





## QUALITY YOU CAN RELY ON

Equipment that is built  
to last

- Products engineered and manufactured in Germany
- Low overall cost of ownership due to the product's long lifespan
- Parts, service and care for the lifetime of your product
- Real customer support when you need it most
- Family-owned, knowledgeable and customer oriented since 1904

Hettich products are used on all seven continents and even outer space onboard the International Space Station.

## QUALITY CONSTRUCTION FOR LONG TERM RELIABILITY

With durable materials and German engineering, Hettich centrifuges deliver reliable results spin after spin. An average performance life of over 10 years, low repair rates and reduced downtimes allow for the maximum use of this high-quality equipment.

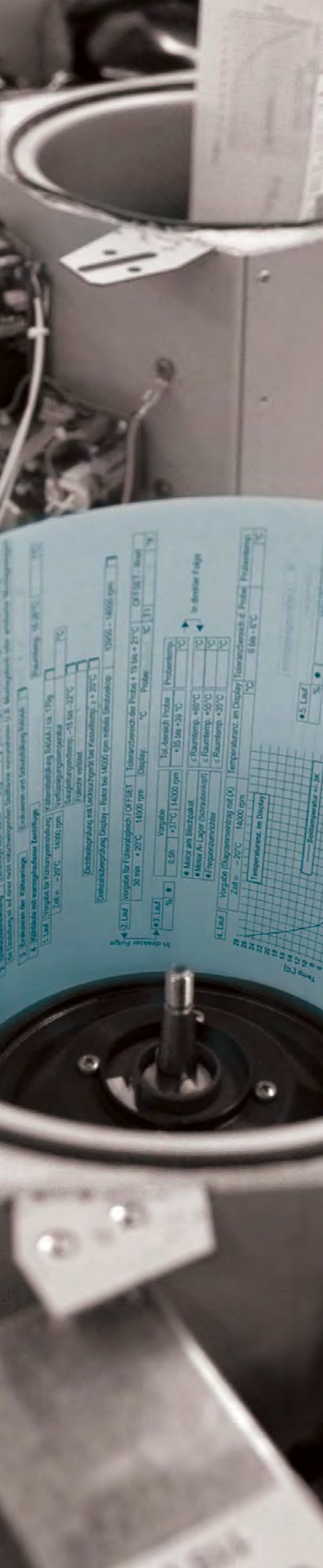
## SPARE PARTS AVAILABILITY FOR YEARS TO COME

Parts and service are available for 10 years, even after a specific model has been discontinued. This support, in addition to the product's long service life, allows numerous years of operation and reduces the cost of ownership significantly.

## FULLY TESTED AND CERTIFIED FOR SAFETY

Hettich products are engineered and manufactured in accordance with all current safety standards, including TÜV certification, and for the most products, Medical Device or IvD registration. Users can depend on a device that meets the highest safety standards in the industry.

Every Hettich product is tested and validated at the factory. Validation and certificates are available by request and without additional cost.



# CERTIFICATES / REGISTRATIONS

Hettich products are distinguished by the highest quality and the most modern technology. Centrifuges and accessories are developed in collaboration with users from the fields of medicine, chemistry, research and industry, and they are always adapted to the latest requirements, in a continuous process. Hettich centrifuges comply with all relevant EU standards in effect. All stages from design to end-product are continuously subjected to the strictest controls. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001, ISO 13485 and ISO 14001 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories. This is why Hettich centrifuges are known for safety and reliability all over the world.



CB and NRTL certificates for our products on request.



We are an Authorised Economic Operator, which means you can expect expeditious customs clearance.



## QUALITY & SAFETY

IvD stands for In-vitro Diagnostics. Hettich centrifuges conform to IvD standards, i.e. they comply with the European IvD guideline's requirements (98/79/EC) and guarantee a standardised level of quality and safety. Please see §15 "Data Storage" of our General Terms and Conditions regarding the traceability of Hettich products.



Under Rule 3 in the Classification section of Annex II to the EU Directive 93/42/EEC, centrifuges used for the manufacture of blood products for transfusion purposes require approval as Class IIa medical products. Hettich holds this approval for the ROTO SILENTA 630 RS, ROTIXA 500 RS and ROTANTA 460 line of centrifuges, as shown by a declaration of conformity in accordance with Annex V to Directive 93/42/EEC.



General lab equipment



## NON-POLLUTING WASTE DISPOSAL

Since 1.1.2006, Hettich has been registered in Germany under WEEE Reg. No. DE 92954423 with the Elektro-Altgeraete Register1) - Foundation for the implementation of the 2012/19/EC directive regarding the disposal of electrical and electronic equipment in the EU. With the symbol of the crossed-out bin, it is made clear that centrifuges may not be disposed of with household waste. The disposal regulations in the individual EU countries can vary. Please ask your supplier, if necessary. In this context, we refer to § 14 "Acceptance of returns / obligation to dispose of the goods" of the General Terms and Conditions.

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## SMALL CENTRIFUGES

### Compact footprint saves bench space

Hettich's small tabletop centrifuges require minimal bench space and are easy to reposition within your lab.

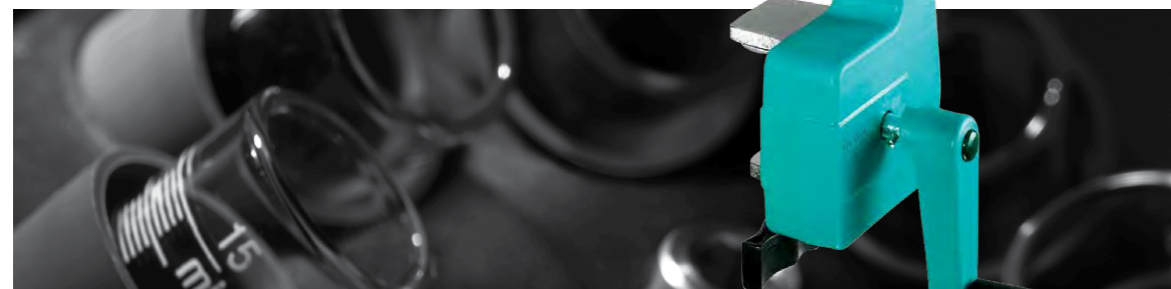
### Fast and multifunctional, performance when you need it

These versatile centrifuges are ideal for low sample volume and offer quick turnaround for time sensitive samples. Both built-in and exchangeable rotors are available for multiple applications. Their speed, versatility and cost make them a valuable asset to any laboratory.

# MANUAL CENTRIFUGE

Operate independently  
anywhere

The adaptable manual centrifuge can be simply clamped to any benchtop, with no need for electricity. Its self-lubricating drive system makes it virtually maintenance-free.



	90 ° ROTOR	50 ° ROTOR
Max. Capacity	4 x 15 ml (conical)	4 x 15 ml
Max. RPM	3,000 min <sup>-1</sup>	3,000 min <sup>-1</sup>
Max. RCF	1,298	1,077
Dimensions	285 x 140 x 175 mm	285 x 140 x 175 mm
Weight	approx. 0.9 kg	approx. 0.9 kg

# EBA 200 / EBA 200 S

Top performance for small  
laboratories

The EBA 200 and 200 S are practical, compact centrifuges for small sample sizes. The high speed S model can deliver reliable results in 3 minutes or less.

Included an 8-place fixed angle rotor to hold standard blood and urine tubes up to 15 ml in capacity.



	EBA 200	EBA 200 S
Max. Capacity	8 x 15 ml	8 x 15 ml
Max. RPM	6,000 min <sup>-1</sup>	8,000 min <sup>-1</sup>
Max. RCF	3,461	6,153
Dimensions	228 x 261 x 353 mm	228 x 261 x 353 mm
Weight	approx. 9 kg	approx. 11 kg

## EBA 270

Superior separation results in medical applications

The EBA 270 is a small centrifuge with a swing-out rotor that has been developed specifically for use in clinical settings. It can centrifuge the blood tubes and urine tubes up to 15 ml in volume at a maximum speed of 4,000 RPM / 2,254 RCF. Its 90° rotor is ideally suited for spinning blood tubes containing a separating gel.



according to directive 98/79/EC



Max. Capacity  
Max. RPM  
Max. RCF  
Dimensions  
Weight

**EBA 270**  
6 x 15 ml  
4,000 min<sup>-1</sup>  
2,254  
239 x 326 x 389 mm  
approx. 14 kg

## EBA 280 / EBA 280 S

Simple rotor change for greater versatility

The EBA 280 and 280 S offer exceptional user comfort and a choice of 6 rotors. The rotor can be removed and replaced easily thanks to the quick release system. The rotor locks in place and remains secure without the use of tools or extra effort. The backlit digital control panel offers the opportunity to save multiple program settings.



according to directive 98/79/EC



Max. Capacity  
Max. RPM  
Max. RCF  
Dimensions  
Weight

**EBA 280**  
6 x 50 ml  
6,000 min<sup>-1</sup>  
4,146  
242 x 326 x 400 mm  
approx. 12 kg

**EBA 280 S**  
6 x 50 ml  
6,000 min<sup>-1</sup>  
5,071  
242 x 326 x 400 mm  
approx. 12 kg

# HAEMATOKRIT 200

## Hematocrit determination in just 7 minutes

The HAEMATOKRIT 200 is a fast and efficient centrifuge for determining hematocrit count. It runs at 13,000 RPM and accommodates up to 24 capillary tubes to a maximum RCF of 16,060.

Results can be clearly viewed with the integrated Haematocrit reader in the rotor lid.



according to directive 98/79/EC



Max. Capacity  
Max. RPM  
Max. RCF  
Dimensions  
Weight

**HAEMATOKRIT 200**  
20/24 Capillaries  
13,000 min<sup>-1</sup>  
16,060  
228 x 261 x 353 mm  
approx. 10 kg







## MICROLITER CENTRIFUGES

### Better results and more samples in less time

Speed rates up to 18,000 RPM with RCF up to 31,540 accommodate a high number of samples to increase efficiency and throughput in your lab.

### Wide range of capabilities

A variety of models and accessories support microliter tube quantities from 12 to 60 per run. Bio-containment and phenol-resistant lids for the safe centrifugation of hazardous samples are available.

### Pre-cooling function for fast operation

Reliable and steady temperature control systems with quick pre-cool and stand-by functions come with precise temperature control. This is ideally suited for temperature sensitive samples in molecular biology and other R&D applications.

# MIKRO 185

Small footprint with unmatched capacity

The MIKRO 185 accommodates 12, 18 or 24 samples and is suitable for a wide range of tasks, thanks to a maximum RCF of 18,845 and a choice of four rotors. Spin column kits (minipreps) can also be used thanks to the special design of the 1213 rotor.



according to directive 98/79/EC



	<b>MIKRO 185</b>
Max. Capacity	24 x 1.5/2.0 ml
Max. RPM	14,000 min <sup>-1</sup>
Max. RCF	18,845
Dimensions	228 x 261 x 353 mm
Weight	approx. 11 kg

# MIKRO 200

Faster results in molecular biology

The MIKRO 200 are amongst the highest-speed microlitre centrifuges in their class. Rotors are designed to spin microliter, PCR and Cryo tubes. MIKRO 200 achieves a maximum RCF of 21,382 with up to 30 tubes, enabling rapid processing of samples and optimal separation, at low noise levels of 53 dB(A).

This unit is available with refrigeration and a temperature range from -10 °C to +40 °C (MIKRO 200 R).



according to directive 98/79/EC



	<b>MIKRO 200</b>	<b>MIKRO 200 R</b>
Max. Capacity	30 x 1.5/2.0 ml	30 x 1.5/2.0 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	21,382	21,382
Dimensions	260 x 275 x 344 mm	260 x 281 x 553 mm
Weight	approx. 11.5 kg	approx. 28 kg

# MIKRO 220

## Fast and flexible

The MIKRO 220 spins at an unmatched speed of 18,000 RPM and delivers an RCF of 31,514 in just 26 seconds. Ultimate flexibility is provided by a choice of 13 different rotors from 0.2 ml microliter tubes to 50 ml conical tubes, allowing for numerous research applications on a single machine.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (MIKRO 220 R).



according to directive 98/79/EC



	MIKRO 220	MIKRO 220 R
Max. Capacity	48 x 1.5/2.0 ml	48 x 1.5/2.0 ml
Max. RPM	18,000 min <sup>-1</sup>	18,000 min <sup>-1</sup>
Max. RCF	31,514	31,514
Dimensions	313 x 330 x 420 mm	313 x 330 x 650 mm
Weight	approx. 21 kg	approx. 42 kg





## BENCHTOP CENTRIFUGES

### Long-term solutions for your evolving laboratory

Hettich manufactures an extensive range of general purpose benchtop centrifuges for nearly any standard laboratory application. We offer long-term solutions for your evolving laboratory.

### Specialty applications, capability beyond the bench

Specialty accessories expand our capability beyond the standard clinical laboratory setting into agriculture, food and beverage, petrochemical and more. Various temperature control options are available.

### Diverse range of accessories for multiple applications

Versatile rotors accommodate multiple applications - saving you from purchasing additional hardware. A vast range of accessories ensure capacity and specification needs are met. Optional bio-containment and phenol-resistant lids for safe centrifugation of hazardous samples are available. Moveable cabinets extend your bench space to provide extra storage and centrifuge portability.

# ROTOFIX 32 A

## Rugged and indispensable

For decades, the ROTOFIX 32 A has set the standard in daily lab routine thanks to its versatility and solid construction. The benchtop centrifuge spins sample volumes up to 6 x 94 ml, 40 blood collection tubes or 8 x 50 ml conical tubes with a simple user interface.

Hettich's cytology rotors are compatible with most existing funnel/slide systems and have bio-containment lids.



	ROTOFIX 32 A
Max. Capacity	4 x 100 ml
Max. RPM	6,000 min <sup>-1</sup>
Max. RCF	4,226
Dimensions	257 x 366 x 430 mm
Weight	approx. 23 kg

# UNIVERSAL 320

## A universal choice

The UNIVERSAL 320 is a compact, versatile and indispensable general purpose centrifuge. Excellent performance and a comprehensive range of accessories enable the UNIVERSAL 320 to carry out virtually any centrifuging tasks including plates, blood tubes, cell culture, microliter and cytology.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (UNIVERSAL 320 R).



	UNIVERSAL 320	UNIVERSAL 320 R
Max. Capacity	4 x 200 ml	4 x 200 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	21,382	21,382
Dimensions	346 x 401 x 529 mm	346 x 407 x 698 mm
Weight	approx. 31 kg	approx. 28 kg

# ROTINA 380

High speed with space saving design

High performance unit supporting a wide array of accessories for multiple applications in just one rotor. Its size and performance make it the ideal bench top centrifuge for most clinical, reasearch and industrial laboratories.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (ROTINA 380 R).



according to directive 98/79/EC



	ROTINA 380	ROTINA 380 R
Max. Capacity	4 x 290 ml	4 x 290 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	24,400	24,400
Dimensions	418 x 457 x 600 mm	418 x 457 x 750 mm
Weight	approx. 51 kg	approx. 81 kg

# ROTINA 420

Many solutions - one rotor

This compact benchtop centrifuge has been developed for large sample volumes. It has a maximum capacity of 4 x 600 ml bottles, 140 blood tubes, 16 microtiter plates or 52 x 15 ml conical tubes, all on a single cost-effective rotor.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (ROTINA 420 R).



according to directive 98/79/EC



	ROTINA 420	ROTINA 420 R
Max. Capacity	4 x 600 ml	4 x 600 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	24,400	24,400
Dimensions	423 x 506 x 650 mm	423 x 713 x 654 mm
Weight	approx. 75 kg	approx. 108 kg

# ROTANTA 460

Superior benchtop for multi-purpose use

This powerful unit is capable of virtually any application you choose. It is able to spin high sample volumes of blood tubes, conical tubes, plates and bottles. Speciality buckets are able to accommodate 450 ml blood bags.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (ROTANTA 460 R).



	ROTANTA 460	ROTANTA 460 R
Max. Capacity	4 x 750 ml	4 x 750 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	24,400	24,400
Dimensions	456 x 554 x 706 mm	456 x 770 x 706 mm
Weight	approx. 101 kg	approx. 141 kg

# ROTANTA 460 RC / 460 RF

The capability of a benchtop without the footprint

This modified version of the standard ROTANTA 460 allows for space saving storage below the bench and frees valuable working space from bench top units.

Both units include refrigeration with a temperature range from -20 °C to +40 °C.



	ROTANTA 460 RC	ROTANTA 460 RF
Max. Capacity	4 x 750 ml	4 x 750 ml
Max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
Max. RCF	24,400	24,400
Dimensions	683 x 554 x 697 mm	961 x 554 x 697 mm
Weight	approx. 140 kg	approx. 164 kg

# ROTOFIX 46

## Robust industrial unit

These are ideal centrifuges for research and industrial laboratories. They are robust and can withstand intensive usage, even in the field. Specialty buckets are able to hold ASTM pear-shaped and conical tubes for petroleum testing.

Heated option provides chamber temperature up to +90 °C (ROTOFIX 46 H).

INDUSTRIAL  
DEVICE  
CE



	ROTOFIX 46	ROTOFIX 46 H
Max. Capacity	4 x 290 ml	4 x 100 ml
Max. RPM	4,000 min <sup>-1</sup>	2,000 min <sup>-1</sup>
Max. RCF	3,095	984
Dimensions	345 x 538 x 647 mm	345 x 538 x 647 mm
Weight	approx. 60 kg	approx. 60 kg







## FLOORSTANDING CENTRIFUGES

### Functional Design for ease of use

The efficient motor and easy to use design eliminates the need for a windshield. This allows unimpeded access for easy loading, unloading and cleaning. Versatile rotors accommodate multiple applications eliminating the need to change rotors or move to another centrifuge.

### Optimal conditions for better results

Robust temperature control system offers accurate and reliable results. Without a windshield, air moves freely throughout the chamber for greater temperature consistency. Dual sensors provide “at-sample” temperature readings for greater accuracy. Save time with quick pre-cool and stand-by cooling functions.

### Proven technology for ultimate dependability

Hettich floor standing centrifuges are built to last, have proven their performance by thousands of units installed worldwide. They are a standard piece of equipment in blood banks worldwide and perform 24 hours a day, 7 days a week over many years for consistent and reliable results.

# ROTIXA 500 RS

Small footprint -  
high volumes

Its durable components make the ROTIXA 500 RS a reliable unit with a long service life. High sample capacity and maximum RCF of 5,252 make it suitable for 4 x 450-750 ml blood bags. Specially designed buckets keep blood bags upright during centrifugation for improved separation of blood components.

In industrial research labs, it accommodates 4 bottles up to 1,000 ml, specialty racks, as well as container and vessels for various applications.



	<b>ROTIXA 500 RS</b>
Max. Capacity	4 x 1,000 ml
Max. RPM	11,500 min <sup>-1</sup>
Max. RCF	18,038
Dimensions	973 x 650 x 814 mm
Weight	approx. 219 kg

# ROTO SILENTA 630 RS

First choice for volumes  
up to 12 Liters

The ROTO SILENTA 630 RS is highly rated in the rapid and efficient centrifugation of blood bags. It is able to spin up to 12 litres of sample or 12 blood bags per run. Four and six-place rotor options are also available to offer the best possible fit.



	<b>ROTO SILENTA 630 RS</b>
Max. Capacity	6 x 2,000 ml
Max. RPM	6,000 min <sup>-1</sup>
Max. RCF	6,520
Dimensions	973 x 813 x 1,015 mm
Weight	approx. 355 kg



## BEST CONDITIONS FOR YOUR LAB

### 1 Application knowledge

Hettich offers accessories for all blood bag manufacturers, volumes and applications. Accessories to support smaller blood bags or blood component bags are available.

### 2 Silent

The ROTO SILENTA 630RS lives up to its name it has a maximum noise rating of 62db(A) even when running at full speed and cooling. At lower speeds and temperature settings, the centrifuge is even quieter.

### 3 Hygienic chamber

The centrifuge chamber is made with medical grade stainless steel and rounded edges to maximize hygiene. Without a rotor windshield, users can clean the chamber thoroughly for a hygienic sample environment.

### 4 User Focused

Hettich works closely with end users to develop new products based on their laboratory's needs. We incorporate customer feedback to help users achieve the best practices in the transfusion lab.

### 5 Ergonomic

With a working height of 91 cm the centrifuge is easy to load and unload. The opening and closing of the lid is aided by gas springs which eliminate most of the effort required to open the centrifuge lid. With the ergonomic handle located the front of the unit, it is easy to close the lid manually. The motorized lid locking systems will ensure safe and easy locking.

## BEST CONDITIONS FOR YOUR BUDGET

### 1 Versatile

In the ROTO SILENTA 630 RS it is possible to use with 2 rotors between 4, 6, 8 or 12 buckets. There is no need to purchase a new centrifuge if your demand increases or reduces. The Double and Single buckets are available for the same rotor.

### 2 Solid construction

The robust design and high grade materials we use ensure a long life time and less cost of ownership.

### 3 Time saving

The Pre-cooling time to 4 °C can be done in under 30 Minutes which reduces the electricity cost and operation time.

### 4 Long lifecycle

The 4524-A bucket is rated for 15,000 cycles at full speed to 40.000 cycles at 3,500 RPM. This can reduce the need the purchase a complete bucket set during the lifetime of the machine. The inserts are made of high-quality materials and are expected to last the lifetime of the machine.

### 5 Save energy

The unique Hettich cooling system reduces the need of cooling during standard operation. With the recommended Buffy Coat application settings at 4.000 RCF the centrifuge will need less than 0,60 kw/h power, during operation at 20-22 °C.



# BEST CONDITIONS FOR YOUR SAMPLES

**1 “Even-Flow” circulation**

Unimpeded air movement maintains a constant “at sample” temperature.

- Higher accuracy of sample temperature
- Reduced precooling & processing times

**2 Dual temperature sensors in the chamber**

Dual temperature sensors in the chamber provide greater temperature control and more accurate “at sample” temperatures. A total of 4 temperature sensors control the compliance of temperature.

**3 Consistent results**

The powerful motor is able to consistently produce the same amounts of centrifugal force regardless of sample size or quantity. The difference between spinning 1 or 12 blood bags per conditions is less than 1%. The same separation run can be repeated day after day.

**4 Uniform braking**

A variety of 18 pre-stored braking setting (with brake-free option,) adjustable timing, and linking options ensures flexibility to the application needs and workflow of the lab.

**5 Enhanced safety**

The auto-locking and secure lid sits inside the bowl, forming a tight seal and fully enclosing the chamber. The centrifuge settings can be saved and locked using the included key. The unit’s medical device registration includes active product updates to keep the end user safe.





# CELL WASHER

## Increased efficiency and versatility

The 7-inch touch screen control panel is intuitive and easy to read. Audio and visual signals provide updates throughout the entire cell-washing process. The control panel can also be password protected for added security in the lab.

## Automated cleaning program

Using the pre-programmed wash setting, the ROTOLAVIT II will automatically clean the chamber, inlet and outlet, eliminating the need to do manual cleaning.

## Advantages over conventional cell washing systems

### Consistent reproducible results

An electronic flow meter provides precise saline fills versus traditional flow timers.

Digital calibration provides easy and accurate control of saline volumes while eliminating time consuming and cumbersome manual calibration.

### Time saving performance

Increase productivity and turnaround times with faster wash cycles. Save 14 seconds per cycle, one minute per wash and one hour per 60 washes.

# ROTOLAVIT II

## User friendly serology solutions

**Automatic cell washing system for serological testing.**

The ROTOLAVIT II cell washing system facilitates routine tasks in transfusion centre laboratories. It was developed for cross-matching, as well as antibody search and differentiation, and for cell washing in TB tests.

Its modern touch screen enables the simple and rapid input of up to 20 different programs. The centrifuge has a small footprint and delivers reliable results at low costs for consumables.



	<b>ROTOLAVIT II</b>
Max. Capacity	24 x 5 ml
Max. RPM	3,500 min <sup>-1</sup>
Max. RCF	1,438
Dimensions	280 x 330 x 480 mm
Weight	approx. 24.5 kg

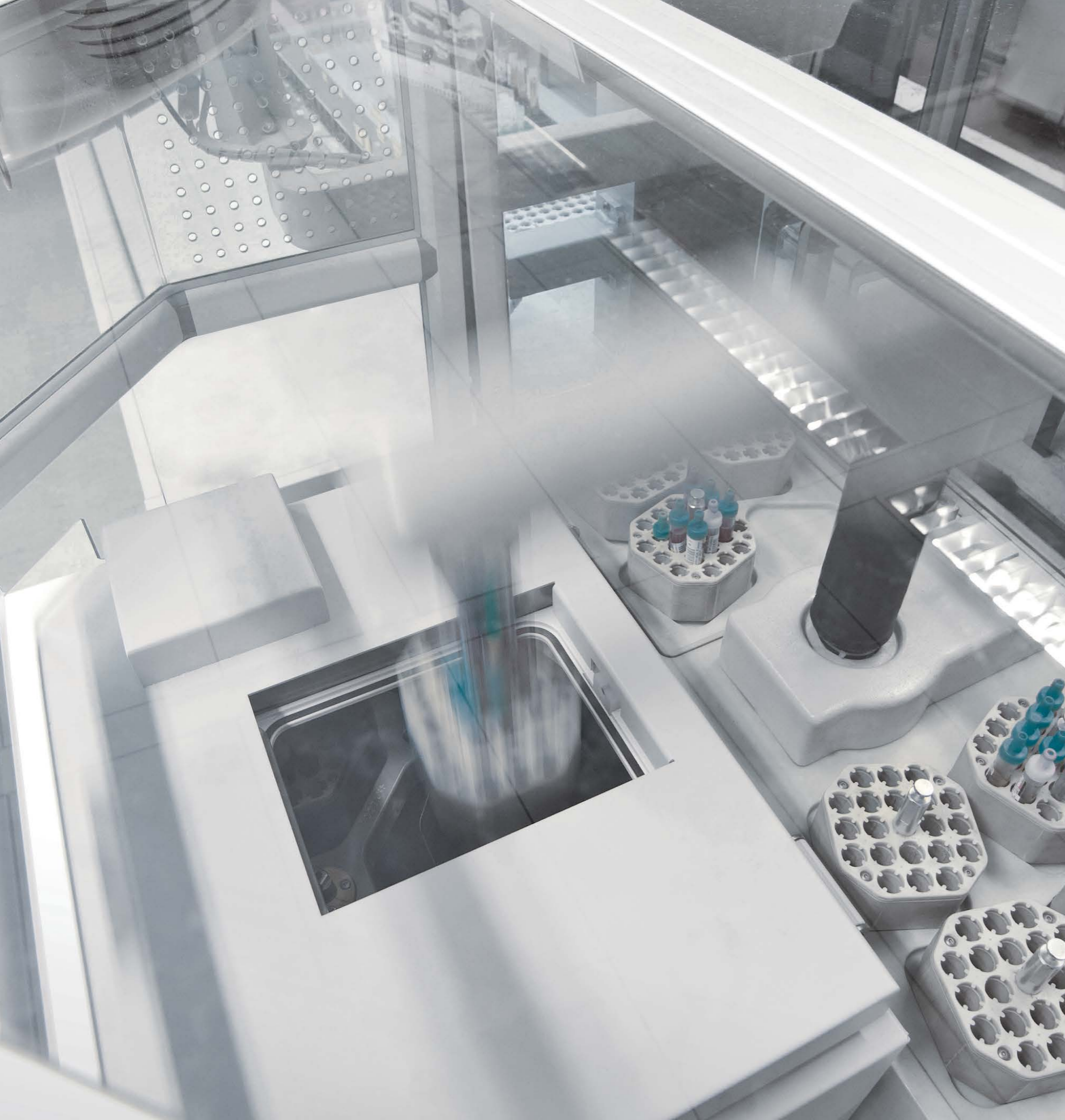
# ROLLING CABINETS

## Make your centrifuge mobile

All rolling cabinets are of sturdy design and feature lockable castors and drawers locks. Any vibrations from the centrifuges are safely dampened.



Suitable models	ROTOFIX UNIVERSAL ROTINA ROTANTA ROTOFIX
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## AUTOMATED CENTRIFUGES

We are the worldwide leader  
in automated centrifuges

Since the introduction of the first robotically integrated centrifuges over 25 years ago, Hettich is setting the benchmark in centrifuge automation technology.

We have successfully integrated in most of today's laboratory automation systems and are recognized globally for the quality, precision and safety of our units. We currently offer three different automation-friendly models – each designed for reliable performance in high-use automation settings.



# HettCube INCUBATORS

## Space-saving design increases capacity

HettCube incubators provide stable temperature uniformity allowing up to 30 % more validated usable space than a traditional incubator with the same internal volume. In addition, the HettCube's upright design requires up to 50 % less floor space than a traditional incubator with similar capacity.

## Optimal growth conditions

HettCube incubators combine the advantages of natural and forced convection to provide a stable and uniform environment for cultures. This yields optimum growth conditions and considerably reduces the potential of samples drying out.

## Low energy consumption

At an operating temperature of 37 °C a HettCube incubator consumes, up to 75 % less power than similar sized incubators.



## ALLOWS FOR EFFORTLESS SAMPLE MANAGEMENT

In addition to the inner chamber, the telescoping shelves, part of the Hettich Tray System (HTS) are made of high-quality, autoclavable stainless steel, making them easy to clean. The optional Hettich Tray System features telescopic rails that extend up to 70 % of its depth for unimpeded access to your samples.

The front mounted control panel is simple and easy to use and features both audio and visual alarms.

HettCubes need one door only. This allows effortless access to the chamber with just one hand.

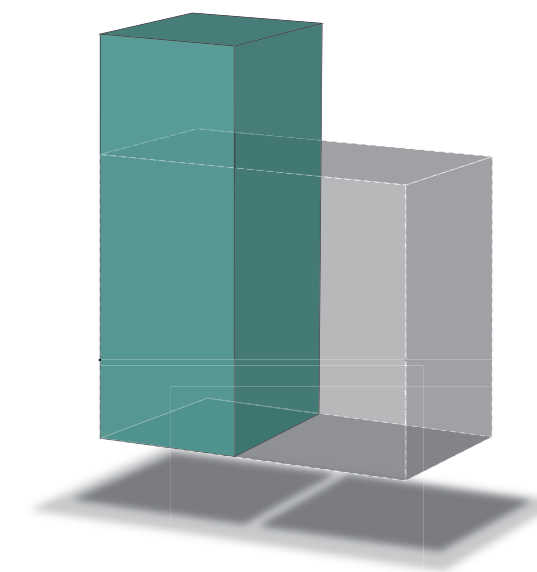
HettCube incubators are available with an optional glass door.



## MAXIMUM USABLE SPACE WITH THE SMALLEST FOOTPRINT

Almost TWICE as much validated usable volume on the same footprint, since two HettCube units fit into a space that is only slightly greater than that occupied by a single unit of a competitor.

HettCube	Other Incubators
Gentle air flow + High-performance insulation + Small footprint =	Strong air flow + Bulky insulation + Large footprint =
Maximum loading capacity + cost savings per m <sup>2</sup> laboratory space	Low loading capacity + higher costs per m <sup>2</sup> laboratory space



**HettCube:**  
702 litres of validated usable space

**Incubator of a competitor:**  
360 litres of validated usable space

## QUIET OPERATION

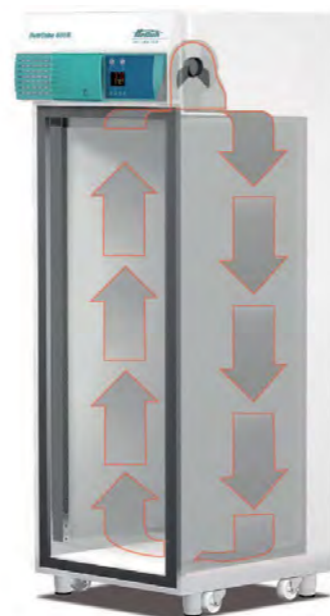
Our incubators are quieter than normal conversation when running, and will not increase the noise levels within your lab. A HettCube incubator has a remarkably low noise output of ≤ 44 dB(A).

# PROCESS RELIABILITY

## Optimal conditions for cultures

HettCube incubators combine the advantages of natural and forced convection to provide a stable and uniform environment for cultures. The fan is housed outside of usable space, providing higher throughputs and limiting airflow inside the incubator. Temperature is primarily maintained by radiated heat to ensure even temperature distribution and to prevent hotspots. This yields optimum growth conditions and considerably reduces the potential of samples drying out.

The advanced control system and insulation mean that the incubator will maintain a set temperature even if there is only a difference of 1 K (°C) from the ambient temperature. This allows an uncooled HettCube incubator to be used in situations in which a comparable incubator would require cooling.



# MINIMAL OPERATING COSTS

## With very low environmental impact

At an operating temperature of 37 °C a HettCube incubator consumes less than 0.05 kWh. A HettCube incubator brings average savings of up to 450 Euros per annum\*.

Therefore Investment costs recouped within shorter time.

The use of a HettCube incubator saves on average up to 940 kg of CO<sub>2</sub> emissions per annum\*.

# HettCube 200

## Efficient use of valuable space

### Incubators and cooled Incubators

Environmentally friendly, economical and well designed. The HettCube Range of incubators will benefit both your balance sheet and the environment, as well as providing optimum growth conditions for your cultures. The HettCube 200 is ideal for all clinical lab applications.

This unit is available with refrigeration and a temperature range from 0 °C to +65 °C (HettCube 200 R).



according to directive 98/79/EC



Internal volume	<b>HettCube 200 / 200R</b> 150 l
Validated useable space	82 l
Number of provided trays	2 (1 standard + 1 HTS)
Dimensions	710 x 825 x 970 mm
Energy consumption	0.033 kWh

\*Assuming 24h operation 365 days a year. The basis for calculation is € 0.29 per kWh – the average price of electricity in Germany in 2016 (see [www.strompreise.de](http://www.strompreise.de)) and 0.6 kg CO<sub>2</sub> per kWh (see [www.prima-klima-weltweit.de](http://www.prima-klima-weltweit.de)).

# HettCube 400

Efficient use of valuable space

With its volume and wide range of accessories the HettCube 400 is well suited for all pharmaceutical, research and industrial applications.

This unit is available with refrigeration and a temperature range from 0 °C to +65 °C (HettCube 400 R).



HettCube 400 / 400 R	
Internal volume	310 l
Validated useable space	199 l
Number of provided trays	3 (2 standard + 1 HTS)
Dimensions	710 x 825 x 1,425 mm
Energy consumption	0.043 kWh

# HettCube 600

Efficient use of valuable space

The most popular model in the HettCube range.

Building on the base of the HettCube 400 the HettCube 600 is a larger version with 152 liters of additional validated usable space than the HettCube 400. This model is capable of holding up to 1,500 petri dishes.

This unit is available with refrigeration and a temperature range from 0 °C to +65 °C (HettCube 600 R).



HettCube 600 / 600 R	
Internal volume	520 l
Validated useable space	351 l
Number of provided trays	4 (3 standard + 1 HTS)
Dimensions	710 x 825 x 1,990 mm
Energy consumption	0.049 kWh

# ACCESSORIES







## OVERVIEW

The following pages provide a quick overview of the main rotors for each centrifuge model, as well as a selection of the applicable accessories.

In addition to the maximum speed (**Max. RPM**) the highest relative centrifugal force (**Max. RCF**) of each rotor, the maximum capacity of each tube size/type is also listed.

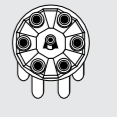




# ROTOR

## EBA 200 / EBA 200 S

Rotor			
EBA		200	200 S
Rotor places		8	
Max. RPM		6,000	8,000
Max. RCF		3,461	6,153
	Volume	0.5 ml	
	Quantity	8	
	Volume	15 ml	
	Quantity	8	
	Volume	4.5-10 ml	
	Quantity	8	
	Volume	1.6-7 ml	
	Quantity	8	
	Volume	15 ml	
	Quantity	4	

# ROTOR

## EBA 270

Rotor		
EBA		270
Rotor places		6
Max. RPM		4,000
Max. RCF		2,254
	Volume	0,5 ml
	Quantity	6
	Volume	15 ml
	Quantity	6
	Volume	1.1-10 ml
	Quantity	6
	Volume	1.6-10 ml
	Quantity	6

# ROTORS

## EBA 280 / 280 S

Rotor						
EBA		280	280 S	280/S		
Rotor places		6	12	12	6	12
Max. RPM		4,700	6,000	5,000	5,000	6,000
Max. RCF		3,112	5,071	2,963	2,879	4,025
	Volume	0.5 ml	-	-	-	0.5 ml
	Quantity	6	-	-	-	12
	Volume	15 ml	5 ml	5-7 ml	15 ml	15 ml
	Quantity	6	12	12	6	12
	Volume	4.5-10 ml	2.6-3 ml	-	9-10 ml	4.5-10 ml
	Quantity	6	12	-	6	12
	Volume	1.6-5 ml	1.6-5 ml	-	1.6-7 ml	1.6-10 ml
	Quantity	6	12	-	6	12
	Volume	-	-	-	15/50 ml	15 ml
	Quantity	-	-	-	6/3	6

# ROTORS

## HAEMATOKRIT 200

Rotor			
Rotor places		24	20
Max. RPM		13,000	13,000
Max. RCF		16,060	16,060
	Quantity	24	20

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## MIKRO 185

Rotor				
Bio-containment lid	inclusive	-	-	on request
Rotor places	24	12	18	18
Max. RPM	14,000	14,000	14,000	14,000
Max. RCF	18,845	15,558	16,654	16,654
	Volume	0.2-2.0 ml	0.2-2.0 ml	0.2-2.0 ml
	Quantity	24	12	18
	Volume	0.5 ml	0.5 ml	0.5 ml
	Quantity	12	12	9
	Volume	-	-	1.5-2.0 ml
	Quantity	-	-	18

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## MIKRO 200 / 200 R

Rotor					
Bio-containment lid	on request	on request	inclusive	on request	on request
Rotor places	24	30	24	20	4
Max. RPM	15,000	15,000	15,000	15,000	15,000
Max. RCF	21,382	20,627	21,382	21,130	14,338
	Volume	0.2-2.0 ml	0.2-2.0 ml	0.2-2.0 ml	-
	Quantity	24	30	24	-
	Volume	0.5 ml	0.5 ml	0.5 ml	-
	Quantity	12	15	12	-
	Volume	-	-	1.5/2.0 ml	-
	Quantity	-	-	24	-
	Volume	-	-	-	1.8
	Quantity	-	-	-	20
	Volume	-	-	-	-
	Quantity	-	-	-	-
	Volume	-	-	-	0.2
	Quantity	-	-	-	4x8

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## MIKRO 220 / 220 R

Rotor						
Bio-containment lid	inclusive	inclusive	inclusive	inclusive	-	
Rotor places	24	30	48	24	6	
Max. RPM	18,000	14,000	14,000	13,000	6,000	
Max. RCF (outer/inner)	31,514	21,255	21,255/18,845	18,516	4,025	
	Volume	0.2-2.0 ml	0.2-2.0 ml	0.2-2.0 ml	0.2-2.0 ml	-
	Quantity	24	30	48	24	-
	Volume	0.5 ml	0.5 ml	-	-	-
	Quantity	12	15	-	-	-
	Volume	-	1.5/2.0 ml	-	-	-
	Quantity	-	24	-	-	-
	Volume	-	-	-	-	30/50 ml
	Quantity	-	-	-	-	6
	Volume	-	-	-	-	15/50 ml
	Quantity	-	-	-	-	6

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTOFIX 32 A

Rotor							
Bio-containment lid	on request	on request	-	-	-	inclusive	
Rotor places	4	4	8	8	6	12	
Max. RPM	4,000	4,000	4,000	4,000	6,000	2,000	
Max. RCF	2,665	2,630	2,415	2,469	4,226	438	
	Volume	1.5/2.0 ml	0.2-2.0 ml	0.2-2.0 ml	-	1.5/2.0 ml	-
	Quantity	36	24	48	-	24	-
	Volume	100 ml	100 ml	5-10 ml	-	94 ml	-
	Quantity	4	4	8	-	6	-
	Volume	2.6-10 ml	2.5-10 ml	2.6-8.5 ml	-	7.5-10 ml	-
	Quantity	20/16	20/16	8	-	6	-
	Volume	1.6-10 ml	1.6-10 ml	1.6-10 ml	-	8.5-10 ml	-
	Quantity	28/16	20/16	8	-	6	-
	Volume	15/50 ml	15/50 ml	-	15/50 ml	15/50 ml	-
	Quantity	4	12/4	-	8	6	-
	Volume	-	-	-	-	-	0.5-6 ml
	Quantity	-	-	-	-	-	12

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## UNIVERSAL 320 / 320 R

Rotor						
Bio-containment lid	on request	on request	-	inclusive	-	-
Rotor places	4	4	2	30	6	6
Max. RPM	4,500	4,500	4,000	14,000	9,000	9,000
Max. RCF	3,328	3,328	2,218	21,255	9,509	9,509
	Volume	1.5/2.0 ml	0.2-2.0 ml	-	1.5/2.0 ml	1.5/2.0 ml
	Quantity	56	20	-	30	24
	Volume	100 ml	100 ml	-	-	15/94 ml
	Quantity	4	4	-	-	6
	Volume	1.1-10 ml	2.6-5 ml	-	-	7.5-10 ml
	Quantity	28/20	20	-	-	6
	Volume	1.6-10 ml	1.6-10 ml	-	-	8.5-10 ml
	Quantity	28/20	20/16	-	-	6
	Volume	15/50 ml	15/50 ml	-	-	15/50 ml
	Quantity	8	16/4	-	-	6/3
	Volume	-	-	MTP	-	-
	Quantity	-	-	8	-	-
	Volume	-	-	0.2 ml	-	-
	Quantity	-	-	24x8	-	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTINA 380 / 380 R

Rotor						
Model	380/R			380	380 R	380/R
Bio-containment lid	on request	on request	on request	inclusive		inclusive
Rotor places	4	4	2	6		30
Max. RPM	5,000	4,000	5,100	10,000	11,000	15,000
Max. RCF	4,863	3,095	3,926	13,640	16,504	24,400
	Volume	1.5/2.0 ml	1.5/2.0 ml	-	0.2-2.0 ml	0.2-2.0 ml
	Quantity	144	160	-	24	30
	Volume	250 ml	250 ml	-	94 ml	-
	Quantity	4	4	-	6	-
	Volume	7.5-10 ml	1.1-10 ml	-	7.5-10 ml	-
	Quantity	52	80/48	-	6	-
	Volume	1.6-10 ml	1.6-10 ml	-	8.5-10 ml	-
	Quantity	64/52	48	-	6	-
	Volume	15/50 ml	15/50 ml	-	15/50 ml	-
	Quantity	36/16	28/16	-	6	-
	Volume	290 ml	290 ml	-	-	-
	Quantity	4	4	-	-	-
	Volume	-	-	MTP	-	-
	Quantity	-	-	10	-	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.



# ROTORS

## ROTINA 420 / 420 R

Rotor						
<b>Bio-containment lid</b>	on request	on request	inclusive	-	inclusive	
<b>Rotor places</b>	4	4	6	4	30	
<b>Max. RPM</b>	4,800	4,000	11,000	9,500	15,000	
<b>Max. RCF</b>	4,740	3,095	16,504	12,007	24,400	
	<b>Volume</b>	1.5/2.0 ml	1.5/2.0 ml	1.5/2.0 ml	-	0.2-2.0 ml
	<b>Quantity</b>	96	160	24	-	30
	<b>Volume</b>	250 ml	250 ml	94 ml	94 ml	-
	<b>Quantity</b>	4	4	6	4	-
	<b>Volume</b>	1.1-10 ml	1.1-10 ml	7.5-10 ml	-	-
	<b>Quantity</b>	104/140	80/44	6	-	-
	<b>Volume</b>	1.6-10 ml	1.6-10 ml	8.5-10 ml	-	-
	<b>Quantity</b>	104/72	48	6	-	-
	<b>Volume</b>	15/50 ml	15/50 ml	15/50 ml	-	-
	<b>Quantity</b>	52/20	28/8	6	-	-
	<b>Volume</b>	600 ml	-	-	250 ml	-
	<b>Quantity</b>	4	-	-	4	-
	<b>Volume</b>	MTP	-	-	-	-
	<b>Quantity</b>	16	-	-	-	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTANTA 460 / 460 R / 460 RC / RF

Rotor						
<b>Cooling</b>	with/without		without	with	with/without	
<b>Bio-containment lid</b>	on request	on request	on request		inclusive	inclusive
<b>Rotor places</b>	4	4	2		30	6
<b>Max. RPM</b>	4,600	3,800	5,900	6,200	15,000	11,500
<b>Max. RCF</b>	5,063	3,196	5,838	6,446	24,400	18,038
	<b>Volume</b>	1.5/2.0 ml	-	-	0.2-2.0 ml	0.2-2.0 ml
	<b>Quantity</b>	224	-	-	30	24
	<b>Volume</b>	250 ml	10 ml	-	-	94 ml
	<b>Quantity</b>	4	196	-	-	6
	<b>Volume</b>	1.1-10 ml	1.1-10 ml	-	-	7.5-10 ml
	<b>Quantity</b>	120/80	292/148	-	-	6
	<b>Volume</b>	1.6-10 ml	1.6-10 ml	-	-	8.5-10 ml
	<b>Quantity</b>	80/68	196/148	-	-	6
	<b>Volume</b>	15/50 ml	15/50 ml	-	-	15/50 ml
	<b>Quantity</b>	56/28	96/40	-	-	6
	<b>Volume</b>	750 ml	750 ml	-	-	-
	<b>Quantity</b>	4	4	-	-	-
	<b>Volume</b>	MTP	MTP	MTP	-	-
	<b>Quantity</b>	16	24	12	-	-
	<b>Volume</b>	450 ml	-	-	-	-
	<b>Quantity</b>	4	-	-	-	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTOFIX 46 / 46 H

Rotor				
Bio-containment lid	-	-	-	on request
Rotor places	4	6	6	4
Max. RPM	2,000	2,000	2,000	4,000
Max. RCF	984	917	805	3,095
	Volume	50-100 ml	-	-
	Quantity	12	-	-
	Volume	-	30	-
	Quantity	-	6	-
	Volume	-	-	25/50 ml
	Quantity	-	-	6
	Volume	-	-	250 ml
	Quantity	-	-	4
	Volume	-	-	15/50 ml
	Quantity	-	-	28/8
	Volume	-	-	290 ml
	Quantity	-	-	4

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

<sup>1)</sup> Only for use in model ROTOFIX 46.

# ROTORS

## ROTIXA 500 RS

Rotor				
Bio-containment lid	on request	on request	-	inclusive
Rotor places	4	4	2	6
Max. RPM	4,500	4,000	3,600	9,500
Max. RCF	5,252	3,631	2,652	14,025
	Volume	1.5/2.0 ml	1.5/2.0 ml	-
	Quantity	336	240	-
	Volume	100 ml	100 ml	94 ml
	Quantity	16	6	6
	Volume	2.6-10 ml	1.1-10 ml	-
	Quantity	201	120/72	-
	Volume	1.6-10 ml	1.6-10 ml	-
	Quantity	200	72	-
	Volume	15/50 ml	15/50 ml	-
	Quantity	204	42/12	-
	Volume	750 ml	290 ml	250 ml
	Quantity	4	6	6
	Volume	MTP	-	MTP
	Quantity	24	-	16
	Volume	1,000 ml	-	-
	Quantity	4	-	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTO SILENTA 630 RS










Rotor			
Bio-containment lid	-	inclusive	
Rotor places	6	6	
Max. RPM	4,500	6,000	
Max. RCF	6,520	5,594	
	Volume	100 ml	94 ml
	Quantity	24	6
	Volume	2.6-10 ml	-
	Quantity	126	-
	Volume	1.6-10 ml	-
	Quantity	126/114	-
	Volume	15/50 ml	15/50 ml
	Quantity	72/30	30/6
	Volume	1,000 ml	250 ml
	Quantity	6	6
	Volume	750 ml	-
	Quantity	12	-
	Volume	2,000 ml	-
	Quantity	6	-

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.

# ROTORS

## ROTOLAVIT II

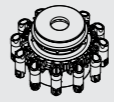
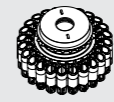

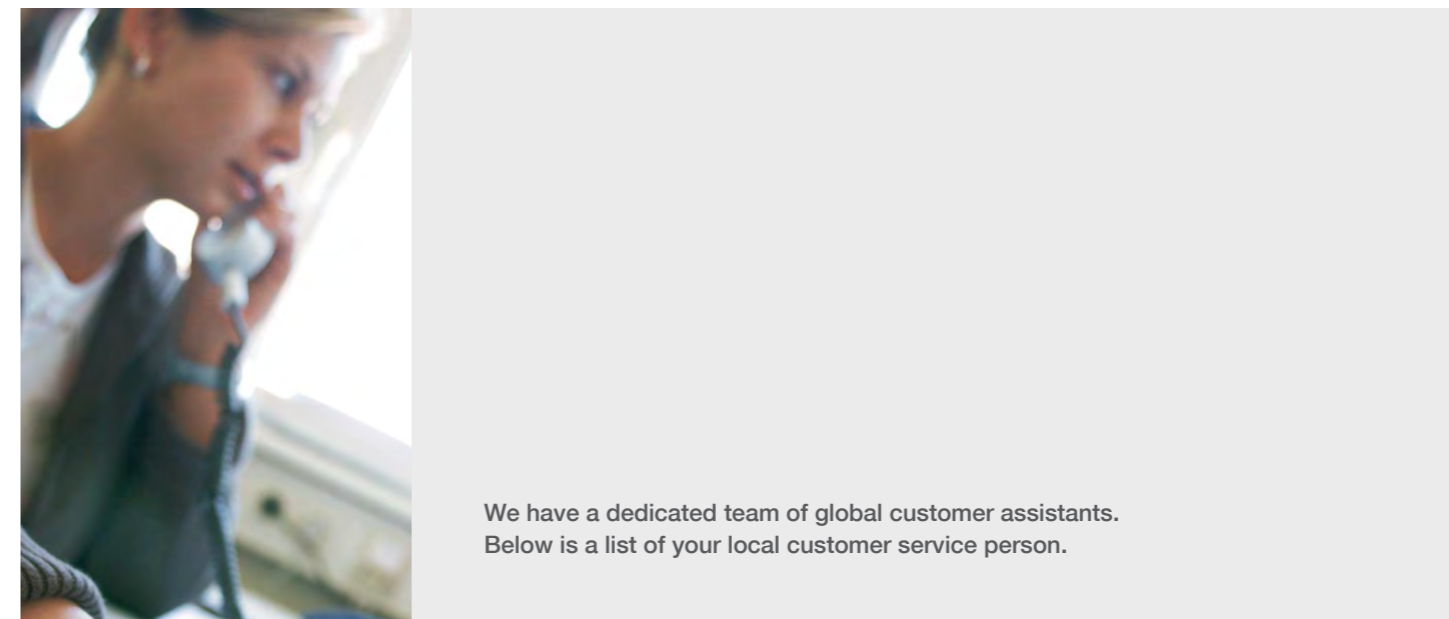
Rotor			
Rotor places	12	24	
Max. RPM	4,500	4,000	
Max. RCF	5,252	3,631	
	Volume	5	5
	Quantity	12	24

Table contains specifications for the most common rotors available per model. For additional configurations contact your local Hettich representative.



We have a dedicated team of global customer assistants. Below is a list of your local customer service person.

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