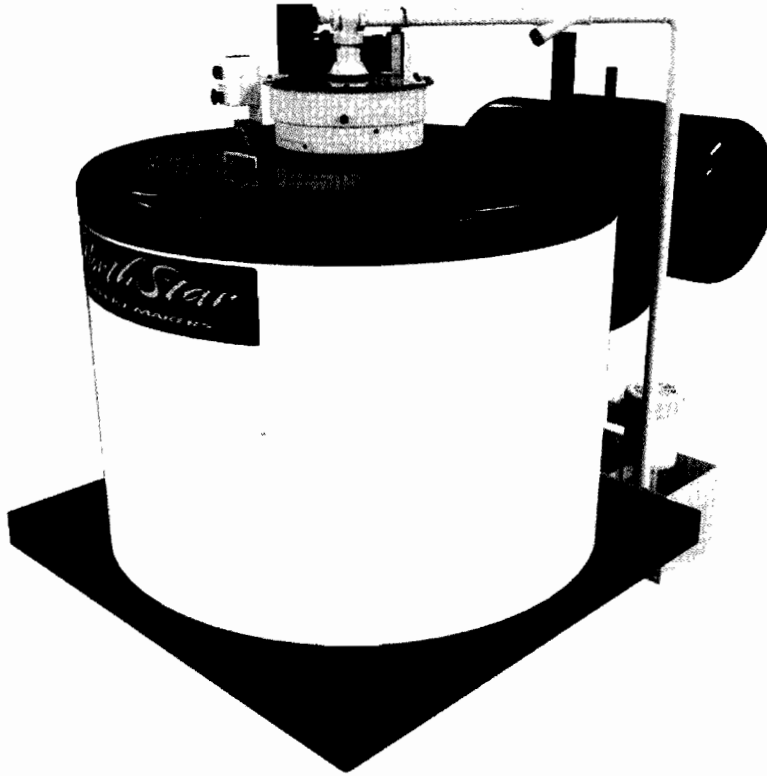


North Star.

MODEL 20 FLAKE ICE MAKER SPECIFICATION SHEET



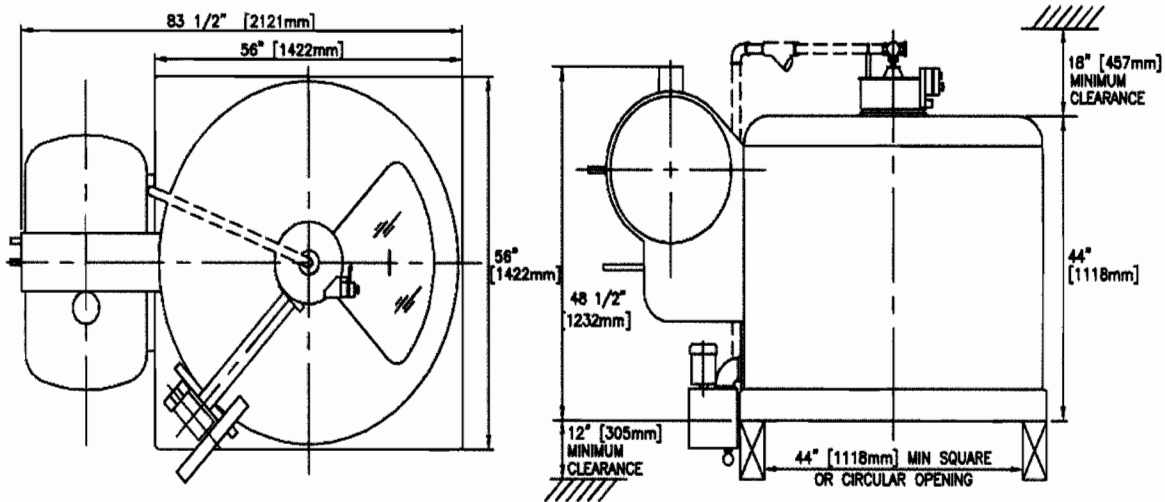
STANDARD FEATURES

- ◆ Double walled, stationary evaporator. No refrigerant seals to leak.
- ◆ Available with either a solid carbon or stainless steel freezing surface.
- ◆ Protection and safety features include mechanical load limit switch, emergency stop switch, jog switch, inspection hatch safety switch and a drive belt guard.
- ◆ Machine available for shipboard installation to produce seawater ice.
- ◆ Polyurethane insulation enclosed in molded fiberglass covers.
- ◆ Attached accumulator for complete gas-liquid refrigerant separation. (Flooded operation)
- ◆ Patented drip shield to insure complete water-ice separation.
- ◆ Stainless steel water make-up tank and ice removal tools are standard. Other stainless steel options are available.
- ◆ Economical, compact, simple to install and operate with minimal maintenance.
- ◆ LIFETIME WARRANTY on North Star evaporators and PERFORMANCE GUARANTEE.

North Star Ice Equipment Corporation PO Box 80227 ♦ Seattle, WA 98108 USA ♦ (206) 763-7300 ♦ 1-800-321-1381
Fax: (206) 763-7323 ♦ E-mail: info@northstarice.com ♦ Web Site: www.northstarice.com

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North Star Model 20 Operating Data



TOP VIEW

SIDE VIEW

Refrigerant Control: Sporlan Levelmaster or RFS (Refrigerant Float Switch)

WEIGHT: 3,800 lbs - 1,705 kg
VOLUME: 240 cu ft - 7.79 cu mtr
DRIVE MOTOR: 0.50 HP
PUMP MOTOR: 0.50 HP
SUCTION LINE: 2 1/2" Sch 40
LIQUID LINE: 1 1/4" Sch 40

OIL DRAIN LINE: 1/2" MPT
WATER LINE:
Tank Inlet: 1/2" FPT
Tank Drain: 1 1/4" FPT
Pump Outlet: 1 1/4" FPT
Flow Control Valve Inlet: 1 1/4" FPT

REFRIGERANT CAPACITY											
Models 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40											
Refrigerant	Weight (lbs)	Weight (kg)	Refrigerant	Weight (lbs)	Weight (kg)	Water Temperature °F	40	50	60	70	80
Freon R-134a	175	(79 kg)	Freon R-404a	166	(75 kg)	Tons of Refrigeration	1.20	1.25	1.30	1.40	1.50
Freon R-22	159	(72 kg)	Ammonia R-717	80	(36 kg)						

ICE MAKING CAPACITY RANGE GUIDELINE

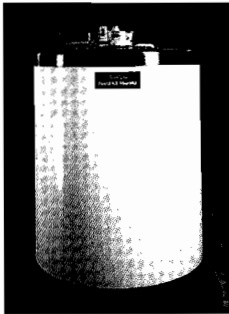
Evaporator Temperature (°F)	Ice Making Capacity (Tons)									
	5	6	7	8	9	10	11	12	13	
Stainless Steel Model	5.0 6.1	6.0 7.2	7.0 8.3	7.8 9.4	8.7 10.3	9.3 11.0	9.6 11.4	9.6 11.4		
Carbon Steel Model	5.7 6.9	6.9 8.2	8.0 9.6	9.2 10.8	10.2 12.2	11.1 13.2	11.8 13.9	12.0 14.0		

*Capacity based on tons (2,000 pounds) per 24 hours, 1.5 to 2.0mm ice thickness, 60°F make-up water, and oil-free ammonia refrigerant. For other operating conditions and specific capacities, refer to our capacity curves or visit the Ice Maker Selection Tool on our web site at www.northstarice.com. Capacities in *italics* are 2.0mm ice thickness.

WATER REQUIREMENT: 0.167 GPM PER TON OF ICE PER 24 HOURS

THERE'S ONLY ONE NORTH STAR

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Ice Maker Specifications

Model numbers indicate the square feet of freezing surface for each model.

"CS" designates a carbon steel freezing surface; "SS" indicates a stainless steel freezing surface.

Product Specifications				Dimensions			Shipping Information		
Model	Motor Drive	Pump	Capacity	Height	Width	Length	Domestic Wt	Export Wt	Volume
5SS/—	1/4 hp dc .19 kw	1/30 hp .03 kw	3.0/ — tons* 2.7/ — MT	44 in 1,118 mm	25 in 635 mm	38 in 965 mm	550 lbs 250 kg	650 lbs 295 kg	60 ft ³ 1.7 m ³
10SS/CS	1/3 hp .25 kw	1/20 hp .04 kw	4.7/ 6.0 tons* 4.3/ 5.4 MT	45 in 1,143 mm	32 in 813 mm	48 in 1,219 mm	1,350 lbs 614 kg	1,500 lbs 682 kg	70 ft ³ 2.0 m ³
20SS/CS	1/2 hp .38 kw	1/2 hp .38 kw	11.4/ 14.0 tons* 10.3/ 12.7 MT	51 in 1,295 mm	56 in 1,422 mm	83 in 2,108 mm	3,800 lbs 1,727 kg	4,000 lbs 1,818 kg	240 ft ³ 6.8 m ³
40SS/CS	3/4 hp .56 kw	1/2 hp .38 kw	19.7/ 22.8 tons* 17.9/ 20.7 MT	75 in 1,905 mm	56 in 1,422 mm	83 in 2,108 mm	5,200 lbs 2,364 kg	5,700 lbs 2,591 kg	326 ft ³ 9.2 m ³
60SS/CS	1.00 hp .75 kw	1/2 hp .38 kw	29.8/ 38.0 tons* 27.0/ 34.5 MT	81 in 2,057 mm	76 in 1,930 mm	107 in 2,718 mm	8,100 lbs 3,632 kg	8,500 lbs 3,864 kg	510 ft ³ 14.4 m ³
90SS/CS	1 1/2 hp 1.13 kw	1/2 hp .38 kw	41.0/ 53.5 tons* 37.2/ 48.5 MT	105 in 2,667 mm	76 in 1,930 mm	109 in 2,769 mm	10,500 lbs 4,773 kg	11,200 lbs 5,091 kg	645 ft ³ 18.3 m ³

* Capacity in 2,000 pound tons (909 kg) per 24 hours with -25° F (-32° C) evaporator and 60° F (16° C) water supply temperatures. 1/16" (1.5 mm) ice thickness and ammonia refrigerant. For other requirements and conditions consult North Star or refer to our capacity guidance curves (IMC-2-SS or -CS). Specifications subject to change without notice.

North Star: The World Leader In Flake Ice Technology

Since 1950, North Star Ice Equipment Corporation has been known the world over for its line of flake ice makers and ice handling systems. The company's product line includes ice rakes and storage systems, ice delivery systems, containerized ice plants and other related products. North Star ice systems are now operating in over 90 countries in a wide variety of applications.

Seafood

Fishing, aquaculture, at-sea & land-based processing, holding, transportation & display

Produce

Perishable cooling & transport

Meat & Poultry

Processing & value-added products

Bakery

Dough cooling

Chemical

Dye & chemical manufacturing

Construction

Concrete cooling

Grocery

Perishable food holding & display

Recreation

Ski resort snow-making

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