

## DEPARTMENT OF ENERGY **Effective March 27, 2017**

### DEPARTMENT OF ENERGY 2017 (DOE 2017)

The upcoming DOE 2017 requirements have created some concern for our customers, so we want to assure everyone that Traulsen has been preparing for these regulations and our products are ready to meet the DOE 2017 requirements. In fact, all commercial refrigeration manufactures and importers must comply with the mandatory DOE 2017 regulations.

DOE has set a limit of the maximum allowed energy consumption or "MDEC" a commercial refrigerator/freezer can consume. DOE calculates the MDEC in kWh/day based on the cabinet's internal volume. If a commercial refrigerator/freezer uses more energy than the MDEC allowed by the DOE, that unit can not be sold in the U.S..

### MEETING YOUR NEEDS WITH TRAUlsen EXPERTISE.

Traulsen has always taken an innovative approach to overcome challenges, and meeting the upcoming DOE 2017 requirements was no exception. We have been building our own refrigeration systems for over 10 years, allowing us to precisely engineer the system to our tough standards while meeting DOE 2017. We have doubled the capacity of our test lab in the last year to insure we are using the latest technology. We have designed an innovative new glass door that is 20% more efficient than our previous glass door. All of our microprocessor controlled

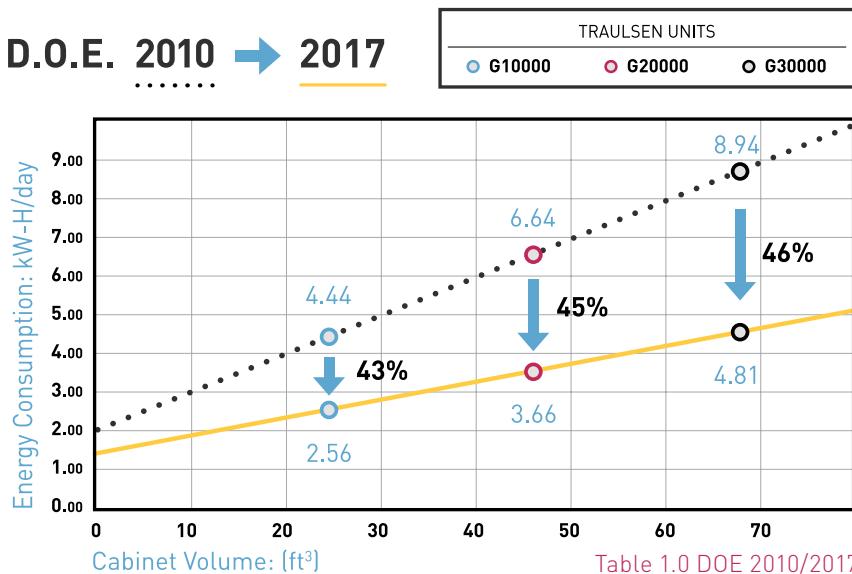


units are now equipped with a proprietary smart sensor that allows each unit to adapt to its unique environment. This allows maximum performance while using the least amount of energy.

### IMPACT ON TRAUlsen'S 1, 2, & 3-SECTION REACH-IN'S

- G10000 Energy Reduction 43% Required
- G20000 Energy Reduction 45% Required
- G30000 Energy Reduction 46% Required

D.O.E. 2010 → 2017



DOE has released two standards regarding Traulsen's self-contained products, DOE 2010 & 2017. The DOE 2010 standard covered the majority of our self contained products and many of our customers did not notice the standard changed. DOE 2017 has received so much attention because it requires the largest energy usage decrease since the agency started regulating commercial refrigeration. The 2017 standard requires over a 40% decrease in energy consumption from the 2010 Standard for Reach-In Solid Door Refrigerators, and goes into effect March 27, 2017.

**THERE IS A TRAUlsen DIFFERENCE, LET US SHOW YOU.**



# ENVIRONMENTAL PROTECTION AGENCY, S.N.A.P

## Phase out of R-134a and R-404A

### EPA'S SNAP OVERVIEW

The Environmental Protection Agency (EPA) manages the Significant New Alternatives Policy (SNAP). SNAP was formed when president Bush signed the Clean Air Act Amendments of 1990. The SNAP program initially focused on delisting ozone depleting refrigerants such as R-12 and R-502 because of their Ozone Depletion Properties (ODP). In 1994, SNAP approved R-134a and R-404A with an ODP=0 as acceptable substitutes for R-12 and R-502.

### MEETING YOUR NEEDS WITH TRAUlsen EXPERTISE.

All of Traulsen's product will be SNAP compliant ahead of the 2020 deadline. Here at Traulsen we have been developing refrigeration systems for over 75 years. We have a state of the art laboratory, and in the last year we have increased our lab's capacity by 100%. Our ISO certified labs are approved for NSF, UL, DOE, Energy Star, and R-290 testing. Traulsen introduced R-290 in 2016. We are currently developing new refrigeration systems with the new approved blended refrigerants. We know our customers' needs are diverse, so unlike many other manufacturers who are choosing either a path of blends or R-290, Traulsen will offer our valued customers a choice between blended refrigerants and R-290.

PHASED-OUT REFRIGERANT	GWP	REMOTES	SYSTEMS <2,200 BTU	SYSTEMS >2,200 BTU
R-134a	1430	2018	2019	2020
R-404A	3920	2018	2019	2020
PHASED-OUT REFRIGERANT	GWP	SNAP APPROVED ALTERNATIVES		GWP
R-134a	1430	R-290		3
		Blend R-450		601
		Blend R-513		630
R-404A	3920	R-290		3
		Blend R-448		1387
		Blend R-449		1400

Phase-out Deadlines & Approved Alternatives

Today, the SNAP program is focusing on reducing refrigerants with a high Global Warming Potential (GWP). SNAP has approved several new substitutes for high GWP refrigerants like R-134a and R-404A. These included R-290 (propane) and several other "Naturals" in 2011, and several blends, R-448/449 and R-450/513 in 2015. SNAP's final ruling calls for the phase out of R-134a and R-404A in most commercial refrigeration products in our category by 2020.

### SNAP'S IMPACT ON TRAUlsen PRODUCTS

SNAP compliance is mandatory for all commercial refrigeration manufactures and importers. For Traulsen equipment, R-134a and R-404A will be phased out of by 2020. All new remote refrigeration systems are to use a SNAP approved non-flammable blend by January 1, 2018. Self-contained medium temperature systems under 2,220 BTU's are required to use either a SNAP approved blend or R-290 by January 1, 2019 (2,200 BTU's typically cover 1 & 2-Door Reach-In's). The final phase requires self-contained medium and low temperature systems over 2,200 BTU's to use either a SNAP approved blend or R-290 by January 1, 2020. The SNAP program also requires foam blowing agents used in the equipment to be free of R-134a and R-404A by 2020.

PRODUCT	2016	2017	2018	2019
G SERIES	CHOICE			
COMPACTS	CHOICE			
SPEC LINE	134/404	CHOICE		
BLAST CHILLER	404	404	BLENDS	
HORIZONTALS	404	404	CHOICE	

Traulsen's SNAP Strategy

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