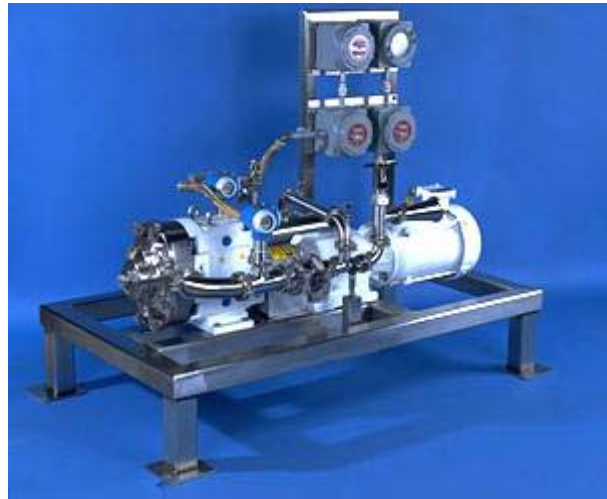


Sonolator Application Card – Fumed Silica Dispersions



The **Sonolator**[™]
High-Pressure Ultrasonic Mixing and Homogenizing Systems

(203) 375-0063
www.sonicmixing.com

Sonic's Sonolator high-pressure homogenizing systems have been used extensively to disperse fumed silica into various components such as resin, glycol, water and more to produce paper and film coatings, defoamers, binders, cosmetic thickening agents, and more. Depending on whether a liquid is polar or non-polar, shear will help either decrease or increase viscosity. In many applications, the fumed silica is used as a thickening agent and the degree of homogenization will determine just how well the silica particles bond to one another to form an effective lattice network.

Sonic's Sonolator very effectively disperses and homogenizes the silica/liquid mix, and usually at much lower pressures than the 5000 psi often suggested. The Sonolator, for example, will disperse silica into polyester resins, generating the desired thixotropic index while eliminating gel agglomeration, at only 500 psi! Our Sonolator systems use a PD pump to force the silica mix through a specially engineered Orifice, generating pressure and cavitation. The mix then exits the Orifice at extremely high velocity, striking a Blade in its path that helps generating excessive cavitation. The fluid acceleration, cavitation and pressure work together to significantly reduce silica agglomerates, thereby improving thix index and product stability and appearance.

Call Sonic to discuss your application needs further. We offer Complimentary Lab Testing so you can see how well our Sonolator will work for you!

