



ICE MACHINES



PATKOL - Tube Ice Machine

STANDARD FEATURES

- All sizes Cyl Ice makers 1.5 to 120 tons/day
- Tropicalized design with guarantee capacity at 86° F make up water
- Sturdy - long service life
- Insulated freezer - cold room not required
- Extra liquid trap - vessel not required
- Near straight cut ice cube
- Available with ASME U Stamp Certificate
- Rugged design and suitable for tropical climate
- Ammonia refrigerant (freon model available)
- Simple and reliable operation

OPTIONS

- Stainless steel ice bin with auger
- PLC remote control panel
- Special cutter for crushed ice
- Supply with Compressor complete package and high side units

Unit	Millimeter				Inch			
Ice size	16	22	35	38	5/8"	7/8"	1 3/8"	1 1/2"
Tube size	19.05	25.4	38.1	41	3/4"	1	1 1/2"	1 5/8"

Models	A	B	C* (Tube Size)				D	E
			5/8"	7/8"	1 1/8"	1 5/8"		
PK-10A	5' 10 7/8"	5' 10 7/8"	18' 9 1/8"	18' 9 1/8"	20' 11 7/8"	20' 11 7/8"	5' 9 5/8"	6' 8 5/8"
PK-20A	6' 6 5/8"	6' 6 5/8"	20' 4 1/8"	20' 4 1/8"	22' 1 1/8"	22' 1 1/8"	6' 11 4/8"	6' 11 7/8"
PK-30A	7' 5 1/8"	7' 5 1/8"	20' 8 3/8"	20' 8 3/8"	22' 8"	22' 8"	7' 10 4/8"	7' 5 3/8"
PK-50A	7' 5 1/8"	7' 5 1/8"	23' 5"	23' 5"	25' 4 5/8"	28' 4 1/8"	9' 9 2/8"	9' 3 3/8"

Unit in feet

Models	A	B	C* (Tube Size)				D	E
			19.05 mm	25.4 mm	38.1 mm	41 mm		
PK-10A	1,800	1,800	5,730	5,730	6,400	6,400	1,770	2,050
PK-20A	2,000	2,000	6,110	6,110	6,710	6,710	2,120	2,130
PK-30A	2,150	2,150	6,310	6,310	6,910	6,910	2,400	2,270
PK-50A	2,150	2,150	7,140	7,140	7,740	8,640	2,980	2,830

Unit in millimeter





PATKOL - Máquina de tubo cilíndrico para hielo

CARACTERÍSTICAS ESTÁNDAR

- Diseño robusto y adecuado para el clima tropical y con un manejo sencillo y fiable
- Cortadora de acero inoxidable con diseño óptimo para el moldeado del hielo y de fácil mantenimiento
- Funciona con agua complementaria a temperatura elevada (no es necesario el uso de un enfriador de agua)
- Se puede instalar en temperatura ambiental, no siendo necesaria la instalación dentro de una cámara frigorífica
- Aislamiento y con revestimiento en hoja de acero inoxidable
- Package delivered complete with service platform
- Refrigerante de amoníaco (modelo de freón disponible)
- Disponible con el sello U de la Asociación Americana de Ingenieros Mecánicos (ASME, por sus siglas en Inglés)



Unidad	Milímetros				Pulgadas			
Hielo	16	22	35	38	5/8"	7/8"	1 3/8"	1 1/2"
Tubo cilíndrico	19.05	25.4	38.1	41	3/4"	1	1 1/2"	1 5/8"

Modelos	A	B	C (Tamaño del tubo cilíndrico)				D	E
			3/4"	1"	1 1/2"	1 5/8"		
PK-10AL	5' 10 7/8"	5' 10 7/8"	20' 9 1/2"	20' 9 1/2"	22' 9 1/8"	22' 9 1/8"	6' 9 7/8"	6' 11 1/4"
PK-20AL	6' 6 3/4"	6' 6 3/4"	20' 11 7/8"	20' 11 7/8"	22' 11 3/8"	22' 11 3/8"	7' 7 3/8"	7' 1 3/4"
PK-20/25AEL	6' 6 3/4"	6' 6 3/4"	N/A	N/A	18' 8 3/8"	18' 8 3/8"	7' 7 3/8"	7' 1 3/4"
PK-30AL	7' 5/8"	7' 5/8"	21' 7 7/8"	21' 7 7/8"	23' 9 5/8"	23' 9 5/8"	8' 3 1/8"	7' 7 5/8"
PK-35AL	7' 5/8"	7' 5/8"	N/A	N/A	26' 9 1/2"	26' 9 1/2"	8' 3 1/8"	7' 7 5/8"
PK-50AL	7' 5/8"	7' 5/8"	24' 2 3/8"	27' 10 7/8"	29' 10 5/8"	29' 10 5/8"	10' 1 5/8"	9' 5 1/8"
PK-60/70AL	7' 5/8"	7' 5/8"	N/A	27' 10 7/8"	30' 8 3/8"	30' 4 3/8"	10' 4 7/8"	9' 5 1/8"

Medidas en pies

OPCIONES

- Depósito para hielo de acero inoxidable
- con una barrena PLC de mando a distancia
- Cortadora especial para triturar el hielo
- Incluye compresor y unidades laterales elevadas

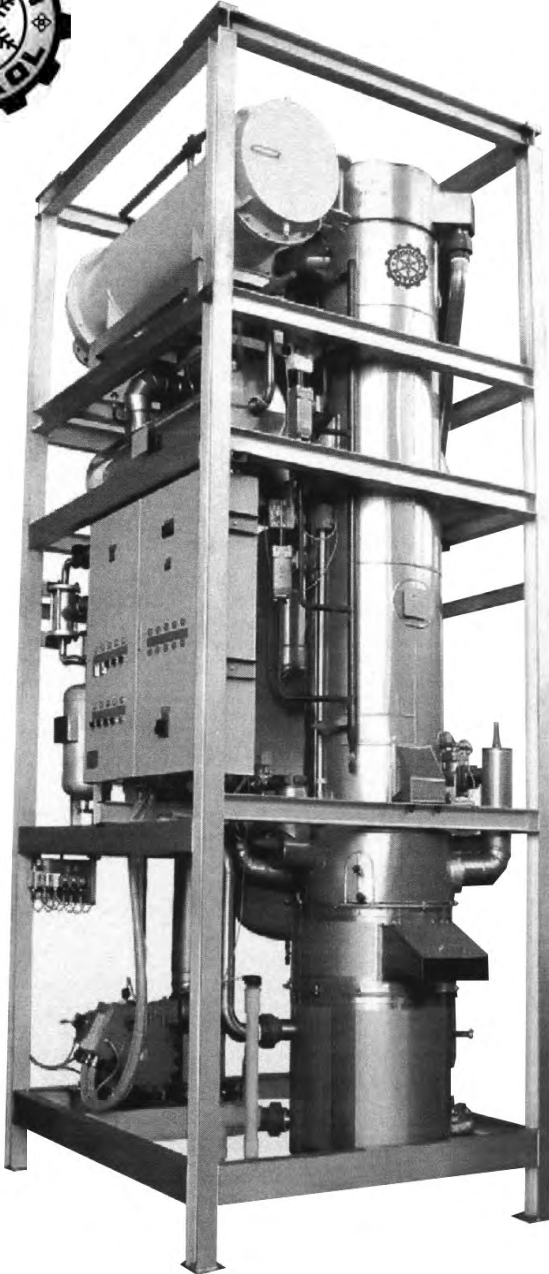
Modelos	A	B	C (Tamaño del tubo cilíndrico)				D	E
			19.05 mm	25.4 mm	38.1 mm	41 mm		
PK-10AL	1,800	1,800	6,340	6,340	6,940	6,940	2,080	2,115
PK-20AL	2,000	2,000	6,400	6,400	6,995	6,995	2,320	2,180
PK-20/25AEL	2,000	2,000	N/A	N/A	5,700	5,700	2,320	2,180
PK-30AL	2,150	2,150	6,600	6,600	7,255	7,255	2,520	2,328
PK-35AL	2,150	2,150	N/A	N/A	8,165	8,165	2,520	2,328
PK-50AL	2,150	2,150	7,375	8,510	9,110	9,110	3,089	2,875
PK-60/70AL	2,150	2,150	N/A	8,510	9,360	9,255	3,173	2,875

Medidas en milímetros





ICE MACHINES



PATKOL TUBE Ice Machine (Model PKU-10FU)

Self-contained Unit

STANDARD FEATURES

- More capacity due to tropicalized design
- Large freezer, high COP resulted in low production cost
- Give good ice shape due to better cutting with small hole

OPTIONS

- Stainless steel casing frame
- Ice bin with screw conveyor
- PLC system
- ASME U-stamp certificate
- Special cutter for crushed ice
- Evaporative condenser
- UL standard control panel

Capacity Table

Model	Refrigerant	Water temperature				
		86°F 30°C	80°F 26.7°C	70°F 21.1°C	60°F 15.6°C	50°F 10°C
PK-15FU	R22	16.3	16.8	17.6	18.4	19.2
	R404a	14.7	15.2	16.0	16.6	17.3
PK-10FU	R22 & R404a	9.8	10.1	10.6	11.0	11.5

Note

- Ice capacity base on 10% blow down
- Ice capacity is in US. Ton/24 hrs. (1 US ton = 0.907 metric ton)
- PK-15FU use industrial open-type compressor, PK-10FU use semi-hermetic compressor.

Standard Ice Size

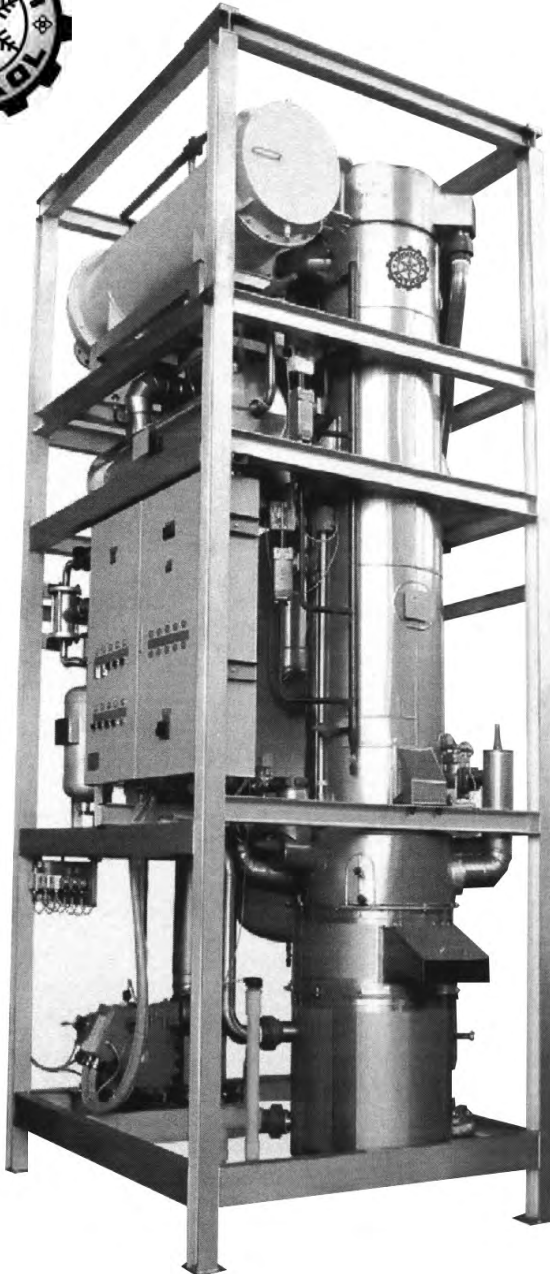
Tube Size	3/4"	1"	1 1/4"	1 1/2"	1 5/8"
Ice Size	5/8"	7/8"	1 1/8"	1 3/8"	1 1/2"

Remark : Dimension of tube size and ice size are outside diameter.

Dimension

Model	A	B	C	D
PK-15FU	6' 10 ^{3/4} "	6' 7 ^{5/8} "	19' 10"	1'
PK-10FU	7' 4 ^{1/2} "	6' 7 ^{1/2} "	17' 4 ^{3/4} "	1'





PATKOL Máquina de tubo cilíndrico para hielo

(Modelos PKU-10FU/PK-15FU)

Unidad autónoma

CARACTERÍSTICAS ESTÁNDAR

- Con más capacidad por su diseño adaptado al trópico
- Congelador amplio. Un elevado COP resultó en una producción a bajo costo
- El hielo bien moldeado gracias a la cortadura producida por una perforación pequeña

OPCIÓN

- Cubierta exterior en acero inoxidable
- Deposito para hielo con transportador de tornillo
- Sistema PLC
- Sello U certificado por la Sociedad Americana de ingenieros Mecánicos (ASME por sus siglas en Inglés)
- Cortadora especial para triturar el hielo
- Condensador de evaporación
- Panel de control UL estándar

Tabla de capacidad

Modelo	Refrigerante	Temperatura del agua				
		86°F 30°C	80°F 26.7°C	70°F 21.1°C	60°F 15.6°C	50°F 10°C
PK-10FU-S	R22 & R404a	9	9.3	9.8	10.2	10.8
PK-10FU	R22 & R404a	10	10.3	10.9	11.4	11.9
PK-15FU	R22	16.3	16.8	17.6	18.4	19.2
	R404a	14.7	15.2	16.0	16.6	17.3

Tamaños estándar

Tubo cilíndrico	3/4"	1"	1 1/4"	1 1/2"	1 5/8"
Hielo	5/8"	7/8"	1 1/8"	1 3/8"	1 1/2"

Dimensiones

Modelo	A	B	C
PK-10FU-S	7' 4 ⁵ / ₈ "	6' 7 ¹ / ₂ "	10' 11 ¹ / ₈ "
PK-10FU	7' 4 ⁵ / ₈ "	6' 7 ¹ / ₂ "	12' 10 ³ / ₄ "
PK-15FU	6' 10 ³ / ₄ "	6' 7 ⁵ / ₈ "	18' 10"





ICE MACHINES



STANDARD FEATURES

- Hygienic ice produced
- Flat and parallel surfaces no damage to product
- Ice thickness between 3 to 12 mm
- Stainless steel all parts
- High efficiency in refrigerant vertical flow of evaporator plate
- Self contained complete ice making unit in freon
- Simple and reliable operation
- Harvest conveyer available



Evaporator plate



Harvest conveyer



3-12 mm. Thickness

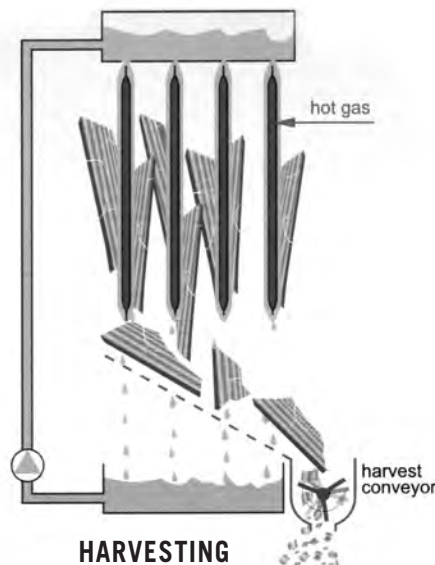
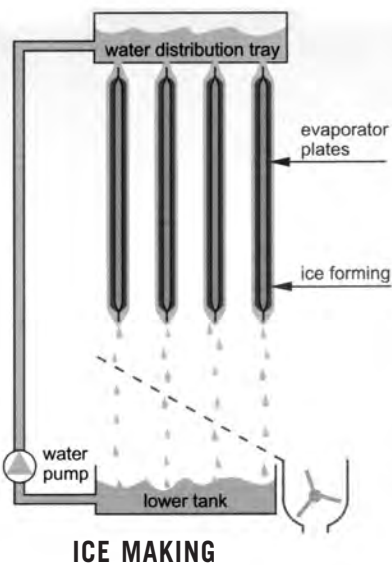
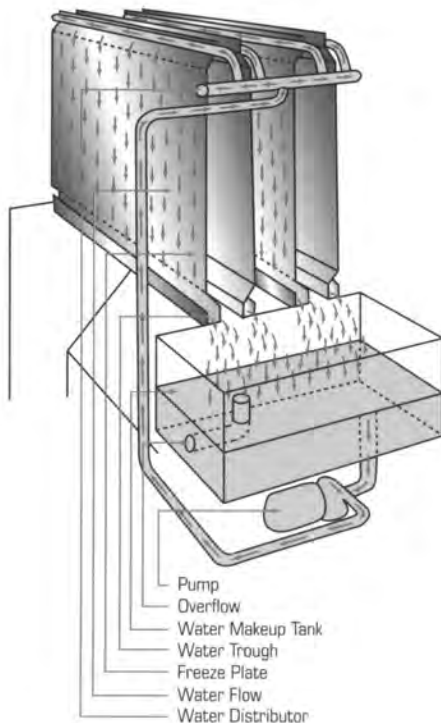
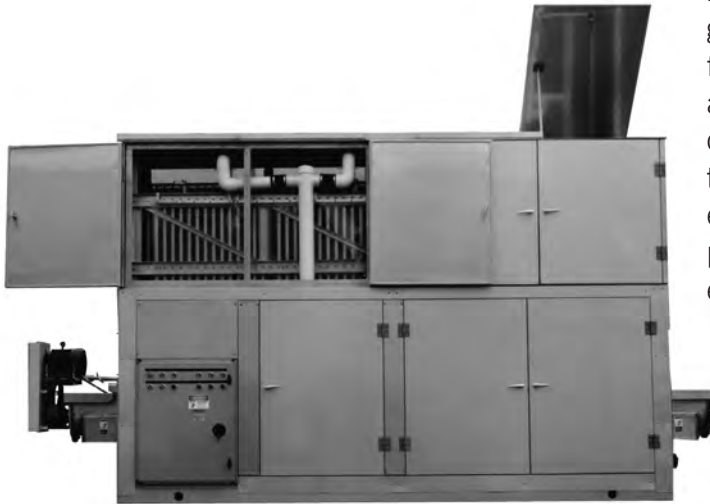




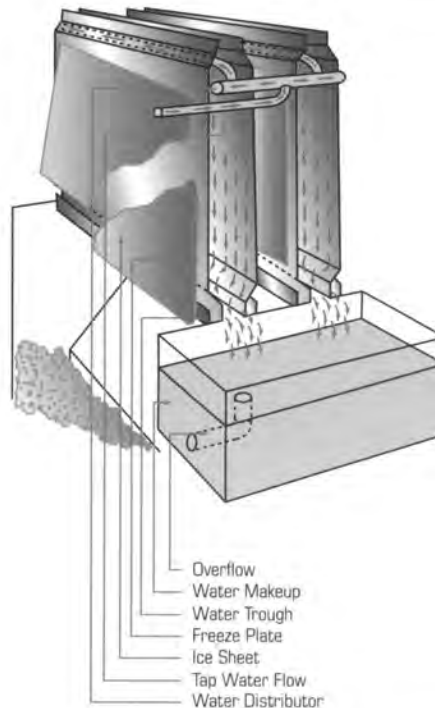
Plate Ice Maker

The Turbo C-line icemakers come in self-contained and remote units from 1 to 85 tons. Ice making plates are grouped vertically with ice forming on both sides in sheets from 3/16" to 1" thick. The C-line gives you dry, hard ice at low cost, chilling quicker and lasting longer. At the end of each ice making cycle, the ice is cold tempered making the ice extra dry and therefore mobile longer, requiring no extra drying apparatus. Because of this, when the ice is placed in storage it does not crust and fuse together. It's easier to handle.



Ice freezing cycle

Water is sprayed on **TURBO's Freezing Plates**. This water then flows, by gravity, over the plates, forming a freezing cycle.



Ice harvesting cycle

For harvesting, fresh water is sprayed on the back of the plates, releasing the ice, which then falls, by gravity, into a breaker bin where the ice is broken into selected-size pieces. **TURBO's Exclusive Ice Drying Cycle** is built into all units.

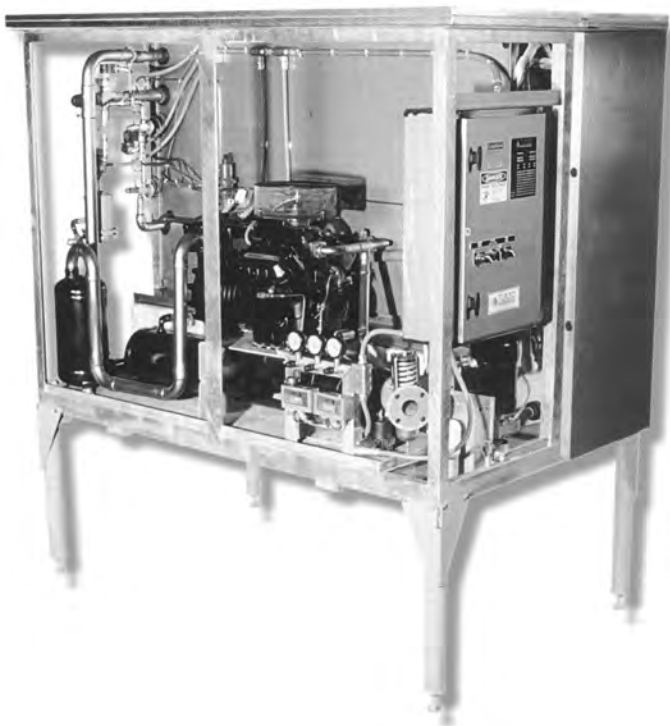




ICE MACHINES *(Used or Refurbished)*

Turbo D-Line Ice Maker

The D-Line was designed as a low cost, 6-ton ice generator. It uses a modified hot gas harvest system that yields lower operational costs and uses a small amount of floor space. The ice harvests from the icemaking plates out the bottom of the unit and must be collected by a screw conveyor or storage bin (purchased separately). A programmable controller controls all functions of the icemaker. A 3-position switch located on the main electrical panel controls ice thickness. The plate type ice is clear and dense. It is the preferred solution for many applications.



D-Line Specifications

Model Number DF-6-XX	U.S.				
Overall Dimensions (with legs)	87" L x 53-1/2" W x 88" H				
Shipping Dimensions (legs ship loose)	87" L x 53-1/2" W x 64" H				
Shipping Weight	3,200 lbs.				
Operating Weight	3,750 lbs.				
Refrigerant Charge					
Water-Cooled	40 lbs. R-22				
Air-Cooled	94 lbs. R-22				
Oil	Suniso 3GS or equivalent				
Oil Charge	152 ounces				
Nominal Capacity (U.S. tons per day)					
40°F Water	6.8				
50°F Water	6.4				
60°F Water	6.0				
70°F Water	5.7				
80°F Water	5.4				
Make-Up Water	28 GPM @ 6.5 PSIG				
Make-Up Water Connection	1" FPT				
Condenser Water Connections					
Inlet/Outlet	2" FPT				
Condenser Flow Rate	38 GPM				
Total FLA (230V/460V)					
Water-Cooled (SC)	67.1/33.6				
See below for cooling tower information					
Air-Cooled (SCA)	87.6/43.8				
Compressor (Nom. HP/KW)	30/20.3				
FLA (230V/460V)	67.8/33.9				
Water Pump (HP/KW)	1.0/1.2				
FLA (230V/460V)	3.0/1.5				
Cooling Tower for Water-Cooled Use (78°F Wet Bulb, 85°F EWT/95°F LWT)					
Dimensions	50-1/4" x 35-1/2" x 51-7/8"				
Shipping Weight	360 lbs.				
Operating Weight	670 lbs.				
Tower Fan	3/4 HP/1.3 KW				
Fan FLA (230V/460V)	3.0/1.5				
Tower Pump					
Flow	38 GPM				
TDH (minimum)	40 feet				
HP/KW	1/2/0.5				
Pump FLA (230V/460V)	1.7/0.8				
Connections (FPT)	2" Suction/1-1/2" Discharge				
Air-Cooled Condenser (100°F Ambient, 120°F SCT)					
Number of Fans/HP/KW	2/1-1/2/4.2				
FLA Total (230V/460V)	25.6/12.8				
Inlet Connection	1-5/8" ODS				
Outlet Connection	1-1/8" ODS				
Shipping Weight	465 lbs.				
Operating Weight	525 lbs.				
Receiver Specifications					
Dimensions (diameter/length)	10-3/4" x 36"				
Shipping Weight	45 lbs.				
Correction Factors for Other Condensing Temperatures					
	100°F	105°F	110°F	115°F	120°F
Capacity (U.S. tons per day)	1.02	1.00	0.97	0.94	0.91
KW	0.95	1.00	1.10	1.14	1.19



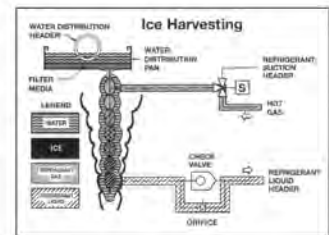
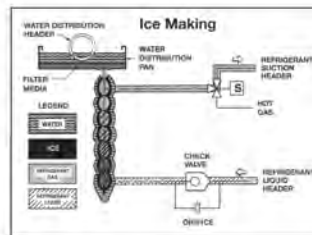
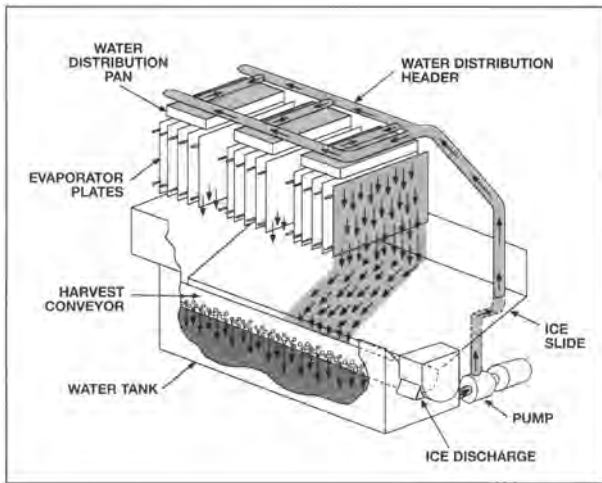


Turbo TIG and TIGAR Ice Makers

The TIG (R-22) and TIGAR (ammonia) series are industry work-horses. Remote or completely packaged units are available with capacities to 250 tons of ice per day. Ice making plates are grouped vertically with ice forming on both sides in sheets from 3/16" to 1/2" thick. The ice has an internal quality that results in a clear, hard ice. Self-contained units provide you with simple, low cost installation. They are wired, charged with refrigerant and fully tested. You need only to connect your water and power sources. Continuous design improvements have made this the most efficient, durable and flexible ice producer available.

FEATURES:

- Manufactured in strict accordance with USDA standards
- TIG/TIGAR series uses a hot gas defrost
- Inlet water is chilled by the ice fines generated in the ice making process
- Stainless steel delivery conveyor and water pumps
- PLC-based control system for easy operator interface and control
- Easy access to all components for maintenance
- Insulated enclosure for indoor or outdoor placement
- Multi-section unit allows for independent operation of separate sections
- Water and energy efficient with hot gas harvest



TIG Series Specifications

SELF-CONTAINED R-22 FREON MODELS

Nominal Ice Capacity (US Tons) (24 hrs)	Model Number	Refrigerant Required (Tons)	KW	Overall Dimensions (LxWxH inches)	Operating Weight (Pounds)	Shipping Weight (Pounds)	Compressor Motor Horsepower	Water Pump Horsepower	Evaporator Condenser (HP Fan) (Pumps)	Feedwater Flow (GPM)	FLA Amps @ 230/3/60
18.0	TIG-18-SC	24.3	85.4	142 x 94 x 115	11,100	9,000	50	1.5	3 (3/4)	3.0	141.6
18.0	TIG-18-SCE	24.3	85.4	278 x 94 x 117	15,500	13,100	50	1.5	3 (3/4)	3.0	135.6
18.0	TIG-18-SCER	24.3	85.4	142 x 94 x 115	10,500	8,400	50	1.5	3 (3/4)	3.0	141.6
18.0	TIG-18-SCAR	24.3	85.4	142 x 94 x 115	10,500	8,400	50	1.5	3 (3/4)	3.0	141.6
21.0	TIG-21-SC	32.4	113.9	142 x 94 x 115	15,600	12,500	60	1.5	5 (3/4)	4.0	165.6
21.0	TIG-21-SCE	32.4	113.9	278 x 94 x 117	21,600	17,900	60	1.5	5 (3/4)	4.0	165.6
21.0	TIG-21-SCER	32.4	113.9	142 x 94 x 115	14,900	11,800	60	1.5	4.0	4.0	165.6
18.0	TIG-21-SCAR	32.4	113.9	142 x 94 x 115	14,900	11,800	60	1.5	4.0	4.0	165.6
33.0	TIG-33-SC	48.6	170.9	187 x 94 x 115	23,400	18,200	100	2 @ 1.5HP	10 (1)	8.0	265.4
33.0	TIG-33-SCE	48.6	170.9	351 x 94 x 117	31,500	25,400	100	2 @ 1.5HP	10 (1)	8.0	205.4
33.0	TIG-33-SCER	48.6	170.9	187 x 94 x 115	22,400	17,200	100	2 @ 1.5HP	10 (1)	8.0	265.4
30.0	TIG-30-SCAR	48.6	170.9	187 x 94 x 115	22,400	17,300	100	2 @ 1.5HP	10 (1)	8.0	265.4
43.0	TIG-43-SC	64.8	227.8	398 x 94 x 117	30,000	23,700	2 @ 60HP	2 @ 1.5HP	10 (1-1/2)	7.0	325.2
43.0	TIG-43-SCE	64.8	227.8	385 x 94 x 117	36,700	33,400	2 @ 60HP	2 @ 1.5HP	10 (1-1/2)	7.0	386.2
43.0	TIG-43-SCER	64.8	227.8	308 x 94 x 117	28,800	22,600	2 @ 60HP	2 @ 1.5HP	10 (1-1/2)	7.0	325.2
64.0	TIG-64-SC	97.3	342.1	388 x 94 x 117	44,100	34,300	2 @ 100HP	3 @ 1.5HP	N/A	11.0	518
64.0	TIG-64-SCE	97.3	342.1	388 x 94 x 117	42,500	32,800	2 @ 100HP	3 @ 1.5HP	N/A	11.0	518
85.0	TIG-85-SC	129.0	453.6	348 x 94 x 117	55,500	43,100	2 @ 125HP	3 @ 2HP	N/A	14.0	601
85.0	TIG-85-SCER	129.0	453.6	348 x 94 x 117	53,800	41,200	2 @ 125HP	3 @ 2HP	N/A	14.0	601

- Dimensions are for the base unit and do not include the lower conveyor extension of 36".
- Dimensions may vary. Please verify current dimensions before plant design.
- SCE model dimensions are based on 78" wet bulb. Overall length will vary with wet bulb temperature.
- Standard conveyor and water pump materials are stainless steel.
- Standard screw conveyor size is 9".
- Harvest conveyor motor is 2hp.

Standard Rating Conditions:
 95°F entering water temperature;
 90°F ambient temperature;
 95°F condensing for base capacity rating.
 Air-cooled condensing operation based on 100°F ambient/120°F SC1
 Water-cooled condensing operation based on 50°F lower water to the condenser and 105°F SC1.
 Ice thickness is 1/4".

TIGAR Series Specifications

REMOTE AMMONIA ICE MAKERS

Nominal Ice Capacity (US Ton) (24 hrs)	Model Number	Refrigerant (Tons)	Ammonia Flow (GPM)	Overall Dimensions (L x W x H inches)	Shipping Weight (Pounds)	Water Pump Horsepower	Feedwater Flow (GPM)	FLA Amps @ 230/3/60
25	TIGAR-25	37.5	12	75 x 94 x 110	6,900	1.5 HP	4	12.8
50	TIGAR-50	75.0	24	118 x 94 x 110	11,500	2 @ 1.5 HP	8	18.2
75	TIGAR-75	112.5	36	153 x 94 x 110	17,300	3 @ 1.5 HP	13	22.8
100	TIGAR-100	150.0	48	211 x 94 x 110	23,000	4 @ 1.5 HP	17	27.4

- Tigar units available for liquid recirculation (TIGAR) or flooded (TIGAR-FL) duty.
- For use with remote ammonia high slide refrigeration equipment.
- Standard conveyor and water pump materials are stainless steel.
- Standard screw conveyor size is 9".
- Harvest conveyor motor is 2hp.
- Dedicated ammonia high slides are available, please consult the factory.

Standard Rating Conditions:
 60°F entering water temperature;
 90°F ambient temperature;
 93°F refrigerant temperature
 Ice thickness is 1/4".

FEEDWATER TEMPERATURES	30°F	40°F	50°F	60°F	70°F	80°F	90°F
ICE CAPACITY MULTIPLIERS	1.17	1.03	1.00	1.00	0.944	0.899	0.851

EVAPORATOR TEMPERATURES	-5°F	0°F	5°F	10°F	15°F	20°F
ICE CAPACITY MULTIPLIERS	1.15	1.00	0.844	0.688	0.531	0.375





ICE MACHINES (Used or Refurbished)

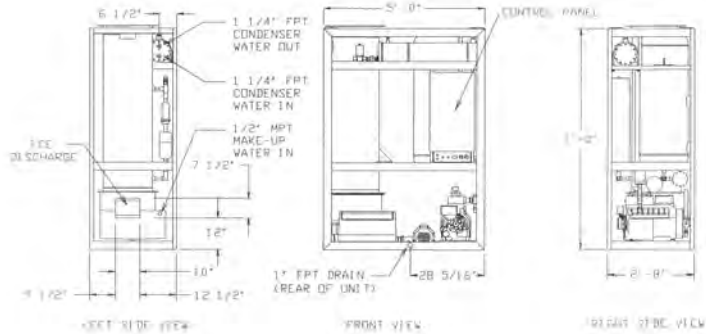
Model P118



Vogt Tube Ice Machines

MODELS AVAILABLE

- P112 ■ P24A/ P24F ■ P34AL
- P118 ■ P24AL ■ P34AL-15
- P18AL ■ P24 FL ■ P34FL
- P18XT ■ P34A/P34F ■ DX11



SPECIFICATIONS

WATER TEMPERATURE	MODEL P118-1"				MODEL P118-1 1/4"				MODEL P118-1 1/2"			
	CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)		CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)		CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)	
			ICE MAKING	CONDENSER			ICE MAKING	CONDENSER			ICE MAKING	CONDENSER
90 °F	4.6	3.44	0.90	68	4.2	3.71	0.84	68	3.95	3.79	0.83	68
80 °F	5.1	3.23	0.94	25	4.6	3.50	0.89	25	4.35	3.58	0.88	25
70 °F	5.5	2.92	1.00	15	5	3.15	0.94	15	4.75	3.23	0.93	15
60 °F	5.9	2.73	1.04	11	5.4	2.96	0.99	11	5.05	3.02	0.98	11
50 °F	6.2	2.51	1.10	8	5.6	2.74	1.05	8	5.35	2.80	1.04	8
WEIGHT	OPERATING: 2,975 LBS (1350 KG)								SHIPPING: 3,200 LBS (1451 KG)			
STANDARD ELECTRICAL REQUIREMENTS	66.9 F.L.A. WATER COOLED								76.9 F.L.A. AIR COOLED			
	208/230 VOLT 3 PHASE 60 HERTZ (OPTIONAL ELECTRICAL ARRANGEMENTS ON REQUEST)											
STANDARD CONDENSING UNIT	15 H.P. (HIGH EFFICIENCY, ENERGY SAVING COPELAND DISCUS COMPRESSOR)											
	STANDARD REFRIGERANT R-22 WITH SEMI-HERMETIC COMPRESSOR AND WATER COOLED TUBE TYPE CONDENSER (REMOTE AIR COOLED CONDENSER OPTIONAL)											
ICE SIZE	CYLINDER 7/8" DIA X 1" LONG				CYLINDER 1 1/8" DIA X 1" LONG				CYLINDER 1 3/8" DIA X 1" LONG			
	CRUSHED ICE 3/16" TO 1/4" THICK CAN BE PRODUCED WITH MODIFICATION OF CUTTER											
NOTE: CAPACITY BASED ON AMBIENT (AIR) TEMPERATURE OF 90 °F						FOR CRUSHED ICE MULTIPLY CAPACITY BY 1.04 AND KWH BY 0.96						
MAKE-UP WATER INCLUDES 20% BLOWDOWN						ICE CAPACITY IS 5% LOWER FOR OPERATION ON 50 HERTZ CURRENT						
KWH BASED ON 60HZ OPERATION						CAPACITY SHOWN IS THE AVERAGE (Individual machines may vary by ± 5%)						

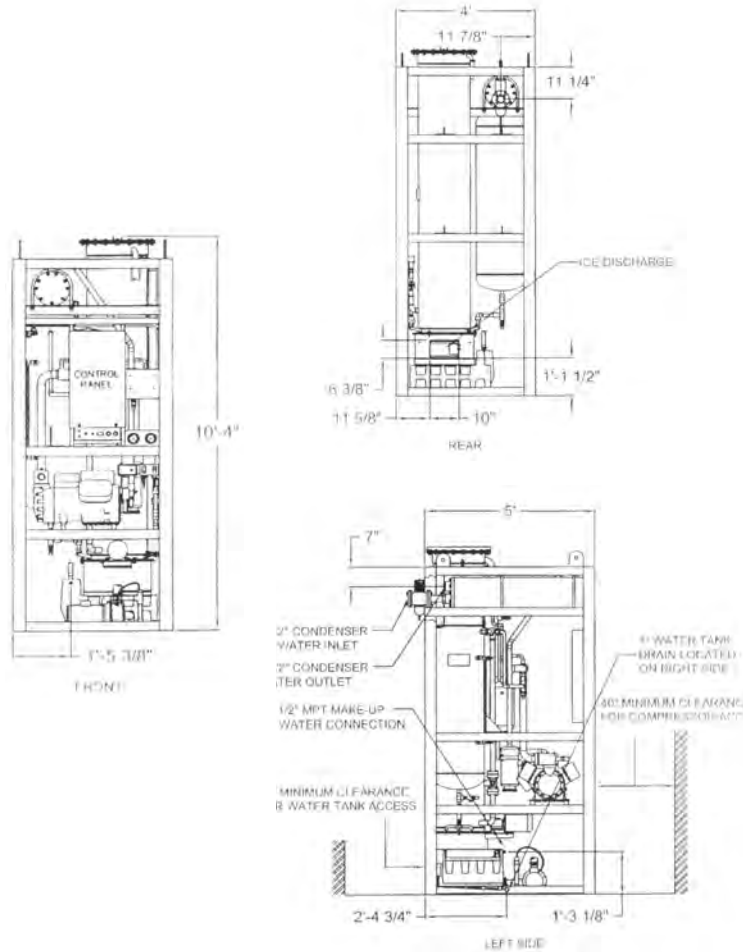
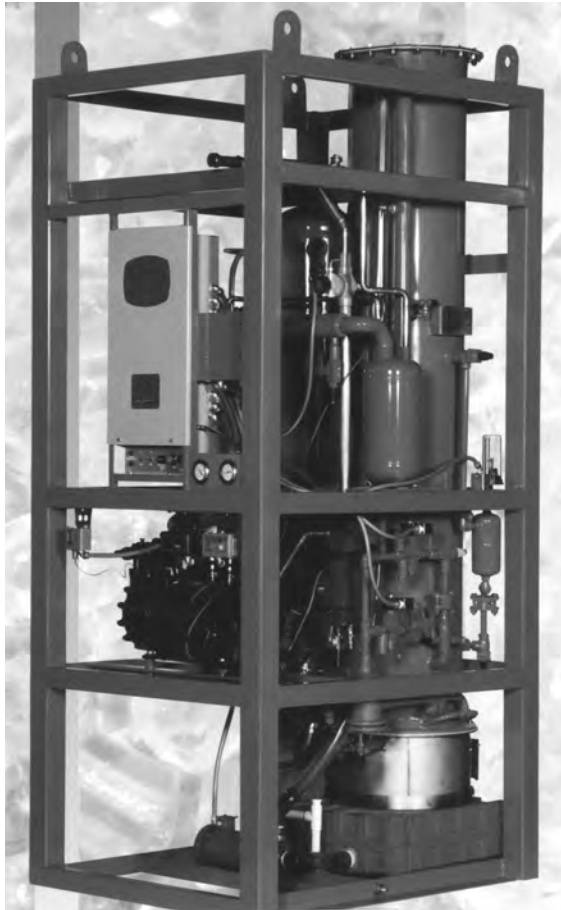
Vogt reserves the right to change designs and specifications without notice.



(Used or Refurbished) ICE MACHINES



Model P 18XT



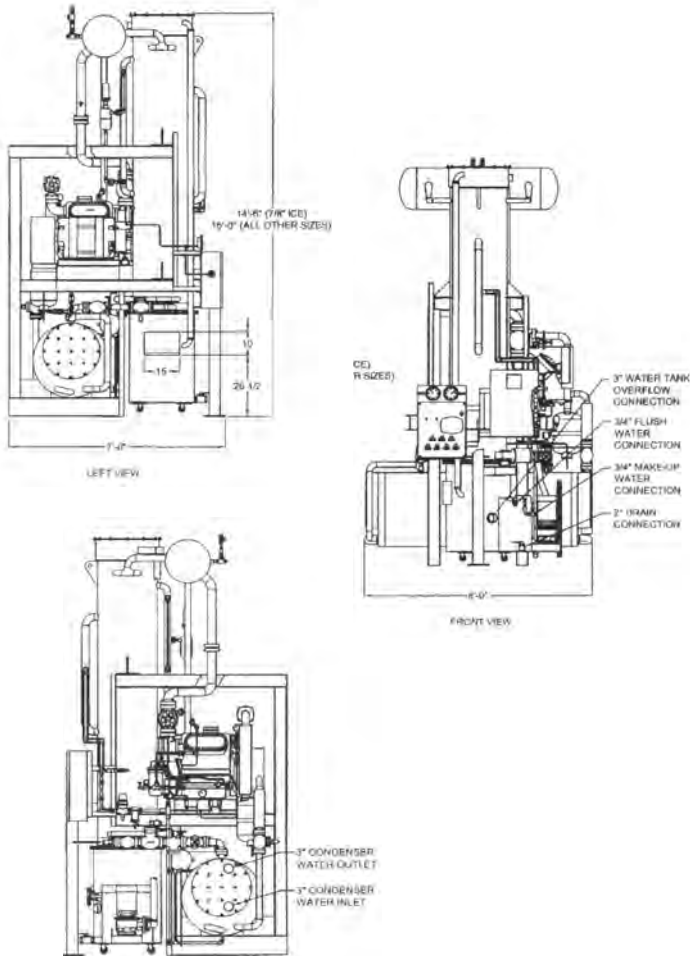
SPECIFICATIONS												
WATER TEMPERATURE	MODEL P18XT-1"				MODEL P18XT-1 1/4"				MODEL P18XT-1 1/2"			
	CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)		CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)		CAPACITY TONS PER 24HRS	KWH PER 100 LBS	WATER REQUIREMENTS (GPM)	
			ICE MAKING	CONDENSER			ICE MAKING	CONDENSER			ICE MAKING	CONDENSER
90 °F	8.30	3.15	1.93	110	7.89	3.15	1.74	110	7.25	3.56	1.68	110
80 °F	9.15	3.03	2.14	34	8.60	3.16	1.93	34	8.00	3.42	1.86	34
70 °F	10.00	2.84	2.35	17	9.05	3.18	2.12	17	8.75	3.21	2.04	17
60 °F	10.30	2.58	2.42	12	9.52	2.19	2.16	12	8.95	2.92	2.09	12
50 °F	10.60	2.30	2.49	9.5	9.73	2.20	2.21	9.5	9.15	2.60	2.14	9.5
WEIGHT	OPERATING: 4,900 LBS (2223 KG)						SHIPPING: 4,800 LBS (2177 KG)					
STANDARD ELECTRICAL REQUIREMENTS	113.1 F.L.A WATER COOLED						130.1 F.L.A. AIR COOLED					
	208/230 VOLT 3 PHASE 60 HERTZ (OPTIONAL ELECTRICAL ARRANGEMENTS ON REQUEST)											
STANDARD CONDENSING UNIT	30 H.P. (HIGH EFFICIENCY, ENERGY SAVING COPELAND DISCUS COMPRESSOR)											
	STANDARD REFRIGERANT R-22 WITH SEMI-HERMETIC COMPRESSOR AND WATER COOLED TUBE TYPE CONDENSER (REMOTE AIR COOLED CONDENSER OPTIONAL)											
ICE SIZE	CYLINDER 7/8" DIA X 1" LONG				CYLINDER 1 1/8" DIA X 1" LONG				CYLINDER 1 3/8" DIA X 1" LONG			
	CRUSHED ICE 3/16" TO 1/4" THICK CAN BE PRODUCED WITH MODIFICATION OF CUTTER											
NOTE: CAPACITY BASED ON AMBIENT (AIR) TEMPERATURE OF 90 °F MAKE-UP WATER INCLUDES 20% BLOWDOWN KWH BASED ON 60HZ OPERATION						FOR CRUSHED ICE MULTIPLY CAPACITY BY 1.04 AND KWH BY 0.96 ICE CAPACITY IS 5% LOWER FOR OPERATION ON 50 HERTZ CURRENT CAPACITY SHOWN IS THE AVERAGE (INDIVIDUAL MACHINES MAY VARY BY + 5%)						
Vogt reserves the right to change designs and specifications without notice.												





ICE MACHINES (Used or Refurbished)

Model P24 A/F



SPECIFICATIONS												
	MODEL P24A (Ammonia Refrigerant)			MODEL P24F (R-22 Refrigerant)								
WATER TEMPERATURE	STANDARD CAPACITY, TONS PER 24 HOURS											
	7/8" DIA. ICE	1 1/8" DIA. ICE	1 3/8" DIA. ICE	7/8" DIA. ICE	1 1/8" DIA. ICE	1 3/8" DIA. ICE						
80 °F	22.9	26.0	19.3	18.8	20.2	18.4						
70 °F	24.3	27.6	20.6	20.1	21.4	19.7						
60 °F	25.9	29.4	22.1	21.7	22.7	21.2						
50 °F	27.7	31.5	23.7	23.5	24.2	23.0						
WEIGHT (LBS)	OPERATING: 7,150 SHIPPING: 5,800	OPERATING: 7,700 SHIPPING: 6,200	OPERATING: 7,500 SHIPPING: 6,000	OPERATING: 7,150 SHIPPING: 5,800	OPERATING: 7,700 SHIPPING: 6,200	OPERATING: 7,500 SHIPPING: 6,000						
STANDARD ELECTRICAL	POWER: 460V, 3P, 60 Hz			CONTROLS: 230 V, 1P, 60 Hz								
	(OPTIONAL ELECTRICAL ARRANGEMENTS ON REQUEST)											
WATER TEMPERATURE	P24A CAPACITY TABLE, TONS PER 24 HOURS (AT SUCTION TEMPERATURE °F)			P24F CAPACITY TABLE, TONS PER 24 HOURS (AT SUCTION TEMPERATURE °F)								
	5			15			5			15		
	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"
80 °F	26.5	30.5	22.9	18.9	21.1	15.6	22.0	24.3	21.8	15.3	16.6	14.8
70 °F	28.1	32.3	24.3	20.1	22.5	16.6	23.5	26.0	23.3	16.4	17.8	15.9
60 °F	29.8	34.4	26.0	21.5	24.0	17.9	25.3	27.9	25.0	17.8	19.1	17.2
50 °F	31.8	36.7	27.9	23.2	25.8	19.3	27.3	30.0	27.1	19.3	20.8	18.6

NOTE: STANDARD CAPACITY BASED ON SUCTION TEMPERATURE OF 10 °F AND AN AMBIENT (AIR) TEMPERATURE OF 90 °F

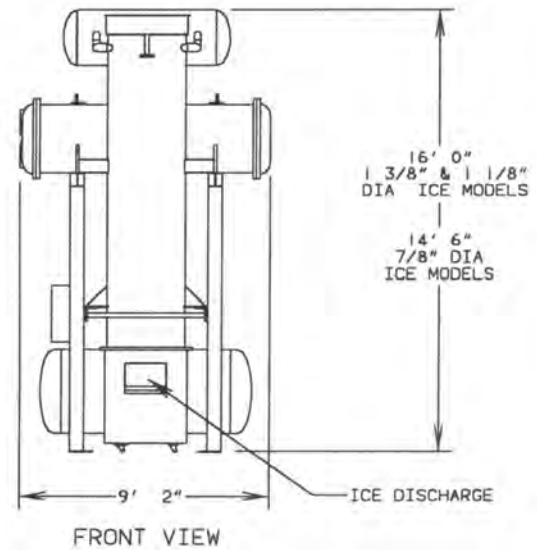
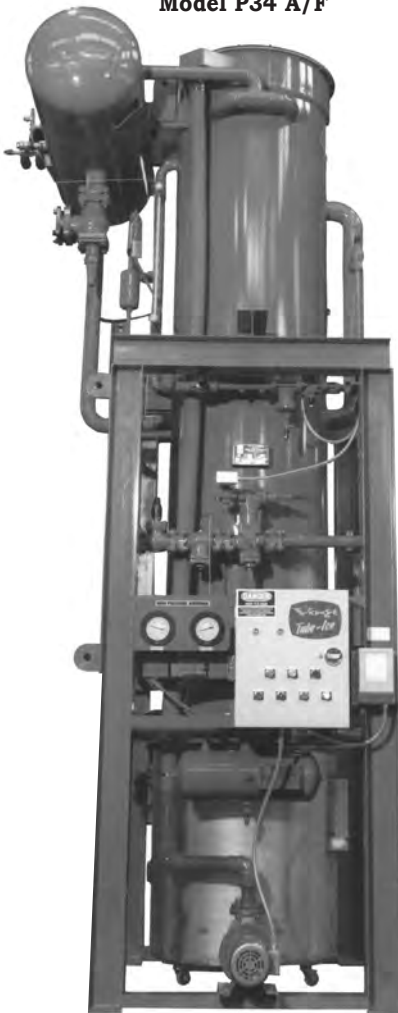
Vogt reserves the right to change designs and specifications without notice.



(Used or Refurbished) ICE MACHINES



Model P34 A/F



SPECIFICATIONS

	MODEL P34A (AMMONIA REFRIGERANT)						MODEL P34F (REFRIGERANT 22)					
	CAPACITY, TONS PER 24 HOURS											
	1 3/8" Dia. Ice		1 1/8" Dia. Ice		7/8" Dia. Ice		1 3/8" Dia. Ice		1 1/8" Dia. Ice		7/8" Dia. Ice	
Water Temperature	US	Metric	US	Metric	US	Metric	US	Metric	US	Metric	US	Metric
85°F 29.4°C	36.0	32.6	39.0	35.3	37.0	33.5	37.0	33.5	42.0	38.1	38.0	34.4
75°F 23.8°C	38.0	34.4	41.5	37.6	39.0	35.3	39.0	35.3	44.0	39.9	40.0	36.3
65°F 18.3°C	40.0	36.3	44.0	39.9	41.0	37.2	41.0	37.2	47.0	42.6	42.0	38.1
55°F 12.8°C	42.5	38.5	47.0	42.6	43.5	39.5	43.5	39.5	50.0	45.3	44.0	39.9
Weight Operating	23000 lbs/10500 Kg		23000 lbs/10500 Kg		22400 lbs/10200 Kg		24100 lbs/10930 Kg		24100 lbs/10930 Kg		23500 lbs/10650 Kg	
Shipping	21500 lbs/9750 Kg		21500 lbs/9750 Kg		20900 lbs/9480 Kg		21800 lbs/9890 Kg		21800 lbs/9890 Kg		21200 lbs/9600 Kg	
Standard Electrical Requirements	Power: 460 volt, 3 phase, 60 hertz Controls: 230 volt, 1 phase, 60 hertz (Other electrical requirements can be furnished)											
Standard Condensing Unit	125 HP Compressor (Ammonia)						150 HP Compressor (R-22)					
	Shell and Tube, Water Cooled Condenser											
Water Connections	Make Up: 1" FPT											
	Drain: 2" FPT											
	Condenser inlet and outlet: 5"											
	Compressor Cooling Inlet and Outlet: one 3/4" FPT Inlet, two 1/2" FPT Outlets											
	Water Tank Overflow 3" FPT											
NOTE:	Capacity based on 90°F ambient (air) temperature. Crushed ice 3/16"-1/4" thick can be produced with modification of cutter.						45 KWH per ton (P34A) 52 KWH per ton (P34F)					

Factory Mutual Approved
USDA Approved

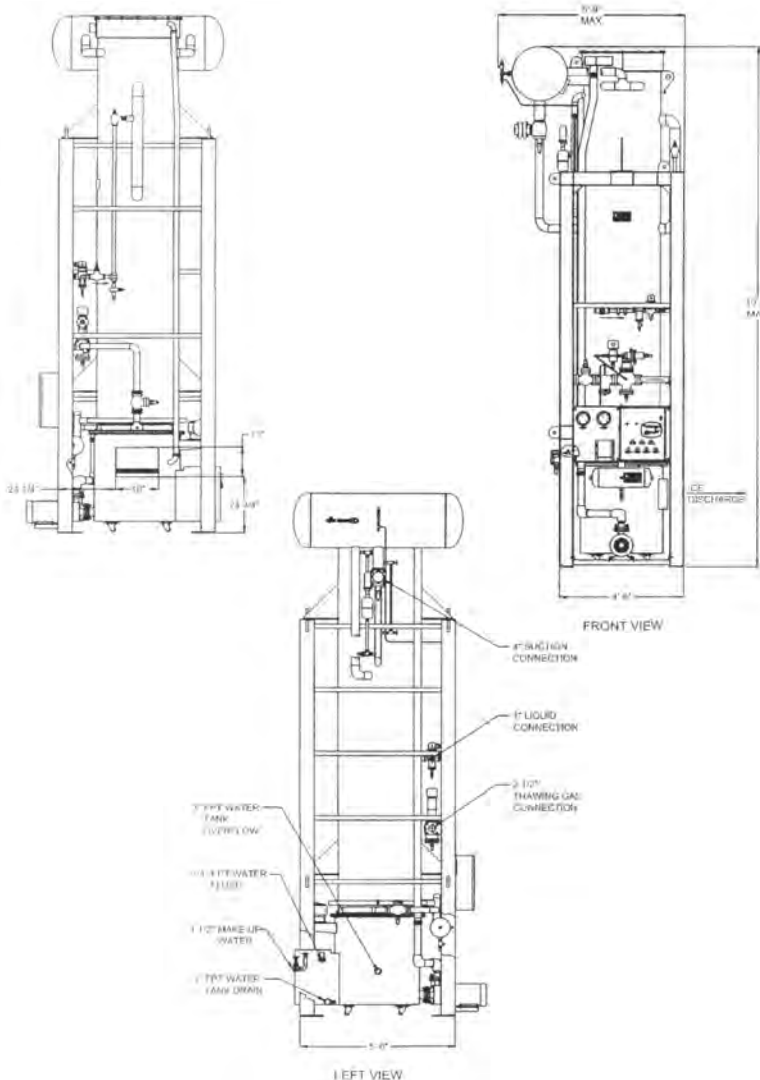
NOTE: Vogt reserves the right to change designs and specifications without notice.
Refrigerant Charge Not Included
Covered by one or more U.S. patents





ICE MACHINES *(Used or Refurbished)*

Model P34 AL-15



SPECIFICATIONS												
MODEL P34AL-15 (Ammonia Refrigerant)												
STANDARD CAPACITY, TONS PER 24 HOURS												
WATER TEMP.	7/8" DIA. ICE			1 1/8" DIA. ICE			1 3/8" DIA. ICE					
80 °F	73.2			70.4			53.9					
70 °F	76.0			73.6			56.6					
60 °F	79.1			77.1			59.5					
50 °F	82.5			80.9			62.7					
WEIGHT (LBS)	OPERATING: 15,400 SHIPPING: 11,700			OPERATING: 16,200 SHIPPING: 12,300			OPERATING: 16,100 SHIPPING: 12,000					
STANDARD ELECTRICAL	230 V, 3P, 60 Hz - 460V, 3P, 60 Hz - 400V, 3P, 50 Hz (OPTIONAL ELECTRICAL ARRANGEMENTS ON REQUEST)											
CAPACITY TABLE, TONS PER 24 HOURS (AT SUCTION TEMPERATURE °F)												
WATER TEMPERATURE	0			5			15			20		
	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"	7/8"	1 1/8"	1 3/8"
80 °F	91.8	91.7	71.5	83.1	81.6	63.1	61.7	58.0	44.0	48.3	44.3	33.2
70 °F	94.9	95.5	74.7	86.1	85.1	66.0	64.3	60.8	46.3	50.5	46.5	35.0
60 °F	98.2	99.6	78.2	89.4	88.9	69.3	67.1	63.9	48.7	53.0	49.0	36.9
50 °F	101.8	104.0	82.1	92.9	93.1	72.8	70.2	67.3	51.5	55.6	51.8	39.2

NOTE: STANDARD CAPACITY BASED ON SUCTION TEMPERATURE OF 10 °F AND AN AMBIENT (AIR) TEMPERATURE OF 90 °F
Vogt reserves the right to change designs and specifications without notice





North Star Flake Ice Machines

An efficient and economical choice for cooling purposes. These machines are simple to install and operate with minimal maintenance requirements. Available in sizes from 3 to 53 tons per 24 hours.

STANDARD FEATURES

- Double-walled, stationary evaporator
- Available with either a Stainless steel or solid carbon steel freezing surface
- Safety features include mechanical load limit, emergency stop, jog, inspection hatch safety switches
- Available for shipboard installation to produce seawater ice
- Polyurethane insulation
- Attached accumulator for complete gas liquid refrigerant separation
- Patented drip shield
- Stainless steel water make-up tank and ice removal tools



MODEL	MOTOR DRIVE	PUMP	CAPACITY	DIMENSIONS W x L x H	DOMESTIC WEIGHT	EXPORT WEIGHT	VOLUME
5SS/--	1/4 HP 0.19 KW	1/30 HP 0.03 KW	3.0/-- Tons 2.7/-- MT	25"x38"x44" 63.5x96.5x119 cm	550 lbs 250 kg	650 lbs 295 kg	60 ft ³ 1.7 m ³
10SS/CS	1/3 HP 0.25 KW	1/20 HP 0.04 KW	4.7/6.0 Ton 4.3/5.4 MT	32"x48"x45" 81.3x121.9x114.3 cm	1,350 lb 614 kg	1,500 lbs 682 kg	70 ft ³ 2.0 m ³
20SS/CS	1/2 HP 0.38 KW	1/2 HP 0.38 KW	11.4/14.0 Tons 10.3/12.7 MT	56"x83"x51" 142.2x210.8x129.5 cm	3,800 lbs 1,727 kg	4,000 lbs 1,818 kg	240 ft ³ 6.8 m ³
40SS/CS	3/4 HP 0.56 KW	1/2 HP 0.38 KW	19.7/22.8 Tons 17.9/20.7 MT	56"x83"x51" 142.2x210.8x190.5 cm	5,200 lbs 2,364 kg	5,700 lbs 5,700 kg	326 ft ³ 9.2 m ³
60SS/CS	1 HP .75 KW	1/2 HP 0.38 KW	29.8/38.0 Tons 27.0/34.5 MT	76"x107"x81" 193x271.8x205.7 cm	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 0.38 KW	41.0/53.5 Tons 37.2/48.5 MT	76"x109"x105" 193x276.9x266.7 cm	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.

