

The Essential Automated Centrifuge

Six factors to consider when choosing a centrifuge for laboratory automation.

The Workhorse of the Automated Lab

The growing demand for in-vitro diagnostic testing, novel drug development, and production of therapeutics is driving the adoption of automation to boost throughput, decrease turnaround time, and maintain consistent result quality. Few laboratory processes do not benefit from centrifugation. Others, like separation and purification, critically depend on precise centrifugation steps. The choice of the right automated centrifuge depends on considerations ranging from technical to regulatory. Hettich has decades-long experience supporting the most demanding clinical and drug discovery efforts, and its expert staff has compiled this article to guide you through the factors you must consider when selecting an automation-friendly centrifuge.

Hettich Automated Centrifuge Family

Hettich has been at the forefront of automated centrifugation advancement for nearly three decades and is the world's leading supplier of automated centrifuges. The [growing automated portfolio](#) includes refrigerated and air-cooled models, top and front-loading robotic interfaces, and a wealth of accessories to handle microtiter plates, 500 mL bottles, 1.5 mL vials, and everything in between. This portfolio spans a wide range of G-forces and offers solutions for all sizes of projects and budgets.

What to Consider When Purchasing an Automated Centrifuge

The selection of an automated centrifuge initially depends on the technical capabilities of each model. It is critical to make sure that parameters such as speed, temperature, and throughput are appropriately addressed. However, other elements must be considered to ensure the automated centrifuge delivers rigorous performance. Please reflect on the following factors when thinking about an automated centrifuge purchase:

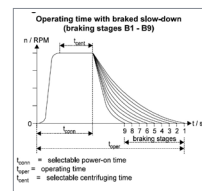
1 Durability and Reliability

The first quality you should look for in an automated centrifuge is durability. Automation subjects each component to a far more demanding workflow than a typical manual loading/

unloading work environment. It's not uncommon for Hettich automated centrifuges to work unattended well into the night or over the weekends, so they must be built to withstand this intense workflow. Hettich automated centrifuges and accessories are rated for hundreds of thousands of cycles using the most advanced components and materials to achieve this. Hettich firmly believes in the quality of its product, extending a two-year warranty on all parts and labor and guaranteeing the smooth operation of the motor for five years.

In addition to being durable, an automated centrifuge must also be reliable. Delivering consistent results is critical to diagnostic efforts and drives the DMTA cycle in drug discovery. Hettich centrifuges are the undisputed workhorses of the automated laboratory and are the performance benchmark for many separation and purification processes.

2 Flexibility



In addition to durability and reliability, flexibility is a third factor to consider when choosing an automated centrifuge. Does the centrifuge allow for sophisticated multi-step spins? Can it precisely maintain the sample temperature curve? Does the centrifuge provide a forgiving imbalance tolerance to accommodate for sample variability? These features have been carefully curated in the case of Hettich's automated centrifuges, offering you the utmost granular control of the centrifuge.

3 Compatibility

Hettich understands that we live in a constantly evolving technological landscape and that researchers have many integrators to choose from when it comes to automating their processes. Similarly, new types of lab-ware are being introduced to the market at a fast pace. Over the years, Hettich has forged strong partnerships with leading automation companies and consumable manufacturers to provide software drivers and develop bespoke solutions for its centrifuges. Whether upgrading an existing system or designing a platform from the ground up, you will benefit from Hettich's expertise and practical experience.

[Learn more: hettweb.com/automation](http://hettweb.com/automation)

Your Centrifuge Integration Partner

hettweb.com

4 Regulatory

The integrity of diagnostic results and the safety of medical products, which grow in reach and scope with every passing year, are supported by strict federal and international regulations. Hettich boasts strong early adoption of all clinical recommendations for the market and is unique in offering IVDD and MDD-certified automated centrifuges. For the peace of mind for your clinical laboratory, Hettich's regulatory experts are focused on maintaining and expanding the certifications available to their centrifuges.

5 Future Proofing

It's essential to envision your automated centrifuge's role now and in the future. Owing to fine construction and attention to detail, Hettich automated centrifuges benefit from extended life-cycles, often outliving their original purpose. With a wealth of accessories available, Hettich automated centrifuges can convert on the fly to accept new lab-ware and address new applications. Automated centrifuges can be re-purposed by sliding under a compatible liquid handler for assisted use or run manually by operating the LCD interface like one of its benchtop counterparts. These are centrifuges that adapt to your research.

6 Choosing Your Automation Partner

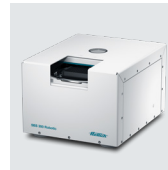
There is much more to purchasing a centrifuge than just the price. When it comes to the critical job of centrifugation in the automated lab, data, and lives depend on your centrifuge's performance and the support of its manufacturer. Your automated lab has little room for error or mechanical breakdown. When buying an automated centrifuge, good is not good enough.

If throughput and performance are paramount to you, look no further than the ROTANTA 460 Robotic, Hettich's flagship automated centrifuge trusted by the leaders in clinical testing and boasting thousands of placements worldwide. For compact high G-force solutions, the ROTINA 380 Robotic or the MIKRO 220 Robotic might be your next upgrade. For a compact front-loading solution for plates, ask about the SBS 300 Robotic. Whatever the scope and pace of your automated project, the experts at Hettich are available to guide your decision and help you weigh the benefits of an investment in Hettich.

Hettich Centrifuges for Automation



Fast and Compact: The [Hettich MIKRO 220 Robotic Centrifuge](#) is an air-cooled, externally controlled microliter centrifuge with PC activation. It centrifuges tubes up to 2.0 mL (e.g., microliter tubes or HPLC tubes) quickly and safely.



Easy Loading: The [Hettich SBS 300 Robotic Centrifuge](#) extends the Hettich automated portfolio towards even more compact solutions. The SBS 300 is a deep-well compatible plate centrifuge designed with busy, multi-step integrations in mind.



Flexible and Versatile: The [Hettich ROTINA 380 Robotic Centrifuge](#) is available with or without temperature control in a benchtop or under-bench version capable of centrifuging microtiter plates and blood collection tubes.



Proven and Powerful: The [Hettich ROTANTA 460 Robotic Centrifuge](#) models have been successfully deployed in many of today's industry-leading automation systems. The ROTANTA is the only high g-force, high-capacity model in the market.

If you are looking for a new centrifuge, the team at Hettich has the experience and commitment to be a partner you can depend on. Visit hettweb.com/automation to learn more or contact one of our representatives today.

Learn more: hettweb.com/automation

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