

equipment specs

**°KWIKFREEZE®
SPIRAL FREEZER**
A versatile family
of carbon dioxide
and nitrogen
freezers

BENEFITS

- Improved product quality
- Increased freezing efficiency
- High production capacity
- Proven reliability
- Minimal maintenance
- Maximum flexibility



BOC Gases provides high-quality, cost-effective carbon dioxide and nitrogen freezing systems. In addition to a nationwide supply network for CO₂ and N₂, BOC Gases offers a complete line of versatile, high-performance cryogenic freezers.

Food processors worldwide use BOC Gases' °KwikFreeze spiral freezers for freezing meat, seafood, poultry, fruits, vegetables, baked goods and specialty products. Only °KwikFreeze spiral freezers ensure your frozen foods are preserved at the absolute peak of flavor, texture and appearance comparable to fresh.

°KwikFreeze spiral freezers offer high reliability, simple operation, easy maintenance, and large freezing capacity in

a compact unit that integrates easily into your process. With six standard models and a wide range of features, there's a °KwikFreeze spiral freezer that can meet your application's requirements.

Other important advantages of the °KwikFreeze spiral freezer include:

Modulating Cryogen Injection and Exhaust

°KwikFreeze spiral freezers make the most efficient use of the cryogen. BOC

Gases' modulating cryogen control provides precise flow rate to match heat input to the freezer, while regulating the vapor exhaust to minimize air ingress into the freezer. BOC Gases' injection system features a simple, easily accessible design requiring minimal maintenance and calibration.

External Belt Drive

All drive components are outside the freezer and readily accessible for preventive maintenance. Drive components are not exposed to cold temperatures, so equipment life is maximized. External drives have fewer parts, which increases reliability, reduces maintenance, and minimizes downtime.

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Controlled Air Flow

Freezing efficiency is improved through higher heat transfer rates as a result of directed vapor flow being confined by the solid drum to the product area. The unique solid drum design also reduces product loss.

High Tier Clearance

Tiers are spaced to maximize vapor flow across the belt. As a result, °KwikFreeze spiral freezers freeze products faster, provide more efficient heat transfer, and reduce temperature gradients across the belt. Plus, high tier clearance allows you to run larger products through the freezer.

Thicker Insulation

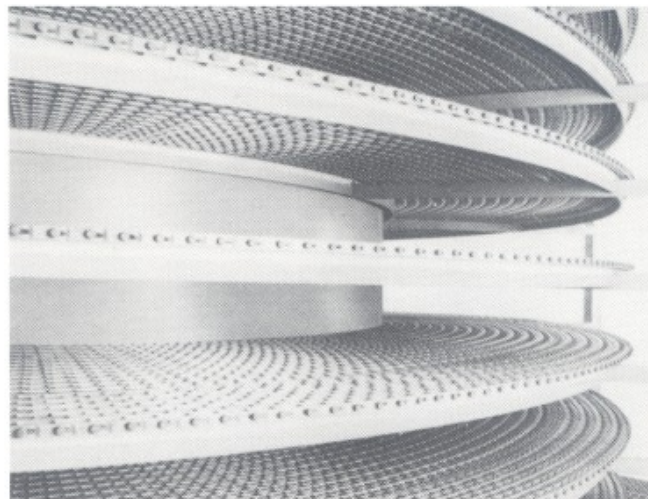
Six inches of polyurethane foam insulation give the °KwikFreeze spiral freezer up to 50% more insulation than competitive models. Extra insulation significantly reduces heat loss through the freezer walls. Therefore, less energy and less cryogen are consumed, resulting in lower operating costs.

A Wide Range of Models and Features

Six standard freezer models are available, ranging from our compact 8'4" x 11'4" models to our high production 20' x 20' models. High capacity and compact design ensure that the °KwikFreeze spiral freezer can meet your production and floor-space requirements. All °KwikFreeze spiral freezers are built to USDA standards using 304 stainless steel construction.

Standard- or Close-Radius Spiral

Standard-radius °KwikFreeze spiral freezers use a drum with a large diameter so the belt wraps around the drum less tightly, minimizing belt collapse. This can be beneficial when freezing fine products. Close-radius °KwikFreeze spiral freezers use a third link to maximize available belt surface area in the freezer.



The °KwikFreeze spiral freezer's drum is covered with stainless steel to increase freezing efficiency and reduce product loss.

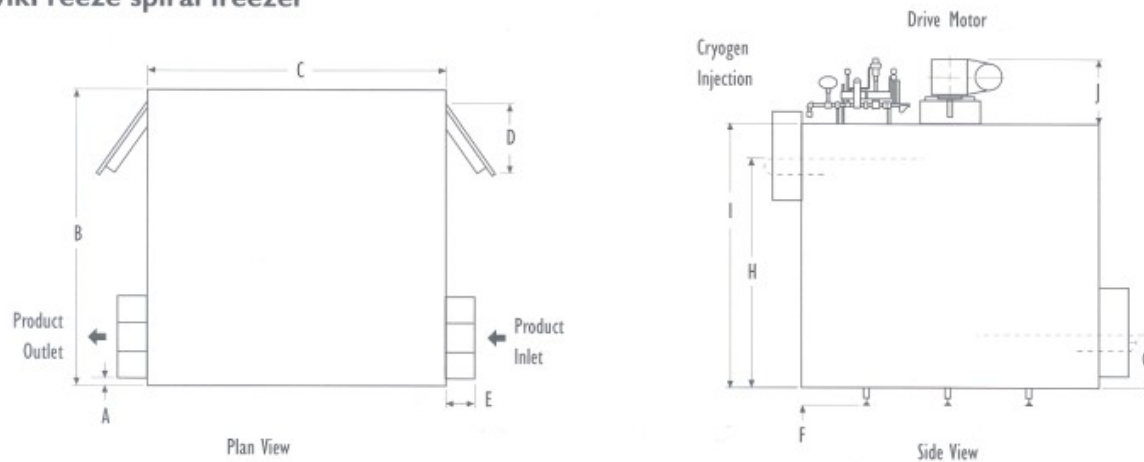
Simple Push-Button Control

A simple control system, in which parameters are input directly into the control panel, makes the °KwikFreeze unit easy to operate. At the touch of a button, you set belt speed, freezer temperature, and dwell time. The dwell time can be set for as long or as short as your product requires.

To learn more about BOC Gases' food chilling, freezing and packaging technology, contact your local BOC Gases representative at the address and phone number listed on the back page of this sheet.

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°KwikFreeze spiral freezer



°KWIKFREEZE SPIRAL FREEZER DIMENSIONS

Key	KF13-225S	KF20-CR175S	KF20-350S	KF28-CR270S	KF28-400S	KF40-CR320S
A Freezer Wall to Outside Link (in)	10	10	31	31	30	30
B Freezer Box Width (in)	100	100	165	165	240	240
C Freezer Box Length (in)	136	136	184	184	240	240
D Door Width (in)	29	29	38.5	38.5	38.5	38.5
E Inlet/Outlet Length (in)	12.5/12	12.5/12	17/14	24/17	28/25	28/25
F Leg Height (in)	4 - 6	4 - 6	11 - 17	11 - 17	11 - 17	11 - 17
G Inlet Belt to Freezer Bottom (in)	18.5	18.5	23	23	23	23
H Outlet Belt to Freezer Bottom (in)	80	80	97	97	84	84
I Freezer Box Height (in)	92	92	118	118	107	107
J Overhead Height (in)	42	42	42	42	42	42

Note: Standard Freezers have clockwise rotation of spiral belt.

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°KWIKFREEZE SPIRAL FREEZER SPECIFICATIONS

Model	KF13-225S	KF20-CR175S	KF20-350S	KF28-CR270S	KF28-400S	KF40-CR320S
Typical Production Rate* (lb/hr)	750 – 1,500	750 – 2,000	1,500 – 4,000	1,500 – 5,000	3,000 – 6,000	3,000 – 6,000
Tier Clearance (in)	3 ³ / ₈	3 ³ / ₈	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂	4 ¹ / ₂
Number of Tiers	10	10	10	10	8	8
Drum Diameter (in)	56	42	86	70	124	100
Usable Belt Length (ft)						
At Drum	160	120	260	200	280	230
At Pivot link	225	175	350	270	400	320
At Outside Link	225	225	350	350	400	400
Dwell Time	As required (5 – 45 min standard)					
Fans						
Horsepower (hp)	1	1	1	1	1	1
Number	8	8	8	8	8	8
Drive Horsepower (hp)						
Positive	1/2	1/2	1	1	1	1
Drum	1	1	3	3	3	3
Electrical Requirements	60A @ 230V	60A @ 230V	45A @ 460V	45A @ 460V	45A @ 460V	45A @ 460V
Internal Inspection Aisles						
Width (in)	17 & 22	17 & 22	20	20	20	20
Number	2	2	3	3	4	4
Total Estimated Weight (lb)	9,000	10,000	25,000	27,000	30,000	30,000

*Actual capacity is dependent on production load

KEY:

KF = °KwikFreeze

First Number = Belt Width

CR = Close Radius

Second Number = Belt Length at Pivot Link

S = Spiral

EXAMPLE:



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