High capacity freezing in a small footprint

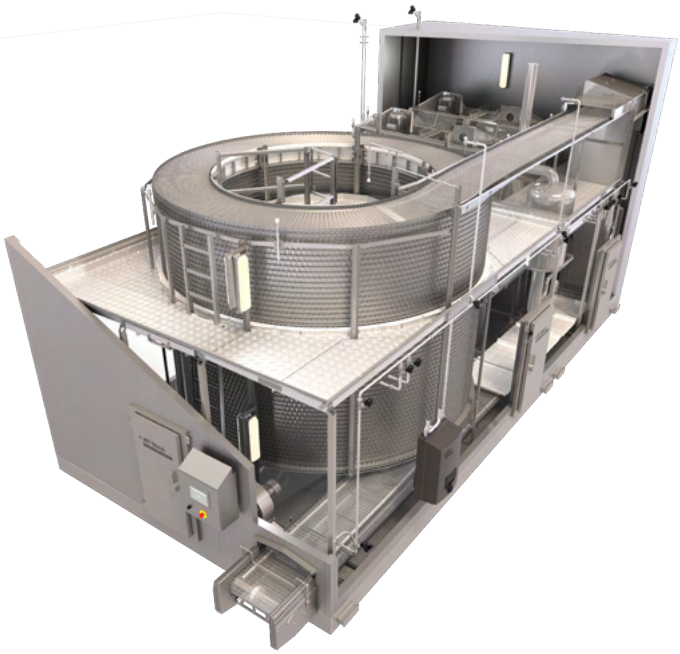
Frigoscandia
GYRoCOMPACT® 70 Spiral Freezer

Freezer, Chiller & Proofer

JBT Marel

Solving your freezing needs

The Frigoscandia GYRoCOMPACT® 70 Spiral Freezer has evolved from one of JBT Marel's best selling products, the GYRoCOMPACT® M7 Spiral Freezer. It retains all the best Frigoscandia® technology, including the Frigoscandia Nova self-stacking belt, which can include a 10-year warranty.

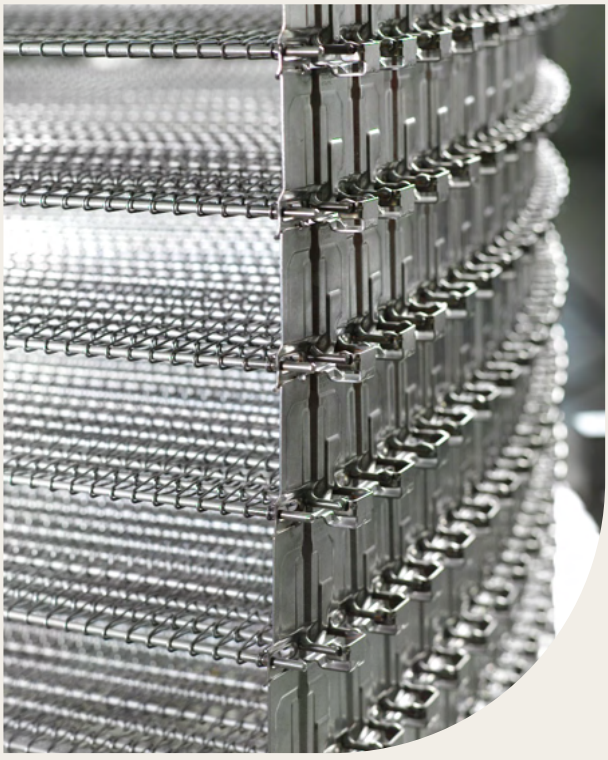


Food safety taken to a new and higher level

- Open profile design on all support structure for full cleanability and access
- Minimized overlapping surfaces

Self-supporting product zone , the ultimate way to build a spiral freezer

- The belt forms its own support structure
- 100 % cleanable
- No glide strips or support structure in the product zone



No tension drive system

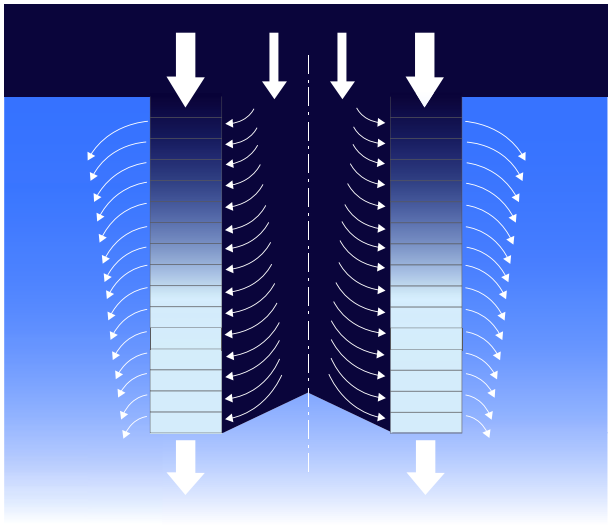
- No drum to wrap the belt around
- No risk of over-stretching the belt
- All forces in the drive system instead of in the belt for fail-safe operation

Optional fully seal-welded stainless steel enclosure

- For high food safety demands
- Possibility for steam sanitation

Vertical controlled air flow

- Counter current air flow for highest possible heat transfer
- No moving products that can occur with horizontal airflow across belt
- Even product temperature across belt



Fully seal-welded, stainless steel floor design

- Improved hygiene, instant inspection, easy access, faster cleaning
- Elevated floor-to-wall joint
- No bacterial traps

Unique FRIGoBELT® Nova self-stacking belt

- Self-stacking belt forms closed freezing zone
- Improved belt design with stronger side-links
- Highest reliability through improved interlocking
- Less wear and increased belt life

Optimised fan and evaporator system

- Fans positioned on dry side of evaporator, no ice or frost build-up
- Increased production uptime, greater freezing capacity, increased reliability
- Maximum heat transfer and frost pick-up
- Easy cleaning
- 2,3 or 4 fan/evaporator setup depending on capacity needs
- Optimised fan/motor combinations give a maximum production capacity with the lowest possible energy consumption

FREEZER TYPE	GC 70/2 GC 70/2E	GC 70/3 GC70/3E	GC 70/4 GC 70/4E
Number of Fans	2	3	4
Number of Evaporators	1	1	2
Equipment length (L)	8435	8855	10365

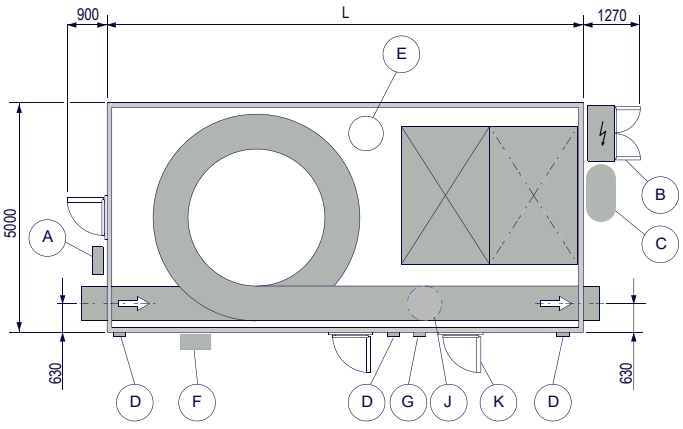
* E stands for enhanced fan alternative.

Unrivaled energy efficiency

- Freezer power consumption from 26 kW
- Short freezing times, low dehydration, maximized product quality
- Low power need for conveyor , less than 4 kW total installed power for the FRIGoBELT conveyor
- JBT Marel patented LVS system also provides refrigeration energy savings up to 13%

Control panel

- Pre-assembled wall-mounted control panel pretested from assembly factory
- Featuring PRoLINK™ control system with state-of-the-art PLC and HMI system
- Prepared for Connected Services, powered by JBT Marel software



A. HMI panel	D. Drain[2)]	G. Drain[2)]
B. Electrical panel	E. LVS1) (Standard position)	J. LVS[1)2)]
C. ADF[1)]	F. Cleaning system[1)]	K. LVS Door[3)]

1. Optional
2. Only when GC70/4 & GC70/4E
3. Only when GC70/4 & GC70/4E with LVS

Options

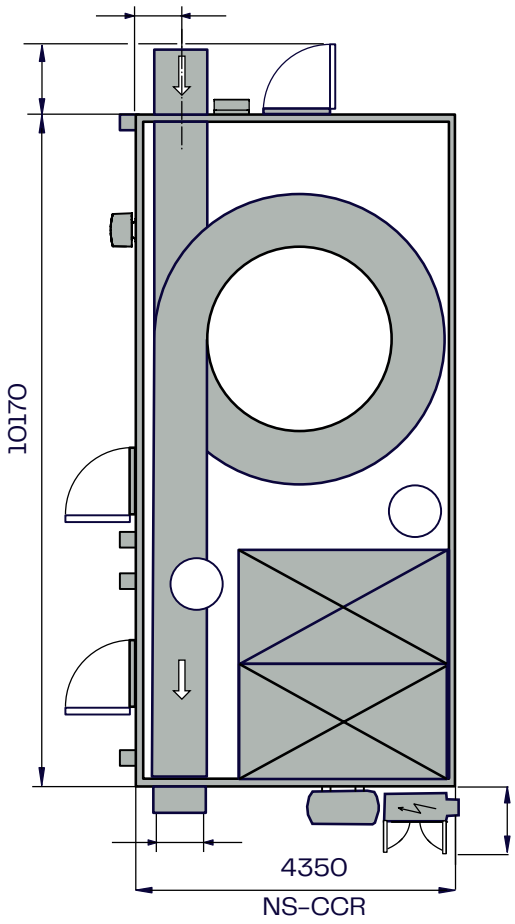
- Air Defrost (ADF) system for simple, endurable and energy-efficient operation
- Frigoscandia's renowned LVS system for energy-efficient refrigeration

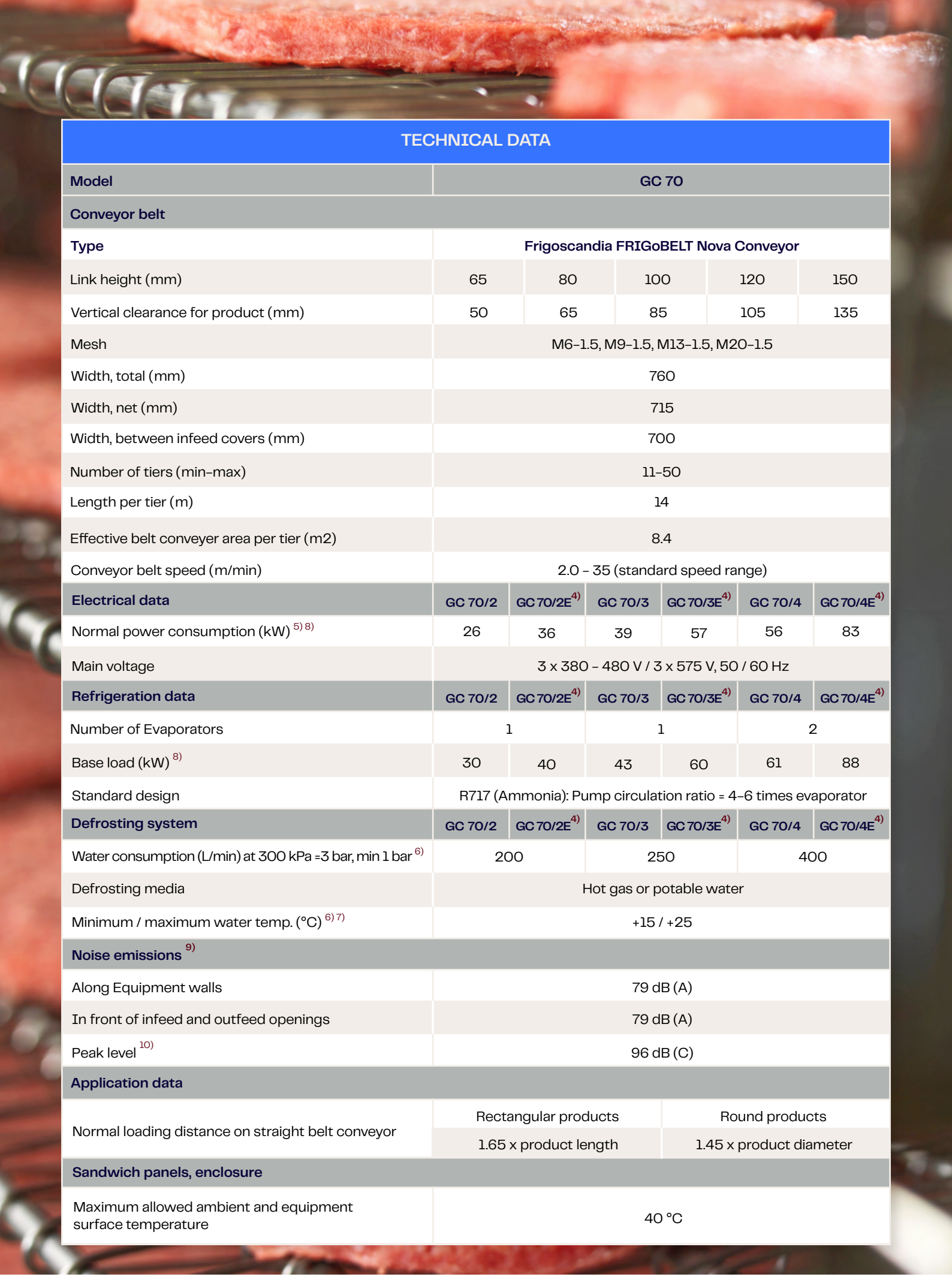
Sequential defrost for prolonged production hours

For production that demands operating several days in a row, with up to a week between defrosts, the GYRoCOMPACT® Sequential Defrost offers secure and reliable technology.

- Be able to defrost one evaporator during production, while the others are in operation.
- Defrosting is fully automatic and can be adjusted for different operating conditions.
- Hotgas are used for defrost the evaporators.

Floor spray is used to flush away ice and snow from the floor. Flow sensor is installed to check that water is available and that the pipes are not clogged by ice. Temperature sensor is installed to check water temperature to avoid damages if water temperature is too high.





TECHNICAL DATA

Model	GC 70					
Conveyor belt						
Type	Frigoscandia FRIGoBELT Nova Conveyor					
Link height (mm)	65	80	100	120	150	
Vertical clearance for product (mm)	50	65	85	105	135	
Mesh	M6-1.5, M9-1.5, M13-1.5, M20-1.5					
Width, total (mm)	760					
Width, net (mm)	715					
Width, between infeed covers (mm)	700					
Number of tiers (min-max)	11-50					
Length per tier (m)	14					
Effective belt conveyer area per tier (m2)	8.4					
Conveyor belt speed (m/min)	2.0 – 35 (standard speed range)					
Electrical data	**GC 70/2**	**GC 70/2E[4)]**	**GC 70/3**	**GC 70/3E[4)]**	**GC 70/4**	**GC 70/4E[4)]**
Normal power consumption (kW) [5) 8)]	26	36	39	57	56	83
Main voltage	3 x 380 – 480 V / 3 x 575 V, 50 / 60 Hz					
Refrigeration data	**GC 70/2**	**GC 70/2E[4)]**	**GC 70/3**	**GC 70/3E[4)]**	**GC 70/4**	**GC 70/4E[4)]**
Number of Evaporators	1		1		2	
Base load (kW) [8)]	30	40	43	60	61	88
Standard design	R717 (Ammonia): Pump circulation ratio = 4-6 times evaporator					
Defrosting system	**GC 70/2**	**GC 70/2E[4)]**	**GC 70/3**	**GC 70/3E[4)]**	**GC 70/4**	**GC 70/4E[4)]**
Water consumption (L/min) at 300 kPa =3 bar, min 1 bar [6)]	200		250		400	
Defrosting media	Hot gas or potable water					
Minimum / maximum water temp. (°C) [6) 7)]	+15 / +25					
Noise emissions [9)]						
Along Equipment walls	79 dB (A)					
In front of infeed and outfeed openings	79 dB (A)					
Peak level [10)]	96 dB (C)					
Application data						
Normal loading distance on straight belt conveyor	Rectangular products			Round products		
	1.65 x product length			1.45 x product diameter		
Sandwich panels, enclosure						
Maximum allowed ambient and equipment surface temperature	40 °C					

4. Enhanced fan alternative
5. Does not include dimensioning of power supply fuses/cables. Refer to customer drawings for maximum power requirement.
6. Must be potable water.
7. Make sure refrigeration system is safe for water temperature in use.
8. All consumption values are calculated for a nominal case. Customer specific values available on request – contact sales support.
9. According to EC Machine Directive. Noise emission values may vary depending on equipment configuration.
10. Measured when the ADF (optional equipment) goes off.

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