MPInterconsulting

ULTRASONICS - SONOCHEMISTRY - INNOVATION

EXTREMELY LARGE FLOW RATE ATOMIZING: ≤1000°C

Solder Alloys Atomizing

Brazing Alloys Atomizing

Liquids Atomizing

Main Web Site: http://www.mpi-ultrasonics.com
Download Server: http://mastersonic.com
Email: mpi@bluewin.ch

MMM, Multifrequency and Wideband Tubular Atomizing

Movie Files: Click over the movie-frame area and play the movie

Solder powders production: Type 3, 4 and 5

Atomizing of all kind of liquids and liquid metals until 1000°C

Flow rate in the range of 500 liters or much more / per hour

Applications

- **Ultrasound is an excellent method of atomizing fluids into very small particles, thereby greatly increasing the liquid material surface area and allowing an efficient air/gas mixing process. While this is known technology we are specializing in development of ultrasonic systems that allow this technology to move form the lab bench or small systems to high volume industrial applications. Based on our proprietary MMM ultrasonic generator technology we have the capability to make large arbitrary shaped (un-tuned) mechanical elements vibrate at ultrasonic frequencies. Normal ultrasonic generator systems cannot make the transition because they rely on carefully tuned mechanical elements of fixed size and shape that limit the scope of their use large scale applications.**

- **Our MMM systems allow us to make a wide range of atomizing elements. Some of our developments have included Solder Powder manufacturing and Ceramic-composites Bead manufacturing. In our lab we have experimented with a number of sonotrodes, vibrating elements, and different liquids, operating from very low temperatures until temperatures significantly higher than 1000° C.**

- **Industrial fluids atomizers & gas mixing (air conditioning, semiconductor technologies…)**
- **Water & fuel atomizers**
- **Liquid alloys atomizers & solder atomizers**
- **Incineration of waste and dangerous liquids by atomizing**
- **Large volume humidifiers & dust removal**
- **Air and water filtering, purification, decontamination & sterilization (nuclear, included)**
- **Micro-encapsulation, coating, surface impregnation**
- **Food and Pharmaceutical applications (surface decontamination)**
- **Electrochemistry & Sonochemistry process integration (nano technologies)**