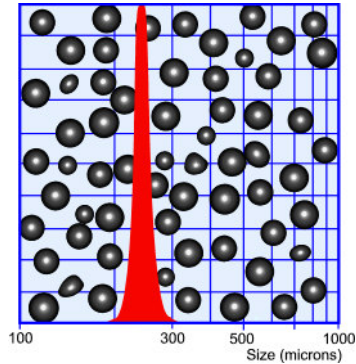




Pore Size Measurement of Sand Screens Using Calibration Beads

**1. Precision Glass Microspheres**



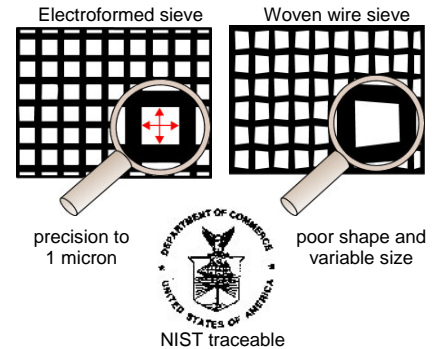
Prepare 20 narrow size range standards from 20 – 600 microns.

**2. Accurately subdivided**



Identical sub-samples are prepared for each sand screen test.

**3. NIST Traceable certification**



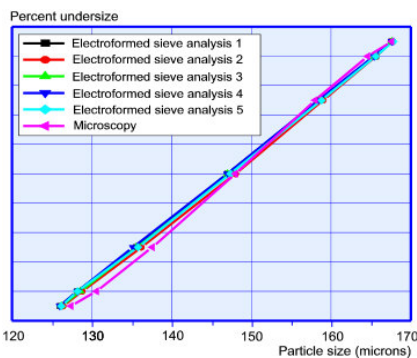
precision to 1 micron

poor shape and variable size

NIST traceable

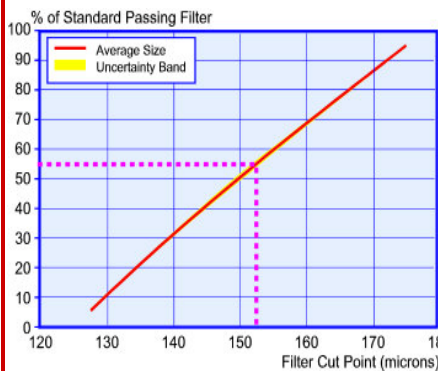
Certified to NIST using calibrated precision electroformed sieves.

**4. Precision measurements**



Good subdivision ensures highly repeatable certification.

**5. Calibration graph**



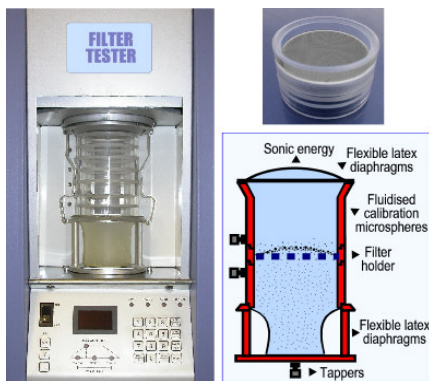
The cut point is determined from the % of beads passing the screen

**Screen sampling**



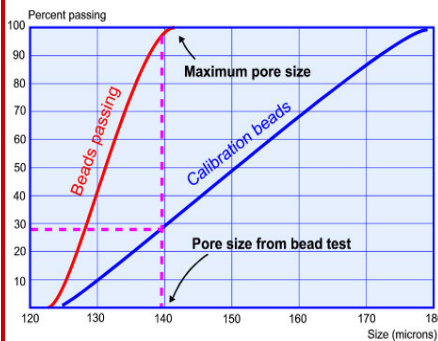
Cut out 6 x 3 1/8" discs from the length of the sand screen element.

**7. The beads in action**



Fully automatic sand screen tester gives highly repeatable results.

**8. Pore size definition**



The cut point is the size above which 97% of the particles are trapped by the filter, and is within 10% of the maximum pore size in the filter.

**9. A typical set of results from a test certificate**

Initial Weight	Weight Retained	% Cut	Passing point
0.349g	0.279g	20%	135µm
0.341g	0.242g	29%	139µm
0.364g	0.267g	27%	138µm
0.375g	0.293g	22%	135µm
0.342g	0.260g	24%	136µm
0.361g	0.281g	22%	135µm

This latest technology offers unprecedented precision and confidence in the final performance.