

**The Power of
ResonantAcoustics®
and
The Throughput of
Continuous Processing**

Continuous RAM Processing



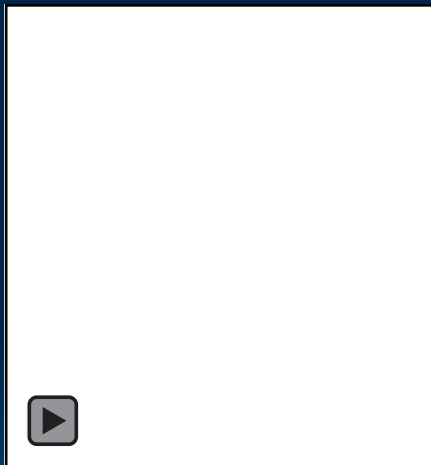
- Continuous Module Adapts to both RAM 5 and RAM 55 Platforms
- Customized Continuous Flow-Through Modules for Specific Client Processing Needs



RAM Solid-Solid Mixing

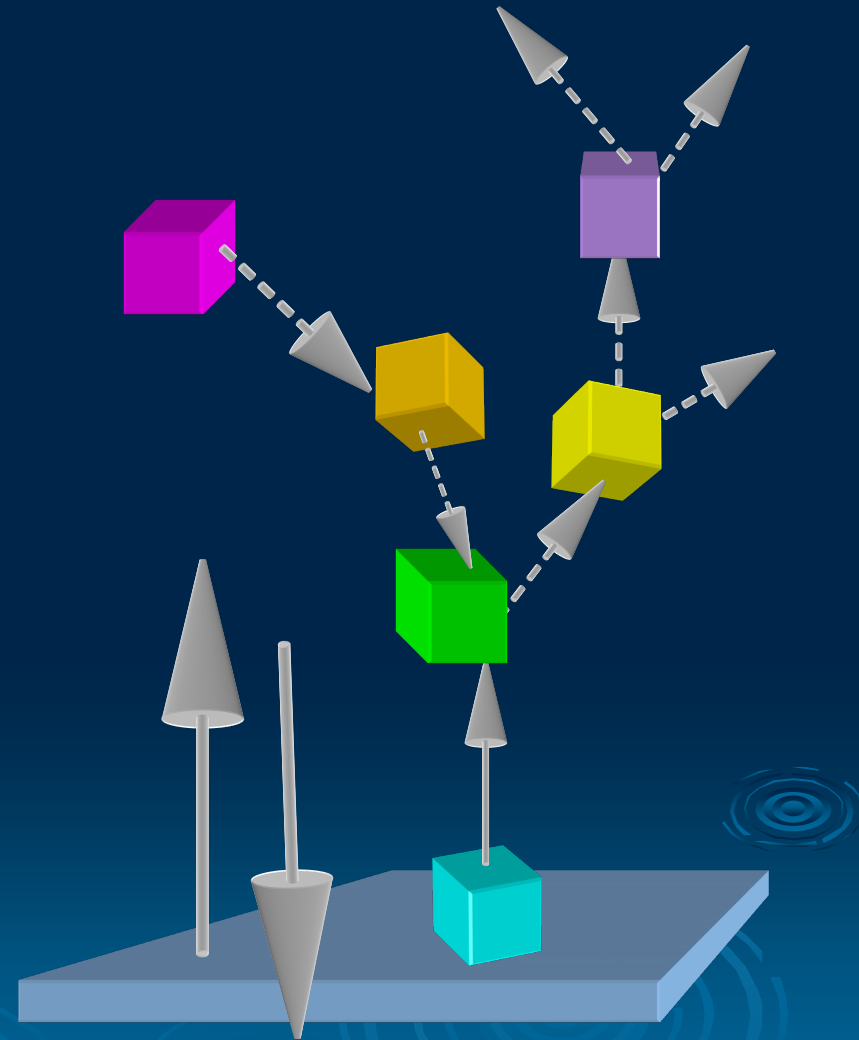


- Collision Driven Inter-particle Redistribution
- Collision Intensity Increases with Higher Acceleration

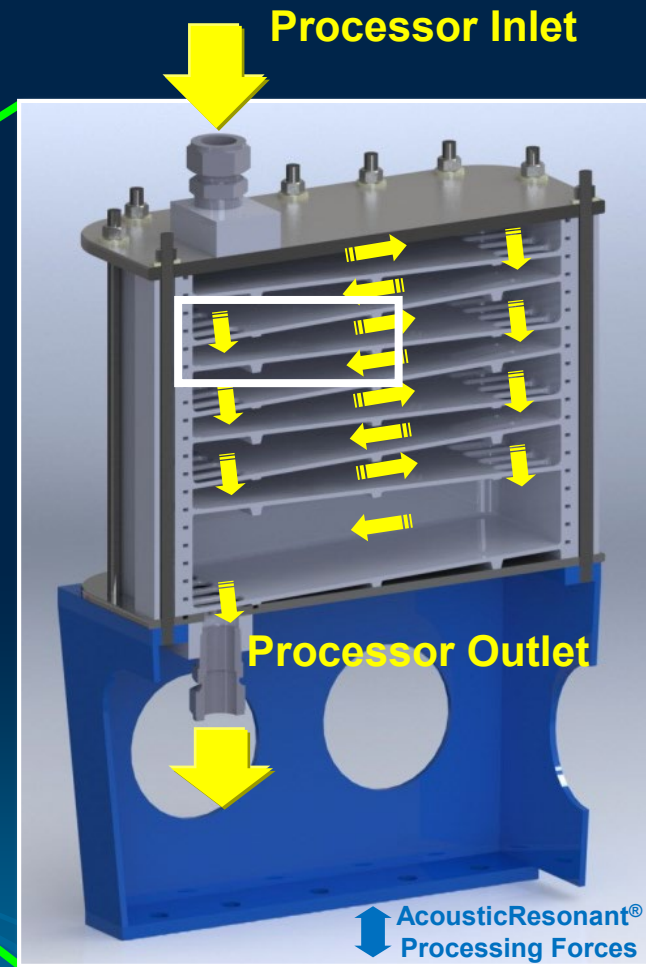
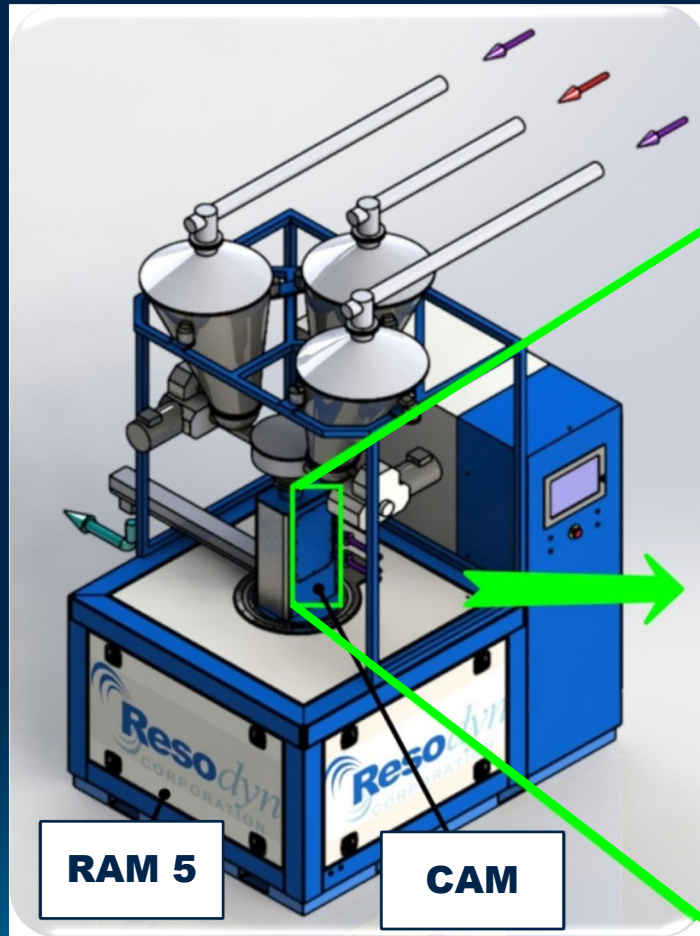


6 mm pellets, 1/60 sec per cycle

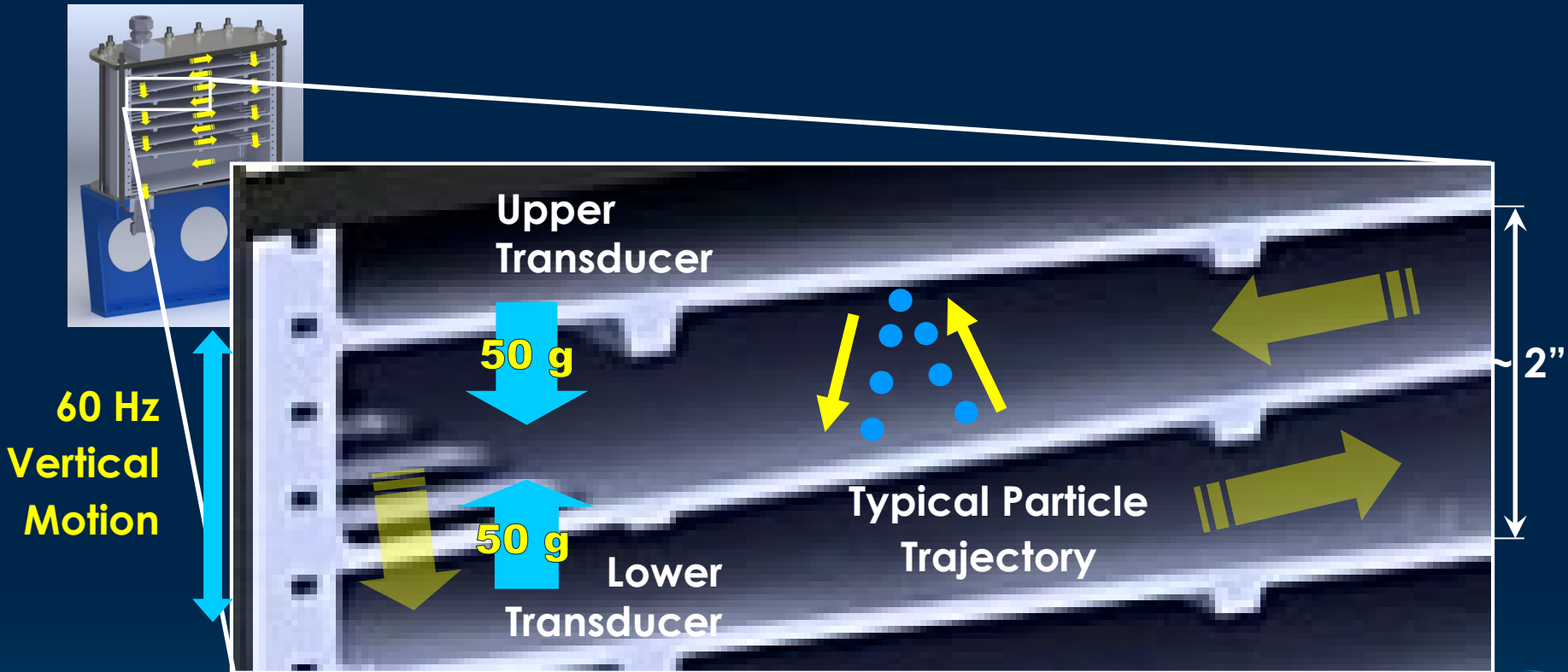
If you are using an Apple device, or otherwise unable to play Flash video, please visit <https://youtu.be/01MnABxsFtY> to see this video content.



Continuous Acoustic Mixer (CAM)



Continuous Acoustic Mixer (CAM)



Chaotic Particle Motion

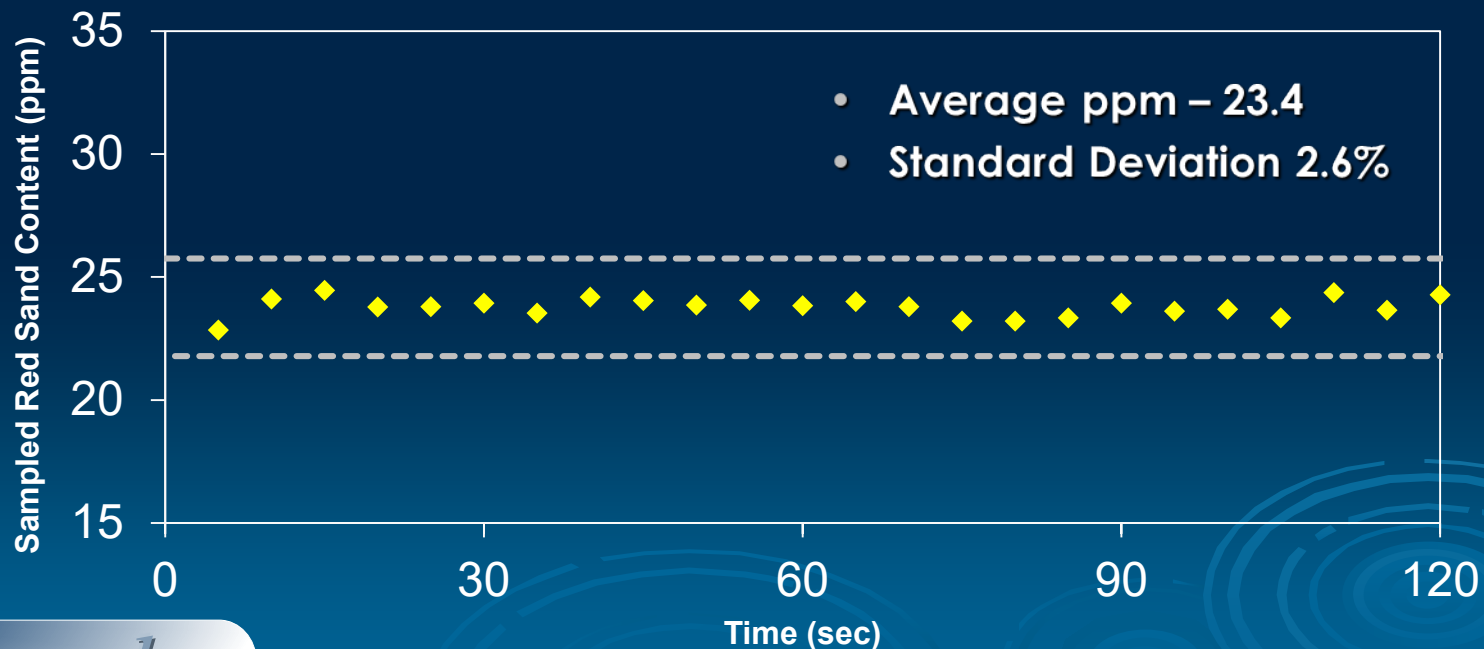
- Upper and Lower Acoustic Transducers Create Intense, Concentrated Redistribution
- Collisions Increase with Acceleration

Continuous Acoustic Mixer (CAM)

Solid-Solid Mixing Tests

■ Uniformity of Output – sampled at 5 second intervals

- White sand: 7.0 lbs/min continuous feed
- Red sand: 0.7 lb/min (260 ppm) continuous feed
- 30 g acceleration



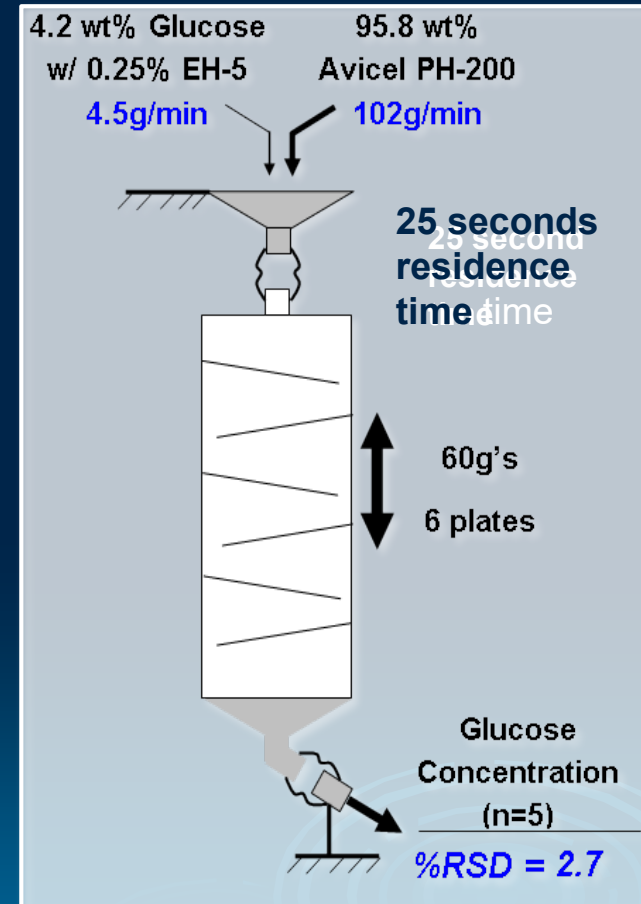
CAM Mixing Performance Test



■ Method

- 210 μm crystalline powder input -
102 g/min
- 100 μm powder input -
4.5 g/min
- 60 g acceleration
- 25 seconds residence
time
- Collected samples from exit
orifice

Continuous Mixing



RAM Industrial Mixer Platforms



RAM 55



RAM 5





Production Capabilities

- CAM Anticipated Processing Rate is Dependent Upon:
 - RAM platform product payload capacity
 - Residence time for mixing to occur

RAM 5	RAM 55
36 kg payload	420 kg payload
100 g acceleration	100 g acceleration
1 minute residence time	1 minute residence time
2,200 kg/hr processing	25,000 kg/hr processing

- Lower acceleration requirements for specific material may increase processing output rate