

Hematocrit Centrifuge



3220

Interchangeable rotors enable 3 types of centrifugation.

1.5/2 mL micro tubes

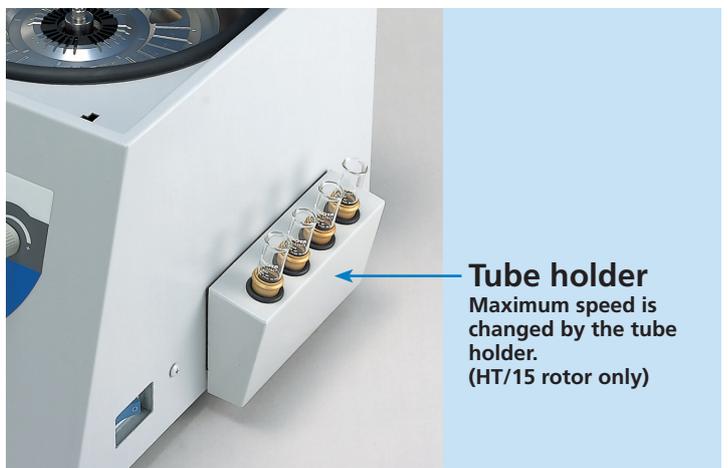
15 mL glass tubes

Hematocrit capillary tubes

HT/2 rotor commonly-used for hematocrit capillary tubes and 1.5/2 mL micro tubes, and it is most suitable for veterinary clinics.

Convenient features and Functions

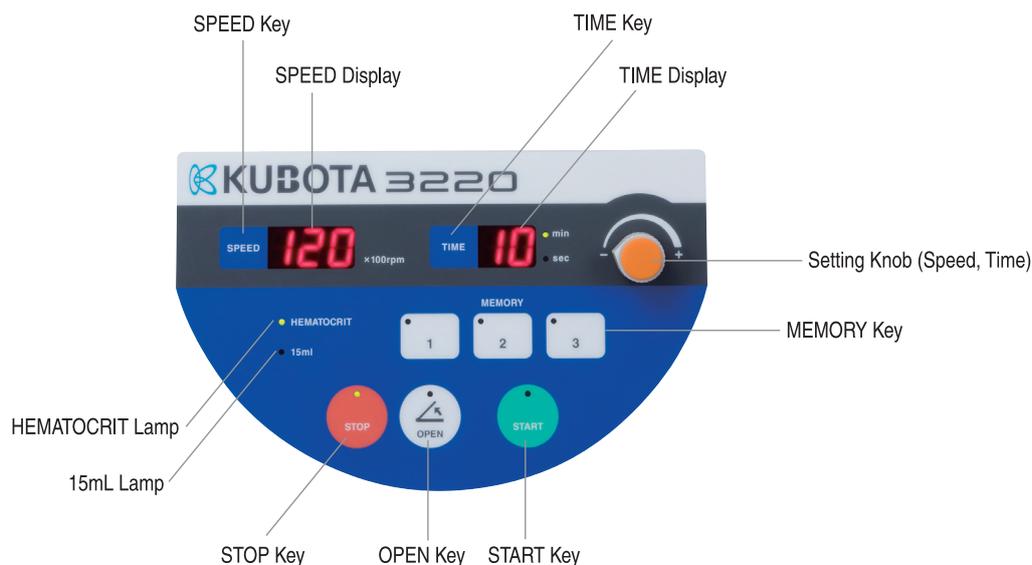
- **Maximum speed :** 12,000 rpm
- **Maximum RCF :** 15,000 xg
- **Maximum capacity :**
 - (1) 8 x 1.5/2 mL micro tubes
 - (2) 4 x 15 mL glass tubes
 - (3) 30 x Hematocrit capillary tubes
- **3 available memory settings, with one-touch save and recall operation.**
A memory function is available for repetitive operation using the same values of operation, i.e. speed and time.
- **Buzzer at the end of operation**
5 different buzzer sounds allow recognition of the end of a centrifuge operation from across the room.
- **Fulfill GMP requirements**
Equipped with tachometer port to comply with GMP requirements. Actual rotor speed is easy to check.
- **Safety priority**
The 3220 model conforms to International Safety Standard IEC 61010-2-020. Interlocking parts are protected against mechanical shock and adopt a dual protection circuit.
- **Speed limit**
When using HT/15 rotor, the maximum speed of rotor is automatically adjusted by using tube holder.
It prevents the speed to rise more than specified below.
With Hematocrit capillary tubes: maximum speed is 12,000rpm
With 15mL glass tubes: maximum speed is 4,000rpm



Tube holder
Maximum speed is changed by the tube holder.
(HT/15 rotor only)

When you use hematocrit capillary tubes, 15mL metallic tube adaptors should be inserted into the tube holder as shown in photo.
When you use 15mL glass tubes, take 15mL metallic tube adaptors out from tube holder and place them onto HT/15 rotor.
Then the maximum speed will change automatically into 4,000rpm.

Control Panel



HT/2 rotor

Both 16 x hematocrit capillary tubes and 8 x 1.5/2 mL micro tubes can be used together at the same time using HT/2 rotor.

	16 x capillary tube	8 x 2 mL micro tube
Maximum speed	12,000 rpm	12,000 rpm
Maximum RCF	15,000 xg	12,720 xg
Tube size (diam. x length) mm	1.0~1.75 x 50~75	9.5~11 x 36~42
Adaptor	055-7590 for 0.5 mL and 0.5 mL PCR	
	055-0500 for 0.2 mL PCR	

HT/15 rotor

24 x hematocrit capillary tubes and 4 x 15 mL glass tubes can be used alternately using HT/15 rotor.

	24 x capillary tube	4 x 15 mL glass tube
Maximum speed	12,000 rpm	4,000 rpm
Maximum RCF	15,000 xg	2,100 xg
Tube size (diam. x length) mm	1.0~1.75 x 50~75	15~17.2 x 85~110

• This HT/15 rotor is equipped with tube holder which is for adjusting maximum speed.

HT rotor

HT rotor is exclusively used for 30 x hematocrit capillary tubes.

Maximum speed	12,000 rpm
Maximum RCF	15,000 xg
Tube size (diam. x length) mm	1.0~1.75 x 50~75

⚠ Rotor has prescribed operating life cycle, after that the rotor must be replaced. For more details, please contact us.

Specifications

Model 3220

Maximum Speed	• 12,000 rpm
Maximum RCF	• 15,000 xg
Maximum Capacity	• (1) 8 x 1.5/2 mL micro tubes • (2) 4 x 15 mL glass tubes • (3) 30 x hematocrit capillary tubes
Control system	• Microprocessor control (brushless motor) • Speed, Time and 3 memory banks
Alarm display	• Lid open, Imbalance, Over speed • Detected electrical abnormality in motor, inverter, lid interlock and speed sensor
Speed limit control	• Automatic maximum speed switching (when HT/15 rotor is used) • With Hematocrit capillary tubes: maximum speed is 12,000 rpm • With 15 mL glass tubes: maximum speed is 4,000 rpm
Speed setting and indication	• Digital display, in 100 rpm steps
Timer setting and indication	• Digital display, with Hold • 1 second to 99 seconds, 1 sec increment • 1 minute to 99 minutes, 1 min increment
Buzzer to inform the end of centrifugation	• 5 types and no sound
Power requirements	• Single phase 50/60Hz, 110V±10%, 115V±10%, 10A • Single phase 50/60Hz, 220V±10%, 230V±10%, 6A
Rated voltage and rated current	• 110V 3.1A, 115V 3.0A, 220V/230V 1.5A
Power consumption and Heat output	• 200W, 720kJ/h
Dimensions, weight	• 32cm x 39cm x 27cm (WxDxH), 21kg height with opened lid 58cm ^{*1}
Certificates of conformity	• IEC 61010-2-020 • CE Marking (220V/230V)

(*1) Not including projections.

All specifications and external appearance are subject to change without notice.

* Use only rotors, adaptors and tube racks made by KUBOTA. Do not attempt to use rotors, adaptors or tube racks made by other manufacturers.

* Follow all instructions in the relevant Instruction & Service Manual when operating centrifuges.

Kubota has acquired ISO 9001 and ISO 13485 certification.

Precautions for use

Products in this catalogue are designed for use only by people who have the requisite technical knowledge, and must always be used with considerable care and only for their intended purpose. People who do not have adequate technical knowledge or training should only use the products under appropriate supervision by someone with expert knowledge, or else accidents are likely to occur.

 Prohibited	Please immediately stop using the products in any of the cases listed on the right. <ul style="list-style-type: none"> • The rotor or buckets appear to be damaged or corroded. • When the replacement period (years of operation, operating lifetime) of a rotor has passed. • The equipment emits a burning smell or becomes abnormally hot. • You receive a weak electric shock when you touch the equipment with your bare hands. • When any other abnormality or indication of failure is noticed. 	IMPORTANT	If any of the cases listed at the left occurs, immediately turn off the power, disconnect the power cable plug or connecting terminals from the main power outlet, place a "Do not use" sign on the unit, and contact the nearest branch of Kubota Corporation.
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 Safety Precautions	To use the equipment safely, be sure to read the instruction manual carefully before you start operations.	Do not misplace the instruction manual. Keep the instruction manual nearby so that you can refer to it whenever necessary.
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- The term of supplying spare parts for repair is 7 years after discontinuation of production (except spare parts which we are unable to procure).
- This catalogue is not for distribution in the USA, Canada and Mexico as products shown are not for sale in these countries.

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