

**“Impacting” the Respiratory Drug Delivery Industry**  
*Test Chamber Improves Accuracy of Inhaler Testing*

Holland, MI, April 19, 2010 – Thermotron has developed a state-of-the-art Impactor Test Chamber to improve accuracy and repeatability of inhaler and nebulizer product testing. By designing a sophisticated, dual-compartment environmental enclosure, Thermotron is able to precisely control temperature and humidity conditions. New developments in US & European Pharmacopeia testing criteria assisted in shaping this configuration.



The test chamber includes two separate, independently controlled test spaces: one compartment for conditioning the temperature and humidity surrounding the nebulizer or inhaler, and one for cooling the impactor. Inside the nebulizer/inhaler compartment, temperatures range between 0°C and 40°C and humidity ranges between 30% to 90% RH. Temperatures within the impactor test space can be controlled down to 0°C. An adjustable shelf in the impactor compartment allows interface with two different types of impactors: the Next Generation Impactor (NGI) and the Andersen Cascade Impactor (ACI). This versatility of testing various environmental conditions sets Thermotron’s Impactor Test Chamber apart from other test solutions.

Proposed revisions to US & European test standards highlight the negative effect evaporative loss can have on accuracy. Impactor related heat loss can cause evaporation, which reduces droplet size and results in artificially low particle size measurement. The Thermotron Impactor Test Chamber cools the impactor in a controlled environment and/or encloses the inhaler device in a temperature and humidity conditioned environment, reducing the potential for evaporation of aqueous droplets after aerosolization and improves accuracy. The chamber can host multiple impactors for pre-conditioning, potentially reducing time required for receiving FDA approval.

Thermotron representatives will be showcasing the Impactor Test Chamber from April 25-29, 2010 at the Respiratory Drug Delivery Conference in Orlando.

**About Thermotron**

Thermotron Industries, headquartered in Holland, Michigan, is North America’s largest, manufacturer of Environmental Test Equipment. Thermotron manufactures a wide range of test equipment and solutions to improve product reliability including: Environmental Test Chambers, Accelerated Stress Test Systems for HALT & HASS, Thermal Shock Chambers, Electrodynamics Electromigration Test Systems, Environmental Stress Screening Systems, Altitude Chambers, and more. Each piece of Thermotron equipment features in-house manufactured instrumentation specifically developed for easy-to-use programming, controlling, and monitoring the test equipment and product under test. The company’s highly skilled Service Engineers assists in systems start-up and on-site training, equipment repair, instrumentation system upgrades and retrofits, preventive maintenance, warranty service, ISO 17025 field calibration and certification.

For more information on Thermotron’s environmental test and instrumentation solutions, visit [www.thermotron.com/impactor](http://www.thermotron.com/impactor).



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