

Thermal Product Solutions Moving To Prove Efficacy of Dry Heat Sterilization on PPE and N95 Masks

New Columbia, PA – April 6th, 2020: Thermal Product Solutions, LLC (TPS), a global manufacturer of thermal-processing and sterilizing equipment, announced they are working with hospitals to prove the efficacy of their Gruenberg product line for dry heat sterilization on PPE and N95 masks for re-use.

Recent tests at a research hospital show positive results in the dry heat sterilization of masks, face shields, gowns and other PPE, with minimal deterioration of the material. During the process, masks were heated to a specified temperature for a calculated period of time that resulted in sterilization of the material. After the sterilization process, fit tests were performed on the masks that passed filtration efficacy, structural integrity and mask fit. TPS is continuing to work with facilities to further confirm test results.



Picture 1: Gruenberg Tabletop Sterilizer

The Gruenberg sterilizers utilize convection airflow and dry heat for the process. Heat is absorbed by the item being sterilized for a period of time until it reaches the proper temperature needed to destroy microorganisms and achieve sterilization. Dry heat sterilizers range in size from small tabletop models (Picture 1) starting at 1.25 cubic feet (cf) to large truck-in models (Picture 2) offering 1,000cf of sterilization capacity. The larger truck-in unit is estimated to have the capacity to sterilize 15,000 to 18,000 masks per day based on a cycle time of roughly one hour.



Picture 2: Gruenberg Truck-In Sterilizer

Gruenberg's smaller dry heat sterilizers feature a unique design where the process chamber is sealed throughout the entire cycle, containing any airborne particulates and sterilizing them. Larger chamber systems are easily customized and feature intake and exhaust HEPA filters and offer several door seal options for peace of mind.

"We are dedicated to finding methods that aid in protecting the health and safety of all those serving on the front lines during the COVID-19 pandemic. Our dry heat sterilizers have been used for decades in the decontamination and sterilization of all forms of microbial life and it only made sense to begin testing their efficacy on sterilizing PPE for hospitals and emergency personnel. We are looking to find additional testing partners quickly and ultimately receive FDA approval to help fight the COVID-19 spread."

– Greg Jennings, President & CEO



About TPS

Thermal Product Solutions ("TPS"), is a leading American manufacturer of industrial ovens, furnaces, pharmaceutical sterilizers, and environmental temperature cycling and stability test chambers. TPS is a global leader in thermal processing products and test solutions with brands including Baker Furnace, Blue M, Gruenberg, Tenney, Lindberg, Lunaire, MPH, and Wisconsin Oven. For more information on equipment solutions from TPS visit the website at www.thermalproductsolutions.com.