

A Multi-Prep Laboratory Homogenizing System

Problem: There are a few important concerns an end-user encounters when homogenizing. Complete sample homogenization is the goal for each homogenizing process; however, many end-users are faced with the difficulty of achieving consistent sample breakdown of multiple samples in a timely manner coupled with a large concern of cross-contamination. Even further, when you have a lot of samples to process per day, it becomes a very time-consuming and labor intensive task as well as tedious nature to stop and clean a generator probe between each sample process. Typical disposable plastic generator probes are not the answer either because of their inaccurate homogenizing results, and most labs can't accommodate or afford large automated systems to address their concerns.

Solution: The Multi-Prep Laboratory Homogenizing System is one product that can simplify the labor and time of the typical homogenization process and to make it easier for the end-user.

This particular system can process up to six samples at once in a quiet, compact, and timesaving unit while providing accurate processing speed during the homogenization cycle. With the Multi-Prep's small footprint similar to a micro-centrifuge, it takes up little counter space and fits in most flow cabinets and fume hoods.

The system allows for precision sample breakdown and repeatability with limited concern of variations in sample size or viscosity, which frees up a large amount of valuable lab time. A typical run time of six samples is done in seconds and with a maximum ability to process six samples per cycle can result in 300 homogenized samples per hour, which can provide significantly higher laboratory productivity.

By automating this process, users can also achieve more consistent results compared to traditional non-automated and standard manual homogenizing. Homogenizer protocols vary within any lab and the Multi-Prep's programmability function can store up to 10 different homogenizing programs in memory. For new homogenizing trials or quick-runs, the system can be used in the manual mode for individual sample processing. All processing is contained in a sound-abating enclosure with its rounded clear polycarbonate door for a full view inside. All program control can be done and seen on its ergonomically placed keypad and LCD screen.

The unique Multi-Pack of Multi-Prep Probes eliminates cross-contamination as well as the time consuming need to stop and clean a generator between samples because a clean Probe is used each time. Probes such as these are known as the better alternative to disposable plastic generator probes, because the reusable Multi-Pack Probes are made from 316 Stainless Steel and PTFE. This design provides the ability to process more difficult samples, including tough tissues and frozen samples. Their infinitely reusable nature means they can be used again and again. When homogenizing is complete, the Multi-Prep Probes can be sterilized by any cleaning method, including flaming and autoclaving. Furthermore,



◀ *PRO Scientific's Multi-Prep Laboratory Homogenizing System.*

its interconnecting design with the Multi-Prep System, through its self-engagement and disengagement, takes away the hassle of typical manual hand-use.

Another added benefit of systems like the Multi-Prep is that there is no need to alter or change the tube continuously being used in a lab's research. Whether processing in small tubes or larger centrifuge tubes, the system can accommodate tubes from 5ml - 50ml. Sample tube integrity is also maintained with the company's removable Spider Tube Rack design that incorporates easy tube replacement. This oscillating tube rack can perform 60 oscillations per minute for enhanced breakdown performance.

Homogenization is a basic but vital component of most research. New homogenizing methods are constantly evolving and moving toward quicker and more efficient processing that can be replicated again and again. The systems like the Multi-Prep take that advancement a step further by raising laboratory productivity and significantly increasing efficiency.

Learn more at <http://www.proscientific.com>