



December 1, 2020

DR. TRISTAN NATHANIEL C. RAMOS

Chairperson
Bids and Awards Committee 3
UP Manila

Dear Dr. Ramos:

This has reference to the project "Supply of Refrigerated Centrifuge for Biochemical Genetics Laboratory (BGL)," IHG with total approved budget of PhP 900, 000.00.

Please find the attached revised technical specifications for re-posting. Also included are few additional conditions pertaining to after-sales and maintenance of the delivered unit.

For your consideration and approval.

Thank you.

Truly yours,

MARIA MELANIE LIBERTY B. ALCAUSIN, MD, FPPS
Director
Institute of Human Genetics
National Institutes of Health

AWARDS COMMITTEE II

BY: *Elmer Finaur*
DATE & TIME: 12-07-20 5:01 PM


Technical Specification	Requested Refrigerated Centrifuge
Max. Speed range:	From 13700 rpm to 16000 rpm
Minimum Max. RCF:	21194 x g
Minimum Max RCF with swing out rotor	4791 x g
Max. Capacity/Volume:	4 x 1000 ml
Speed range:	100 - 16000 rpm
Cooling	Refrigerated with pre-cooling program
Temperature range	-11°C to 40°C
Number of programs	99 with at least 5 program keys
Running time:	10 s to 99 h 59 min / 59 min 50 s in 1 min / 10 s increments
Other features:	<ul style="list-style-type: none"> • aerosol-tight rotors and buckets to avoid contamination • Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 1,000 mL • noise level: $\leq 60 \pm 2$ dB • self-diagnostic program to record usage and error history
Accessories:	with rotor/ bucket and adapter
Rotor type	Medium capacity, high speed, swing-bucket, aerosol-tight, including 4 x 750 mL round buckets
Maximum volume	4 x 750 mL
Minimum Max. RCF	4800 x g
Minimum Max. speed for the rotor	4700 rpm
	Swing out rotor 4 place; Acceleration in seconds: 34/309 Deceleration in seconds: 36/458 Angle: 0-90°
Loading	Mixed to accommodate 2 sets each: a) 2 round tube buckets for 5.5-12 mL and b) 2 round tube buckets for 2.6 to 8 mL
Adapter specifications (1 st type)	for 20 x round bottom tubes diameter 16 mm (max. tube dia.), set of 2 pcs, to fit PYREX® 11 mL Screw Cap Culture Tubes with Phenolic Caps, 16x100 mm, cat. #9825
Tube volume	5.5-12 mL
Maximum vessel height	125 mm
Maximum vessel height for use with cap lid	120 mm
Minimum Max. RCF:	4594 x g
Number of vessels per adapter/rotor	20/80
Bottom shape:	round

Adapter specifications (2 nd type)	for 23 x round bottom tubes diameter 13 mm (max. tube dia.), set of 2 pcs, to fit 4 mL Sodium Heparin, green top, blood collection tube
Maximum vessel height	121 mm
Maximum vessel height for use with cap lid	113 mm
Minimum Max. RCF:	4569 x g
Number of vessels per adapter/rotor	23/92
Bottom shape	round
Other specifications:	
	Buckets, caps and adapters are autoclavable.
Caps type	Aerosol-tight, quick lock
Cap fitting	For 750 mL/1000 mL, will fit the rotor/bucket

Other important terms and conditions:

1. Preventive maintenance (for at least 1 year, during the warranty period) must include **calibration services** following ISO or other international guidelines, to ensure temperature accuracy (with accompanying certificate reflecting the uncertainty of measurements, etc.), rotational speed verification and operating time.
2. Inclusion of on-site training to include the following activities: 1) product orientation and operating training for end users and 2) troubleshooting training for technicians and research staff after complete installation.
3. A certificate of calibration must be issued to accompany the delivery of the equipment (Manufacturer's calibration certificate)
4. Manufacturing date (model type) should not be more than 3 years from the date of delivery.

Prepared by:


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