SpeedMixer™

Above: - 600gm / 1ltr SpeedMixer™
DAC600.2 VAC-P with Vacuum Degassing Capability

DAC SpeedMixer - What is it?

The DAC SpeedMixer™ from Hauschild Germany, is a safe, quiet laboratory-sized instrument for the rapid mixing and grinding of materials that would otherwise require large amounts of time and / or effort to mix and / or grind / mill.

How does it work?

*The DAC SpeedMixer™ works by rotating a high speed mixing arm in one direction while the mixing basket rotates in the opposite direction - hence the "**DAC**" name - **D**ual **A**symmetric **C**entrifuge. This combination of emense forces opperating in different planes enables incredibly fast mixing, whilst the precision engineered construction of each instrument prevents vibration to to perfect balance that allows an amazingly quiet operation.*

What can it do?

With this instrument, the typical mixing time for fully dispersing a colour paste into a Silicone / MMA / PU sealant is less than 10 seconds. Mixing of fumed silica or precipitated chalk silicone formulations 8 - 14 seconds will normally suffice. These are both operations that would otherwise require up to 3 hours or more of mixing time using a traditional overhead mixer with an impeller blade. A DAC SpeedMixer™ allows mixing or quantities from 1ml upto 1 litre. Mixing with a DAC SpeedMixer™ does not incorporate any air, simultaneous removal of air bubbles occurs during our mixing cycle. Additional mixing time will removes more air from the blend, yielding an air free product when the mixing process is finsihed. SpeedMixer instruments are also available with integral Vacuum Degassing capability as shown on the left here.

What materials can it mix?

The DAC SpeedMixer™ is ideal for 1 and 2 component silicones, polyurethanes, polysulfides, acrylics and a wide range of other materials. There are certainly a great number of products not included in this list that can benefit from the use of Hauschild's 1974 DAC SpeedMixer™ technology. With disposable PP Mix Cups, eliminate concern of contamination in colour master batches, pharmaceutical products, or other sensitive materials. The SpeedMixer™ has no mixing blades or other components that require cleaning. Use metal autoclavable re-usable containers or the less expensive disposable cups (recommended where cross-contamination is of concern). SpeedMixer™ technology also allows for higher filler loadings than conventional overhead mixers, e.g., >25% fumed silica into silicone. As everything is contained inside a sealed container there is also no hazard to health.

How much can it mix?

Over several sized models support mixing weights range from 1 gram to 10kg's. PP Mix Cups are used with holders that have weights designed to maintain balance between minimum and maximum opperational weights. Various PP Mix Cup sizes are available to meet your needs to minimize material waste by tailoring the actual sample size to a quantity you wish to process.

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Where are these instruments used?

The main applications are for QA lab screening, R+D formulations and formulation of components and for small volume production. The incredible speed of SpeedMixing means the bottleneck now becomes the weighing operation, not the mixing duration. This makes every DAC SpeedMixer™ user far more productive, since it allows the mixing of many iterations that would otherwise cause delay due to time constraints. The DAC SpeedMixer™ has proven itself extremely useful for tests involving cure rates, colours, aesthetic appearance, as well as the measurement of basic physical properties. High efficiencey permits the screening of numerous formulations before the next phase of development scale-up. DAC SpeedMixer™ technology requires use of the proper size cup for each mixture so an optimum fill and mix line is observed. This ensures 100% of the materials are processed with no waste yielding consistent, fully repeatable results every time.

How do I control the instrument speed to avoid damage to my product?

Especially designed for research and development and quality control work, the DAC SpeedMixer™ always incorporates variable speed control which sets the RPM revolution rate. A window for viewing the mixing basket, allows more in-depth research work to be done. Fixed speeds can be digitally programmed in order to duplicate formulation requirements at a desired rotation. Using lower speeds can help avoid some of the effects of the tremendous centrifugal forces generated at top speed, e.g., the build-up of frictional heat in sensitive mixes, or the potential damage to nano tubes, microspheres etc. in micro environments.

About Us:

***Productive Innovations Limited** - Your trusted DAC SpeedMixer™ authorised service partner and product distributor of Hauschild. Committed to exceeding customer requirements, raising the bar delivering safe, reliable customer solutions on time in full, every time.*

All new and existing SpeedMixer™ customers are most welcome to visit our U.K based, Application Support Centre for hands on competancy training, material mixing trials or demonstrations from a vareity of Hauschild DAC / Smart-DAC SpeedMixer™ products.

Manufacturing for 50 years since the company started in 1974. DAC Hauschild product safety, quality and reliability are of paramount concern so they will not let you down.

Please scan for more information about the original DAC SpeedMixer™

Productive Innovations

Are you #MixingWithTheBest !?

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