

Sabroe V/VD flake ice machines



Flake ice

Flake ice is produced in a continuous process by freezing circulating water on a rotating drum. Refrigerant evaporates inside the drum, which at the same time acts as a liquid separator. Water is pumped from a reservoir at the bottom of the flake ice machine to the

top, where it is distributed onto a part of the drum. This water then floats down the drum and freezes to ice. After one revolution of the drum, the ice is scraped off and falls downwards for collection as flake ice. The thickness of this ice can be adjusted by altering the speed at which the drum rotates.

Multitude of uses

Flake ice is used for a considerable number of different purposes in industry, including keeping fish catches cool all the way from the fishing vessel to the retailer, process cooling in the pharmaceutical industry and in chemical plants, and the cooling of concrete in large construction projects. Flake ice can also play a crucial role in food production, where it is used to inhibit bacterial growth – for example by mixing flake ice with the product to maintain a consistent temperature. Sabroe V/VD flake ice machines are currently available with production capacities of 4–60 metric tons per day. They can be used with all common refrigerants and can produce either dry/subcooled or wet ice using either fresh water or sea water.

Significant advantages

The advantages of the Sabroe V/VD flake ice machine design include

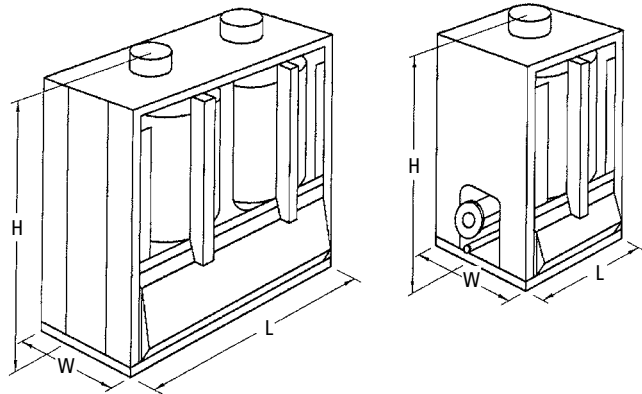
- ice produced on the outside of the drum.
- freezing drum surface based on a dual-layer coating (nickel and chromium).
- simple change of the ice removal knife makes it easy to change application.
- sturdy, compact design featuring freezing drum with built-in separator for connection to compressor or pump circulation system.
- drum rotation speed can be varied steplessly.
- flake ice production on a continuous basis.
- produces ice with a brittle consistency and large surface area.

Customer benefits

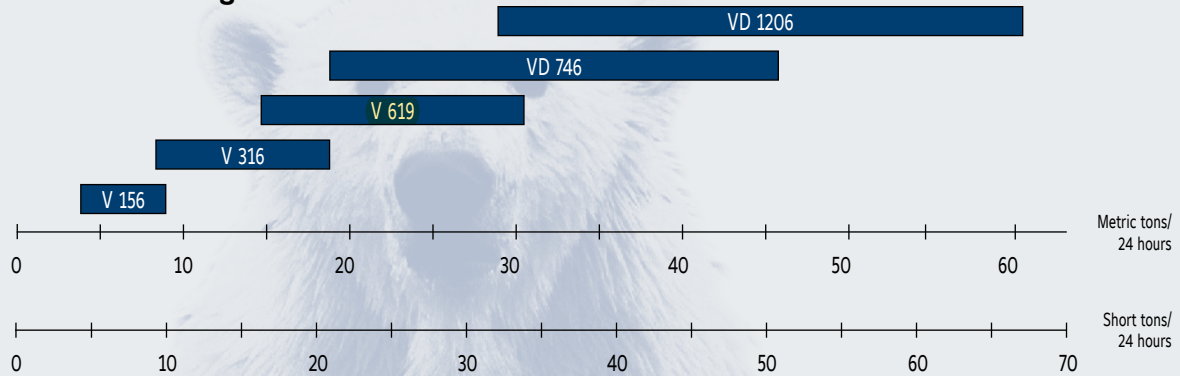
For the customer, the benefits of the Sabroe V/VD flake ice machine design include

- ▶ easy to inspect ice production directly.
- ▶ very corrosion-resistant compared with other ice machines with only single-layer chromium coating. This results in long service life and low service costs.
- ▶ provides considerable versatility and easy shift between using fresh water and sea water, with installation either on land or for maritime applications.
- ▶ the small footprint saves space and makes it possible to use the machine in many different locations.
- ▶ easy to adjust ice thickness and consistency to comply with specific application and product requirements.
- ▶ no defrosting required. The ice is ready for immediate use, with no crushing required. The ice is also extremely durable when subcooled.
- ▶ the consistency and lack of sharp edges make the ice mix gently around the product and enclose it tightly, with a rapid, intensive cooling effect. The uniform consistency also makes it easy to store, handle and dose the ice by weight and volume, and to use it with a wide range of different products.

Sabroe product description



Sabroe V/VD range



Technical data

Type		H	W	L	Motor(s)				Refrigerant charge				Connection size			Net weight	Shipping volume
					Drum(s)		Pump(s)		R717	R22	R404A	R507	Suction	Liquid	Water		
					kW/HP	kW/HP	kg/lbs	kg/lbs	kg/lbs	kg/lbs	mm/in	mm/in	mm/in				
mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in	mm/in		
V 156	Metric	1850	1145	1200	0.37	0.37	45	85	75	75	100	25	25	1100	3.9		
V 156	British	72.6	45	47.2	0.5	0.5	99	187	165	165	4	1	1	2425	137		
V 316	Metric	2500	1165	1200	0.37	0.37	90	180	160	160	100	25	25	1360	5.1		
V 316	British	98.2	45.8	49.2	0.5	0.5	198	396	355	355	4	1	1	2998	180		
V 619	Metric	3830	1265	1200	0.75	0.37	150	305	265	265	100	25	25	1900	7.7		
V 619	British	142.6	49.8	47.2	1.0	0.5	330	671	590	590	4	1	1	4189	272		
VD 746	Metric	2800	1210	1960	2 x 0.37	2 x 0.37	2 x 105	2 x 210	2 x 185	2 x 185	2 x 100	2 x 25	25	3350	8.9		
VD 746	British	110.3	47.5	77.2	2 x 0.5	2 x 0.5	2 x 231	2 x 462	2 x 410	2 x 410	2 x 4	2 x 1	1	7385	314		
VD 1206	Metric	3700	1280	1960	2 x 0.75	2 x 0.37	2 x 150	2 x 305	2 x 265	2 x 265	2 x 100	2 x 25	25	4400	12.1		
VD 1206	British	145.8	50.3	77.2	2 x 1.0	2 x 0.5	2 x 330	2 x 671	2 x 590	2 x 590	2 x 4	2 x 1	1	9700	427		

All information is subject to change without previous notice