Coating small objects and filling small bores using particle generators

Coating and filling bores and long tubes using particle generators is very easy to accomplish. Using a Sonaer containment cell and particle generator, small bores, tubes and small areas can be either filled or coated with micron size particles. The components needed for this application include the following:

1. Particle Generator, model 241, 24M, 244, 247 etc.
2. Containment Cell, model SC241SS etc.
3. Schedule 40 "T", 1.5" pipe
4. Tube for introducing an air flow, gas flow, 2 cfm or less.
5. Reducer fitting to focus particles into a small pipe or tube.

**Operation:** As particles are being generated, it is best to move the particles as they are being made, so that larger particles are not fabricated by several particles connecting to one another. Larger particles fall to the bottom of the cell for reprocessing due to the increase in weight. Air or gas is injected through a tube that is more than halfway past the centerline of the containment cell, mounted into a “T”. As the gas is injected, particles are picked off the area above the particle generator and moved, into a reducer and finally through a small diameter tube. This tube can be used to direct particles up, down or sideways onto objects needing coating. This same procedure can be used to fill particles inside of long tubes.