



REAL-TIME CONTAINMENT VERIFICATION SERVICE

OVERVIEW

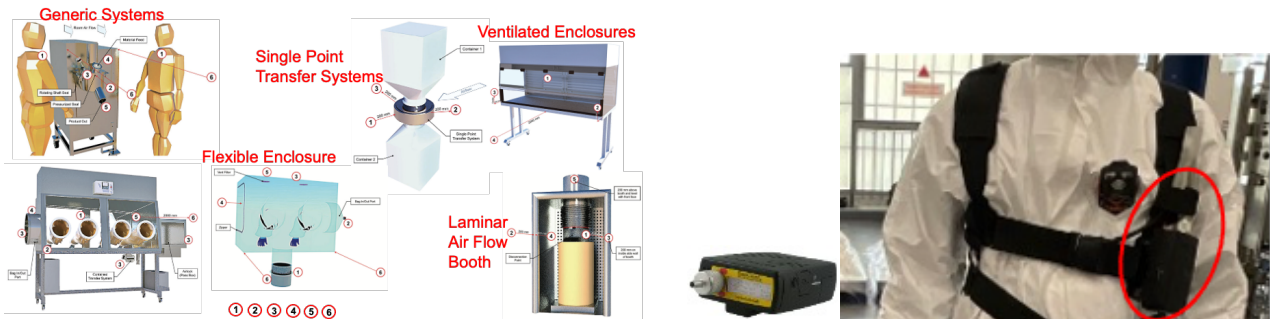
Turn-key REAL-TIME CONTAINMENT VERIFICATION SERVICE aka REAL-TIME SMEPAC SERVICE.

Doing Containment verification is a long and expensive process. Now Nanozen has created a real-time version that will drastically cut the time and expense of testing, lowering testing cost significantly, and cutting production dead-time drastically.

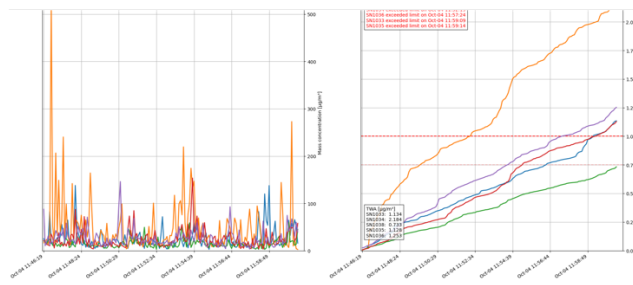
Nanozen uses its patent-pending Real-Time Containment Verification method, which includes a special version of its DustCount, Nanozen special technique, and Nanozen special software to provide immediate visibility of the results of testing, and the ability to fix issues on the spot and complete successful testing in days instead of weeks or months.

FEATURES AND BENEFITS

- ❖ Turn-key service for Drug manufacturers and Pharm Equipment Vendors. We bring in all the equipment and do the testing.
- ❖ Uses the familiar SMEPAC guidelines for Testing. Location of monitors, duration of tests, number of repetitions.
- ❖ Each SMEPAC pump/filters location also has a special pharma DustCount real-time monitor. (see diagram)



- ❖ High sensitivity ng/m3 real-time DustCounts, tests to high OEB levels and low OELs. No more “below detection” results.
- ❖ Real-time graphical presentation of results and visual alarms. See the results and fix issues immediately. (See diagram)



10 Monitors real-time data

Accumulated concentration

- ❖ Optional Video/data synchronization feature to see what was causing problems.





- ❖ Watch the mass concentration and particle size distribution graphs for each of the DustCount test units every few seconds.
- ❖ Ability to stop the testing, review the video/data, and explore solutions, fix issues on the spot, and restart the test process.
- ❖ Side-by-side testing allows customer to send in only the known successful filters for validation.
- ❖ Nanozen provides a complete report on the testing and results.

CONTAINMENT VERIFICATION SERVICE PROCESS

1. PREPARATION

Up Front test plan mutually agreed and signed off.

2. SET-UP

Nanozen brings all required equipment and sets up and tests.

3. TESTING

Nanozen operates the Real-time DustCounts, Customer operates their containment equipment and processes.

4. REAL-TIME RESULTS

Special software gathers the data from all real-time devices + video and processes it to provide real-time graphical results.

5. FIX ISSUES ON THE SPOT

If equipment or processes causes leaks the testing can be stopped in order to explore solutions to issues.

Once the issues are solved the testing can be restarted to provide a clean run.

This allows a single CV test to complete the process.

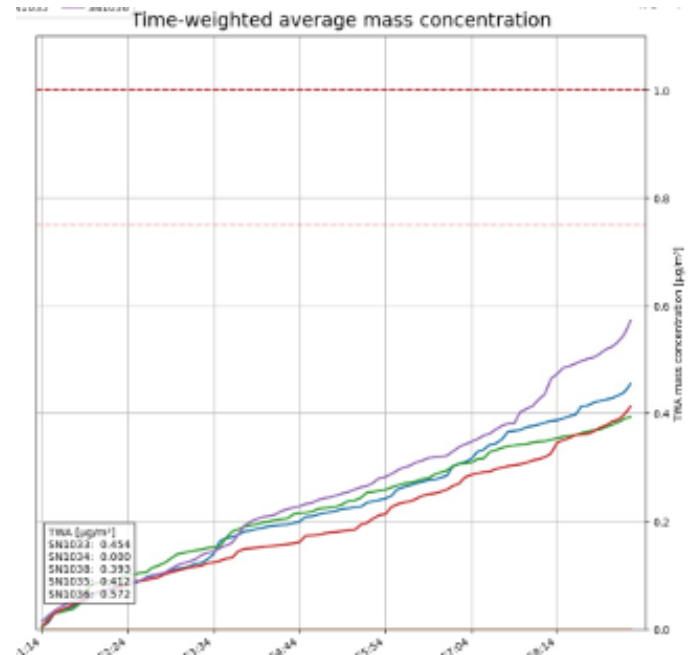
6. REPORT

A standard report is provided at the end of testing.

7. SPECIFICATIONS

OEB 3 to OEB 6, ng/m³ sensitivity, .5 um and up.

Real-time mass concentration and particle-size Distribution



After on-the-spot fixes this unit concentration readings are all below the red dotted line and the device passed!!!