# **THE MOST EFFICIENT AND RELIABLE SPIRAL FREEZER EVER OFFERED!**

ADVANCED has utilized more than 20 years of proven spiral freezer, refrigeration and high technology enclosure design experience to create this more efficient and trouble-free freezing system. This spiral freezing system is a unique and most versatile design compared to other types of freezers.

It can freeze or chill any delicate product ordinarily subject to freezing damage, such as raw shrimp, raw hamburger, chicken patties specially prepared products and packaged products requiring a long retention time.

**GUARANTEED FREEZING QUALITY** The ADVANCED SPIRAL FREEZER assures excellent product freezing quality by continuously conveying the product without interruption from transfer, handling or **pile-ups**, until it is safely frozen. The product shrinkage is minimized to as low as 0.15% due to our unique vertical air flow pattern.

**GUARANTEED LOWEST OPERATION COST** The ADVANCED SPIRAL FREEZER has the lowest operation cost compared to CO<sub>2</sub>, nitrogen and other freezers. This is achieved by utilizing the most efficient mechanical refrigeration method, combined with our new unique **low-pressure**, **high velocity**, **vertical-down air flow** recirculation system. The vertical-down air flow assures that btu's are continuously scrubbed from all sides of the product.

GUARANTEED LOWEST INVESTMENT The ADVANCED SPIRAL FREEZER is the most economical freezer offered in its class. Every component of the freezer is manufactured in our well-equipped engineering and manufacturing facility, We can afford to pass on the savings to our customers without sacrificing quality.

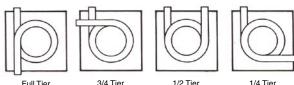
## GUARANTEED MANUFACTURING AND DESIGN QUALITY

The ADVANCED SPIRAL FREEZER is completely factory assembled, and tested prior to shipping. The spiral conveyor is constructed with non-corrosive, hotdipped galvanized steel. The steel conveyor is designed with bolt-on option for easy, fast assembly and relocation. Refrigeration coils are constructed with aluminium or hot-dipped galvanized steel to maximize heat transfer efficiency and length of operation intervals. The frigid air is delivered with aluminium high efficiency air foil fan wheels directly driven by high efficiency motors. Air flow baffling is constructed of heavy gauge aluminium for maximium air channeling and optimum heat removal from the product. The freezer enclosure is constructed with 4 inch thick foamed in-place urethane laminated with galvanized steel, white enamel on galvanized steel, or stainless steel. The spiral drives are driven by a variable frequency drive for a smooth and safe control speed to protect the system from over-tension and malfunction. The freezer is built to USDA, FDA, OSHA, UL and CSA standards.

### **CUSTOM DESIGN**

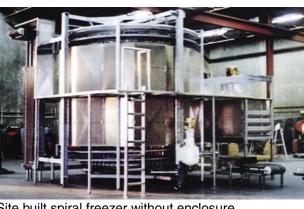
ADVANCED EQUIPMENT INC. begins with a standard design that is carefully customized to meet most standard needs. However, we also provide small capacity standard spiral freezers for your budget. Please contact us for more information on other types of freezers for various product applications.

### INFEED/OUTFEED CONFIGURATION





1/4 Tier



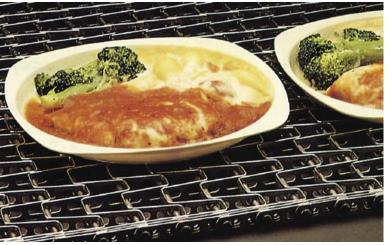
Site built spiral freezer without enclosure



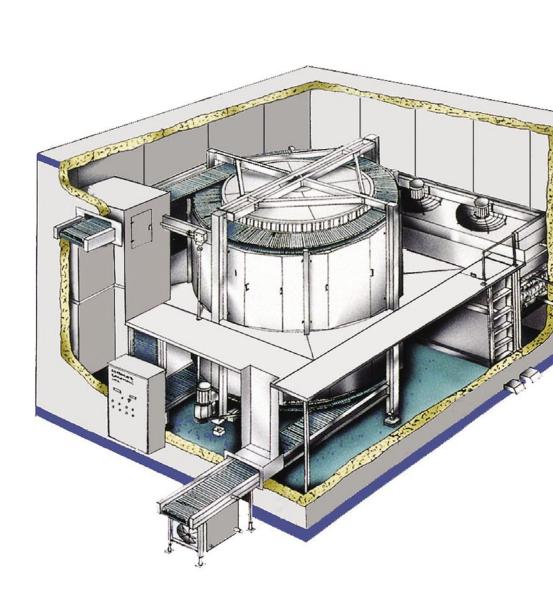
Spiral conveyor.



Electrical control panel



Fiex-wire belt for packaged products.





Balanced weaved belt for I.Q.F. products.



Site built spiral freezer without enclosure.



Spiral conveyor.

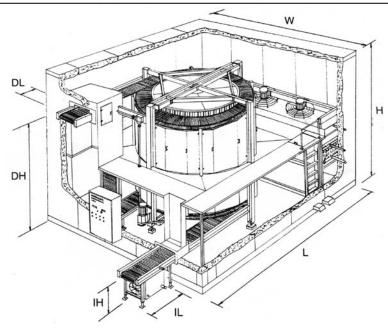


Bolt on style for easy assembly



Spiral freezer parts ready for shipping.

## **GENERAL DIMENSION AND SPECIFICATION DATA**



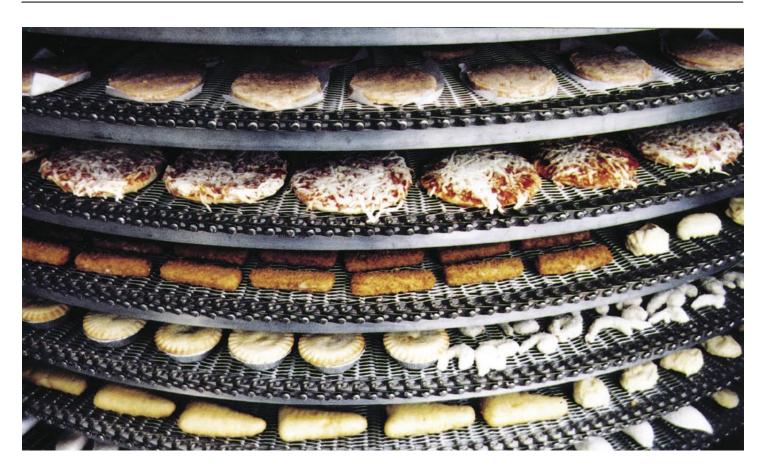
	Model No.	16-17-462	20-15-636	20-15-636 20-18-763		24-18-1119	24-21-1306	30-15-1484 30-18-1780 30-21-2078 30-24-2375 30-30-2969					36-15-2163 36-18-2596 36-21-3028 36-24-3461 36-30-4326				
	Belt Width (in.)	16	16 20		24			30					36				
	Number of Tiers	17.5	15	18	15	18	21	15	18	21	24	30	15	18	21	24	30
	Active Belt Length (ft.)	472	503	604	605	726	847	754	905	1056	1207	1508	911	1094	1276	1458	1822
	Length per tier (ft.)	26.96	33	.51		40.32				50.26					60.74		
	Useable Belt Area: Omni-Grid (sq. ft./ft.) Omniflex (sq. ft./ft.)	981 1.26 1.05 1.33		1.54 1.62			1.96 2.04				2.39 2.46						
i	Max. Belt Loading:				Max. Std.			Max. Std.				Max. Std.					
5	Omni-Grid (lb./lf.) Omniflex (lb./lf.)	20 10 15 10 40 10 30 10			12 10 24 10			8 8 16 10				5 5 10 10					
	Max. Product Height (in.)						2.5					3.5					
	Tier Clearance (in.)	3.0										4.0					
	Standard Tier Pitch (in.)			5	.0			5.5				6.5					
	System Radius (in.)	51.5	6	64		77		96				116					
	Refrigeration Sys.	(AMMONIA OR HALOCARBON) DX. PLUMP RECIRCULATION, OR GRAVITY FLOODED															
:	Evaporator Temp.									AT EVAPORAT							
	Base Load (TR)	4.4	5.8	7.0	8.0	9.4	10.7	12.0	14.8	16.9	20.0	24.0	16.9	20.0	24.0	26.5	33.4
	Capacity (1000 BTU/DTD)	21.4	27.6	33.4	38.4	45.1	51.2	57.7	71.0	81.0	95.8	115.0	81.0	95.8	115.0	126.9	160.0
	Coil Surface (sq. ft.)	4,177	5,886	6,536	7,519	9,189	10,024	11,295	13,900	16,514	19,120	23,467	16,514	19,120	23,467	24,836	31,315
	Intern. Coil Vol. (cu. ft.)	6.5	9.1	10.2	11.7	14.3	15.6	17.5	21.6	25.6	29.7	36.4	25.6	29.7	36.4	38.6	48.6
l	Defrost Method		•		•			WATE	R STANDARD	- HOT GAS OP	TIONAL						
	Defrost WATER (GPM)	70	100	110	125	150	165	190	230	275	320	390	275	320	390	415	520
	Fans No.	1	2	2	2	3	3	3	4	4	4	6	4	4	6	8	8
	Total Air CFM. (1000)	23.5	34.0	39.0	40.0	51.0	60.0	70.5	80.0	94	110.0	141.0	94.0	110.0	141.0	160.0	188.0
<b>HEFHIGEHALION</b>	Fan Motor (HP)	10.0	7.5	7.5	7.5	7.5	7.5	10.0	7.5	10.0	15.0	10.0	10.0	15.0	10.0	7.5	10.0
	Total Fan (HP)	10	15	15	15	22.5	22.5	30	30	40	60	60	40	60	60	60	80
	Total Connected (HP)	13	20	20	20	27.5	27.5	37.5	37.5	47.5	70	75	47.5	70	70	75	95
	Main Drive (HP)	3	5	5	5	5	5	7.5	7.5	7.5	10	15	7.5	10	10	15	15
	Voltage 3 Phase	-		-	. ·		-			77/480V, 240, 6							
_	Length (L) (in.)	218	2	52	r	286		I	120/2001, 2	336	001,00112		· · · · · ·		386		
	(m)	5.5			7.3			8.5					9.8				
	Width (W) (in.) (m)	186 4.7		12	238 6.0			276 7.0				314 8.0					
	Height (H) (in.) (m)	159 4.0	148 3.8	163 4.1	148 3.8	163 4.1	178 4.5	155 3.9	170 4.3	185 4.7	200 5.1	230 5.8	163 4.1	181 4.6	199 5.1	217 5.5	253 6.4
	Infeed Height (IH) (in.) (m)																
DIMENSIONS	Infeed Length (IL) (in.) (m)									50 .52							
1	Discharge Height (DH) (in.) (m)	125 3.2	115 2.9	130 3.3	115 2.9	130 3.3	145 3.7	123 3.1	139 3.5	156 4.0	172 4.4	205 5.2	130 3.3	148 3.8	166 4.2	184 4.7	220 5.6
	Discharge Length (DL) (in.)	0.2	2.3	0.0	2.3	0.0	0.7	0.1		10	4.4	0.2	3.5	0.0	9.2	4.7	5.0
-	(m) Weight (lbs)	0.25 12,000 13,000 14,000 16,000 20,000 24,000 20,000 25,000 28,000 31,000 37,000 24,000 29,000 34,000 39											39.000	49,000			
_	worgin (ib3)	12,000	10,000	14,000	10,000	20,000	24,000	20,000	20,000	20,000	01,000	57,000	24,000	23,000	04,000	00,000	-3,000

## CED I.Q.F. FREEZER ADVANCED EQUIPMENT INC.

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# **ADVANCED I.Q.F. SPIRAL FREEZER**

## THE OPTIMUM FOOD FREEZING SYSTEM



### QUICK FREEZE EACH INDIVIDUAL PRODUCT TO RETAIN THE DELICATE ORIGINAL FLAVOR

- Continuous inline food freezing
- Gentle, smooth handling of product
- Lowest, reliable operation cost

**DESIGN & MANUFACTURED BY** 

• Saving in processing floor space

### **BENEFITS...**

• Special air flow allowing lowest weight loss • Factory assembled and tested • Stainless steel constructed to U.S.D.A. specifications · Easy access to sanitation and maintenance



FOOD FREEZING SPECIALIST