

Frozen by your R-22 Dilemma?

Fresh thinking.
Responsible solutions.™

Hillphoenix

A DOVER COMPANY

R22
CONVERSION

When the eventual end of R-22 was announced and the end date set, supermarket chains and HVACR contractors had several options that ranged from sit and do nothing to wholesale refrigeration systems replacement. But as expected, along with the ticking clock came a gradual rise in the cost of R-22. In the past year, that gradual rise has sharpened steeply and trying to hold onto and service R-22 systems has become economically unpractical.

**Fresh thinking.
Responsible solutions.™**

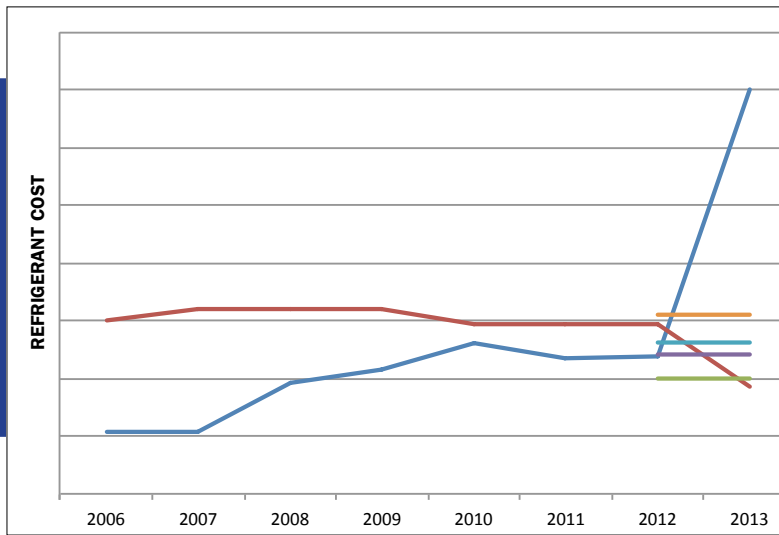
R22
CONVERSION

The R-22 Catch-22

With doing nothing no longer a viable option, the dilemma now is down to a choice between two scenarios. Retrofit? Or wholesale replacement? Both options present practical arguments for and against. Retrofit costs may be lower initially than complete replacement of an entire system. But depending on the age, condition and type of equipment currently installed, refrigerant choices may be limited and performance over time may ultimately be less cost-efficient. A completely new system, while it may be more costly in the beginning, will perform better because its components will be matched exactly to the refrigerant used and the job it's supposed to do.

The Path of Least Resistance

The best way to get through any maze of conflicting viewpoints and difficult decisions is to take the path of least resistance and follow the lead of others who have gone before you. Hillphoenix is that leader. Our experts and engineers have faced the R-22 dilemma with a host of customers and are well versed in the complexities of striking a balance between short-term and long-term results.



Guided by Hillphoenix

Based upon our position as a refrigeration systems industry leader and significant hands-on experience with R-22 conversions, Hillphoenix customers can be assured of a

smooth, efficient transition. We manage every project from start to finish, analyzing every case with four specific goals in mind:

Quality Before any conversion process is begun, experienced Hillphoenix staff will assess current system conditions and provide a detailed conversion plan. Our engineers design the system to be put in place to rigorous standards of performance and efficiency. Highly qualified contractors install and test the system and a Hillphoenix Project Manager oversees the entire process.

Efficiency Conversion schedules are compressed to accomplish the most in the least time with the fewest interruptions. For example, refrigerant gas removal is performed at night to minimize the impact on the store. Also, an experienced Hillphoenix Project Manager will be onsite to direct the process and answer any questions that could otherwise delay the project.

Consistency Every R-22 conversion is planned and completed based upon conversion best practices guidelines determined by the industry and the Environmental Protection Agency. To maintain consistent efficiencies throughout the process, Hillphoenix provides field tablets loaded with specifications and daily checklists of schedules and tasks. A Project Manager is always present to be sure contractors receive immediate, onsite support.

Value Always a concern with any project, cost savings are an important part of the conversion process with Hillphoenix. The company maintains close partnerships with vendors to keep prices low. We take advantage of volume pricing from vendors on buyout parts. Finally, we enjoy preferred pricing from contractors based upon relationships we have developed over many years and many projects.

Refrigerant Cost Trends

- R22
- R404A/R507
- R407a
- R407c
- R407f
- M099

Hillphoenix

A DOVER COMPANY

Our Project Management Advantage.

A conversion project can be a complicated proposition. The specialties involved... The personnel required...The engineering that must be completed in a timely manner...The equipment that has to be

specified and installed correctly...To do it with the least interruption, briefest downtime and the cleanest outcome requires a hands-on approach and a top-down perspective. Project Management is where Hillphoenix truly shines. We put a Project

Manager on site on every conversion to shepherd the job through and around any complications that may arise to a final, successful conclusion.

Systematic Approach

All Hillphoenix conversion customers know exactly what to expect and how long a conversation project will take

because we divide the job into a pre-defined series of steps developed and refined over time.

| Proposal/Commitment | Week Two |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Provide initial proposal based off of a refrigeration schedule provided by customer• Receive commitment from customer | <ul style="list-style-type: none">• Retrofit one rack per night• Nightly activities include:<ul style="list-style-type: none">– store Meeting– refrigerant recovery– replace all elastomeric seals on high side– oil Change– evacuation– replace Refrigerant– leak check• Check superheats on all systems each morning |
| Evaluation | |
| <ul style="list-style-type: none">• Perform initial walk-through• Scope project and conduct in-depth evaluation of system(s)<ul style="list-style-type: none">– from site visit and “as-built” documents an engineering evaluation is done to evaluate system capacities and performance– engineering for required modifications is performed• Review any changes with the customer that are identified during the evaluation and engineering review | Week Three |
| Week One | <ul style="list-style-type: none">• Replace schrader valves and caps• Replace oil filters• Replace suction filters and liquid driers• Conduct another post-leak detection• Verify all rack settings and adjust as needed |
| <ul style="list-style-type: none">• Detect and repair leaks• Perform the first system oil change• Program downloading | |

The time has come to finally make a decision about converting from R-22. Not only to comply with the EPA but to protect the growth and profitability

of your business going forward. The smarter, more economical choice will always be the one with the most experience and the resources to be

sure the conversion is done right. Call your Hillphoenix representative today and we promise you'll breathe a sigh of relief tomorrow.

Hillphoenix

Conyers, GA USA
770-285-3057
hillphoenix.com

A  DOVER COMPANY

©2013 Hill PHOENIX, Inc.
RS.R22v1-01k0713

Fresh thinking.
Responsible solutions.™