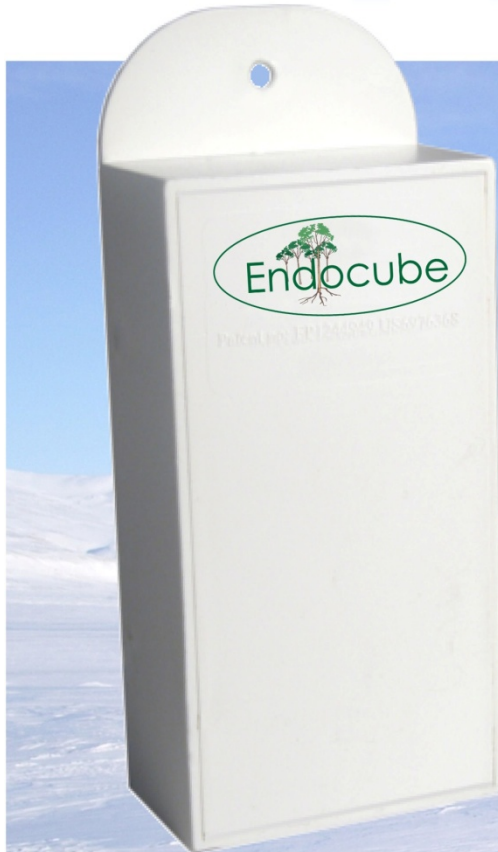


a breakthrough for commercial refrigeration



NSF Approved

Saving more than just money and energy

- Allows thermostat to monitor food temperature rather than air temperature
- 10 Year warranty
- No moving or electrical parts
- Extends life of equipment
- One time cost - save year after year
- Never needs replacing
- Save up to 33% on refrigeration energy cost



Nearly 20% of Global Energy is used for Refrigeration!

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Explanation of Endocube

Endocube is a simple device that fits over the thermostat probe on a refrigerator or freezer. Inside Endocube is a material that has been proven by the NSF to mimic the properties of food and beverages. Now, rather than responding to rapidly fluctuating air temperature, Endocube allows the unit to respond to food temperature instead.

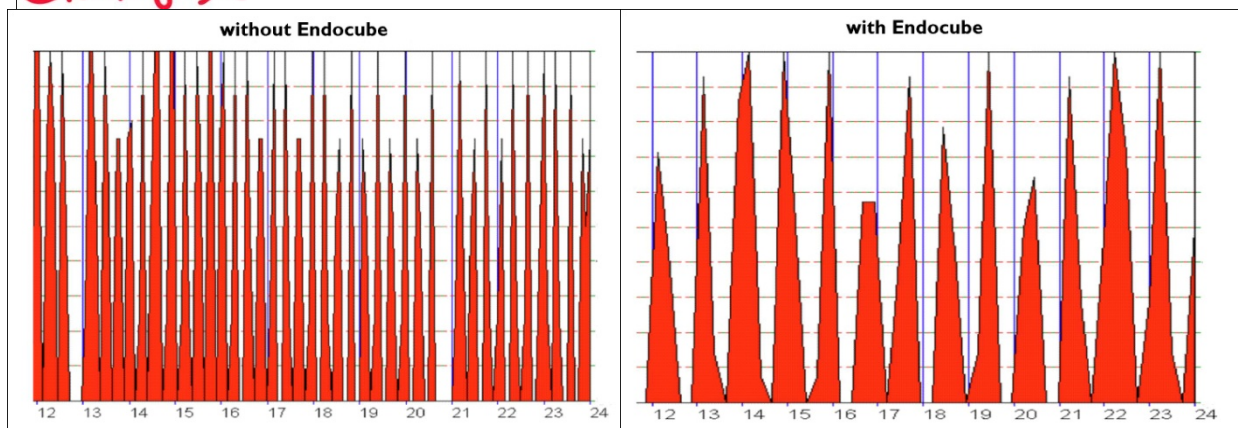
Endocube provides the existing thermostat with product temperature instead of air temperature, a more accurate measurement. This more accurate and stable temperature causes the compressor to run fewer, but much longer cycles. These longer cycles create "thermal inertia" as it cools food for a longer period of time (at a more accurate temperature), thereby increasing the efficiency of the unit.

So how does Endocube save you money?

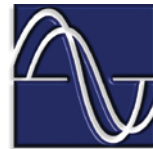
Because the compressor is cycling less often (up to 80% less), the life of the compressor is extended. Since it is also operating more efficiently less energy is used. Multiple case studies have demonstrated that refrigeration units use between 10% to 30% less energy with Endocube, while maintaining the desired temperature in the unit



Test results from a walk-in at a Chick-fil-A Restaurant



66% reduction in compressor cycles with Endocube with a 20% reduction in energy use.



**TOTAL
ENERGY
CONCEPTS**



NSF Protocol P235
Temperature mimicking sensors.
Temperature mimicking sensors are not intended to
monitor the air temperature of the refrigerated location in
which they are being used

Endocube is a temperature-mimicking sensor (TMS1) tested under protocol P235 by NSF International. It is designed for placement into refrigeration containing dairy, meat, ready meals and other food products meant to be maintained at or below 41°F. Endocube is designed to accurately reflect the temperature of food under refrigeration conditions, and warm more quickly than food products upon equipment failure. (1TMS is a separate, non-invasive device consisting of a food simulant material with a thermocouple or thermistor attached.)

NSF International's mission is to "protect you by certifying products and writing standards for food, water and consumer goods. As an independent, not-for-profit organization, NSF International's ongoing public health commitment is to encourage everyone to live safer."2

Under the performance requirements of Protocol P235, Endocube has passed the following tests5:

- The temperature indicated by endoCube is between ± 2 °F of the of the refrigerated food products 15mm below their surface during the normal refrigeration operations test. The purpose of the test is to ensure that Endocube accurately mimics the food product temperatures.
- The temperature indicated by endoCube is no more than 2°F lower and no more than +5° higher than the refrigerated food products during the warm up test, which imitates a refrigeration failure. The purpose of the test is for Endocube to indicate a higher temperature than the food products to provide advanced warning and allow users to take remedial actions.
- Endocube carries this NSF logo for Protocol P235:



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Under Protocol P235, Endocube is also required to adhere to standards ANSI/NSF 51 for Food Equipment Materials Requirements and ANSI/NSF 2 for Food Equipment Requirements for Design & Construction. Both of these standards ensure that the Endocube's design is easily cleanable and the materials used are not harmful when operated in the refrigeration environment.