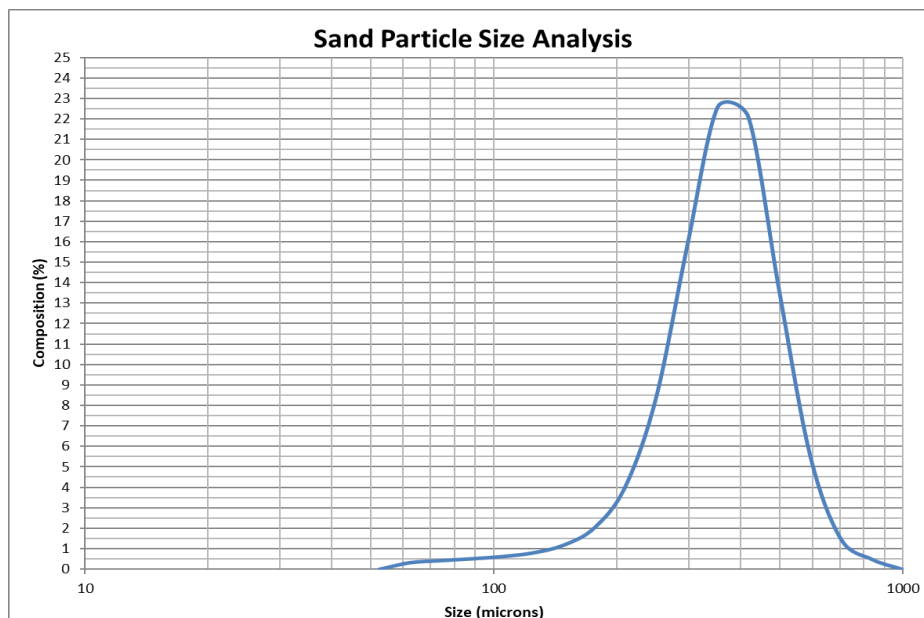


Vacu-Valve Case Study

Sand

Aerodyne Environmental tested sand in our test lab with a GPC-08 and 8" Vacu-Valve. The sand had a particle size distribution as shown in the graph below. Its mean particle size was 355 micron with a bulk density of 108 lbs/ft³.



For the first test, No Spring Resistance - The Vacu-Valve was under -3" W.C. pressure and the springs were completely loosened. This resulted in approximately 8 lbs/min of sand flowing through the valve.

Here is [how the Vacu-Valve operated under no spring resistance](#).

Here is [another view showing the Vacu-Valve under no spring resistance](#).

For the second test, Half Spring Resistance - The Vacu-Valve was again under -3" W.C. pressure but the springs were halfway tightened. This resulted in approximately 10 lbs/min of sand flowing through the valve.

Here is [how the Vacu-Valve operated with half spring resistance](#).

* Please note that flow rates are based on multiple factors in the process, including but not limited to cyclone and valve size, pressure drop through the cyclone and valve, spring tension, particle size distribution, particle geometry, and material density. This test is a representative test, and results for your application may be different based on the above conditions.