

GEA ProEdge Drive

A new alternative to traditional
freezing systems

The 'less is more' approach to spiral freezing and cooling

The GEA ProEdge Drive is a spiral freezing solution that is robust, reliable and offers superior hygienic design and seamless integration into your processing line. The ProEdge Drive features an innovative GEA patented sprocket design and offers top performance under a wide range of cooling, chilling, and freezing conditions.

The ProEdge Drive delivers a freezing solution that provides:

- Ease of cleaning
- Ease of maintenance
- Ease of operation

It's a simple concept. The best ideas often are. Reduce the number of components in a spiral freezing and cooling system and you make it more efficient, easier to maintain and more reliable. With our new GEA ProEdge Drive system we've gone one stage further: we've removed the drum completely, proving that less really can be more.



The GEA ProEdge system drives the spiral conveyor belt from its outside edge. Sprockets at each spiral tier level engage into belt links, and the two sprocket shafts are driven by synchronized motors.



Why less really is more

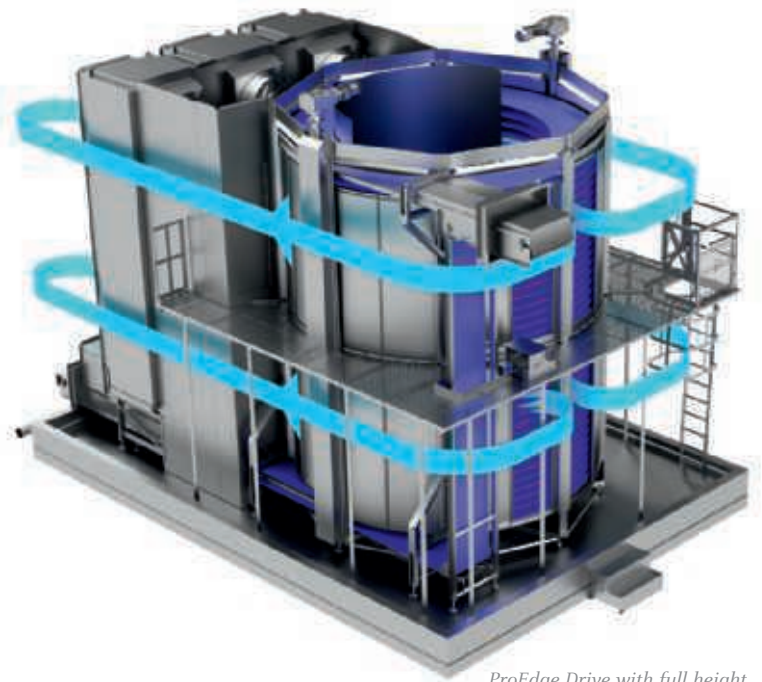
The new GEA intelligent spiral freezing and cooling system featuring the GEA ProEdge Drive, has something missing: the drum. By eliminating this central component, we've also removed multiple parts and, with them, complexity. A less complex, drum-free, no-friction design is more reliable, easier to maintain, more hygienic and more robust for even longer service life.

How it works

The GEA ProEdge Drive is an intelligent system that provides perfect synchronization of the drives in all conditions. It features external drive motors for easy access and improved hygiene. The innovative, patented sprocket design ensures top performance even under the most demanding freezing conditions.

Higher capacity

By removing the drum, we have reduced the height of the freezer giving you more flexibility to add tiers giving up to 12% extra vertical capacity, for the same footprint. The system has also been designed to accommodate wide belts, further increasing capacity if required.



ProEdge Drive with full height horizontal airflow configuration.

Better hygiene and simpler maintenance

The drum-free design, with fewer structural parts and external drive motors, allows much easier access, quick and effective cleaning, and less downtime.

Better performance and greater efficiency

The intelligent control and self-calibration built into the design gives perfect drive synchronization under all running conditions. The positive-edge drive limits belt tension and allows less product movement on the belt. This helps to preserve the product shape and ensures safe product handling with smooth, continuous product flow.



Seamless integration

The ProEdge Drive seamlessly integrates into GEA's spiral freezer range. All GEA spiral freezers provide:

- Full-height horizontal airflow to optimize product yield and freezing performance
- Sequential defrost option to reduce downtime in operations
- GEA Static Pressure Control System to control air balance for frost management

GEA ProEdge Drive 'less is more' benefits

- Drum-free design for better hygiene and easy maintenance
- Improved efficiency
- Patented sprocket design for smooth, continuous product flow
- Up to 12% more capacity with same ceiling height
- External motor drives for easy access
- Robust construction for long service and reliability
- Intelligent control system requires minimal manual adjustment
- Multiple belt width and layout options for seamless integration into your processing line
- Less downtime

Technical Specifications

Models	Number of Tiers	20	25	30	35
19 (1.6) 393mm effective belt width	Production capacity (kg/h) (*)	460			
	Evaporator Refrigeration duty (kW) (*)	100			
	Enclosure Dimensions LxWxH (mm) (*), (**)	6600x3200x3870			
19 (2.2) 393mm effective belt width	Production capacity (kg/h) (*)	640			
	Evaporator Refrigeration duty (kW) (*)	150			
	Enclosure Dimensions LxWxH (mm) (*), (**)	7200x3700x3870			
Plug-in ready: Get your freezer up and running in just 2 weeks. The ProEdge Drive 19 (1.6 & 2.2) models are shipped as fully assembled units for short installation on site.					
27 (1.6) 596mm effective belt width	Production capacity (kg/h) (*)	990	1230	1480	1730
	Evaporator Refrigeration duty (kW) (*)	210	260	320	370
	Enclosure Dimensions LxWxH (mm) (*), (**)	8200x5300x4500	8200x5300x5220	8200x5300x5950	8200x5300x6670
27 (2.2) 596mm effective belt width	Production capacity (kg/h) (*)	1350	1700	2040	2380
	Evaporator Refrigeration duty (kW) (*)	280	350	420	480
	Enclosure Dimensions LxWxH (mm) (**)	9200x6100x4500	9200x6100x5220	9200x6100x5950	9200x6100x6670
33 (1.6) 748mm effective belt width	Production capacity (kg/h) (*)	1510	1890	2260	2640
	Evaporator Refrigeration duty (kW) (*)	310	390	460	550
	Enclosure Dimensions LxWxH (mm) (**)	9100x6100x4500	9100x6100x5220	9100x6100x5950	9100x6100x6670
33 (2.2) 748mm effective belt width	Production capacity (kg/h) (*)	2080	2600	3120	3640
	Evaporator Refrigeration duty (kW) (*)	400	500	600	700
	Enclosure Dimensions LxWxH (mm) (**)	10300x7100x4500	10300x7100x5220	10300x7100x5950	10300x7100x6670

(*) based on fully cooked nuggets freezing. 21grams unit weight; T in 75°C; T out -18°C equilibrated. Shift defrost. -40°C evaporating temperature.

(**) For 19" models, standard 120mm tier pitch, 55mm maximum product height. For 27 and 33" models, standard 145mm tier pitch, 80mm maximum product height.

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