

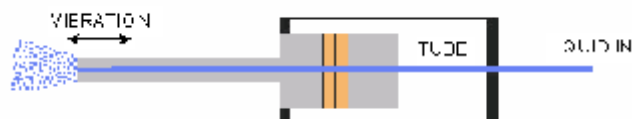
Ultrasonic Atomizing

Make fine particles from liquids



Flow Through Probe Design

Three different tip configurations are offered. A flat tip for focusing particles, a bell shape tip for spreading particles over a wide area and a radial tip for coating bores by spraying through the side of the probe.



Atomize Liquids

Sonaer's ultrasonic atomizers come standard with flow - through design for introducing liquids from the back of the probe. Without the use of air pressure, liquids are pumped through the center of the probe, where it is atomized into fine particles. The particles are then used in processes either for coating, burning, moisturizing or other applications that require particles made from liquids.

30K50ST



130K50T



Sonaer ultrasonic atomizers are available in frequencies starting from 20kHz, up to 130kHz. Sonaer ultrasonic atomizers are easy to clean, maintain, do not clog and have no moving parts to wear out.

Atomizer transducers have wetted parts made from Titanium, Stainless Steel and Teflon, atomizing many different types of solutions.

Sonaer high frequency probes make the finest particle size, whereas lower frequency probes can handle a greater flow of liquid, making it useful in coating large objects.

HOW IT WORKS

In the center of the probe are piezo ceramics which convert the electrical signal to mechanical vibration. This vibration is amplified by the step that forms the tip of the probe, and is a reflected back toward the piezo ceramics, mixes with outgoing waves, creating standing waves. These standing waves cause a pumping action that sucks liquid toward the center of the probe. With the Sonaer atomizer probe design, liquid will spray continuously and will not flow back into the probe from these standing waves, creating a sudden spurt of liquid, called "flashing." Low flow rates can be achieved with all Sonaer atomizer probes with our center floating tube design. A smooth operating pump is recommended for greater control such as a, gear, syringe, positive displacement type.

Connection at the rear is a 1/8" diameter Swage lock, allowing connection of various fittings, tube materials and manifolds for introduction of multiple liquids and gases.

Sonaer's ultrasonic atomizer generator is small in size measuring 9" by 8" by 3 1/4". The front of the generator has a membrane key pad for entering information and a LCD display that provides the user with the performance of the atomization. At the rear of the generator is the input power, connection to the probe and external enable / disable function used for automated processes.

The Sonaer ultrasonic generator can be ordered with multiple probes, up to six. A menu will allow the user to select the probe frequency for the application.

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