LA-960 Result Interpretation

Sample Name, Material, Lot Number: Assigned by operator ID, Data Name: Assigned automatically.

Circulation Speed: Pump recirculation setting.
Ultra Sonic: OFF if not used, time in sec and level if turned on.
Agitation Speed: Stirrer speed in the sample reservoir.

Transmittance (R) & (B): The percentage of the red laser and blue LED power passing through the sample.

Sample Data Acquisition Times: Number of times the scattering pattern is collected. Default 5000 = 5 seconds.

Refractive Index (R) & (B): Real and imaginary R.I. of sample for red and blue light sources. Also, the R.I. of the dispersant.

Distribution Base: Volume, Area, Length, or Number based distribution calculation. Default for laser diffraction is volume.

Iteration Number: How many times the algorithm is applied before presenting the result. A typical value is 15.

Median Size: 50% of the population lies above and below this diameter. Also known as the D50.
Mean Size: The volume mean diameter. Also known as the d(4,3).
Mode Size: The peak of the frequency distribution.

Diameter on Cumulative %: 10% of the population lies below the D10, 90% below the D90. Can be displayed as % above.

Std. Dev.: Standard deviation for the frequency distribution.
CV: The coefficient of variation for the frequency distribution.
Graph: Typically plotted with Diameter in microns on the x-axis, the y-axis is q%, the percent in a given histogram channel and the right y-axis shows the cumulative % above or below a point on the cumulative curve, if plotted.

Span: OFF if not used, default value is (D90-D10)/D50 if on.

Table: Typically in columns showing the channel number (No.), the smallest size in a given channel in microns (Diameter μm), the percent in a given size channel (q%), followed by either the % below this channel (UnderSize %) or the % below this channel (OverSize %). Each size channel is defined by the smallest size and the largest size - shown in the net channel number. For example, the first channel is between 0.011 and 0.013 μm. The default number of size channels is 93, but may be adjusted by the operator. Note: The table, graph and other characteristics of the result can be customized by the end user to meet specific guidelines.