



R-22 Phaseout

Refrigerant Management & Your Customers

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MSCA Virtual Learning Series

Presenter:

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- All-in-one field service & operations platform
- From **service to project** management
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Today's Agenda

- Providing Guidance for our Customers
- Phasing down Refrigerants - Looking Back
- What's Changed with R-22
- Creating a proactive R-22 strategy
- Refrigerant Conversions
- Recommended Next-Steps
- New Refrigerants

AGENDA

A silhouette of a person in a suit climbing a staircase that leads upwards and to the right. The background is a soft-focus image of a sunset or sunrise sky with warm orange and yellow tones. The person is on the left side of the frame, and the staircase is on the right side.

The Path to Achieving Goals

Successful companies don't get that way by accident. They do this by planning and executing effective business strategies.

The best sales managers will tell you that mechanical service is “a business of repetition” and the most successful service companies continually focus on the study of service fundamentals.

Leveraging Your Current Maintenance Base

- ➔ The best way to grow your service business is to change your sales force from reactive to proactive.
- ➔ Maintenance Agreements provide the most reliable and proactive source of revenue.
- ➔ Maintenance Agreements will always generate a recurring cash flow with little or no recurring sales effort.
- ➔ Identifying retrofit work from your PMA base is a great retention strategy



Why Focus on Your Current Customers?

- Planned maintenance retention has dropped in recent years
- More customers are requiring multiple bids
- Customer loyalty has changed
- Customers are more demanding
- Office and field staff are getting difficult to find/keep
- We need to provide value added solutions

If you're not educating your customers your competitor definitely is!

A Look In The Rear View Mirror

The EPA began phasing out/ down refrigerants in 1990s

The issue was ozone depletion.

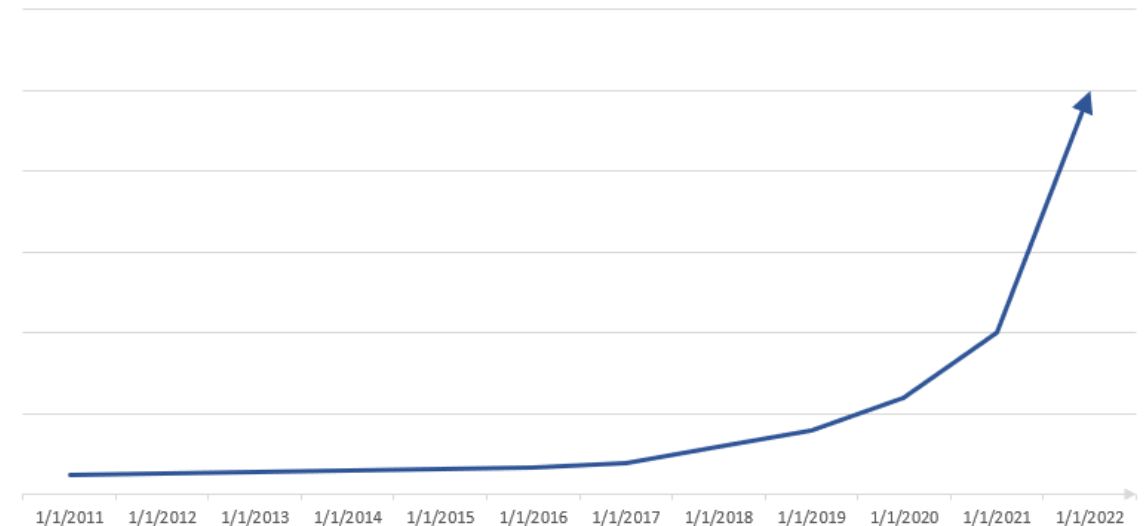
- Since 2010, no new equip. could be shipped with R22
- Phaseout completed (As of 2020, NO “virgin” R-22 would be manufactured or imported)
- Available R22 would be based on supplier stockpiles and amount reclaimed by contractors, but R22 was expected to be available for servicing equipment for years.



What Changed?

- Suppliers have been rationing their stockpile of R-22 and they are telling us that R22 may become unavailable by 2023
- The cost of R22 has risen dramatically
- When R-22 becomes unavailable, break/fix becomes more significant and costly

Supply shortage driving
cost increase



Polling Question #1

Is your Sales Team up to speed regarding the R-22 situation?

- Not at all, need more information
- Some of our Team has discussed it
- We are informing our customers
- We are experts



Polling Question #2

How much of your Customers HVAC equipment would you estimate still has R22?

- Less than 25%
- 26% - 50%
- 51% - 75%
- Greater than 75%
- No idea



A Simple Sales Strategy



Step 1: Review Your Equipment Lists

Equipment	Manufacturer	Model	Serial #	Size	Refrigerant Type
RTU 5 Package Unit	AAON	RK-25-3-E0-000:ZL00H000000MFX	200311-AKCP07895	25 TON	R-22
RTU 7 Package Unit	AAON	49957RK-25-3-E0-000:ZL00H000000MFX	200311-AKCP07894	25 TON	R-22
RTU 6 Package Unit	AAON	49957RK-25-3-E0-000:ZL00H000000MFX	200311-AKCP07896	25 TON	R-22
RTU 15 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7190326	20 TON	R410A
RTU 16 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7185191	15 TON	R410A
RTU 14 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7185188	20 TON	R410A
RTU 13 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7190325	20 TON	R410A
RTU 12 Package Unit	Trane	YHC102A3RZA0TE1	730103494L	8.5 TON	R41A
RTU 9 Package Unit	Trane	YHC120A3RZA0TE0	730103434L	8.5 TON	R41A
RTU 1 Package Unit	Trane	SFHLF554PE46E7BD	C11E02490	55 TON	R410A
RTU 2 Package Unit	Trane	SFHLF554PE46E7BD	C11E02491	55 TON	R410A
RTU 4 Package Unit	Lennox	KGB240S4BM2G	KGB240S4BM2G	20 TON	R-410A
RTU 3 Package Unit	York	DIEG240N32046FDD	DIEG240N32046FDD		R-22
RTU 8A Package Unit	AAON	RM020-8-0-AB22-379	RM020-8-0-AB22-379	25 TON	R-22
RTU 8B Package Unit	AAON	RM020-8-0-AB22-379	RM020-8-0-AB22-379	25 TON	R-22
Boiler 1 - Gas Fired	THERMAL SOLUTIONS	ECA0750BB1-UAA	64565998	N/A	N/A
Boiler 2 - Gas Fired	THERMAL SOLUTIONS	EVA0750BBA-UAA	64565997	N/A	N/A
Pump 1	Marathon	AVB56T17F5322J	N/A	.75 HP	N/A
Pump 2	Marathon	AVB56T17F5322J	N/A	.75 HP	N/A

BUILD  **OPS**



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RTU 6 Package Unit	AAON	49957RK-25-3-E0-000:ZL00H000000MFX	200311-AKCP07896	25 TON	R-22
RTU 15 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7190326	20 TON	R410A
RTU 16 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7185191	15 TON	R410A
RTU 14 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7185188	20 TON	R410A
RTU 13 Package Unit	Johnson Controls	J20ZJC00G2B5BCD2H1	N1L7190325	20 TON	R410A
RTU 12 Package Unit	Trane	YHC102A3RZA0TE1	730103494L	8.5 TON	R41A
RTU 9 Package Unit	Trane	YHC120A3RZA0TE0	730103434L	8.5 TON	R41A
RTU 1 Package Unit	Trane	SFHLE554PE46E7BD	C11E02490	55 TON	R410A
RTU 2 Package Unit	Trane	SFHLE554PE46E7BD	C11E02491	55 TON	R410A
RTU 4 Package Unit	Lennox	KGB240S4BM2G	KGB240S4BM2G	20 TON	R-410A
RTU 3 Package Unit	York	DIEG240N32046FDD	DIEG240N32046FDD		R-22
RTU 8A Package Unit	AAON	RM020-8-0-AB22-379	RM020-8-0-AB22-379	25 TON	R-22
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Step 2: Educate Customers on Refrigerant Costs



Refrigerant	June 1st, 2021	June 1st, 2022	Rate of change
R22	\$19.25	\$51.00	2.6
R410a	\$4.40	\$19.65	4.5
R407c	\$4.95	\$19.50	3.9
r134a	\$3.50	\$13.80	3.9
r404a	\$5.00	\$22.00	4.4
R407A	\$5.05	\$20.50	4.1
r507	\$5.20	\$21.75	4.2

ADDITIONAL BENEFIT TO REPLACE UNITS

- Efficiency requirements from 2017 to 2018 increased about 13%
- Efficiency requirements from 2022 to 2023 increase about 15%
- The benefit to customers will be reduction in energy use, energy cost, and carbon footprint
- Customers can market themselves as more energy efficient in a growingly consumer conscientious world



Polling Question #3

Do you have an alternate refrigerant identified when R22 is no longer available (and repairs are required)?

- Yes
- No
- No idea



REFRIGERANT CONVERSIONS

- What refrigerant do you choose?
- Have you completed any refrigerant conversions?
- Do you know what it costs to do a conversion?
- What's the best option today? R407C, Bluon?



Whatever you do – Be consistent

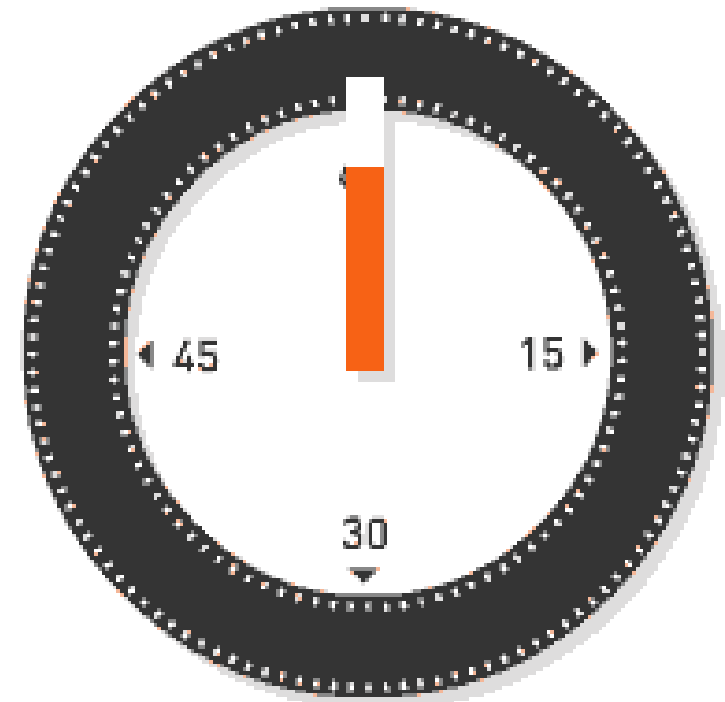
- Avoid using different alternatives at the same customer site
- If equipment has multiple circuits, convert them all at once

New Refrigerants and 2025

- HFC Phasedown – As of 2025, new equipment will have HFO refrigerants
- HFO's are a mixture of Hydrogen, Fluorine, and Carbon B
- HFO's are designated as “slightly Flammable”
- Equipment and spaces may require additional safety measures
- Replacement equipment could be heavier due to explosion proof motors and controls



Time For Questions?



Thank You!

For attending this
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