

Proving the Upper Size Limit of LA-960

Introduction

Laser Diffraction is one of the most common particle size analysis techniques because it has an ultra-wide size range. HORIBA can lay claim to the feat that the LA-960 measures the widest particle size range. The LA-960 measures as small as 10 nm to as large as 3,000 μm using the FlowCell system. To prove the LA-960 upper size limit, 2,900 μm (2.90 mm) plastic beads, shown in Figure 1, were measured on the FlowCell system using de-ionized (DI) water as dispersant for analysis.

Analytical Test Method

Instrument: LA-960 Laser Diffraction Particle Size Analyzer

Sample: Monodisperse 2.9 mm Plastic Beads

Dispersing medium: DI water



Figure 1: Size of a plastic bead measured by caliper

Results

The overlay of three measurements of monodisperse plastic beads samples are shown in Figure 2. The mean diameter of this sample was 2,898 μm (2.898 mm). Results were generated based on the volume distribution. The maximum iteration number was used because the sample was monodisperse.

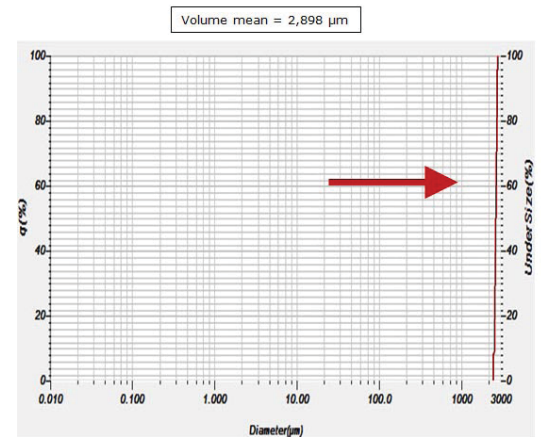


Figure 2: Nominal 2.90 mm plastic bead size result on the LA-950