

DustCount 8899 – Performance Analysis

Overview

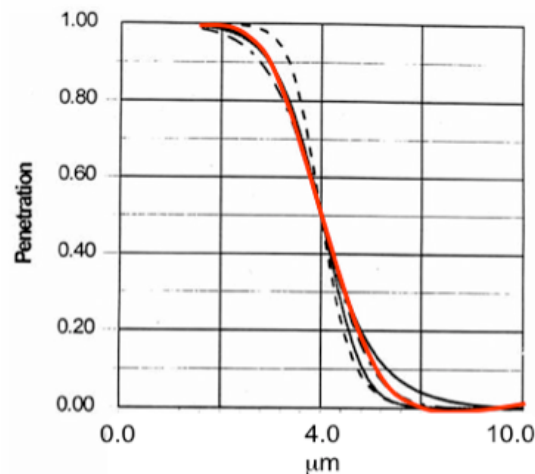
The DustCount 8899 is a real-time Personal Wearable Particle Monitor that provides the features required to support real-time personal aerosol monitoring.

The product combines the advantages of real-time dust monitoring with the ability to do the standard method all in a compact, lightweight package.

It is important to validate the DustCount Product against ideal

Input Curve

The input curve of an aerosol monitor must meet the standard for the dust fraction that it is measuring. The following graph shows the comparison of the DustCount 8899 with the standard NIOSH curve.

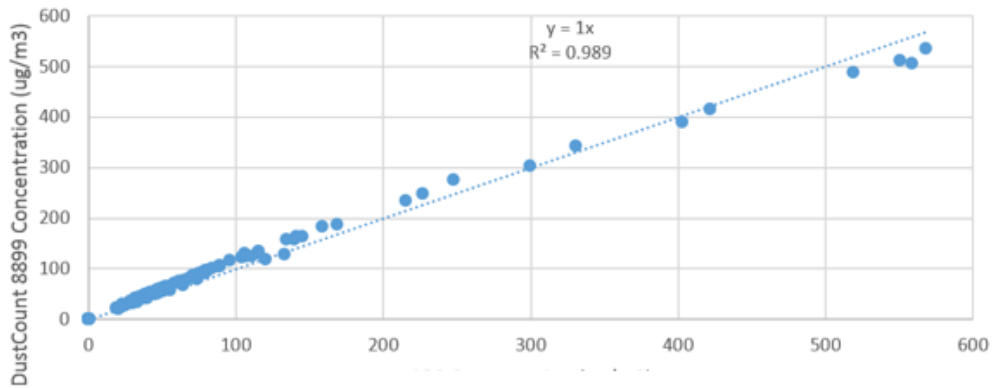


ISO/ACGIH/CEN – 1995, reference P.A. Baron (NIOSH/DART)

The DustCount tracks the NIOSH curve to within the required 5% envelope at any point on the curve.

Straight Line Concentration Performance

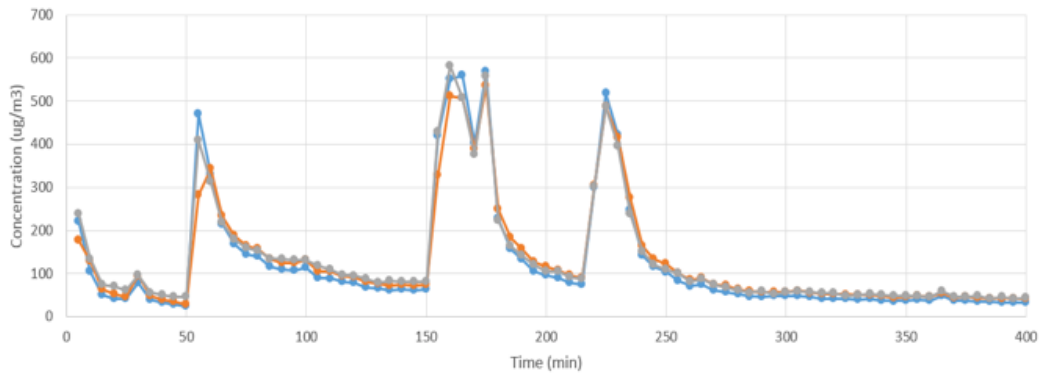
In this test the DustCount 8899 is tested at a fixed respirable particle size with varying concentrations as measured by an industry standard, highly accurate lab test device.



The DustCount product shows close correlation to the performance of the highly accurate Lab Test device.

Varying Concentration Performance

Next the DustCount is tested under varying concentrations over time at slow changing rates and fast changing rates side by side with 2 other highly accurate real-time dust monitors.



Clearly the DustCount performance is very close to the other industry standard Dust Monitors.