SAMPLE PREP WORKFLOW

Selecting Vortexers, Shakers & Peristaltic Pumps

FAQ

What should someone consider when selecting a rocker or shaker?

The most important factors when choosing a shaker are the type of motion required for your application, along with the speed and orbit or stroke length needed to achieve consistent results. Equally important are versatile accessories and attachments that can be exchanged easily, allowing the shaker to adapt as your research evolves. Tool-free changeovers enable faster setup, greater flexibility, and less downtime at the bench.

What is the most popular product in this space and why?

Our most popular product by far is the Titramax 1000, uniquely designed to accommodate up to six microtiter plates on a single platform—a capability typically limited to large, floor-standing units. While most benchtop platform shakers max out at four plates, the Titramax 1000 delivers higher throughput without sacrificing valuable bench space. The platform measures 290 × 258 mm. Beyond capacity, Heidolph's orbital shaker portfolio is widely recognized for exceptional precision and reproducibility, with a precisely engineered stroke length that supports consistent, repeatable results run after run.

Unlike traditional shakers that require time-consuming screw-mounted clamps and tube racks, Heidolph offers tool-free accessories and interchangeable platforms across its broader shaker range, reducing setup time and minimizing the risk of lost hardware.

What are important factors when choosing a vortexer?

Vortexers are used constantly—often dozens of times a day—making them a true bench workhorse. That's why reliability, intuitive controls, and effortless operation matter. Features like one-touch and continuous operation modes aren't just conveniences—they're essential for keeping workflows moving.

Heidolph stands apart as the only manufacturer offering both a traditional vortexer and an exclusive multi-sample vortexing solution for 12–24 vials or tubes. While others rely on small-capacity attachments, none support 12 samples or more. This enables hands-free vortexing, significantly increasing throughput—up to three times the output—while reducing repetitive strain.

Repetitive vortexing can contribute to hand–arm strain and vibration-related fatigue, an often under-discussed ergonomic risk in high-throughput labs.

Better mixing shouldn't come at the cost of your hands.

What are common features to look for when sourcing a peristaltic pump?

For most labs and bioprocess applications, +_3-5% flow accuracy is considered acceptable. Tighter tolerances are application-driven, not a default requirement. Achievable accuracy depends on multiple factors, including the pump, pump head, tubing selection, operating flow rate, and system back pressure. Equally important are intuitive controls for ease of use and pump-head versatility, allowing the system to adapt as workflows change.