

"Heinen stands for innovative cutting-edge technology and reliable service. The company sets standards in hygienic design and cleaning technology. Heinen offers solid German engineering at the highest level, as well as robust and durable constructions that ensure machine runtimes of over 30 years. Made in Germany. Made by Heinen!"

"Heinen" stands for the market leader in the field of:

spiralfreezer and spiralcooler spiralproofer

cartonfreezer

and IQF-freezer

The Heinen USA Corporation, based in Alpharetta, Atlanta, GA, is a 100% subsidiary of the successful German engineering company Heinen GmbH & Co. KG from Jade, Germany, which has been thriving for over 40 years. For several decades, the company, with its 150 employees, has been supplying machines and services for freezing, cooling, proofing, and pasteurizing all types of food to customers worldwide. With nine different series, a capacity range from 500 lbs/h to 55,000 lbs/h, process temperatures from +185°F to -40°F, numerous options, and the ability to realize custom solutions, Heinen can meet almost any requirement. The company's capabilities have further increased with the move to new, modern, and expanded facilities in early 2024, allowing an average of 1-2 machines per week to leave the factory.

Since 2022, Heinen USA Corporation has been serving its customers in the United States and Canada from its branch in Alpharetta, Atlanta, GA. The Alpharetta location houses offices for sales and project management, service and administration, as well as a workshop and large storage facilities for spare parts and assembly tools.

packfrost®

Heinen carton freezers of the packfrost series are available in three system widths and can be customized in the number of levels and in the depth of the product-shelves. The packfrost can be equipped with approximately 500 product-shelves, achieving a storage capacity of up to 165.000 lbs. Depending on the product and packaging, throughput rates of up to 2,000 cartons per hour and a freezing capacity of up to 55.000 lbs per hour can be realized.

Despite its size, the packfrost is extremely flexible thanks to its state-of-the-art control technology and numerous sensors and servo drives. The principle of the product-shelves not only allows for gentle transport and freezing of various package sizes but also enables the adjustment of freezing times by distributing the products across different levels. This allows for longer or shorter freezing times or even just cooling of the products within the same machine.

Thanks to the extremely robust construction made of galvanized steel, stainless steel, and aluminum, machines with a height of 55 ft or more and a length of up to 165 ft can be realized. A Heinen packfrost is frozen together with the floating concrete foundation once and ideally remains frozen until the end of its service life of about 20 to 30 years. This is made possible by the sequential defrosting

developed by Heinen over decades. The air coolers are divided into individual sections that can be defrosted sequentially during normal freezing operation. This ensures consistently high freezing performance and snow- and ice-free fin surfaces, guaranteeing efficient use of the required cooling capacity.

The insulation thicknesses of the wall and ceiling panels, up to 8 in, ensure that the high air speeds and strong air pressures remain within the system and no cold escapes. Optional air locks at the machine's inlet and outlet can be used when there are significant temperature and humidity differences with the surroundings.

If no product is being fed into or out of the machine, it automatically switches to storage mode. After an adjustable period, the frozen products are stored at a preselected storage temperature, e.g., -4°F. In this mode, the cooling consumption is significantly reduced, and the fans are either turned off or operated at the lowest speed. This allows for significant energy savings during production breaks or overnight without compromising product quality.

Since Heinen understands the importance of the availability of industrial freezing systems, only topquality components such as SEW, Siemens, ABB, Arem, Sick, and Dold are used. Great emphasis is placed on good accessibility to all areas. In the unlikely event of a malfunction, quick action is required. Therefore, the machine is equipped with numerous platforms and walkways, as well as manual and electric chain hoists, to quickly install and remove components.

The machine can also be continuously monitored via remote services and numerous video cameras. Communication with the refrigeration system or upstream and downstream conveyor technology is carried out via common fieldbus systems. Optionally, the complete upstream and downstream conveyor technology, including scanner systems, sorting and discharge lines, and corresponding platforms, can be supplied.



Caption: packfrost

arctic[®]

The arctic, compact, and compactduo series are Heinen's spiral freezers and coolers. The company has over 40 years of experience in building spiral freezers. The first freezer was built by Heinen in 1982. Since then, over 1,000 high-performance machines have left the factory in northern Germany, many of which continue to serve their customers faithfully to this day.

The arctic spiral freezer and cooler is undoubtedly the most versatile and flexible machine in the Heinen portfolio. The machine is characterized by the following basic

features:

- available as a single-drum or double-drum system
- conveyor system entirely made of stainless steel, hygienic design with sealed bearings, selfcleaning inclined surfaces, and intelligent design from laser-cut parts
- capable of conveying upwards or downwards
- from 10 to 40 tiers, with infeed or outfeed heights up to 25 ft
- belt widths from 20" (508 mm) to 60" (1,524 mm)
- metal or plastic belts
- friction drive or form locked drive belt system
- drive via central drive located below the drum

- modular cleaning system with water pressure increase up to 20 bar and monitored cleaning agent supply
- conveyor and freezing capacities up to 15.000 lbs/h possible
- shift defrosting and sequential defrosting
- vertical air flow with horizontal air coolers and horizontal air flow with vertical air coolers, frequency-controlled fans
- cooling and freezing processes at air temperatures from +32°F to -40°F possible
- insulated housing made of stainless-steel inside, optionally fully welded, plastic-coated or stainless-steel outside. Stainless steel floor continuously welded with non-slip profiling, slope, and drainage channels. Mounted on a concrete foundation or stainless-steel frame.

There are numerous options for product-specific customization of the base system. The modern control technology is operated via a multilingual touch panel with a graphical user interface. Many options enable communication with refrigeration systems, upstream and downstream line technology, higher-level MES, or even for remote services.

The systems are delivered in pre-assembled modules and are assembled, wired, tested, and commissioned on-site by Heinen technicians.

Heinen is committed to realizing the special wishes of its customers. Contact us – we are experts in engineering, layout, and customizing our proven base models to meet your requirements.



Caption: arctic

compact® – compactduo®

The compact series spiral freezer and cooler has been a successful entry-level series for small and medium capacities for decades. It is suitable for cooling and freezing products such as baked goods, fish, meat, poultry, pizza, and more. Fully assembled and equipped with a stainless-steel base frame, it is immediately ready for operation after connecting all media such as energy, refrigeration supply, and water (for the cleaning system). The base frame allows for quick and easy relocation.

The compact duo is an extension of

the successful compact series. It offers a more powerful yet still compact system. The compact duo is available as a double-drum system in three different layout variants, all with absolutely compact dimensions. With numerous installed systems, the compact duo has proven to be an excellent solution for medium capacities at an attractive price.

Both series can be equipped with plastic or stainless-steel belts. Options such as loading conveyors for shape-sensitive products, discharge conveyors, or a fully welded insulated housing are just a few of the numerous and proven equipment variants.



Caption: compact



Caption: compactduo

Visitors to IPPE 2025 will have the opportunity to meet our experts in Hall C, Stand 24194



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