

The Importance of Low Temperature Measurement in Pharmaceutical Products



As many of today's pharmaceutical products are more advanced and complicated, the need to control very low temperatures has quickly become a requirement.

Historically, most products (many in pill form) had a relatively short shelf life and were typically stored for short periods of time at refrigeration temperatures. Today, more advanced products are being used that require longer storage times; and many must be frozen to -70 to -90°C . To protect these products in long-term storage, reliable systems must be in place to keep the freezing temperatures at the appropriate levels.

The product inside these super freezers can be very expensive. So to avoid product loss and to maximize quality, having a temperature calibrator that can test these freezers is essential.

Our Solution

The JOFRA RTC-159 Ultra Cooler Temperature Calibrator has a low range of -100°C , making it the ideal instrument to calibrate the sensors in super freezers. It features accuracy to 0.06°C , stability to 0.03°C , and the patented DLC system, which brings unmatched temperature uniformity in the insert.

Using the autostep feature, the calibrator can be set to test each point, and then 5°C below and above the setpoint. This saves the user valuable time and brings consistency to each calibration.

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The RTC-159 Ultra-Cooler
Temperature Calibrator

Your Benefit

In addition to the super-low temperature applications, the RTC-159 can also be used for many other higher temperature applications in the pharmaceutical industry.

The full range of the RTC-159 is -100°C to 155°C, which allows it to be used to calibrate:

Super freezers -95 to -60°C

Freezers -60 to 0°C

Freeze Drying -80 to -60°C

Lyophilization -50 to 0°C

Autoclaves 110 to 135°C

Process Cooling -60 to 0°C

Dataloggers -80 to 150°C

Every RTC-159 also includes our JOFRACAL calibration software. With JOFRACAL, RTC calibrators can operate as a stand-alone instrument, using advanced calibration routines without the assistance of a personal computer. Once all calibrations are completed, the data can be stored on the user's computer to provide documentation of the tests.

For more information, including videos and data sheets, [please visit our RTC product page.](#)