

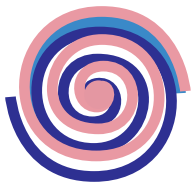
Copeland Scroll®

Refrigeration Compressors

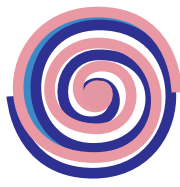


Reliable Choice For Soft Serve
& Frozen Carbonated Beverages

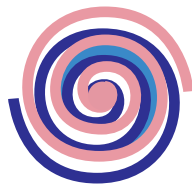




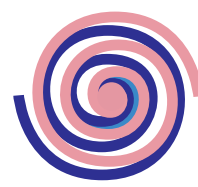
1 Gas enters an outer opening as one scroll orbits the other.



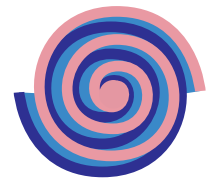
2 The open passage is sealed as gas is drawn into the compression chamber.



3 As one scroll continues orbiting, the gas is compressed into an increasingly smaller "pocket."



4 Gas is continually compressed to the center of the scrolls, where it is discharged through precisely machined ports and returned to the system.



5 During actual operation, all passages are in various stages of compression at all times, resulting in near-continuous intake and discharge.



Copeland Scroll® Technology

How It Works

Copeland Scroll® compressors utilize two identical, concentric scrolls, one inserted within the other. One scroll remains stationary as the other orbits around it. This movement draws gas into the compression chamber and moves it through successively smaller "pockets" formed by the scroll's rotation until it reaches maximum pressure at the center of the chamber. There, it's released through a discharge port in the fixed scroll. During each orbit, several pockets are compressed simultaneously, so operation is virtually continuous.

Why Use Copeland Scroll®?

Copeland Scroll® compressors are available for low temperature and medium temperature applications in the widest available range of sizes.

Copeland Scroll® compressors are inherently more reliable because they have significantly less moving parts. The compliance of their scroll members allows them to handle liquid slugs and debris more effectively. Copeland Scroll® compressors also have a 100% volumetric efficient compression process, which translates into greater operating efficiency and lower energy costs.

Copeland Scroll® units are smaller in size, lower in weight than reciprocating compressors. This means that your soft serve and frozen carbonated beverage refrigeration unit is easier to install and more pleasant to work around.

To learn more about the Copeland Scroll® line of compressors for soft serve applications & frozen carbonated beverage, go to www.emersonclimate.com.



Frozen Carbonated Beverage and Soft Serve Compressor Technologies

Product Comparison		
	Copeland Scroll	Hermetic
Efficiency	✓	
Reliability	✓✓	✓
Sound	✓	
Life Cycle Cost	✓	

Compressor Technologies

Compressors are the heart of your soft serve and frozen carbonated beverage refrigeration system. Some compressor technologies are more energy efficient, more reliable, or quieter than others.

Copeland Scroll®

Scroll compressors have earned a reputation for reliability and lower energy costs. Unlike compressors that use pistons (including hermetic and semi-hermetic), scroll compressors have significantly less moving parts.

This difference results in a more reliable compressor which translates into less downtime. Additionally, the overall dimensions of the scroll allows for a smaller unit design which will save counter space for the end-user.

These features make it a natural fit for the Soft Serve Applications and Frozen Carbonated Beverage .



Hermetic

Hermetic compressors typically have a lower first cost, but may not have the lowest life cycle cost because of the higher energy savings or reliability associated with other compressor technologies such as the scroll compressor.

Aftermarket Support

Regardless of the type of compressor technology you select for your soft serve and frozen carbonated beverage, you want a supplier with replacement compressors readily available in the event something should happen to your soft serve and frozen carbonated beverage. With that in mind, Emerson Climate Technologies™ offers centralized aftermarket support for authorized wholesalers, contractors and end-users covering the full line of Copeland® brand compressors and condensing units as well as Emerson® motors, flow controls and services.

Scroll Benefit In Frozen Carbonated Beverages Soft Serve Application

Features	Advantages	Benefits
Superior Start/Stop Capability At FCB Operating Conditions	Increased Reliability	Increased Revenue From More Uptime
Excellent Liquid Handling Ability	Increased Reliability	Less Sound & Vibration
		Increased Revenue From More Uptime
Smooth Scroll Movement	Quieter Environment	Increased Revenue From More Uptime
	Less Refrigerant Leaks	
Smaller Size	Smaller Unit Size Required	Opportunity to Increase Sales/Sq. Ft.

1675 W. Campbell Road
 Sidney, OH 45365
EmersonClimate.com

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