## **Hettich**

## AUTOMATED CENTRIFUGES

MIKRO 220 ROBOTIC / ROTINA 380 ROBOTIC / ROTANTA 460 ROBOTIC

Since the introduction of the first robotically integrated centrifuges over 25 years ago, Hettich has become the benchmark in centrifuge automation technology. Our centrifuges are integrated into many of today's leading laboratory automation systems and are recognized globally for their ease of integration, quality, precision, and safety. We currently offer a variety of automation-friendly models – each designed for reliable performance in high-use automation settings.

## Controlled environment for the sample.

Centrifuging blood or other temperature-sensitive samples requires an accurate, controlled temperature environment so that samples always remain at the temperature they started before centrifugation. Hettich has temperaturecontrolled centrifuges to maintain a stable environment at the correct temperature.

**High throughput.** In a high throughput environment, sample capacity is essential. The ROTANTA 460 has a 460 mm diameter chamber and high capacity buckets on a 4-place rotor to maximize sample volume for each centrifugation cycle.

**Sample size.** From blood tubes, 15/50 ml conical tubes, SBS format plates and 2ml microliter tubes Hettich has a solution for integrating most centrifugation requirements on all automation platforms.

**High Speeds.** Performance must be able to meet the requirements of the application. Blood, Bacteria, DNA extraction, and more, are possible with g-forces up to 18,516 x g.

**Precision positioning.** Samples are precisely positioned under a hatch in the lid for extraction. An optical encoder allows positioning to within 0.5 mm.

**Integration.** The centrifuge acts as an integrated slave module to the automation system. The central controller controls all programming and information requests.

**Quiet and Safe.** Even at high speeds, Hettich centrifuges operate quietly and safely. Hettich centrifuges are built to meet international safety and quality requirements and are rigorously tested and validated to the highest standards.

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**Centrifuges for the automated lab.** Hettich introduced the **ROTANTA 460** as the first centrifuge to integrate into an automation system. It was part of a pre-analytical module for centrifuging blood tubes. Today, Hettich has a variety of centrifuges, from high-capacity to small-volume and high-speed for a variety of automation applications.



**Fast and Compact:** The MIKRO 220 automated centrifuge is an air-cooled, externally controlled microliter centrifuge with PC activation. It centrifuges tubes up to 2.0 mL (e.g., microliter tubes) quickly and safely. Ideal for sample preparation for laboratories of the life sciences as well as for daily routine tasks in medical diagnostics.

- Compact for small volumes
- High-speed up to 18,516 x g
- 90° swing-out rotors for microliter
- Rotor positioning accuracy
- Continuous status communication



**Flexible and Versatile:** The ROTINA 380 automated centrifuge is available with or without temperature control in a benchtop or under-bench version capable of centrifuging microtiter plates and blood collection tubes. The ROTINA 380 RC is ideal for an automated workstation in routine clinical diagnostics. The intended use is for standard clinical samples, as well as the preparation of cellular and bacteria samples.

- Max. RCF of 4,696 x g
- 48 blood tubes
- 6 microtiter plates
- Rotor positioning accuracy
- Continuous status communication

**Proven and Powerful:** Our ROTANTA 460 automated centrifuge models are in many of today's industry-leading automation systems. With more than 20 years of centrifugation in clinical laboratories for high throughput screening, the ROTANTA 460 is the gold standard and market leader. The ROTANTA is the only high g-force, high-capacity model in the market today.

- High speed with a max. RCF of 6,446 x g
- 80 blood collection tubes
- 24 x 50 ml conical tubes
- 16 microtiter plates
- Industry-leading automated centrifuge
- Rotor positioning accuracy
- Hybrid rotor for microtiter plates and conical tubes



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