsman we value the experience of our partners and are willing to listen to any suggestions from your experience, in order to offer an even better product: you really are our out-sourced Research and Development

**Design:** while on one side we rely on the information that we receive from our distribution network, the other drivers of our development are market analysis and research, as requests from different segments are constantly evolving. This information and our constant attention to the market allow us to anticipate the needs of the end users of ice machines, and to offer solutions specifically designed to meet their new requirements. Our final goal is to turn each customer into a satisfied and loyal customer, wherever they are in the world.

**Develop:** the final touch is creativity using state-of-theart technology that allows us to develop new products as well as upgrading our existing ones, with constant attention to better performance, ease of use and maintenance and cost reduction, without compromising on the quality of our brand. Each and every new model is tested and certified according to the most stringent International quality protocols.

# The result is the leading ice maker brand... World-

Scotsman's mission has not changed throughout the last 60 years: fulfilling the requirement for quality ice, day

We strive for reliability from the very first stage of design, through to the manufacturing stage. Each and every unit is factory tested before leaving our facilities, which is why a Scotsman ice maker starts delivering excellent ice, cubes or flakes, from the very first batch. All the components of a Scotsman ice machine undergo rigorous tests. Our QA department's system requires that each new model undergoes a number of specific field tests in demanding working environments, in order to guarantee an excellent quality standard in line with the reputation of the Scotsman brand name. Our commitment to quality and reliability is testified by the warranty that covers all our products.

### When you buy Scotsman, you buy reliability.

Our Customer Service Department is constantly available to support our local network of installers and service technicians in their day-to-day work. Moreover, our Customer Service Department constantly organises regular technical seminars and training, ensuring our aftersales service operates to a quality standard in line with that of the Scotsman brand.

# Warranty and **Certifications**

Scotsman is the world's largest ice maker manufacturer. We are well known to most International QA institutes and our products are endorsed by the most prestigious certifications.





















Scotsman: the smart choice in ice machines.



# Scotsman<sup>®</sup> Ice Systems

# Ice the world demands



www.scotsman-ice.it www.scotsman-ice.com www.scotsman-ice-on-tablet.com

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