



50 Years Air-Free Mixing In 2024





YOUR PERFECT MIXER FOR

Mixing. De-Airing. Dispersing. Milling. Vacuum Degassing.

NextGen: SMART Mixing.

50 Year Anniversary - 1974 - 2024

HAUSCHILD ENGINEERING

50 years dedicated to developing & producing Hauschild SpeedMixer®

Since 1974 Hauschild GmbH & Co. KG (Hauschild Engineering) has been providing innovative mixing machines worldwide for a wide range of applications. Hauschild SpeedMixer[®] is the most widely used equipment in laboratories around the world when mixing is a critical part of the R&D process. In just a few minutes, the Hauschild SpeedMixer[®] can be used to obtain air bubble-free multimaterial compounds, such as liquids, high-viscosity pastes and powders.

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Hauschild

DAC TECHNOLOGY

German Engineering

Through continuous improvements *made over* 50 years, the Hauschild SpeedMixer® has become the most reliable mixing solution available today. The mixing of materials is based on the Dual Asymmetric Centrifuge *(DAC)* principle: the container where the material is placed rot- ates clockwise around a main axis and counter-clockwise around the basket's axis. The combination of forces generated by these opposite rotations allows for very quick and homogeneous bladeless mixing. The precision in the construction of every unit provides perfect equilibrium that allows for safe and very low-noise operation. Thanks to its optimized mechanical configuration, the Hauschild SpeedMixer[®] enables almost 100% *de-airing* while mixing, obtaining air-bubble free mixtures, and therefore sparing any additional degassing cycle. For complete, *true degassing*, machines operating under vacuum are also available. Programmable cycles ensure an identical mixture from batch to batch and the opportunity to accelerate the development process. Mixing in a closed container reduces the chemical load to a minimum. The Hauschild SpeedMixer[®] is a bladeless mixer that works with disposable cups reducing to zero the necessity of using chemicals for cleaning of the equipment.

C Hauschild

DAC 250.3 SF

C Hauschild SpeedMixer

PRODUCT RANGE

The Hauschild SpeedMixer[®] product line can be divided in three major groups, depending on the maximum nominal gross weight a machine can mix: small, medium, and large machines. Small and medium equipment are generally better suited for laboratory work, large equipment can also be utilized in a production setting where the batch size is up to 10kg (22 lb).



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SPECIAL FEATURES

We mix it better



Volume is an important parameter when mixing and that is why Hauschild offers the largest volume available in the market given a specific volume. For low specific gravity materials, Hauschild offers HV (high volume) machines. The LR (long radius) option provides a more efficient and cleaner process.

ROBOTIC SOLUTIONS

Optimize your workflow

The Hauschild SpeedMixer[®] are also available in a robotic version. Our Robotic machines have been widely used in small and large robotic systems developed in collaboration with world recognized system integrators.

CUSTOMIZATION

Up to every challenge

We recognize that each one of our customers has different mixing challenges. For this reason, Hauschild Engineering has developed hundreds of different customized solutions based on the Hauschild SpeedMixer[®]. The more we understand your application, the better we can serve your needs.

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#MixingWithTheBest 1974-2024

THE NEXT GENERATION IS HERE: THE SMART DAC HAUSCHILD SPEEDMIXER®

INTELLIGENCE & POWER BLEND TOGETHER PERFECTLY IN OUR MOST ADVANCED DAC MIXER



What does SMART DAC mean to us?

Speed -

new motors with more power for faster rotation and higher G forces. Twin-motors configuration for variable counter rotation.

Mechanical Art -

more stable mechanical configuration for zero vibrations at very low mixing speed.

Automation-

IoT compatible, QR-Code reader, programmable cycles, sensors integration.

Robotic -

easy integration in robotic system, servo motor, and the new and unique vacuum robotic version.

Temperature control –

by combining temperature reading with an automatic cooling system.

LARGER CAPACITY AND HIGHER MIXING WEIGHT

We have increased the capacity, offering more choices for your specific application. The SMART DAC series allows mixing from 250 g up to 2 kg.

All SMART DAC are available with mixing volume from 310 ml up to 3.8 liters. Choose the mixing basket volume that better suits your material.



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REVOLUTIONARY FEATURES



SENSOR INTEGRATION (humidity, gas detection, fire & smoke,...)



REAL-TIME MATERIAL TEMPERATURE CONTROL



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INTERNET OF THINGS

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AUTOMATIC AND PROGRAMMABLE COOLING SYSTEM

Wariable Counter Rotation

- O Up to 500 programs with multiprogram function
- O Up to 36 steps with acceleration & deceleration programmable for each step
- O Up to 30 minutes mixing time
- Strobe light

The Hauschild team will support you configuring the SMART DAC according to your requirements. Highly sophisticated. Very easy to use. It will enhance your daily lab work significantly.

R.O.I

Time saving, almost maintenance free, robust, reliable, long lasting. These are the reasons why the Hauschild SpeedMixer® SMART DAC represents a fast Return On Investment.

Made In Germany

Hauschild Engineering invented, develops and handcrafts its dual asymmetric centrifuges in Germany *now for* five decades. We devoted three years to offer our customers a unique *new* device that is becoming the new gold standard in the laboratories' world.

We Create Standards

More than 900 patents have been developed using the Hauschild SpeedMixer[®] devices. The SMART DAC will facilitate the development of new processes and protocols even more.

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MATERIAL TYPES

You name it, we mix it

The Hauschild SpeedMixer[®] can be used to mix different fluids and pastes, pastes with powders, powders with powders and other fluids/ powders combinations. Materials with different chemical and physical properties can be mixed, dispersed or milled. You chose! Resins, inks, paints, silicones, oils, gels, emulsions, creams, epoxies, powders, urethanes, ... the list is endless. The Hauschild SpeedMixer[®] is well suited to mix one, two or multi-component liquids and pastes.



INDUSTRIES

We serve them all

The Hauschild SpeedMixer[®] is used in every industry and field where mixing is an essential part of the development or production process. Some of the most common applications and industries are: preparation of materials for 3D printing; mixing of adhesives and sealants; mixing of materials for the aerospace and defence industry including explosive materials (for these applications machines are manufactured with a remote control unit); mixing of materials used in electrical batteries such as slurry or pastes, gels, epoxies and other resins used in electronics manufacturing; solvent purging and blending of cannabinoids in the cannabis industry; mixing in the pharmaceutical industry where repeatability and precision of results are key to a solid development process; mixing of base materials for the ink industry; mixing of several materials in the cosmetics industry to produce creams, lotions, lipsticks and other products.



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PP MIX CUPS + PAILS



Numerous options

Depending on the mixing weight and fill volume, different PP Mix Cups or pails are available for your Hauschild SpeedMixer[®]. The most popular are made of polypropylene (PP) due to their high resistance to the temperature and low chemical reactivity. Dimensions of the cups and buckets go from a few 6ml up to 16l of nominal capacity. Hauschild offers PP Mix Cups in several colorways, transparent; plus white and black which are opaque and suitable for photosensitive materials. Aluminium and non-disposable cups from non plastic materials such as stainless steel and titanium are available in several sizes for specific applications.

HOLDERS AND ADAPTERS

Standard and customized

To help customers obtain the best results with their

Hauschild SpeedMixer®, we continuously work on the research and

development of accessories. Custom made adapters have been designed to allow our customers mixing in a wide range of small and large containers such as our polypropylene PP Mix Cups or syringes, cartridges, glass bottles and customer specific containers. Our solutions allow mixing in one or more containers for every run. We are pleased to help you find the best suitable accessory to compliment your formulation process.

EQUIPMENT STANDS



Comfort and safety for your workstation

A portable floor stand is available for the 400-1100gm DAC range and all SmartDAC instruments. The Hauschild SpeedMixer[®] is positioned on the stand at an ergonomic, user-friendly height with sufcient storage space for accessories. Independant adjustable wheel heights with an integral locking mechanisum guarantees easy relocation for optimal positioning and cleaning.

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THE PAST. THE PRESENT. THE FUTURE.

5 decades dedicated to the original Hauschild Speedmixer[®]

THE ORIGINAL GERMAN MIXING SOLUTION FOR 50 YEARS 1974 - 2024

Hauschild Engineering