THERMOTRON_®

PRODUCT DEWPOINT CONTROL



Prevent condensation on the product under test by using Product Dewpoint Control, which keeps the product warmer than the surrounding air.

Preventing condensation from forming on a product under test is one of the biggest problems encountered during environmental temperature and humidity chamber testing. Condensation on a product can impair or even destroy it – not what you want when testing prototypes that are both expensive and time consuming to make. To overcome this, it is essential to maintain a chamber air dewpoint below the product temperature, which can be difficult to do if chamber temperatures are ramping from cold to hot.

Thermotron developed Product Dewpoint Control (PDC) to overcome this problem. PDC enables products under test to stay warmer than the chamber dewpoint, preventing condensation from forming and potentially ruining the product. PDC uses algorithms programmed in the 8800 Controller to automatically adjust the chamber's heat and humidity systems to maintain a lower chamber air dewpoint than the product being tested.

Industries ranging from defense, electronics, aerospace, automotive, and telecommunications can utilize PDC to prevent expensive testing equipment from water damage due to condensation. It is important to note that the amount of water in the chamber at the start of the transition will influence the rise in the dewpoint as the chamber temperature rises.

PDC is simple and easy to use. First, users enter the desired dewpoint offset value in the system setup screen. The controller then uses this offset to limit the dew point of the chamber to the monitored product temperature(s) minus this offset. After attaching the thermocouple(s) to the product, the system is ready for testing.

Product Dewpoint Control is available for customers to add to their humidity chamber and can be retrofitted to existing test chambers, as well.

For more than 55 years, Thermotron has provided quality environmental test equipment. We've worked to establish a trusted reputation among our peers, and when people hear the name *Thermotron*, they have confidence in the testing of their own product. We've been building our name since 1962; now it's your turn.



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