METROPOLITAN NY CHAPTER Refrigeration Service Engineers Society

Continuing Education for the HVAC/R Industry

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Metro NY RSES

"Better Service Through Knowledge"



May 2025



EDUCATIONAL MEETING

WEDNESDAY, May14th, 2025

Dinner at 6:00pm

At *TAVERNA KOS* 41-19 23rd Ave., Astoria <u>See Page 2 for details</u>

Our May meeting will be the last meeting before we break for the summer. We will resume meeting on September 10th-mark your calendars now. Rich Bruno is busy lining up speakers for the coming year. If you have any suggestions—*or requests*— you can email him at RichBrunoNY@AOL.com.

I would like to thank the members who have attended our monthly meetings. The members who have not shown up missed some very educational meetings, as well as the opportunity to network with other technicians. I would also like to thank the members on your board of directors: Stan Hollander CMS, Herb Meyer, Steve Aiello and especially Rich Bruno who arranged our speakers. These gentlemen have been the driving force in keeping our chapter alive.

Your Board joins me in wishing you a Safe and Prosperous Summer and I hope to see you in September.



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Refrigerants, Past, Present, Future!
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Low GWP Refrigerant Options. R-32/R454B.
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Flammability A1 Vs. A2l Vs. A3 know the difference !
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Presented by:John P Maiorana Product Support Manager *Forane Refrigerants*

THE IMPORTANCE OF READING A SYSTEM'S DISCHARGE PRESSURE

When servicing refrigeration and air conditioning equipment, it is important to read both the system's suction **and** discharge pressures. Many times when servicing a piece of equipment, a service technician will omit reading the discharge pressure. This might be due to the system not having an access valve on the high side, or maybe the technician is trying to save steps or cut time on the job. But failure to read the discharge pressure could lead to misdiagnosing a problem, or not finding the **real** problem with the system.

By reading only the suction pressure, a technician diagnoses only half of the system. To effectively troubleshoot any system, he/she must also read the discharge pressure. For example, a tech is working on a system with a capillary tube as its metering device and records a lower than normal suction pressure. His first diagnosis would be a system with a low refrigerant charge. This may be correct. However, the capillary tube could be partially plugged, and this would also give a lower than normal suction pressure reading. If the tech also measured the discharge pressure, he/she would see that a system with a low charge would show both low suction **and** discharge pressures, while a system with a plugged capillary tube would show a low suction pressure and a higher than normal discharge pressure.

If a tech is working on a system and finds the suction pressure *higher* than normal, he could have either a compressor which is not pumping efficiently, or a system with an overcharge of refrigerant. By measuring the discharge pressure He/she should be able to tell the difference. A system with an overcharge of refrigerant will have both high suction pressure and high discharge pressure. A system with a defective compressor will have a high suction pressure and a lower than normal discharge pressure. These problems could appear in relation to the current problem, or they may cause new problems with the system in the future. For example, on systems with remote air cooled condensers it is not always easy to get to the condenser to examine its condition. If a technician skips over measuring the discharge

pressure, he may come up with a diagnosis unrelated to the actual problem. The condenser may simply be dirty and in need of cleaning, and the tech could have easily determined this by looking at the discharge pressure. Measuring the discharge pressure should/**must** be a normal part of any service call. Unfortunately, sometimes it does get overlooked, which leads to needless returns calls and unhappy customers. At times, it may seem like an insignificant part of a service call, but it is truly necessary to completely troubleshoot any system **PROPERLY.**

Joe Marchese, CMS, Greater Pittsburgh Chapter Past International President, RSES

Things you didn't need to know . . .

◆ If you toss a penny 10,000 times, it will not be heads
 5,000 times, but more like 4,950. The heads picture weighs more, so it ends up on the bottom.

♦ Only one person in two billion will live to be 116 or older.

 Humans and dolphins are the only species that have sex for pleasure.

The pop you get when you crack your knuckles is
 actually a bubble of gas bursting.

101 Dalmatians and Peter Pan are the only two Disney
 cartoon features with both parents who are present and
 don't die throughout the movie.

♦ The winter of 1932 was so cold that Niagara Falls froze
 completely solid.

◆ There's no Betty Rubble in Flintstones Chewable Vitamins.

↓ It's impossible to get water out of a rimless tire.

♦ Banging your head against a wall uses 150 calories an hour.

• Did you know that you are more likely to be killed by a champagne cork than by a poisonous spider?

