





#### **About Hot Gas Defrost**

Hot gas defrost is the energy-efficient alternative to electric defrost refrigeration systems. Hot gas defrost systems work by routing hot compressor discharge gas through the outlet of the evaporator, thawing any accumulated frost. This gas then condenses back into a liquid and flows back into a common liquid line. Evaporator coil heaters do not energize, defrost times are significantly reduced and product temperatures stay more stable.

#### **Hot Gas Defrost Benefits**

In addition to being 50 to 70 percent more energy efficient, hot gas defrost has several other advantages over electric defrost in certain applications.

Fast pull-down time — your product reaches its optimal temperature level quickly, remaining at its peak freshness.

Product protection — box temperatures remain more stable because of shorter defrost cycles, resulting in consistent product temperatures.

Increased productivity — equipment runs on average 20-22 hours a day. Longer run times often allow for the selection of a smaller horsepower compressor, providing you with cost savings because of less refrigerant and material costs.

Potential rebates — check with your local utility company to find out if rebates are available in your area for hot gas defrost systems.

## **Hot Gas Defrost vs. Electric Defrost**

ELECTRIC DEFROST HOT GAS DEFROST		
Number of Defrosts	4 @ 40 minutes/day	4@10 minutes/day
Steaming	Steaming is produced by excessive heat generated by coil heaters	Limited steaming is created because of the efficient use of hot gas as well as shorter defrost times
Overall investment	Lower initial investment Higher monthly energy bills Higher labor cost	Slightly higher initial investment Lower monthly energy bills Lower labor cost
Run time	18 hours	22 hours
Average Box Temperature Rise	15-20° F	2-3° F



#### The name behind the brands you trust™

Trust your perishable investments to the leader in commercial refrigeration. Through four market-leading brands — Bohn, Larkin, Climate Control and Chandler — Heatcraft Refrigeration Products (HRP) has been providing climate control solutions for businesses in more than 70 countries for more than 75 years. And now you can maintain your existing refrigeration equipment with certified commercial refrigeration parts from InterLink, Heatcraft's newest brand.

Our products are manufactured with quality, reliability and innovation to meet and exceed the highest expectations. Rigorous development and testing in our 25,000-square-foot research and development laboratory keep our products ahead of the competition with trouble-free performance and cutting-edge technology. These high performance standards are backed by superior customer-service teams dedicated to serve every need with the best solution and deliver at the best lead times in the industry.



We have made a commitment to customer needs, innovation and environmental stewardship and have dedicated ourselves to delivering energy-efficient choices that reduce costs, improve bottom lines and enhance equipment performance and service life. Look for the Energy Solutions® logo to identify other products and options that can help you save money

The Mohave<sup>™</sup> Advanced Hot Defrost System is designed for simplicity and optimal performance in agricultural, process cooling, cold storage and warehouse applications.

#### **Dependable Performance**

Performance is regulated with logical decision-making, allowing you to focus on your business while the Mohave system is taking care of your investment.

## **Tremendous Energy Savings**

Hot gas defrost systems can save thousands of dollars more than electric defrost per year. The Mohave system can save you more money and energy with intelligent defrost management. Real-time data regulates timing parameters, creating more efficient defrost cycles.

## **Enhanced Product Integrity**

Shorter defrosts keep the overall box temperature stable and product remains at its desired temperature.

## **Product Line Specifications**

6-30 HP: low temperature
7-40 HP: medium temperature
Vertical Discharge Condensing Units:
feature Discus® semi-hermetic compressors
Large or Medium Profile Unit Coolers:
feature standard PSC motors for more
efficient operation



Introducing Mohave, the market's most advanced hot gas defrost system, which combines an optimized mechanical hot gas defrost system with today's proven technology to provide the best solution to your needs: dependable performance, increased productivity, protection for your perishable investment and the peace of mind to continue running your business at its most profitable level.

#### TODAY'S SOLUTION FOR PEAK PERFORMANCE.

With its factory-programmed defrost management controller, the Mohave system monitors and processes real-time data through a proprietary program that allows for effective and efficient operation in all ambient conditions. The Mohave system's continuous optimization keeps your system running at its peak performance, keeping your product at its peak of freshness.

#### DON'T COMPROMISE YOUR INVESTMENT.

Compared to other hot gas defrost systems on the market, the Mohave system utilizes exact data instead of compromising with average conditions and variables. Real-time monitoring of pressures, temperatures and set points allows for the continuous optimization of operation, keeping your valuable investment safe. In addition, the system includes a powerful diagnostic tool that simplifies troubleshooting and dramatically reduces installation and service time.



The Mohave Advanced Hot Gas Defrost System is part of the Energy Solutions® portfolio of energy-efficient products.

#### The Most Advanced

- The Mohave<sup>™</sup> system is the only system on the market with an advanced controller for hot gas defrost applications
- Peak performance with changing conditions; there is no need to manually adjust settings for seasonal variables
- Sensors gather information to assess the condition of the system and outside ambient to defrost most efficiently

### The Most Versatile

- Performs exceptionally in all ambient conditions, adjusting to operate efficiently and effectively; whereas traditional systems typically must be adjusted manually twice a year
- The service switch, which allows the system to "sleep" until it is needed again, is perfect for seasonal agricultural applications

## The Simplest To Use

- Control board is preset with factory settings optimized for model size and refrigerant type — no programming is required
- Basic and expert menu modes allow flexibility for various degrees of expertise









# Designed

#### CONTINUOUS OPTIMIZATION

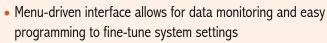
- Controller is factory preset with customized model specifications
- Automatically compensates for changes in outdoor temperatures
- Real-time monitoring of all pressures, temperatures and set points

#### **ENERGY EFFICIENCY**

**EASY INSTALLATION** 

 Effective management of the timing and sequence of defrost, along with head pressure control, minimizes the already low energy demands of hot gas defrost

 Factory-programmed settings are optimized for freezer or cooler applications and do not have to be modified in the field



 Special evacuation mode opens all necessary valves, ensuring a complete vacuum

#### RUGGED DEPENDABILITY

 Conformal coating on the control board can handle the most extreme conditions

#### QUICK AND EASY TROUBLESHOOTING

- Service mode allows you to test the operation of every relay in the system
- · LED indicators show system status and diagnostics
- Remote alarm contact is ready for your refrigeration expert to install a remote alarm module that will alert you to issues that need attention









#### The Lowest Maintenance

- No valves or timers to manually adjust for seasonal conditions
- No water tank to maintain or check for leaks
- Diagnostic tool keeps you in the know all the time, allowing troubleshooting with a minimal amount of effort

### The Best Protection for Your Investment

- Controller is customized to operate within the specified operation envelope of each compressor model, ensuring the safest and most efficient performance
- No guesswork is involved in the system settings, so you do not have to compromise the integrity of your product
- Detailed error and alarm codes greatly reduce troubleshooting time

## for Your Peace of Mind.

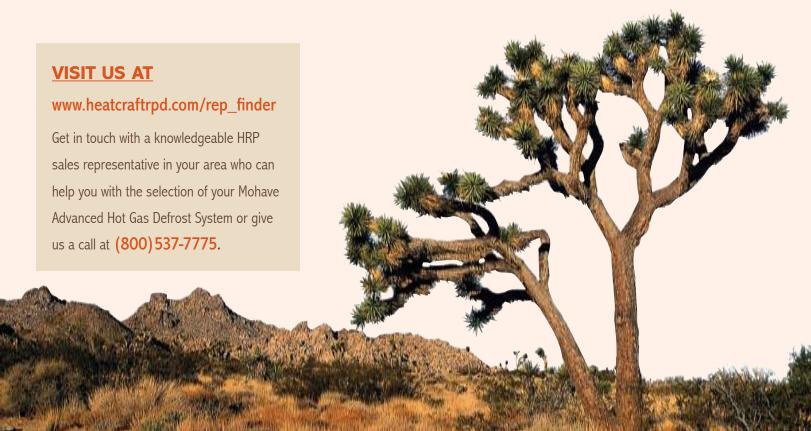
From the innovative leader in refrigeration, choosing the Mohave™ Advanced Hot Gas Defrost System from the most trusted brands in the industry is the easiest choice you have to make.













The name behind the brands you trust  $^{\text{\tiny TM}}$ 











2175 West Park Place Boulevard • Stone Mountain, Georgia 30087 www.heatcraftrpd.com • P 770.465.5600 • F 770.465.5990