



- Hipermarketlerde balık reyonlarında, ekmek fırınlarında ve unlu mamüllerde hamur karılmasında yaprak tip hijyenik buza ihtiyaç vardır. Ussan buz makinası hijyen sınıfı özelliklerde dizayn edilmiş olup, ekmek fırınlarında, simit, börek, pasta, hertürlü unlu mamül imalatında kullanılmaktadır.
- Yaprak buz yiyecek sergileme, salata barları ve gıda üretim tesisleri için mükemmeldir.
- Günde 750-2500 kg arasında yaprak buz üretimi için farklı model seçenekleri mevcuttur.
- Buz makinelerimiz, paslanmaz çelikten (AISI 316 normuna uygun) üretilmiş kazanlara sahiptir.
- Makine üretiminde kullanılan malzemeler, 1,5 mm , 8 mm ve 6 mm gibi kalın saclardan oluşmakta ve inox malzeme ile gaz altı kaynak tekniği kullanılarak imal edilmektedir.
- Redüktör, gaz devresine müdahale edilmeden kolayca değiştirilebilir.
- Yüksek termodinamik verimliliğe sahiptir.
- Kompresöre dönen sıvı R404A miktarı minimum seviyededir.
- Isı eşanjörü bulunmaktadır. Özel tasarlanmış, tek taraflı ve sıfır gaz kaçağı sağlayan bir salmastra sistemi ile donatılmıştır.

Ice Machine at Fishery stands in markets and Bakery Products:

Hygienic flake ice is required for kneading dough at bakery ovens and bakery products. Ussan ice machine was designed with specifications of hygiene class; and is used at bakery ovens for production of bagel, pastry, cake, and all kind of bakery products.

- Flake ice is perfect for food display, salad bars and food production facilities.
- There are different model options available for flake ice production ranging from 750-2500 kg per day.
- Our ice machines have boilers made of stainless steel (in accordance with AISI 316 norm).
- The materials used in the production of the machine consist of thick sheets such as 1,5mm, 8 mm and 6 mm and are manufactured using inox material and gas welding technique.
- The reducer can be easily replaced without interfering with the gas circuit.
- It has high thermodynamic efficiency.
- The amount of liquid R404A returning to the compressor is at minimum level.
- There is a heat exchanger. It is equipped with a specially designed, single-sided packing system that ensures zero gas leakage.

- Gaz sızdırmazlığı tamamen sağlanmıştır.
- Silindir içinde proses yolları yer almaktadır.
- Makine, PLC otomasyonlu olup zaman ayarlı (timer saatli) çalışma özelliğine sahiptir.
- Pano içi tamamen birinci sınıf elektrik malzeme ve ürünlerden oluşmaktadır.
- Su pompalama ve dağıtım sistemi sayesinde verimlilik artırılmıştır.
- Buz kapasitesi, 12°C su girişi ve 24°C dış ortam sıcaklığı baz alınarak nominal değerlerle belirtilmiştir. Bu değerler ± 10 oranında değişiklik gösterebilir.

Önemli Notlar (Olmalı / Olmamalı!):

- ❖ Silindir, yüksek verimli ve içi tanımlı proses yollarına sahip olup, boş değildir!
- ❖ Su kazanı, 8 mm kalınlığında paslanmaz çelikten üretilmiştir; plastik türevli veya ince saclı değildir!
- ❖ Tek taraflı özel tasarım sıfır kaçak gaz salmastrası vardır; çift salmastra kullanılmaz!
- ❖ Buz, kalınca yaprak şeklinde soğuk buzdur; ince pul buz değildir!

GAZ Açıklaması: R404A soğutucu gazı, diğer adıyla R404A, ticari isimleri arasında SUVA HP62, SUVA 404A, Genetron 404A ve benzerleri yer almaktadır. R404A, HFC tipi, azeotropik olmayan (ozon tabakasına zarar veren CFC ve HCFC gazlarından tamamen arındırılmış) soğutucu gazdır. Şu anda dünya çapında çoğu ülke tarafından tanınmakta olup, yeni soğutma ekipmanlarının kurulumu ve bakımı sırasında yaygın olarak kullanılan ana akım kriyojenik soğutucu gazlardandır. ABD çevre kuruluşları EPA, SNAP ve UL standartlarına uyumlu olup, Amerikan Isıtma, Soğutma ve Havalandırma Mühendisleri Derneği (ASHRAE) güvenlik seviyesi A1 kategorisindedir (bu, insan sağlığına zararsız olan en yüksek seviyedir).

- Gas tightness is fully ensured.
- Process pathways are present inside the cylinder.
- The machine is PLC automated and has timer clock operation.
- The inside of the panel consists entirely of first class electrical materials and products.
- Efficiency is increased thanks to the water pumping and distribution system.
- Ice capacity is indicated with nominal values based on 12°C water inlet and 24°C outdoor temperature. These values may vary by ± 10 %.

Important Notes (Must Have / Must Not Have!):

- ❖ The cylinder is high-efficiency and has defined internal process pathways; it is not empty!
- ❖ The water tank is made of 8 mm thick stainless steel; it is not made of plastic derivatives or thin sheet metal!
- ❖ It has a single-sided, specially designed, zero-leak gas sealing system; double seals are not used!
- ❖ Ice is thick flake-shaped cold ice; not thin flake ice!

GAS Description: R404A refrigerant gas, also known as R404A, trade names include SUVA HP62, SUVA 404A, Genetron 404A and the like. R404A is an HFC-type, non-azeotropic (completely free of ozone-depleting CFC and HCFC gases) refrigerant. It is now recognized by most countries worldwide and is one of the mainstream cryogenic refrigerants commonly used during the installation and maintenance of new refrigeration equipment. It is compliant with the standards of the US environmental agencies EPA, SNAP and UL, and has an American Society of Heating, Refrigerating and Ventilating Engineers (ASHRAE) safety level A1 category (the highest level that is harmless to human health).

USSAN Flake Ice Makers capacity table

ICE Machine Model	ICE Type	ICE Capacity	ICE Thickness	Compressor Power	Komp.Type	Dimensions	Sheet Material	Electric Supply
USS/MN-750	Flake ice	750 kG/day	1,5 mm aprox.	2 hP	Hermetic	530x1030xh 1500 mm	inox 316 serie	3ph 380 V 50/60 Hz
USS/MN-1000	Flake ice	1000 kG/day	1,5 mm aprox.	5 hP	Semihermetic	530x1030xh 1500 mm	inox 316 serie	3ph 380 V 50/60 Hz
USS/MN-1500	Flake ice	1500 kG/day	1,5 mm aprox.	7 hP	Semihermetic	530x1030xh 1500 mm	inox 316 serie	3ph 380 V 50/60 Hz
USS/MND-2500	Flake ice	2500 kG/day	1,5 mm aprox.	15 hP	Semihermetic	690x1400xh 1500 mm	inox 316 serie	3ph 380 V 50/60 Hz

The capacities of the ice machinery are for water inlet temp. 16C and outer air temperature 24C.

All ice machines have monoblock construction ; Monoblock type (includes condenser, compressor, and evaporator one block designed)

All Evaporators design are horizontal type that includes one side special sealing system.

Refrigerant : 404a

Four different capacities are available at Ussan ice machine produces as Flake type ice. Our ice machineries are manufactured in a range from 1 ton to 7.5 tons of ice production capacity per day. These capacities are for ice production from fresh mains water. As for the Ussan sea water ice machines, they are manufactured in a range from 1 ton to 8 tons of sea water ice production capacity per day.



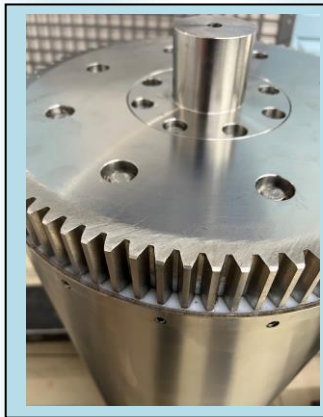
Ussan flake type ice machine is used very often at fishery sector; at fishing vessels in order to make ice from sea water, at supermarkets for fish sale on ice in fish aisles; and at hatcheries. Furthermore, the flake ice produced by the ice machine is mixed with dough at bakery products and bakery ovens. Ussan flake ice machine is used at chicken and turkey slaughterhouses for washing with icy water and for shocking.



Flake shaped ice produced by flake ice machine can be stored as seen in the figures below. It can be stored in cold chamber or in bucket. The ice machine is also erected in as split type, near to the fish aisle or on the fish cold chamber at super markets or hypermarkets. The ice machine also erected in dough house at bakery products or bakery ovens. Perpetual ice stream in the buckets in front of it is created. The ice should be put into the dough being weighed beforehand.



The ice machine works with horizontal evaporator; and its materials which contact water; mainly the drum evaporator are made of stainless inox. Refrigerant gas inlet and outlet systems were provided by perfect sealing system from the same single side. Even if only by this side, a perfect design was applied in Ussan ice machine manufacturing. The fact that the ice machine is complete stainless, and entire water tank is detachable and cleanable within 3 minutes without requiring any tool, puts Ussan brand ice machine into fully hygiene class



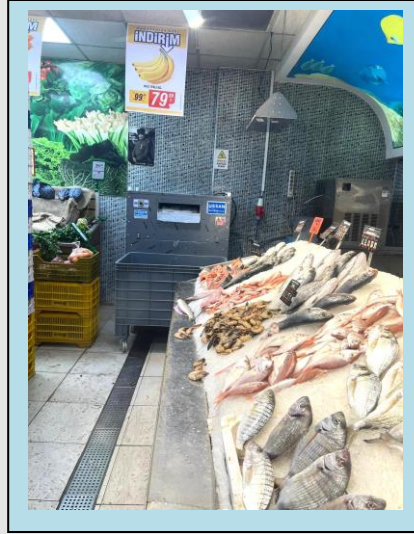
Hygienic Ice Machine

The ice machine also should be hygiene class in order to maintain hygienic ice production from the flake type ice machine

Ussan has developed and made available the hygiene class material and hygiene design in the flake ice machinery synchrocial with the most advanced models in the world.

What is Hygiene Ice Machine or Hygienic Ice Machine? There are three main elements that put Ice Machine in the hygiene class: Particularly the evaporator of the ice machine that produces ice, main water caldron, evaporator support side faces, ice breaker ice cutter, metal ice bus is attached, and also everywhere where the water circulates must be made of aisi 304 inox stainless material. Design of the ice machine requires that the evaporator where the ice is produced must be open and completely apparent. In this case, the ice must be produced at the outer surface of the evaporator but not at the inner surface. The ice machinery with aslope horizontal evaporator are suitable with this specification. The ice machinery with vertical type evaporator are not included in hygiene class because they are fully closed hermetic. As for the last main element, the water caldron of ice evaporator is inox; and attached to the

USSAN Ice Makers On Fish Stand In Markets



Ice Machine in Fish Aisle of Super Markets

The sectors that mostly require USSAN Ice Machine, are supermarkets and hypermarkets in relation to fisheries and their sale. Ice is used for preparation of fish aisle in supermarkets. It is ensured that both fishes contact to cold and wet ice surface, and also the ice, because of it is white, keeps the fish forefront. The Ice Machine located on the fish cold chamber spills its ice into the wheeled buckets in the cold chamber.

